Submitted to NCDENR
12/21/2005 SAJ
Hand Delivered

ANNUAL GROUNDWATER MONITORING REPORT 2003-2005
CAMPBELL STREET FUEL FARM SITE
MARINE CORPS AIR STATION NEW RIVER
NORTH CAROLINA

VOLUME I
Revision 0

Prepared for:

DEPARTMENT OF THE NAVY
Contract No. N62470-03-D-4000

Atlantic Division
Naval Facilities Engineering Command
6506 Hampton Boulevard
Building C, Room 311
Norfolk, Virginia 23508

Prepared by:

Engineering and Environment, Inc.
824 Gum Branch Road, Suite S
Jacksonville, North Carolina, Virginia 28540

We hereby certify that the Report shown and marked in this submittal is proposed to be incorporated into Contract Number N62470-03-D-4000, is in compliance with the contract drawings and specifications, can be installed in the allocated spaces, and is submitted for Government approval.

Certified by QC Project Manager
William C. Morris, North Carolina P.G. #1218

Project Manager
William C. Morris, North Carolina P.G. #1218

19 December 2005

12-20-05

LIST OF ACRONYMS/ABBREVIATIONS

AFVR	Aggressive Fluid/Vapor Recovery
AST	Aboveground Storage Tank
Baker	Baker Environmental, Inc.
bgs	below ground surface
CAP	Corrective Action Plan
Catlin	Catlin Engineers and Scientists
Δh	change in head measured along direction of groundwater flow
ΔL	straight-line distance between groundwater head measurement locations.
DI	Deionized Water
DWM	Division of Waste Management
EDB	Ethylene Dibromide (1,2-Dibromoethane)
EEI	Engineering and Environment, Inc.
EPA	United States Environmental Protection Agency
ft/dy	feet per day
i	hydraulic gradient
K	hydraulic conductivity
L	Liter
MCB	Marine Corps Base
MCAS	Marine Corps Air Station
MTBE	Methyl tert butyl ether
msl	mean sea level
NAVFACENGCOM	Naval Facilities Engineering Command
NCAC	North Carolina Administrative Code
NCDENR	North Carolina Department of Environment and Natural Resources
NCGS	North Carolina Geological Survey
NCGWQS	North Carolina Groundwater Quality Standard
n_e	effective porosity
PAH	Polynuclear Aromatic Hydrocarbons
PID	Photoionization Detector
QC	Quality Control
Shaw	Shaw Environmental, Inc.
ug/L	micrograms per liter
UST	Underground Storage Tank
V	groundwater linear flow velocity
VOC	Volatile Organic Compound

TABLE OF CONTENTS
Volume I

Section			Page
ES	Executive Summary		1
1.0	Introduction		3
	1.1	Site Description	3
	1.2	Site History	4
2.0	Field Program		7
	2.1	Well Gauging	7
	2.2	Groundwater Sampling	7
	2.3	Influent/Effluent Sampling	8
	2.4	Equipment Decontamination and Waste Handling Procedures	8
	2.5	Well Maintenance	9
	2.6	System Operations and Maintenance	9
3.0	Hydrogeology		10
	3.1	Regional Hydrogeology	10
	3.2	Site Hydrogeology	10
4.0	Groundwater Quality Monitoring Results		13
	4.1	Laboratory Analytical Results	13
		4.1.1 Groundwater Analytical Results	13
		4.1.2 Treatment System Influent/Effluent Analytical Results	16
		4.1.3 Quality Assurance/Quality Control and Data Verification	17
	4.2	Free Product Gauging Results	17
	4.3	Air Stripper Vapor Discharge Monitoring	17
5.0	Conclusions and Recommendations		18
	5.1	Conclusions	18
	5.2	Recommendations	18
6.0	References		20

TABLE OF CONTENTS
Volume I
(Continued)

Figures

1-1 Site Location
1-2A Site Layout
Campbell Street Fuel Farm/AS-143 Area
1-2B Site Layout
Building AS-4151 Area
3-1A Shallow Well Groundwater Elevations for 24 September 2003
Campbell Street Fuel Farm/AS-143 Area
3-1B Shallow Well Groundwater Elevations for 24 September 2003
Building AS-4151 Area
3-2A Shallow Well Groundwater Elevations for 28 December 2003
Campbell Street Fuel Farm/AS-143 Area
3-2B Shallow Well Groundwater Elevations for 28 December 2003
Building AS-4151 Area
3-3A Shallow Well Groundwater Elevations for 17 March 2004
Campbell Street Fuel Farm/AS-143 Area
3-3B Shallow Well Groundwater Elevations for 17 March 2004
Building AS-4151 Area
3-4A Shallow Well Groundwater Elevations for 9 June 2004
Campbell Street Fuel Farm/AS-143 Area
3-4B Shallow Well Groundwater Elevations for 9 June 2004
Building AS-4151 Area
3-5A Shallow Well Groundwater Elevations for 2 September 2004
Campbell Street Fuel Farm/AS-143 Area
3-5B Shallow Well Groundwater Elevations for 2 September 2004
Building AS-4151 Area
3-6A Shallow Well Groundwater Elevations for 27 December 2004
Campbell Street Fuel Farm/AS-143 Area
3-6B Shallow Well Groundwater Elevations for 27 December 2004
Building AS-4151 Area
3-7A Shallow Well Groundwater Elevations for 16 March 2005
Campbell Street Fuel Farm/AS-143 Area
3-7B Shallow Well Groundwater Elevations for 16 March 2005
Building AS-4151 Area
3-8A Shallow Well Groundwater Elevations for 21 June 2005
Campbell Street Fuel Farm/AS-143 Area
3-8B Shallow Well Groundwater Elevations for 21 June 2005
Building AS-4151 Area

TABLE OF CONTENTS
Volume I
(Continued)

Figures (continued)

4-1A Dissolved Petroleum Constituent Concentrations for September 2003 Campbell Street Fuel Farm/AS-143 Area
4-1B Dissolved Petroleum Constituent Concentrations for September 2003 Building AS-4151 Area
4-2A Dissolved Petroleum Constituent Concentrations for December 2003 Campbell Street Fuel Farm/AS-143 Area
4-2B Dissolved Petroleum Constituent Concentrations for December 2003 Building AS-4151 Area
4-3A Dissolved Petroleum Constituent Concentrations for March 2004 Campbell Street Fuel Farm/AS-143 Area
4-3B Dissolved Petroleum Constituent Concentrations for March 2004 Building AS-4151 Area
4-4A Dissolved Petroleum Constituent Concentrations for June 2004 Campbell Street Fuel Farm/AS-143 Area
4-4B Dissolved Petroleum Constituent Concentrations for June 2004 Building AS-4151 Area
4-5A Dissolved Petroleum Constituent Concentrations for September 2004 Campbell Street Fuel Farm/AS-143 Area
4-5B Dissolved Petroleum Constituent Concentrations for September 2004 Building AS-4151 Area
4-6A Dissolved Petroleum Constituent Concentrations for December 2004 Campbell Street Fuel Farm/AS-143 Area
4-6B Dissolved Petroleum Constituent Concentrations for December 2004 Building AS-4151 Area
4-7A Dissolved Petroleum Constituent Concentrations for March 2005 Campbell Street Fuel Farm/AS-143 Area
4-7B Dissolved Petroleum Constituent Concentrations for March 2005 Building AS-4151 Area
4-8A Dissolved Petroleum Constituent Concentrations for June 2005 Campbell Street Fuel Farm/AS-143 Area
4-8B Dissolved Petroleum Constituent Concentrations for June 2005 Building AS-4151 Area

TABLE OF CONTENTS
Volume I
(Continued)

Tables

3-1 Monitoring Well Construction Summary
3-2 Groundwater Elevation Data – September 2003 to August 2005
3-3 Horizontal Hydraulic Gradients and Average Linear Velocities
3-2 Vertical Hydraulic Gradients
4-1 Summary of Laboratory Analyses for Groundwater
4-2 Summary of Laboratory Analyses for Influent / Effluent Samples
4-3 Product Thickness Data – September 2003 to August 2005

Appendices

A Summary Field Gauging Measurements

Volumes IIA and IIB

Appendices

B Laboratory Analytical Reports

EXECUTIVE SUMMARY

On behalf of the Department of the Navy, Atlantic Division, Naval Facilities Engineering Command, Engineering and Environment, Inc. has prepared this annual groundwater monitoring report for the Campbell Street Fuel Farm Site, Marine Corps Air Station New River, North Carolina. The report presents the findings of groundwater remediation and monitoring activities conducted from September 2003 through August 2005.

The site is located on Marine Corps Air Station New River in Onslow County, North Carolina. The site includes two areas. One area includes the Campbell Street Fuel Farm and Building AS-143, located north of Campbell Street at the intersection of Campbell Street and White Street. The second area includes Building AS-4151, located along White Street approximately 500 feet south of the Campbell Street Fuel Farm. The site has been assigned incident number 23297 by the North Carolina Department of Environment and Natural Resources and is classified as an Intermediate Risk. Previous investigations indicate the site meets criteria for Industrial/Commercial land use.

Several site assessments have been conducted at the Fuel Farm / AS-143 and Building AS-4151 areas. These investigations identified petroleum constituents in soil and groundwater at the site; measurable free product was identified in some wells. The presence of these petroleum constituents was attributed to leaks from former underground storage tank systems and from a former JP5 pipeline. Releases of petroleum product to ground surface occurred in 2004 and 2005; the releases were associated with fueling operations conducted at the Fuel Farm. Soil excavation activities were conducted immediately after the two releases occurred.

In 1994, Corrective Action Plans were prepared for the Fuel Farm / AS-143 and Building AS-4151 areas. Both plans included in part installation of groundwater recovery trenches, with recovered groundwater treated by an oil/water separator, an air stripper, and granular activated carbon.

In 1996, three groundwater recovery trenches were installed at the site, one located at the Fuel Farm, one in the vicinity of Building AS-143, and one in the vicinity of Building AS-4151. Groundwater from the three trenches is piped to a treatment system located at the Fuel Farm. The system includes an oil/water separator, an air stripper, and granular activated carbon; treated effluent is discharged to a drainage ditch south of the treatment system building. In 1999, four recovery wells were installed and connected to the treatment system.

An optimization study conducted in 2000 recommended in part that the pump and treat system be deactivated, and that Aggressive Fluid / Vapor Recovery events be conducted as needed. Based on these recommendations, the recovery trenches located at the Fuel Farm and Building AS-4151 were deactivated. The trench located in the vicinity of Building AS-143 remained in operation, with water from this trench treated by the treatment system. In 2001, the trench in the vicinity of Building AS-4151 was reactivated as free product was observed in the area.

Site groundwater monitoring activities were conducted in conjunction with operation of the treatment system. Data from the monitoring activities conducted from 1996 through 2002

indicated that concentrations of petroleum constituents in groundwater at some wells were above North Carolina Groundwater Quality Standards, but that concentrations were decreasing over time. Measurable free product was detected in five wells. Multiple Aggressive Fluid / Vapor Recovery events were conducted, and sorbent socks at times were installed in some wells. Measurable free product has not been detected at any site well since February 2002

The current program was initiated in September 2003 and completed in August 2005. The program included: inspection, monitoring, and maintenance of the remediation system conducted approximately three times per week; well gauging at 26 site wells conducted monthly; influent/effluent sampling at three to five locations conducted approximately quarterly, and groundwater sampling at 16 to 17 monitoring wells conducted quarterly. Additionally, based on recommendations presented in correspondence from the North Carolina Department of Environment and Natural Resources to the Navy, the remediation system was deactivated, and monthly well gauging was continued through to the completion of the program.

During the current monitoring program, no measurable free product was identified at any site well. Various volatile organic compounds and polynuclear aromatic hydrocarbons were detected at concentrations above North Carolina Groundwater Quality Standards but below Gross Contaminant Levels. The extent of these constituents is limited.

Correspondence from North Carolina Department of Environment and Natural Resources to the Navy in June 2005 indicated the site currently is classified as Industrial/Commercial land use, and Intermediate Risk, the latter classification resulting from the presence of measurable free product detected at some site wells prior to data collected during the current monitoring program. The correspondence indicated in part that: 1) if the remediation system were deactivated; and 2) no sorbent socks were installed in site wells; and 3) well gauging conducted over a period of one year indicated that measurable free product was not present at site wells, then the site may meet criteria associated with the Low Risk classification. (If free product were to be detected, then product recovery efforts would be indicated.) Consequently, the remediation system was deactivated on 6 July 2005. Monthly well gauging was continued for the remaining duration of the current monitoring program (on 22 July and 5 August 2005), during which time no measurable free product was detected in site monitoring wells, and during which time no sorbent socks were present in site wells.

It is recommended to continue conducting monthly well gauging at site wells for a one year period, with the period concluding in June 2006. The groundwater remediation system should remain deactivated, and sorbent socks should not be installed in site wells during the well gauging monitoring period, unless measurable free product is detected. If free product is detected, then product removal activities should be conducted, which could include reactivation of the remediation system, installation of sorbent socks, and/or conducting Aggressive Fluid/Vapor Recovery events. At the conclusion of the gauging program, report the findings of the program to North Carolina Department of Environment and Natural Resources, and request site closure if warranted by the data. If, during the gauging program, measurable free product is detected, the detection should be reported to North Carolina Department of Environment and Natural Resources soon thereafter, and a recommended remedial response be identified, such as those noted above.

SECTION 1
INTRODUCTION

On behalf of the Department of the Navy, Atlantic Division, Naval Facilities Engineering Command (NAVFACENGCOM), Engineering and Environment, Inc. (EEI) has prepared this annual groundwater monitoring report for the Campbell Street Fuel Farm Site, Marine Corps Air Station (MCAS) New River. The report presents the findings of groundwater monitoring and remediation activities conducted from September 2003 through August 2005. This report and the methods used to acquire the data in support of this report have been prepared in accordance with the North Carolina Department of Environmental Resources (NCDENR), Division of Waste Management (DWM), Underground Storage Tank (UST) Section guidelines (NCDENR, 2002 and 2003) and the site specific work prepared for this site by EEI (EEI, 2003).

The site has been assigned incident number 23297 by NCDENR and is classified as an Intermediate Risk. Previous investigations indicate the site meets criteria for Industrial/Commercial land use (Catlin, 2005).

1.1 Site Description

The site is located on MCAS New River in Onslow County, North Carolina (34°, 43', 13" N, 77°, 27', 09" W) (Figure 1-1). The site includes two areas. One area includes the Campbell Street Fuel Farm and Building AS-143, located north of Campbell Street at the intersection of Campbell Street and White Street. The second area includes Building AS-4151, located along White Street approximately 500 feet south of the Campbell Street Fuel Farm.

The Campbell Street Fuel Farm is an active fuel storage facility. Four 215,000-gallon steel aboveground storage tanks (ASTs) hold JP5 jet fuel that is pumped through a filter building at the site, then transferred via a buried fuel line to the airfield southeast of the site. The pipeline was installed in 1985 and replaced a former pipeline that was abandoned in place (Figure 1-2A). Building AS-143 is an active gasoline fueling station that supplies gasoline to government owned vehicles. The station stores unleaded gasoline in an AST located at the station (Figure 1-2A). Building AS- 4151 is a steam generating plant. Three 100,000-gallon ASTs store Number 6 fuel oil, and one 1,000-gallon UST stores Number 2 fuel oil. Reportedly, a waste oil AST had been used at site but has been removed. The fuel transfer line that runs from the Campbell Street Fuel Farm to the airfield runs along the eastern side of the site (Figure 1-2B) (Catlin, 2005).

The site is generally flat. Most of the area at the Fuel Farm / AS-143 area is unpaved; somewhat more extensive pavement is present in the vicinity of the Building AS-4151 area. No permanent surface water bodies are present at the site. Several surface water bodies (flowing drainage ditches, etc.) are located within 1,500 feet of the site, but none are present within 500 feet of the site. A retention pond is located within 500 feet of the site (Catlin, 2005). The nearest mapped body of water is Southwest Creek; the creek and associated marsh are located approximately 2,000 feet southwest of the site. No active water supply wells are located within 1,500 feet of the site (Catlin, 2005).

1.2 Site History

In 1985, eight USTs containing JP5 and aviation gasoline at the Fuel Farm were closed. Seven of the USTs were excavated and removed; the eighth UST was closed in place. The current ASTs replaced these closed USTs. Also in 1985, the existing fuel pipeline was installed, replacing an older pipeline that reportedly leaked. The older line was abandoned in place; in 2000, closure activities of the abandoned pipeline were completed. A 5,000-gallon concrete UST used for storage of JP5 was removed from the Fuel Farm in 2000. An investigation conducted at the former UST indicated the site met criteria for classification as Low Risk, and concluded that no additional investigative or remedial activities were warranted (Catlin, 2005).

In 1994, a 10,000-gallon UST at Building AS-143 was removed from the site and replaced with a 10,000-gallon fiberglass UST. In 2000, the 10,000-gallon fiberglass UST was removed from the site and replaced with the existing AST. During the UST removal conducted in 2000, no petroleum constituents were detected in soil samples at concentrations above the applicable Industrial/Commercial Maximum Soil Contaminant Concentrations (MSCCs); some constituents were detected in groundwater at concentrations above North Carolina Groundwater Quality Standards (NCGWQSs). Additional investigation was subsequently conducted. The investigation indicated that constituents in soil were below applicable MSCCs,and constituents in groundwater were below Gross Contaminant Levels (GCLs); it was concluded that no additional investigative or remedial activities were warranted (Catlin, 2005).

Several site assessments were conducted in the early to middle 1990s at the Fuel Farm / AS-143 and Building AS-4151 areas. These investigations identified petroleum constituents in soil and groundwater at the site; measurable free product was identified in some wells. The presence of these petroleum constituents was attributed to leaks from former UST systems and from the former JP5 pipeline. In 1994, two corrective action plans (CAPs) were prepared, one for the Fuel Farm / AS-143 area and one for the Building AS-4151 area. The CAP for the Fuel Farm / AS-143 area recommended removal of petroleum affected soils present at the site from previous UST removals and installation of groundwater recovery trenches. Groundwater recovered by the trenches would be treated by a system that would include an oil/water separator, an air stripper, and granular activated carbon. The treated effluent would be discharged to a drainage ditch (Baker, 1994c). The CAP for the Building AS-4151 area recommended cleaning and abandoning the JP5 pipeline, excavation of petroleum affect soils present under a portion of the pipeline, and installation of a groundwater recovery trench. Groundwater recovered by the trench would be treated by a system that would include an oil/water separator, an air stripper, and granular activated carbon. The treated effluent would be discharged to the storm sewer. Excavation of soils has not been completed; cleaning and abandonment of the pipeline was completed in 2000 (Catlin, 2005).

In 1996, a groundwater pump and treat system was installed. Two groundwater recovery trenches were installed at the Fuel Farm / AS-143 area, one located on the southern portion of the Fuel Farm and the other near Building AS-143. A third trench was installed east of Building AS-4151 (Figures 1-2A and 1-2B). Pneumatic pumps were installed in the trenches; water discharged from the pumps was piped to a treatment system located on the Fuel Farm. The treatment system included an oil/water separator, a low profile air stripper, and granular

activated carbon canisters. The treated effluent was discharged under permit to a drainage ditch south of the treatment building. In 1999, extraction wells were installed in both the Fuel Farm / AS-143 and Building AS-4151 areas and connected to the treatment system (Figures 1-2A and 1-2B) (Catlin, 2000).

A remediation optimization study was conducted in 2000. The study recommended in part that the pump and treat system be deactivated, and that Aggressive Fluid / Vapor Recovery (AFVR) be conducted as needed at the site (Radian, 2000).

Based on the recommendations of the optimization study, the recovery trenches located at the Fuel Farm and Building AS-4151 were deactivated. The trench located in the vicinity of Building AS-143 remained in operation, with water from this trench treated by the treatment system. In 2001, the trench in the vicinity of Building AS-4151 was reactivated as free product was observed in the area (Catlin, 2005).

Site groundwater monitoring activities were conducted in conjunction with operation of the treatment system. Data from the monitoring activities conducted from 1996 through 2002 indicated that concentrations of petroleum constituents in groundwater at some wells were above NCGWQSs, but that concentrations were decreasing over time. Measurable free product was detected in five wells, at thicknesses of over one foot in one well. Multiple AFVR events were conducted, and sorbent socks at times were installed in some wells. Measurable free product has not been detected at any site well since February 2002 (Shaw, 2004).

In 2004, a surface release occurred from a manhole connected to the truck containment area at the Fuel Farm. Surface soil where the release occurred subsequently was excavated (Figure 1-2A) (Catlin, 2005).

An optimization study and revised CAP was prepared in 2005. The study indicated that the site meets criteria for classification as Intermediate Risk and Industrial/Commercial land use. Some additional site investigation activities of soil and groundwater recommended.

In August 2005, a release to ground surface of JP5 occurred from a fuel sample port located on aboveground piping in the vicinity of the ASTs at the Fuel Farm. Excavation activities were conducted in the area of the release (Figure 1-2A). Soil samples were collected from the base and sidewalls of the excavation; analysis of the samples indicated elevated concentrations of petroleum constituents in some of the samples (EEI, 2005).

The current program was initiated in September 2003 and completed in August 2005. The program included: inspection, monitoring, and maintenance of the remediation system conducted approximately three times per week; well gauging at 26 site wells conducted monthly; influent/effluent sampling at three to five locations conducted approximately quarterly; and groundwater sampling at 16 to 17 monitoring wells conducted quarterly. Additionally, based on recommendations presented correspondence from NCDENR to the Navy, the remediation system was deactivated, and monthly well gauging was continued through to the completion of the program (NCDENR, 2005).

Data for the current monitoring program are discussed in the following sections. Section 2 describes field methods used at the site. Section 3 discusses hydrogeologic characteristics of the site. Laboratory analytical results and product gauging data are presented in Section 4. Section 5 provides conclusions and recommendations based on review of the data. References cited in the report are listed in Section 6. Figures and tables are organized after the text. Supporting documentation (summarized field gauging measurements and laboratory analytical reports) are contained in Appendices A and B, respectively, with Appendix B (laboratory analytical reports) presented Volume II.

SECTION 2
FIELD PROGRAM

Field methods employed during the groundwater monitoring program are discussed briefly below. Activities were conducted in accordance with NCDENR guidance (NCDENR, 2002 and 2003) and as per the work plan (EEI, 2003), which details the field methods.

2.1 Well Gauging

The following 26 wells were gauged in September 2003 and monthly from January 2004 through August 2005: MW-3, MW-9, MW-10, MW-12, MW-14, MW-15, MW-16, MW-21, MW-22, MW-24, DW-2, DW-6, 13MW-1, 13DW-1, 122MW-3 through 122MW-9, 122MW-11, 122MW-13, 122MW-14, and 122RW-1. Field gauging measurements are summarized in tables A-1 and A-2 of Appendix A

Wells were gauged using an electronic interface probe to measure the depth to water and depth to product (if present). Data were recorded to the nearest 0.01 foot and referenced to the surveyed top of casing. No measurable free product was observed during the monitoring program, although sorbent socks were present during one gauging event (June 2004) at two wells (122-MW9 and 122RW-1).

2.2 Groundwater Sampling

Groundwater samples were collected quarterly in: September and December 2003; March, June, September, and December 2004; and March and June 2005. Wells sampled included the following: MW-3, MW-11, MW-12, MW-14, MW-16, MW-21, MW-24, DW-2, DW-6, 13MW-1, 13MW-2, 122MW-3, 122MW-4, 122MW-7, 122MW-8, 122MW-9, and 122MW-11. One duplicate sample was collected during each quarterly field event beginning with the December 2003 event. Trip blanks were supplied by the laboratory for each event.

Prior to sampling, standing water in the wells was purged using a low-flow sampling pump discharging through polyethylene tubing. Water quality indicator parameters (pH, temperature, conductivity, oxidation-reduction potential, dissolved oxygen, and turbidity) were measured and recorded repeatedly during the purge. Purging was continued until a minimum of three well casing volumes of water had been removed and water quality indicator parameters had stabilized, or until a maximum of five well casing volumes had been purged. If a well purged to dryness, the well was allowed to recharge, and a sample then was collected. Samples were collected immediately upon completion of the purge (after allowing for a short recharge period, if required) by filling the laboratory-prepared sample bottles directly from the discharge tubing. Samples were kept in an iced cooler from the time of collection until received by the laboratory.

Groundwater samples collected during the events were analyzed for the following parameters:

- Volatile Organic Compounds (VOCs), EPA Method 602
- 1,2-Dibromoethane (EDB), EPA 504.1
- Polynuclear Aromatic Hydrocarbons (PAHs), EPA Method 610 (typically only at wells DW-2, DW-6, 12DW-1, and 122MW-9)

Samples were submitted under chain-of-custody to Accutest Analytical Laboratories in Orlando, Florida. Samples were delivered to the laboratory via overnight commercial courier.

2.3 Influent/Effluent Sampling

Samples of the influent from the recovery wells and the effluent from the treatment system were collected during the monitoring program. Samples were collected from sampling ports installed at the wells and the system, by opening the port and allowing the water to flow for several seconds, then filling the laboratory-prepared sample bottles directly from the port. Samples were kept in an iced cooler from the time of collection until received by the laboratory. Samples were collected in September 2003, October 2003, December 2003, June 2004, September 2004, December 2004, March 2005, and June 2005. Additionally, an effluent sample was collected April 2005 as the March 2005 effluent data appeared anomalous.

Samples were analyzed for the following parameters:

- VOCs, EPA Method 602 (system influent and treated effluent)
- PAHs, EPA Method 610 (system effluent only)
- Metals, EPA Method 6010 (system effluent only)
- Total Hardness, EPA Method 6010 (system effluent only)
- Total Dissolved Solids, EPA Method 160.1 (system effluent only)
- Total Suspended Solids, EPA Method 160.2 (system effluent only)

Samples were submitted under chain-of-custody to Accutest Analytical Laboratories in Orlando, Florida. Samples were delivered to the laboratory via overnight commercial courier.

2.4 Equipment Decontamination and Waste Handling Procedures

During each sampling event, the pump was decontaminated before first use and after each use by pumping a mixture of Alconox soap and potable water through the pump. The pump then was rinsed by pumping potable water through it, and final-rinsed with deionized (DI) water. New polyethylene tubing was used at each well.

Down-hole gauging equipment was decontaminated after each use by washing with an Alconox/DI water mixture, followed by a DI water rinse. Water quality probes were decontaminated with a DI rinse.

Well purge water and equipment decontamination water generated during the sampling events were contained in a portable holding tank. The water was processed through a groundwater treatment system located at Lot 203 on Marine Corps Base Camp Lejeune. Used tubing and

other miscellaneous material were collected and bagged as they were generated. This material was treated as normal solid waste and placed in EEI's refuse container.

2.5 Well Maintenance

During the sampling events, any brush, debris, and/or litter in the vicinity of the well heads were cleared. The well heads, casing risers, well pads, bollards, well caps, locks, etc. were inspected for damage or deterioration. During the monitoring program, all wells appeared to be in serviceable condition.

2.6 System Operation and Maintenance

The system includes three groundwater recovery trenches, two of which were active (located in the vicinity of AS-143 and Building AS-4151) and one of which was inactive (located on the south side of the Fuel Farm). Two recovery wells equipped with pneumatic pumps are installed in each trench. Discharge from the pumps is piped to a treatment system located at the Fuel Farm. The system includes an oil/water separator, a low profile air stripper, two suspended solids filters, and two granular activated carbon canisters. The treated effluent is discharged to a storm drainage ditch south of the treatment building.

System monitoring and maintenance was performed regularly, with site visits conducted approximately three times per week. Instrument readings conducted during the site visits included flow rates, pneumatic pump compressor pressure, filter and carbon canister pressures, recovery well pump pressures, electricity usage, and motor run times. Servicing (oil changes, belt re-tensioning or replacement, filter changes, etc.) was conducted as per manufactures instructions or as needed based on system inspection.

The system generally operated continuously except during equipment servicing/repair, power outages, etc. The system operated without significant interruptions during the monitoring program. As per correspondence from NCDENR dated 28 June 2005, the system was deactivated on 6 July 2005, with site monitoring to be continued by monthly gauging at site wells (NCDENR, 2005).

Photoionization detector (PID) readings were recorded monthly in 2004 and weekly beginning in 2005. Readings were recorded by attaching the PID instrument inlet to a port located on the discharge stack of the air stripper. Beginning in February 2005, vapor velocity readings, vapor temperature, and vapor pressure were recorded at the time the PID readings were recorded.

SECTION 3
HYDROGEOLOGY

The hydrogeologic characteristics of the subsurface substantially control the movement of groundwater, which strongly influences movement of dissolved constituents. The regional geologic setting provides a framework for understanding and interpreting the site-specific hydrogeology. Knowledge of the latter allows for evaluating groundwater flow at a scale relevant to the monitoring program.

3.1 Regional Hydrogeology

The site is located in the eastern portion of the Coastal Plain Physiographic Province of North Carolina. The Coastal Plain consists of nearly flat to gently dipping sedimentary strata of varying composition that overlie a crystalline basement complex. Approximately 80 miles northwest of the site, the Coastal Plain pinches out where it contacts the Piedmont Physiographic Province along the Fall Line. East of the Fall Line, the sediments gradually thicken, reaching a maximum thickness of approximately 10,000 feet at Cape Hatteras, North Carolina. In the vicinity of the site, the sedimentary sequence is estimated to be approximately 2,000 feet thick (NCGS, 1988).

Surficial deposits of Quaternary age are present in and around the area of the site, typically at thicknesses ranging from about 25 to 80 feet. The uppermost mapped unit in the area of the site is identified as the River Bend Formation of Tertiary age, described as a calcareous limestone interlaced with indurated sandy, molluscan limestone (NCGS, 1985). The River Bend Formation overlies the Castle Hayne Formation, also of Tertiary age. The Castle Hayne Formation is described as gray to cream colored, fine grained to fossiliferous calcareous limestone with minor amounts of fine quartz, glauconite, and phosphate (NCGS, 1988). The thickness of the Castle Hayne Formation in the vicinity of the site is estimated at approximately 300 feet. The Castle Hayne aquifer is a primary source of potable water for the area.

3.2 Site Hydrogeology

The site is generally flat. Most of the area at the Fuel Farm / AS-143 area is unpaved; somewhat more extensive pavement is present in the vicinity of the Building AS-4151 area. No permanent surface water bodies are present at the site. Several surface water bodies (flowing drainage ditches, etc.) are located within 1,500 feet of the site, but none are present within 500 feet of the site. A retention pond is located within 500 feet of the site (Catlin, 2005). The nearest mapped body of water is Southwest Creek; the creek and associated marsh are located approximately 2,000 feet southwest of the site.

Shallow soils in the vicinity of the Fuel Farm / AS-143 area are described as silty clay to clay in the upper 15 to 25 feet, underlain by silty sand, sand, and sand-and-gravel to depths of approximately 55 feet below ground surface (bgs), the maximum depth of borings advanced at the site. At some locations limestone fragments in a limey clay matrix were reported at depths of 40-to-50 feet bgs (Baker, 1992, 1994a). In the vicinity of Building AS-4151, the upper three-to-five feet of soil is described as sand and silt, underlain by an eight-to-ten foot thick clay.

Beneath the clay, sands and sands-and-gravels were encountered, extending to depths of approximately 55 feet bgs, the maximum depth of borings advanced at the site (Baker, 1994b). Groundwater typically was encountered in both areas at approximately three-to-five feet bgs.

All of the monitoring wells at the site are screened in the saturated sediments of the surficial aquifer. Most wells are screened in the upper portion of the surficial aquifer; three wells included in this monitoring program (DW-2, DW-6, and 13DW-1) have been installed in the deeper portion of the surficial aquifer. Table 3-1 presents a summary of available well construction data as reported from previous studies.

Using the top-of-casing elevations and gauging data recorded at the site, groundwater elevations for the site monitoring wells were calculated. Table 3-2 presents groundwater elevation data for gauging events conducted during the current monitoring program. If wells exhibited measurable free product, the groundwater elevation was corrected by adding 80 percent of the product thickness to the calculated groundwater elevation. (The product thickness was multiplied by 80 percent as the specific gravity of the product is estimated to be 0.8. No wells exhibited measurable free product during the monitoring program, so no corrections were required.) (Product thickness data are summarized in Table 4-2 and discussed in Section 4; field measurements of depth-to-water and depth-to-product respectively are summarized in Tables A-1 and A-2 of Appendix A.)

The elevation data for the shallow wells were used to construct shallow surficial aquifer groundwater elevation maps for gauging events corresponding to the eight groundwater sampling events conducted during the current monitoring program, with separate maps prepared for the Fuel Farm / AS-143 area and the Building AS-4150 area. (Flow maps for wells screened in the deeper portion of the surficial aquifer could not be constructed as neither area included at least three deep wells designated for gauging during the program, and a minimum of three elevations are needed to estimate flow direction.) From the shallow well maps, groundwater flow direction can be estimated. Figures 3-1A/B through 3-8A/B respectively present groundwater elevation maps for the quarterly sampling events from September 2003 through June 2005, respectively, with the "A" figures presenting the Fuel Farm / AS-143 area and the "B" figures presenting the Building AS-4151 area.

From the figures, groundwater flow patterns at the Fuel Farm / AS-143 area generally are consistent, with groundwater flowing south across the site under a minor gradient. In the southeast portion of the area, flow is to the southeast in response to groundwater extraction from the groundwater recovery trench near Building AS-143. At the Building AS-4151 area, groundwater generally flows easterly across the site, and flows away from the site to the south. Along the eastern portion of the area, a westerly flow component towards the groundwater recovery trench frequently is observed. Relatively high groundwater elevations typically are observed in the central portions of the site (near wells 13MW-1 and/or 122MW-4). However, for the September 2005 data (Figure 3-5B), a relatively low groundwater elevated is observed at well 13MW-1; this is the only map exhibiting a relative groundwater low at well 13MW-1.

The horizontal gradient i (unitless) is calculated using the standard equation $i = \Delta h / \Delta L$, where Δh is the change in head measured along the direction of groundwater flow, and ΔL is the straight-line distance between the measurement locations. Using data from the current program monitoring events, the horizontal gradient has been calculated using data from well pairs that are closely aligned with the groundwater flow direction. Selected well pairs include MW-3 / MW-24 (Fuel Farm / AS-143 area) and 122MW-4 / 122MW-8 (Building AS-4151 area) (Table 3-3).

From Table 3-3, the average horizontal gradient for the listed gauging events is 0.023 to the east-southeast for well pair MW-3 / MW-24 (Fuel Farm / AS-143 area) and 0.036 to the east for well pair 122MW-4 / 122MW-8 (Building AS-4151 area). (The well pair average is calculated by summing all of the calculated gradients for the pair and dividing by the total number of gauging events for the pair).

The groundwater linear flow velocity V is calculated using the standard equation $V = (Ki) / n_e$, where i is the horizontal gradient (discussed above), K is the hydraulic conductivity, and n_e is the effective porosity. Previous investigations have provided estimates of shallow zone K for the Fuel Farm / AS-143 area based on an aquifer pumping test and slug testing; for the BuildingAS-4151 area, K was estimated based on slug tests. Shallow zone estimates for n_e for each area were based on examination of subsurface soil samples collected during the investigations. The investigations reported an average value of K of 0.46 foot / day (ft/dy) and a value for n_e of 0.28 (unitless) for the Fuel Farm / AS-143 area, and an average value for K of 0.14 ft/dy and a value for n_e of 0.34 (unitless) for the Building AS-4151 area (Baker, 1994b, 1994c).

Using the above values for shallow zone K and n_e and the shallow zone horizontal gradients calculated for the well pairs discussed above, linear flow velocities for the gauging events have been calculated for the two areas (Table 3-3). From Table 3-3, the average linear velocity is 0.038 ft/dy (13.9 feet per year) to the east-southeast for the Fuel Farm / AS-143 area, and 0.015 ft/dy (5.5 feet per year) for the Building AS-4151 area. The calculated velocities do not account for tortuosity (a parameter describing the deviation from a straight line flow path as groundwater moves around and between grains of soil). Consequently, at scales comparable to the size of the site, the linear velocity will overestimate the effective distance groundwater will travel for a given period of time.

Vertical gradients (unitless) have been calculated using elevation data from the current monitoring program for the shallow/deep well pair MW-21 / DW-6, located in the Fuel Farm / AS-143 area. (This was the only shallow/deep pair included in the monitoring program.) From Table 3-4, a relatively low, negative (upward) vertical gradient average of –0.04 is present at the well pair. The gradient indicates the potential for upward flow of groundwater from the deeper portion of the surficial aquifer to the shallower portion of the surficial aquifer.

SECTION 4
GROUNDWATER QUALITY MONITORING RESULTS

Groundwater samples were collected quarterly from September 2003 through August 2005 at site monitoring wells. Treatment system influent and effluent samples also were collected approximately quarterly. Well gauging was conducted monthly at site wells.

4.1 Laboratory Analytical Results

Groundwater samples were collected quarterly from September 2003 through June 2005. Wells sampled included the following: MW-3, MW-11, MW-12, MW-14, MW-16, MW-21, MW-24, DW-2, DW-6, 13MW-1, 13MW-2, 122MW-3, 122MW-4, 122MW-7, 122MW-8, 122MW-9, and 122MW-11. One duplicate sample was collected during each quarterly field event beginning with the December 2003 event. Trip blanks were supplied by the laboratory for each event. Groundwater samples were analyzed for VOCs (EPA Method 602 with total xylene isomers and methyl tert butyl ether) and EDB (EPA Method 504.1); some locations (typically wells DW-2, DW-6, 12DW-1, and 122MW-9) also were analyzed for PAHs (EPA Method 610). Samples of the influent from the recovery wells and the effluent from the treatment system were collected in September 2003, October 2003, December 2003, June 2004, September 2004, December 2004, March 2005, and June 2005. Additionally, an effluent sample was collected in April 2005 for VOCs analysis as the March 2005 effluent data appeared anomalous. Influent and effluent samples were analyzed for VOCs (EPA Method 602). System effluent samples also were analyzed for the following parameters: PAHs (EPA Method 610); metals (EPA Method 6010); total hardness (EPA Method 6010); total dissolved solids (EPA Method 160.1); and total suspended solids (EPA Method 160.2). Samples were analyzed by Accutest Analytical Laboratories in Orlando, Florida. Appendix B presents the laboratory analytical reports for each quarterly sampling event.

4.1.1 Groundwater Analytical Results

Table 4-1 summarizes the laboratory analytical results for groundwater samples collected during the current monitoring program. The upper portion of the table presents results for wells located in the Fuel Farm / AS-143 area, and the lower portion of the table presents results for wells located in the Building AS-4151 area. Laboratory analytical reports for groundwater samples collected the current monitoring program are presented in Appendix B (Volume II).

From Table 4-1, EDB was not detected at any well during in any of the eight sampling events. Several VOCs and a limited number of PAHs were detected at the site, some of which exceeded NCGWQSs but all of which were substantially below GCLs.

At the Fuel Farm / AS-143 area, VOCs detected at concentrations above NCGWQSs during one or more sampling events at one or more shallow wells include benzene, ethylbenzene, total xylenes, and MTBE. (No deep wells exhibited VOC concentrations above NCGWQSs). Benzene was reported above the NCGWQS of 1 ug/L at shallow well MW-12 only during the December 2003 event, at a concentration of 1.3 ug/L; no other VOCs were detected above NCGWQSs at this well during any other sampling event conducted during the current program.

Benzene, ethylbenzene, and total xylenes typically were present above NCGWQSs at shallow wells MW-16, MW-21, and MW-24. At well MW-16, located in the southern portion of the Fuel Farm, benzene concentrations exhibited limited variation, ranging from 65.4 ug/L (December 2004) to 34.1 ug/L (September 2003). No other VOCs were reported above NCGWQSs at this well during the current monitoring program.

At shallow well MW-21 (located near the Building AS-143 recovery trench), benzene concentrations ranged from 381 ug/L (December 2003) to 8.3 ug/L (December 2004), ethylbenzene concentration ranged from 246 ug/L (December 2003) to 1.7 ug/L (December 2004; concentration less than the NCGWQS of 29 ug/L), and total xylene concentrations ranged from 1060 ug/L (December 2003) to 6.1 ug/L (December 2004; concentration less than the NCGWQS of 530 ug/L). MTBE was reported above the NCGWQS of 200 ug/L only during the September 2003 sampling event (MTBE concentration of 259 ug/L); no other well exhibited MTBE concentrations above the NCGWQS during any of the other sampling events. Although concentrations varied somewhat over time, in general a decrease in VOC concentrations was observed at well MW-21.

At shallow well MW-24 (also located near the Building AS-143 recovery trench), benzene concentrations ranged from 598 ug/L (December 2004) to 40.1 ug/L (December 2003), ethylbenzene concentration ranged from 347 ug/L (September 2003) to 19.1 ug/L (December 2003; concentration less than the NCGWQS of 29 ug/L), and total xylene concentrations ranged from 1020 ug/L (September 2003) to 62.9 ug/L (December 2003; concentration less than the NCGWQS of 530 ug/L). As at MW-21, concentrations varied somewhat at well MW-24 but generally exhibited decreases over time.

Other than the June 2004 sampling event, PAHs were not included in the analytic suite for shallow wells in the Fuel Farm / AS-143 area. PAHs exhibiting concentrations greater that NCGWQSs included naphthalene (NCGWQS of 21 ug/L) at wells MW-16 (73.4 ug/L), MW-21 (57.5 ug/L), and MW-24 (37.8 ug/L) and 2-methylnapthalene (NCGWQS of 14 ug/L) at wells MW-16 (54.2 ug/L) and MW-21 (15.1 ug/L). Additionally, 1-methylnapthalene was detected at well MW-12 (8.4 ug/L), MW-16 (94.5 ug/L), MW-21 (9.3 ug/L), and MW-24 (6.9 ug/L). There is no NCGWQS for 1-methylnapthalene; therefore, any detection of this compound is considered to be above the standard. There is no GCL for 1-methylnaphalene.

Deep wells included in the monitoring program at the Fuel Farm / AS-143 area include DW-2 and DW-6. Very few VOCs were detected at either deep well. Benzene was the only VOC detected above the NCGWQS (of 1 ug/L), reported at a concentration of 9.2 ug/L at well DW-2 during the December 2004 event. Benzene was not detected during any other sampling event at well DW-2 or DW-6.

No PAHs were detected at deep well DW-6 during the current monitoring program. At well DW-2, PAHs reported above NCGWQSs included naphthalene and 1-methylnaphthalene. Naphthalene was detected above the NCGWQS (of 21 ug/L) during the December 2003 event (36.0 ug/L and 36.9 ug/L, primarily and duplicate samples, respectively), the September 2004 event (83.2 ug/L) and the March 2005 event (26.8 ug/L). During these same three events only,

1-methylnaphalene was detected at concentrations ranging from 2.3 ug/L (estimated) to 9.5 ug/L. As indicated above, there is no NCGWQS for 1-methylnapthalene; therefore, any detection of this compound is considered to be above the standard.

At the Building 4151 area, few VOCs were detected, and of those, benzene was the only VOC reported at concentrations above the NCGWQS. At shallow well 13MW-1, benzene was reported during the March 2005 event at a concentration of 8.7 ug/L, above the NCGWQS of 1 ug/L. Benzene was not detected at any other shallow well during any other sampling event. In deep well 13DW-1, benzene was detected above the NCGWQS during six sampling events, ranging from 7.9 ug/L to 9.8 ug/L.

Analyses for PAHs were conducted at deep well 13DW-1 and typically at shallow well 122MW-9. In June 2004, all wells sampled included PAH analyses. At shallow well 122MW-9, naphthalene was reported above the NCGWQS (of 21 ug/L) during most of the sampling events; concentrations ranged from 142 ug/L (December 2004) to 8.3 ug/L and an estimated 3.7 ug/L (primary and duplicate samples, June 2005 event; both concentrations below the NCGWQS). 2-Methylnaphthalene was reported above the NCGWQS (of 14 ug/L) during the September 2003 and December 2004 events, at 41 ug/L and 31.1 ug/L, respectively. 1-Methylnaphthalene was detected during each event that PAHs were quantitated at well 122MW-9 (all events except September 2004), ranging in concentration from 75.6 ug/L (December 2004) to an estimated 3.8 ug/L and 5 ug/L (primary and duplicate samples, June 2005 event). As discussed above, as there is no NCGWQS for this compound, and therefore any detection is considered above the standard.

At shallow well 13MW-1, PAHs were quantitated during the June and September 2004 events. Naphthalene, 2-methylnapthalene, and 1-methylnaphthalene were detected above NCGWQSs, at maximum concentrations of 139 ug/L, 97.6 ug/L, and 77.4 ug/L, respectively.

Shallow well 122MW-7 exhibited 1-methylhaphthalene during the June 2004 event, at an estimated concentration of 2.7 ug/L; as there is no NCGWQS for this compound, any detection is considered above the standard. At shallow wells 122MW-3, 122MW-4, and 122MW-8, no PAHs were detected above NCGWQSs during the June 2004 event.

At deep well 13DW-1, naphthalene, 2-methylnapthalene, and 1-methylnaphthalene frequently were detected above NCGWQSs, at maximum concentrations of 1660 ug/L, 145 ug/L (estimated), and 145 ug/L (estimated), respectively. Acenaphthene was reported at this well at concentrations slightly above the NCGWQS (of 80 ug/L) during the December 2004 (81.9 ug/L) and March 2005 (84.2 ug/l, estimated) events. In general, concentrations of these PAHs at this well did not vary substantially over time.

Figures 4-1A/B through 4-8A/B illustrate VOC and PAH concentrations for shallow and deep wells for the eight quarterly groundwater sampling events conducted during the current monitoring program, with the "A" figures presenting the Fuel Farm / Building AS-143 area and the "B" figures presenting the Building AS-4151 area. The figures illustrate the limited areas where constituent concentrations exceed NCGWQS.

4.1.2 Treatment System Influent/Effluent Analytical Results

Samples of the influent from the recovery wells and the effluent from the treatment system were collected in September 2003, October 2003, December 2003, June 2004, September 2004, December 2004, March 2005, and June 2005. Additionally, an effluent sample was collected in April 2005 for VOCs analysis, as the March 2005 effluent data appeared anomalous (discussed below).

Samples were analyzed by Accutest Analytical Laboratories for the following parameters:

- VOCs, EPA Method 602 (system influent and treated effluent)
- PAHs, EPA Method 610 (system effluent only)
- Metals, EPA Method 6010 (system effluent only)
- Total Hardness, EPA Method 6010 (system effluent only)
- Total Dissolved Solids, EPA Method 160.1 (system effluent only)
- Total Suspended Solids, EPA Method 160.2 (system effluent only)

Table 4-2 summarizes the influent/effluent results. The table identifies the NPDES permit effluent concentration permit limits, and presents NCGWQSs for comparison to the recovery well influent data. Appendix B presents the laboratory analytical reports.

From Table 4-2, benzene, ethylbenzene, and total xylenes were detected at concentrations above NCGWQSs for one or more recovery wells during one or more sampling events. This is expected as the recovery wells are intended to capture groundwater affected by petroleum constituents (with the groundwater subsequently treated to remove the petroleum constituents prior to discharge).

The treated effluent consistently exhibits concentrations below discharge limits identified in the NPDES permit, and generally exhibits non-detectable concentrations for VOCs, PAHS, metals, and total suspended solids (TSS). However, the effluent sample collected in March 2005 exhibited detectable concentrations of several VOCs and TSS (all below permitted limits), potentially indicating the carbon was becoming less effective at adsorbing organic compounds (i.e., "spent"). However, as the carbon canisters had been backflushed approximately one week prior to collection of the effluent sample (as part normal system maintenance), it was considered possible that some carbon particles had been entrained in the effluent at the time of sampling, so that the March 2005 VOC results reflected the VOCs adsorbed onto the entrained carbon, and the TSS data reflected the entrained carbon particulates. Consequently, effluent samples were collected for VOCs analysis in April 2005. Results of the April VOCs analyses (one for a sample collected downstream of the air stripper but upstream of the carbon canisters, and a second for a sample collected downstream of the carbon canisters at the discharge), indicated VOC concentrations comparable to that normally observed (i.e., little or no detectable VOCs). The April 2005 data indicate that the March 2005 results reflected the presence of carbon entrained in the effluent due to disturbance associated with the March 2005 backflushing maintenance procedure.

4.1.3 Quality Assurance/Quality Control and Data Verification

Quality control (QC) samples collected during the monitoring program included laboratory-supplied trip blanks and field duplicate samples. Trip blanks were submitted to Accutest Laboratories for analysis for VOCs only. With the exception of two trip blanks associated with the September 2004 event, no VOCs were detected in the trip blank samples. The trip blanks analyzed during September 2004 event exhibited detectable concentrations of benzene, ethylbenzene, toluene, and total xylenes, ranging in concentration from 0.51 ug/L (estimated) for benzene to 8.1 ug/L for toluene. Trip blank data are presented in Appendix B. Field duplicate samples were collected during quarterly sampling events, and results of the duplicate samples are listed in Table 4-1. The primary and QC samples were submitted to Accutest Laboratories for the same analyses. Results for each of the primary/duplicate sample sets were consistent.

Data verification was performed by EEI on the complete set of the primary investigative samples, and included a review of the following:

- Holding times
- Blanks
- Laboratory control spikes
- Surrogate recoveries
- Internal standards
- Calibrations

An assessment of the results indicated the data are usable for project purposes.

4.2 Free Product Gauging Results

During the current monitoring program, gauging was conducted at 22 site wells in September 2003, then monthly from January 2004 through August 2005. During this period, no measurable free product was detected at any well during any gauging event. (During the June 2004 gauging event, sorbent socks were present in wells 122MW-9 and 112RW-1.) Table 4-3 summarizes the product thickness data for the current monitoring program. Field measurements (depth-to-water and depth-to-product) respectively are summarized in Tables A-1 and A-2 of Appendix A.

4.3 Air Stripper Vapor Discharge Monitoring

Beginning in February 2005 and continuing through August 2005, PID readings (as well as flow velocities, SVE vapor velocities, temperatures, pressures/vacuums) were recorded at the site, typically on a weekly basis. No PID readings above background were observed.

SECTION 5
CONCLUSIONS AND RECOMMENDATIONS

Conclusions and recommendations have been developed based on a review of site data. Each is discussed below.

5.1 Conclusions

The following conclusions have been drawn based on site data:

- Previous investigations indicated JP5 and gasoline have been released from former USTs located at site, from fuel distribution lines, and from operation of ASTs at the Fuel Farm.
- No water supply wells are located within 1,500 feet of the site. The nearest mapped body of water is Southwest Creek; the creek and associated marsh are located approximately 2,000 southwest of the site.
- In the vicinity of the Fuel Farm and Building AS-143, shallow surficial aquifer groundwater flow is to the south and southeast, and in the vicinity of Building AS-4151, flow is to the east and south. In both areas, operation of groundwater recovery trenches influenced groundwater flow.
- A slight upward vertical gradient is present between the upper and lower portions of the surficial aquifer, indicating a potential upward flow of groundwater.
- No measurable free product was identified at any site well during the monitoring program.
- Various VOCs and PAHs have been detected at concentrations above NCGWQSs but below GCLs. The extent of these constituents is limited.
- Based on correspondence from NCDENR to the Navy, the site may meet criteria for classification as Low Risk if, with the remediation system deactivated and no product recovery actions (such as sorbent socks in wells) conducted, no measurable free product is detected in site wells over a one year period. Consequently, the system was deactivated in July 2005, and no sorbent socks are present in site wells. No measurable free product was observed in the two monthly gauging events conducted after deactivation of the remediation system.

5.2 Recommendations

Correspondence from NCDENR to the Navy of June 2005 indicated the site currently is classified as Industrial/Commercial land use, and Intermediate Risk, the latter classification resulting from the presence of measurable free product detected at some site wells prior to data collected during the current monitoring. The correspondence indicated in part that: 1) if the remediation system were deactivated; and 2) no sorbent socks were installed in site wells; and 3) well gauging conducted over a period of one year indicated that measurable free product was not present at site wells, then the site may meet criteria associated with the Low Risk classification. (If free product were to be detected, then product recovery efforts would be indicated.) Consequently, the remediation system was deactivated on 6 July 2005. Monthly well gauging was continued for the remaining duration of the current monitoring program (on 22 July and 5 August 2005), during which time no measurable free product was detected in site monitoring

wells, and during which time no sorbent socks were present in site wells. Based on the June 2005 NCDENR correspondence and the findings of this monitoring program, the following recommendations are made:

- Continue conducting monthly well gauging at site wells for a one year period, with the period concluding in June 2006.
- The groundwater remediation system should remain deactivated, and sorbent socks should not be installed in site wells during the well gauging monitoring period, unless measurable free product is detected. If free product is detected, then product removal activities should be conducted, which could include reactivation of the remediation system, installation of sorbent socks, and/or conducting AFVR events.
- At the conclusion of the gauging program, report the findings of the program to NCDENR, and request site closure if warranted by the data. If, during the gauging program, measurable free product is detected, the detection should be reported to NCDENR soon thereafter, and a recommended remedial response should be identified, such as those noted above.

SECTION 6
REFERENCES

Baker, 1992. (Baker Environmental, Inc.) 12 August 1992. Final Site Assessment Report, The Campbell Street Fuel Farm and UST System AS-143, New River Marine Corps Air Station, Jacksonville, North Carolina. Prepared for the Department of the Navy.

Baker, 1994a. (Baker Environmental, Inc.) April 1994. Final Site Assessment Report, Additional Assessment Activities at The Campbell Street Fuel Farm and UST System AS-143, Marine Corps Air Station New River, Jacksonville, North Carolina. Prepared for the Department of the Navy.

Baker, 1994b. (Baker Environmental, Inc.) 8 June 1994. Final Site Assessment Investigation, BuildingAS-4151 Steam Generating Plant, Marine Corps Air Station New River, Jacksonville, North Carolina. Prepared for the Department of the Navy.

Baker, 1994c. (Baker Environmental, Inc.) 22 July 1994. Final Corrective Action Plan, Campbell Street Fuel Farm and UST System AS-143, Marine Corps Air Station New River, Jacksonville, North Carolina. Prepared for the Department of the Navy.

Catlin, 2005. (Catlin Engineers and Scientists). 9 May 2005. Remedial Action Optimization and Revised Corrective Action Plan, Campbell Street Fuel Farm, Marine Corps Air Station New River, North Carolina. Prepared for the Department of the Navy.

EEI, 2003. (Engineering and Environment, Inc.). November 2003. Field Sampling Plan for Site and Laboratory Activities at Marine Corps Base Camp Lejeune, North Carolina. Prepared for the Department of the Navy.

EEI, 2005. (Engineering and Environment, Inc.) 22 September 2005. Soil Contamination Report, Campbell Street Fuel Farm Site, Marine Corps Air Station New River, North Carolina. Prepared for the Department of the Navy.

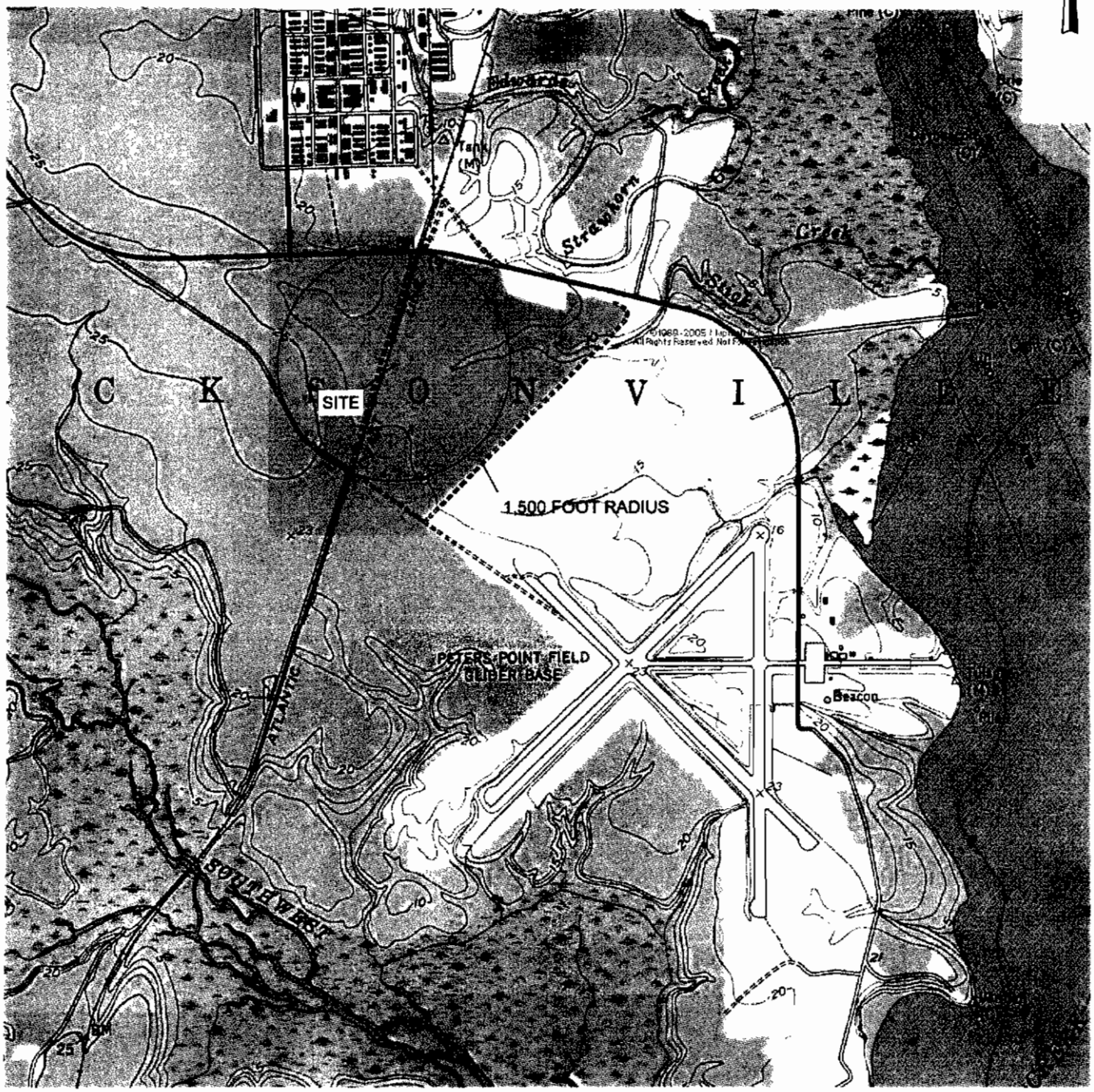
NCDENR, 2002. (North Carolina Department of Environment and Natural Resources). 1 July 2001 (Change 1, 20 August 2002). Guidelines for Assessment and Corrective Action.

NCDENR, 2003. (North Carolina Department of Environment and Natural Resources). 1 September 2003. UST Section Guidelines for Sampling, Version 1.2.

NCDENR, 2005. (North Carolina Department of Environment and Natural Resources). 28 June 2005. Correspondence from Bruce Reed (NCDENR) to Andrew Smith (Environmental Management Division, Marine Corps Base Camp Lejeune).

NCGS, 1985. (North Carolina Geological Survey). 1985. Geologic Map of North Carolina, scale 1:500,000.

FIGURES



SCALE (Feet)

1000 0 1000 2000

(1:24000)

U.S.G.S TOPOGRAPHIC MAP:
JACKSONVILLE SOUTH, N.C.

Engineering & Environment, Inc.

FIGURE	1-1
DATE	9/14/05
REVISION	0
DRAWN BY	AER
FILE	CSFF-AMR-TOPO

SITE LOCATION

CAMPBELL STREET FUEL FARM SITE
ANNUAL MONITORING REPORT
MCAS NEW RIVER, NC

LEGEND

- SHALLOW MONITORING WELL
- DEEP MONITORING WELL
- RECOVERY WELL
- EXISTING FUEL PIPELINE
- ABANDONED FUEL PIPELINE

N

AST 4
AST 3
AST 2
AST 1
SEPTEMBER 2005 EXCAVATION
PUMP STATION
MW-10
MW-11
MW-17
AS 140
TRUCK OFFLOAD
TRUCK OFFLOAD
FORMER UST AS-146 (EXCAVATED)
TRUCK OFFLOAD
MW-07
AS 144
MW-08
DW-02
MW-04
AS 146
SAS 139
DW-05
MW-13
DW-01
MW-3
GROUNDWATER RECOVERY AND TREATMENT SYSTEM (INACTIVE)
ISLAND
MW-12
CSRW-1
MW-16
RWA-1
RWA-2
GROUNDWATER RECOVERY TRENCH (INACTIVE)
DW-04
MW-09
MW-14
OIL/WATER SEPARATOR
CAMPBELL STREET
DITCH
MW-15
MW-22
WHITE STREET
DITCH
MW-05
MW-20
APPROXIMATE LOCATION OF AST
OIL/WATER SEPARATOR
WASH PAD
MW-19
FORMER UST AS-142 (EXCAVATED)
RW-01
DW-06
MW-21
143RW-2
MW-18
RWB-3
AS 143
GROUNDWATER RECOVERY TRENCH (DEACTIVATED JULY 2005)
RWB-1
MW-24
RWB-4
DITCH

SCALE (Feet)
25 0 25 50

(Base map adapted from Shaw, 2004 and Catlin, 2005)

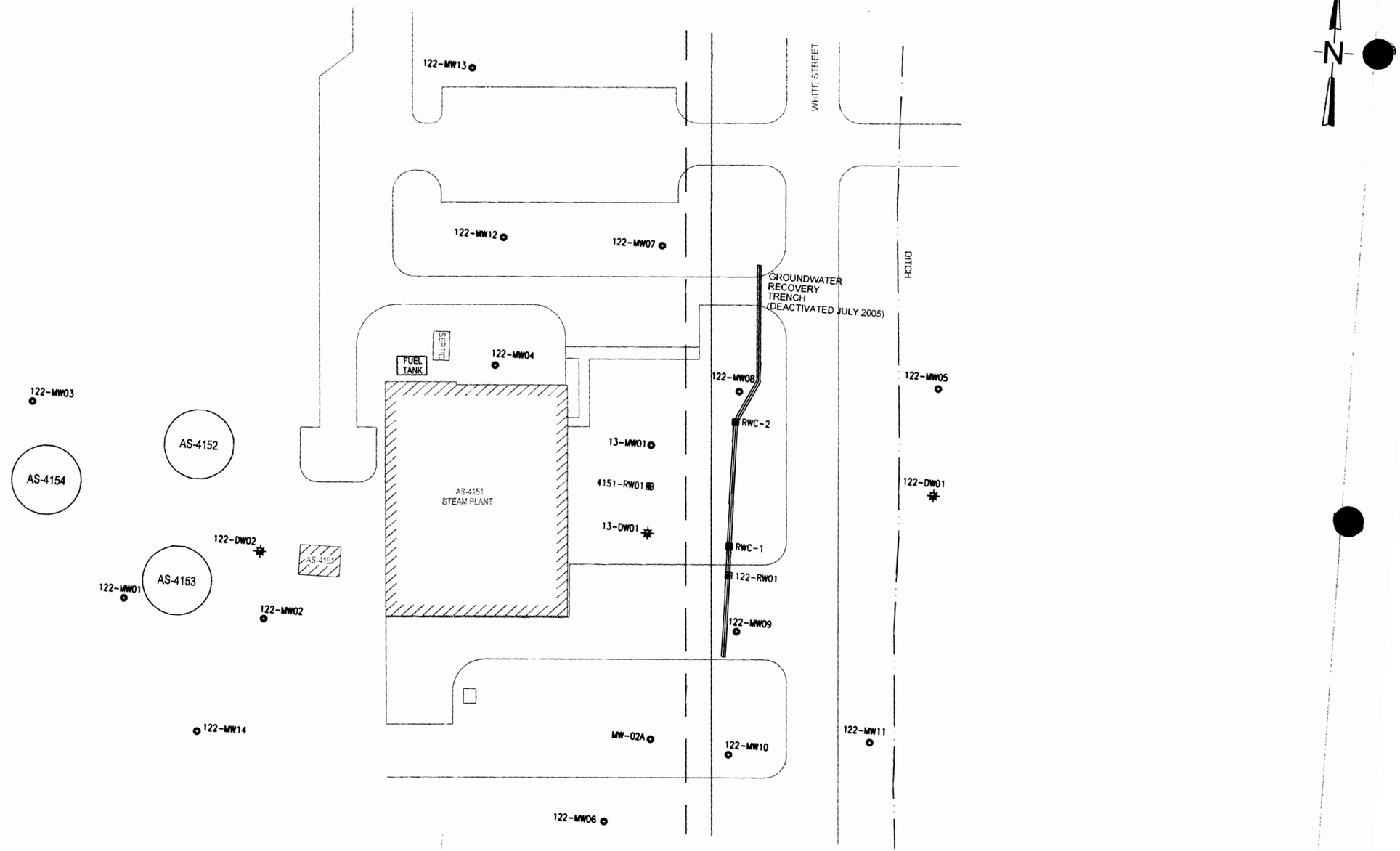
Engineering & Environment, Inc.

FIGURE	1-2A
DATE	11/1/05
REVISION	0
DRAWN BY	WCM
FILE	CSFF_4151_BMAP

SITE LAYOUT
CAMPBELL STREET FUEL FARM/AS-143 AREA
CAMPBELL STREET FUEL FARM SITE
ANNUAL MONITORING REPORT
MCAS NEW RIVER, NC

LEGEND

- SHALLOW MONITORING WELL
- DEEP MONITORING WELL
- RECOVERY WELL
- EXISTING FUEL PIPELINE
- ABANDONED FUEL PIPELINE



SCALE (Feet)

25 0 25 50

(Base map adapted from Shaw, 2004 and Catlin, 2005)

Engineering & Environment, Inc.

FIGURE	1-2B
DATE	11/1/05
REVISION	0
DRAWN BY	WCM
FILE	CSFF_4151_BMAP

SITE
LAYOUT
AS-4151 AREA
CAMPBELL STREET FUEL FARM SITE
ANNUAL MONITORING REPORT
MCAS NEW RIVER, NC

LEGEND

- SHALLOW MONITORING WELL
- DEEP MONITORING WELL
- RECOVERY WELL
- EXISTING FUEL PIPELINE
- ABANDONED FUEL PIPELINE
- 1.51 SURFICIAL AQUIFER GROUNDWATER ELEVATION
- 3.0 SURFICIAL AQUIFER GROUNDWATER ELEVATION CONTOUR (HACHURES POINT IN DIRECTION OF GROUNDWATER FLOW)

(GROUNDWATER ELEVATIONS EXPRESSED IN FEET ABOVE/BELOW MEAN SEA LEVEL)

AST 4
AST 3
AST 2
AST 1
SEPTEMBER 2005 EXCAVATION
PUMP STATION
MW-10
MW-11
MW-17
AS 140
TRUCK OFFLOAD
TRUCK OFFLOAD
TRUCK OFFLOAD
MW-07
AS 144
FORMER UST AS-146 (EXCAVATED)
TRUCK OFFLOAD
DW-02
MW-04
MW-08
DW-05
MW-13
SAS 139
AS 146
DW-01
GROUNDWATER RECOVERY AND TREATMENT SYSTEM (INACTIVE)
16.23
MW-3
ISLAND
16
15
15
15.09
MW-12
CSRW-1
MW-16
14.54
RWA-1
RWA-2
GROUNDWATER RECOVERY TRENCH (INACTIVE)
14
DW-04
MW-09
MW-14
CAMPBELL STREET
DITCH
MW-15
MW-22
WHITE STREET
DITCH
MW-05
MW-20
APPROXIMATE LOCATION OF AST
OIL/WATER SEPARATOR
WASH PAD
MW-19
RW-01
DW-06
MW-21
143RW-2
MW-18
FORMER UST AS-142 (EXCAVATED)
AS 143
RWB-3
GROUNDWATER RECOVERY TRENCH (DEACTIVATED JULY 2005)
RWB-1
13
12.13
MW-24
RWB-4
DITCH

N

SCALE (Feet)
25 0 25 50

(Base map adapted from Shaw, 2004 and Catlin, 2005)

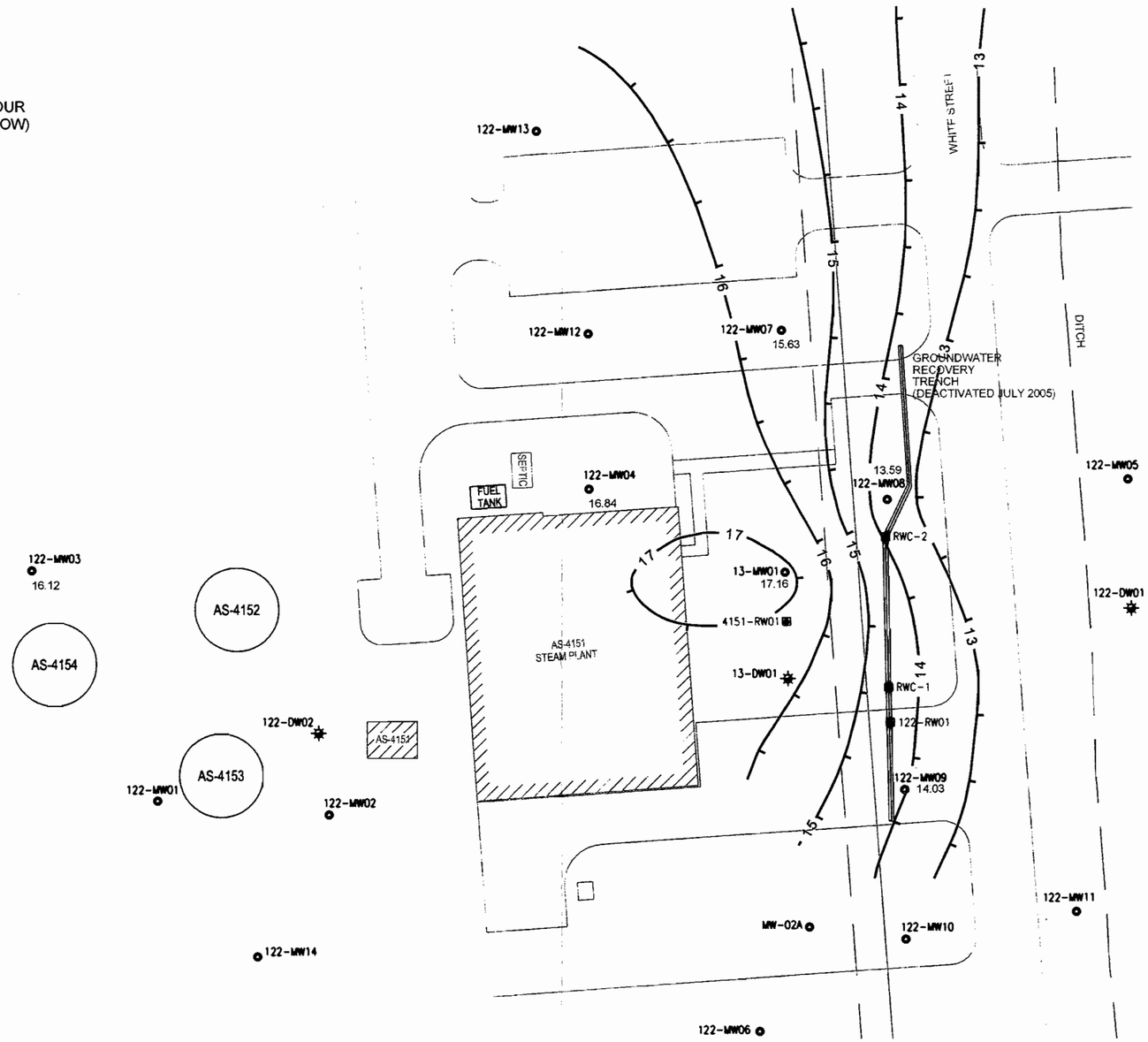
Engineering & Environment, Inc.	FIGURE 3-1A
	DATE 11/1/05
	REVISION 0
	DRAWN BY WCM
	FILE CSFF_4151_BMAP

SHALLOW WELL GROUNDWATER ELEVATIONS FOR 24 SEPTEMBER 2003
CAMPBELL STREET FUEL FARM/AS-143 AREA
CAMPBELL STREET FUEL FARM SITE
ANNUAL MONITORING REPORT
MCAS NEW RIVER, NC

LEGEND

- SHALLOW MONITORING WELL
- DEEP MONITORING WELL
- RECOVERY WELL
- EXISTING FUEL PIPELINE
- ABANDONED FUEL PIPELINE
- 1.51 SURFICIAL AQUIFER GROUNDWATER ELEVATION
- 3.0 SURFICIAL AQUIFER GROUNDWATER ELEVATION CONTOUR (HACHURES POINT IN DIRECTION OF GROUNDWATER FLOW)

(GROUNDWATER ELEVATIONS EXPRESSED IN FEET ABOVE/BELOW MEAN SEA LEVEL)



SCALE (Feet)

25 0 25 50

(Base map adapted from Shaw, 2004 and Catlin, 2005)

Engineering & Environment, Inc.	FIGURE	3-1B
	DATE	11/1/05
	REVISION	0
	DRAWN BY	WCM
	FILE	CSFF_4151_BMAP

SHALLOW WELL GROUNDWATER ELEVATIONS FOR 24 SEPTEMBER 2003
AS-4151 AREA
CAMPBELL STREET FUEL FARM SITE
ANNUAL MONITORING REPORT
MCAS NEW RIVER, NC

LEGEND

- SHALLOW MONITORING WELL
- DEEP MONITORING WELL
- RECOVERY WELL
- EXISTING FUEL PIPELINE
- ABANDONED FUEL PIPELINE
- 1.51 SURFICIAL AQUIFER GROUNDWATER ELEVATION
- 3.0 SURFICIAL AQUIFER GROUNDWATER ELEVATION CONTOUR (HACHURES POINT IN DIRECTION OF GROUNDWATER FLOW)

(GROUNDWATER ELEVATIONS EXPRESSED IN FEET ABOVE/BELOW MEAN SEA LEVEL)

AST 4
AST 3
AST 2
AST 1
SEPTEMBER 2005 EXCAVATION
PUMP STATION
MW-10 15.50
MW-11 16.09
MW-17
AS 140
TRUCK OFFLOAD
TRUCK OFFLOAD
MW-07
AS 144
FORMER UST AS-146 (EXCAVATED)
TRUCK OFFLOAD
DW-05
MW-13
DW-02
MW-04
MW-08
AS 146
AS 139
DW-01
GROUNDWATER RECOVERY AND TREATMENT SYSTEM (INACTIVE)
16.11 MW-3
ISLAND
MW-12 14.86
CSRW-1
MW-16 15.05
RWA-1
RWA-2
GROUNDWATER RECOVERY TRENCH (INACTIVE)
DW-04
MW-09 14.66
MW-14 15.00
CAMPBELL STREET
DITCH
MW-15 14.87
MW-22 15.53
WHITE STREET
DITCH
MW-05
MW-20
APPROXIMATE LOCATION OF AST
WASH PAD
OIL/WATER SEPARATOR
MW-19
FORMER UST AS-143 (EXCAVATED)
RW-01
DW-06
MW-21 15.23
MW-18
RW-2
RW-3
AS 143
GROUNDWATER RECOVERY TRENCH (DEACTIVATED JULY 2005)
RW-1
13.90 MW-24
RW-4
DITCH
N
SCALE (Feet)
25 0 25 50

(Base map adapted from Shaw, 2004 and Catlin, 2005)

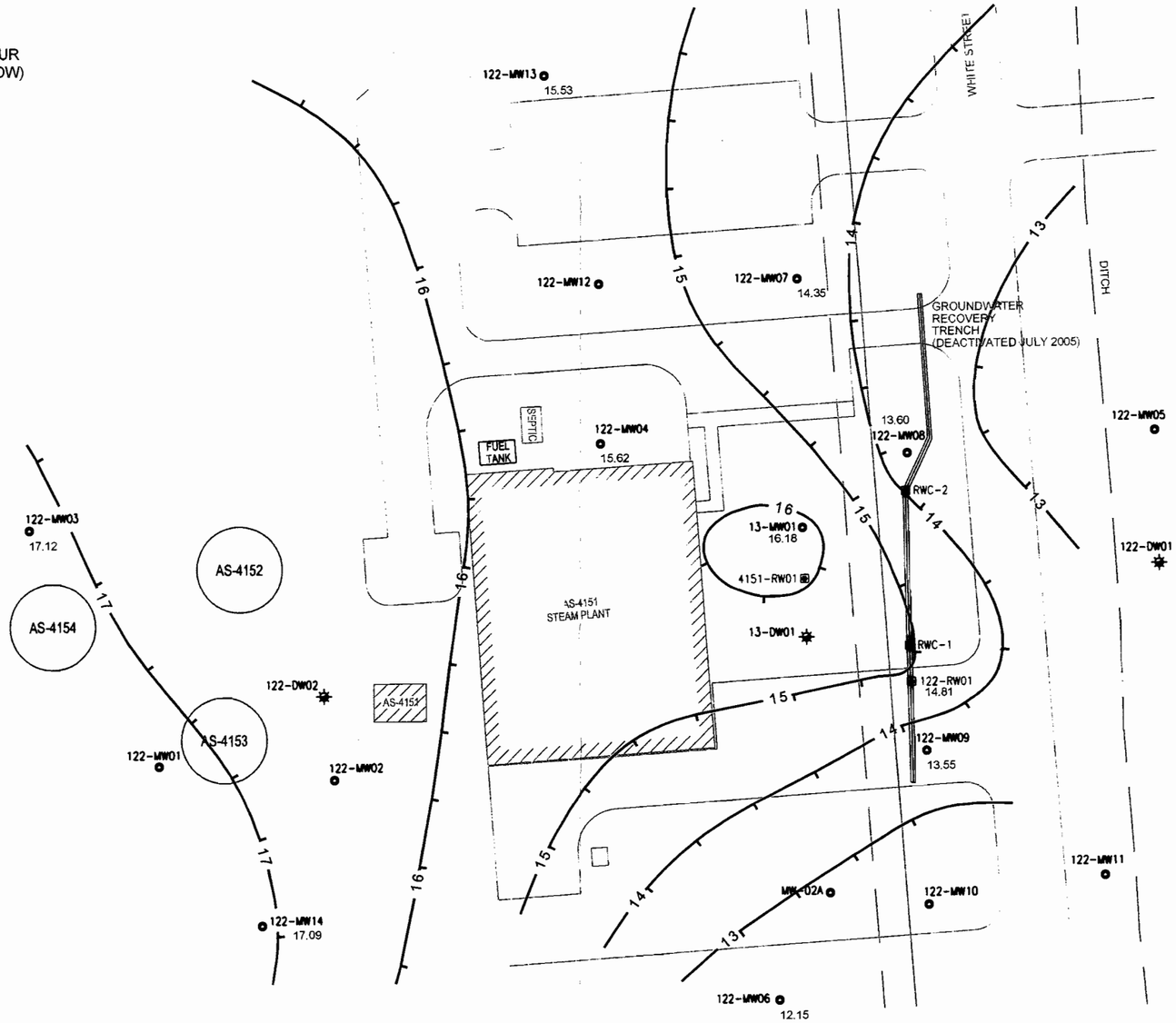
Engineering & Environment, Inc.	
FIGURE	3-2A
DATE	11/1/05
REVISION	0
DRAWN BY	WCM
FILE	CSFF_4151_BMAP

SHALLOW WELL GROUNDWATER ELEVATIONS FOR 28 DECEMBER 2003
CAMPBELL STREET FUEL FARM/AS-143 AREA
CAMPBELL STREET FUEL FARM SITE
ANNUAL MONITORING REPORT
MCAS NEW RIVER, NC

LEGEND

- SHALLOW MONITORING WELL
- DEEP MONITORING WELL
- RECOVERY WELL
- EXISTING FUEL PIPELINE
- ABANDONED FUEL PIPELINE
- 1.51 SURFICIAL AQUIFER GROUNDWATER ELEVATION
- 3.0 SURFICIAL AQUIFER GROUNDWATER ELEVATION CONTOUR (HACHURES POINT IN DIRECTION OF GROUNDWATER FLOW)

(GROUNDWATER ELEVATIONS EXPRESSED IN FEET ABOVE/BELOW MEAN SEA LEVEL)



SCALE (Feet)

25 0 25 50

(Base map adapted from Shaw, 2004 and Catlin, 2005)

Engineering & Environment, Inc.

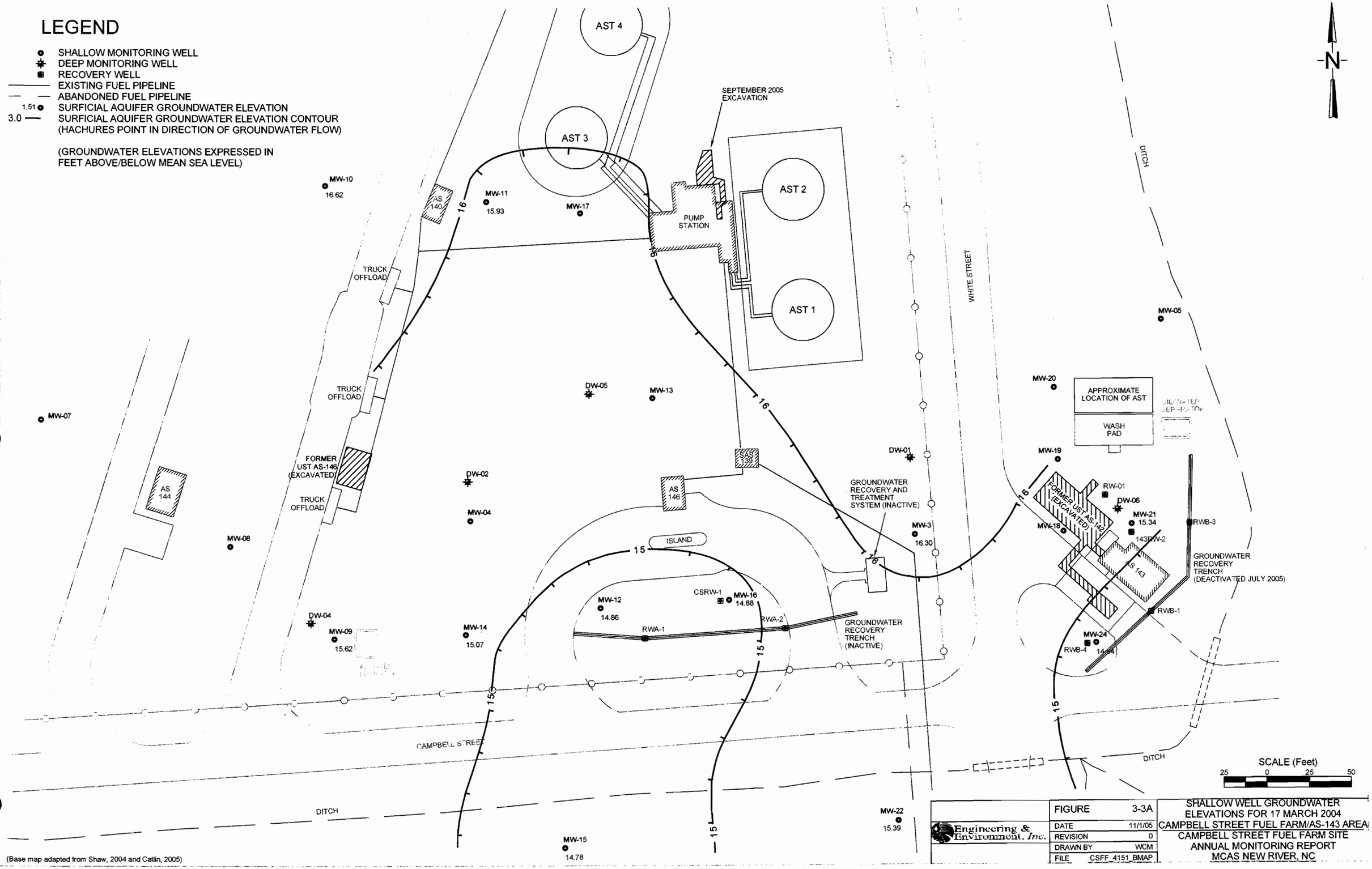
FIGURE	3-2B
DATE	11/1/05
REVISION	0
DRAWN BY	WCM
FILE	CSFF_4151_BMAP

SHALLOW WELL GROUNDWATER ELEVATIONS FOR 28 DECEMBER 2003
AS-4151 AREA
CAMPBELL STREET FUEL FARM SITE
ANNUAL MONITORING REPORT
MCAS NEW RIVER, NC

LEGEND

- SHALLOW MONITORING WELL
- DEEP MONITORING WELL
- RECOVERY WELL
- EXISTING FUEL PIPELINE
- ABANDONED FUEL PIPELINE
- 1.51 SURFICIAL AQUIFER GROUNDWATER ELEVATION
- 3.0 SURFICIAL AQUIFER GROUNDWATER ELEVATION CONTOUR (HACHURES POINT IN DIRECTION OF GROUNDWATER FLOW)

(GROUNDWATER ELEVATIONS EXPRESSED IN FEET ABOVE/BELOW MEAN SEA LEVEL)



(Base map adapted from Shaw, 2004 and Catlin, 2005)

FIGURE	3-3A
DATE	11/1/05
REVISION	0
DRAWN BY	WCM
FILE	CSFF_4151_BMAP

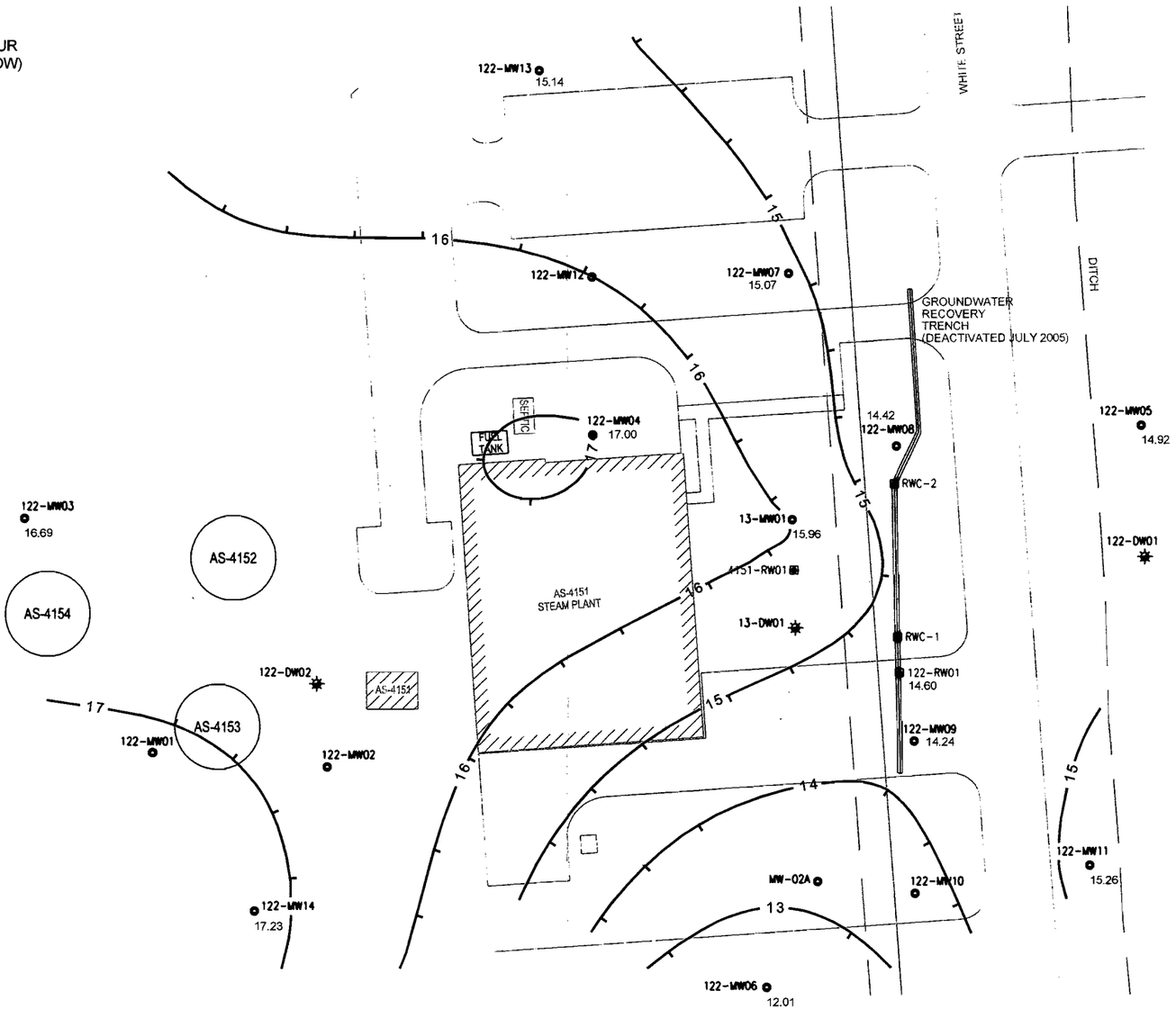
Engineering & Environment, Inc.

SHALLOW WELL GROUNDWATER ELEVATIONS FOR 17 MARCH 2004
CAMPBELL STREET FUEL FARM/AS-143 AREA
CAMPBELL STREET FUEL FARM SITE
ANNUAL MONITORING REPORT
MCAS NEW RIVER, NC

LEGEND

- SHALLOW MONITORING WELL
- DEEP MONITORING WELL
- RECOVERY WELL
- EXISTING FUEL PIPELINE
- ABANDONED FUEL PIPELINE
- 1.51 SURFICIAL AQUIFER GROUNDWATER ELEVATION
- 3.0 SURFICIAL AQUIFER GROUNDWATER ELEVATION CONTOUR (HACHURES POINT IN DIRECTION OF GROUNDWATER FLOW)

(GROUNDWATER ELEVATIONS EXPRESSED IN FEET ABOVE/BELOW MEAN SEA LEVEL)



SCALE (Feet)
25 0 25 50

(Base map adapted from Shaw, 2004 and Catlin, 2005)

Engineering & Environment, Inc.	FIGURE	3-3B
	DATE	11/1/05
	REVISION	0
	DRAWN BY	WCM
	FILE	CSFF_4151_BMAP

SHALLOW WELL GROUNDWATER ELEVATIONS FOR 17 MARCH 2004
AS-4151 AREA
CAMPBELL STREET FUEL FARM SITE
ANNUAL MONITORING REPORT
MCAS NEW RIVER, NC

LEGEND

- SHALLOW MONITORING WELL
- DEEP MONITORING WELL
- RECOVERY WELL
- EXISTING FUEL PIPELINE
- ABANDONED FUEL PIPELINE
- 1.51 SURFICIAL AQUIFER GROUNDWATER ELEVATION
- 3.0 SURFICIAL AQUIFER GROUNDWATER ELEVATION CONTOUR (HACHURES POINT IN DIRECTION OF GROUNDWATER FLOW)

(GROUNDWATER ELEVATIONS EXPRESSED IN FEET ABOVE/BELOW MEAN SEA LEVEL)

N

AST 4
AST 3
AST 2
AST 1
SEPTEMBER 2005 EXCAVATION
PUMP STATION
MW-10 14.59
MW-11 14.35
MW-17
AS 140
TRUCK OFFLOAD
TRUCK OFFLOAD
MW-07
AS 144
FORMER UST AS-146 (EXCAVATED)
TRUCK OFFLOAD
MW-08
DW-02
MW-04
DW-05
MW-13
SAS 139
AS 146
DW-01
GROUNDWATER RECOVERY AND TREATMENT SYSTEM (INACTIVE)
MW-3 14.59
ISLAND
MW-12 14.51
CSRW-1
MW-16 14.78
RWA-1
RWA-2
GROUNDWATER RECOVERY TRENCH (INACTIVE)
DW-04
MW-09 14.34
MW-14 14.16
14
CAMPBELL STREET
14
DITCH
MW-15 13.56
MW-22 14.77
WHITE STREET
DITCH
MW-05
MW-20
APPROXIMATE LOCATION OF AST
WASH PAD
MW-19
FORMER UST AS-142 (EXCAVATED)
RW-01
DW-06
MW-21 14.08
MW-18
143RW-2
RWB-3
AS 143
GROUNDWATER RECOVERY TRENCH (DEACTIVATED JULY 2005)
RWB-1
13.16
MW-24
RWB-4
14
13
14
DITCH

SCALE (Feet)
25 0 25 50

(Base map adapted from Shaw, 2004 and Catlin, 2005)

Engineering & Environment, Inc.

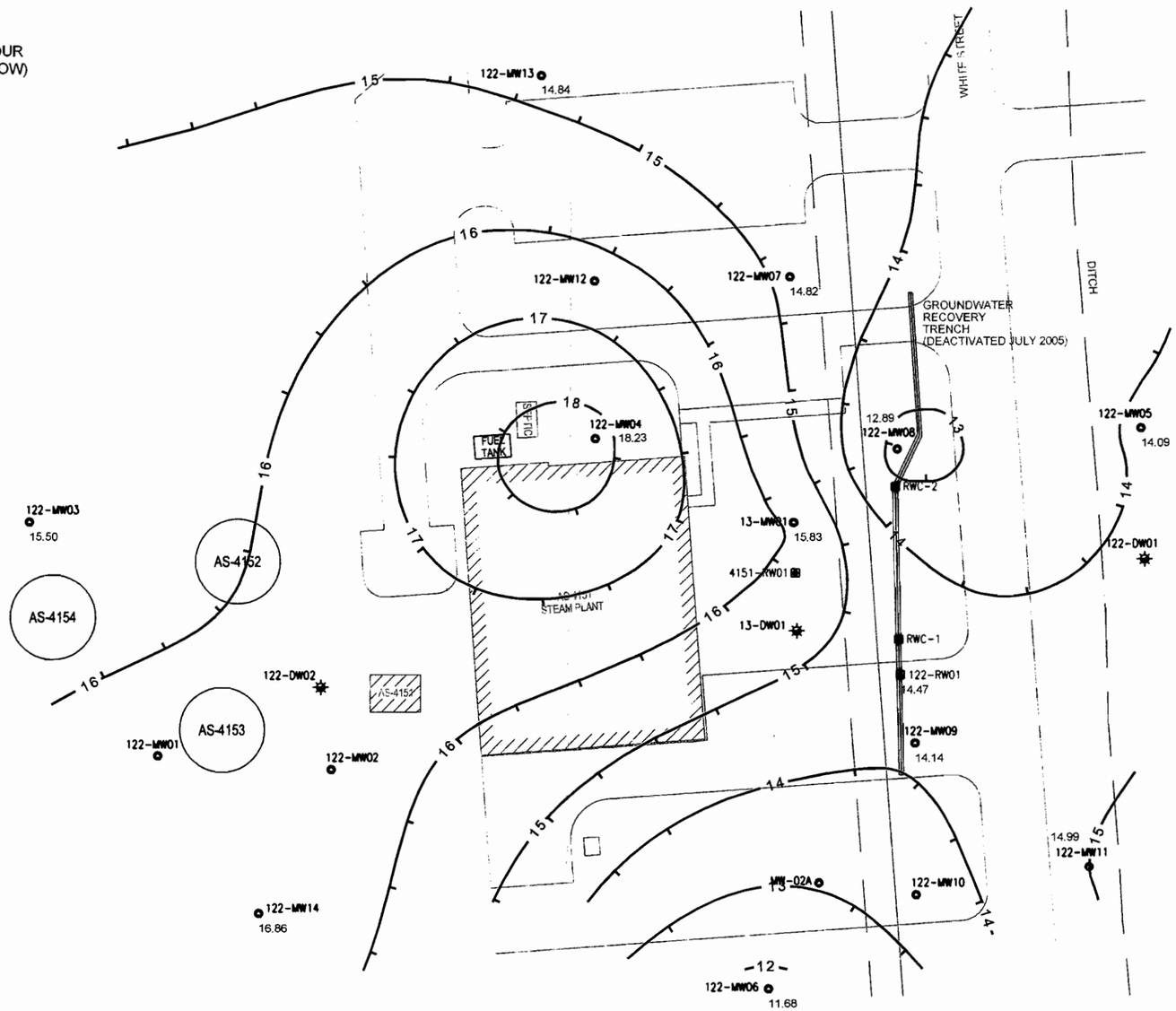
FIGURE	3-4A
DATE	11/1/05
REVISION	0
DRAWN BY	WCM
FILE	CSFF_4151_BMAP

SHALLOW WELL GROUNDWATER ELEVATIONS FOR 9 JUNE 2004
CAMPBELL STREET FUEL FARM/AS-143 AREA
CAMPBELL STREET FUEL FARM SITE
ANNUAL MONITORING REPORT
MCAS NEW RIVER, NC

LEGEND

- SHALLOW MONITORING WELL
- DEEP MONITORING WELL
- RECOVERY WELL
- EXISTING FUEL PIPELINE
- ABANDONED FUEL PIPELINE
- 1.51 SURFICIAL AQUIFER GROUNDWATER ELEVATION
- 3.0 SURFICIAL AQUIFER GROUNDWATER ELEVATION CONTOUR (HACHURES POINT IN DIRECTION OF GROUNDWATER FLOW)

(GROUNDWATER ELEVATIONS EXPRESSED IN FEET ABOVE/BELOW MEAN SEA LEVEL)



SCALE (Feet)
25 0 25 50

(Base map adapted from Shaw, 2004 and Catlin, 2005)

Engineering & Environment, Inc.	FIGURE	3-4B
	DATE	11/1/05
	REVISION	0
	DRAWN BY	WCM
	FILE	CSFF_4151_BMAP

SHALLOW WELL GROUNDWATER ELEVATIONS FOR 9 JUNE 2004
AS-4151 AREA
CAMPBELL STREET FUEL FARM SITE
ANNUAL MONITORING REPORT
MCAS NEW RIVER, NC

LEGEND

- SHALLOW MONITORING WELL
- DEEP MONITORING WELL
- RECOVERY WELL
- EXISTING FUEL PIPELINE
- ABANDONED FUEL PIPELINE
- 1.51 SURFICIAL AQUIFER GROUNDWATER ELEVATION
- 3.0 SURFICIAL AQUIFER GROUNDWATER ELEVATION CONTOUR (HACHURES POINT IN DIRECTION OF GROUNDWATER FLOW)

(GROUNDWATER ELEVATIONS EXPRESSED IN FEET ABOVE/BELOW MEAN SEA LEVEL)

AST 4
AST 3
AST 2
AST 1
SEPTEMBER 2005 EXCAVATION
PUMP STATION
MW-10 17.35
MW-11 16.34
MW-17
AS 4L
TRUCK OFFLOAD
TRUCK OFFLOAD
TRUCK OFFLOAD
MW-07
AS 144
FORMER UST AS-146 (EXCAVATED)
TRUCK OFFLOAD
MW-08
DW-02
MW-04
DW-05
MW-13
SAS 139
AS 146
ISLAND
DW-01
GROUNDWATER RECOVERY AND TREATMENT SYSTEM (INACTIVE)
MW-3 16.97
MW-12 15.63
CSRW-1
MW-16 15.25
RWA-1
RWA-2
GROUNDWATER RECOVERY TRENCH (INACTIVE)
DW-04
MW-09 16.12
MW-14 15.64
MW-15 15.23
MW-22 15.99
CAMPBELL STREET
DITCH
DITCH
WHITE STREET
MW-05
MW-20
APPROXIMATE LOCATION OF AST
WASH PAD
OIL/WATER SEPARATOR
MW-19
RW-01
DW-06
MW-21 15.56
143RW-2
RWB-3
MW-18
FORMER UST AS-143 (EXCAVATED)
AS 143
GROUNDWATER RECOVERY TRENCH (DEACTIVATED JULY 2005)
RWB-1
14.70
MW-24
RWB-4
16
17
15

SCALE (Feet)
25 0 25 50

(Base map adapted from Shaw, 2004 and Catlin, 2005)

Engineering & Environment, Inc.

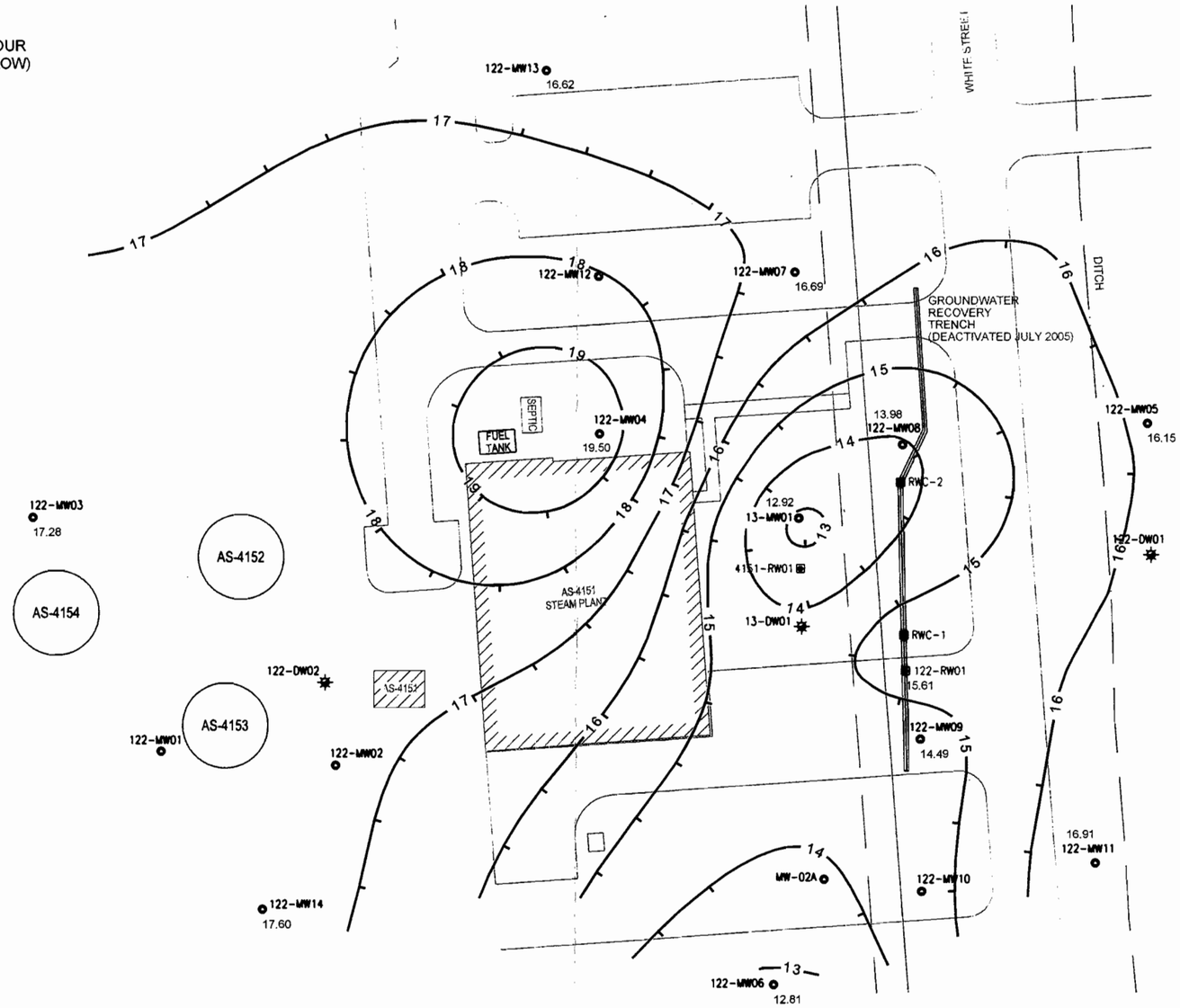
FIGURE	3-5A
DATE	11/1/05
REVISION	0
DRAWN BY	WCM
FILE	CSFF_4151_BMAP

SHALLOW WELL GROUNDWATER ELEVATIONS FOR 2 SEPTEMBER 2004
CAMPBELL STREET FUEL FARM/AS-143 AREA
CAMPBELL STREET FUEL FARM SITE
ANNUAL MONITORING REPORT
MCAS NEW RIVER, NC

LEGEND

- SHALLOW MONITORING WELL
- DEEP MONITORING WELL
- RECOVERY WELL
- EXISTING FUEL PIPELINE
- ABANDONED FUEL PIPELINE
- 1.51 SURFICIAL AQUIFER GROUNDWATER ELEVATION
- 3.0 SURFICIAL AQUIFER GROUNDWATER ELEVATION CONTOUR (HACHURES POINT IN DIRECTION OF GROUNDWATER FLOW)

(GROUNDWATER ELEVATIONS EXPRESSED IN FEET ABOVE/BELOW MEAN SEA LEVEL)



SCALE (Feet)
25 0 25 50

(Base map adapted from Shaw, 2004 and Catlin, 2005)

Engineering & Environment, Inc.	FIGURE 3-5B	SHALLOW WELL GROUNDWATER ELEVATIONS FOR 2 SEPTEMBER 2004 AS-4151 AREA
	DATE 11/1/05	CAMPBELL STREET FUEL FARM SITE
	REVISION 0	ANNUAL MONITORING REPORT
	DRAWN BY WCM	MCAS NEW RIVER, NC
	FILE CSFF_4151_BMAP	

LEGEND

- SHALLOW MONITORING WELL
- DEEP MONITORING WELL
- RECOVERY WELL
- EXISTING FUEL PIPELINE
- ABANDONED FUEL PIPELINE
- 1.51 SURFICIAL AQUIFER GROUNDWATER ELEVATION
- 3.0 SURFICIAL AQUIFER GROUNDWATER ELEVATION CONTOUR (HACHURES POINT IN DIRECTION OF GROUNDWATER FLOW)

(GROUNDWATER ELEVATIONS EXPRESSED IN FEET ABOVE/BELOW MEAN SEA LEVEL)

AST 4
AST 3
AST 2
AST 1
SEPTEMBER 2005 EXCAVATION
PUMP STATION
MW-10
16.19
MW-11
14.63
MW-17
AS 140
TRUCK OFFLOAD
TRUCK OFFLOAD
TRUCK OFFLOAD
MW-07
AS 144
FORMER UST AS-146 (EXCAVATED)
DW-02
MW-04
MW-08
DW-05
MW-13
AS 139
AS 146
ISLAND
GROUNDWATER RECOVERY AND TREATMENT SYSTEM (INACTIVE)
DW-01
MW-3
15.97
MW-12
14.61
CSRW-1
MW-16
14.70
RWA-1
RWA-2
GROUNDWATER RECOVERY TRENCH (INACTIVE)
DW-04
MW-09
14.41
MW-14
14.90
OIL/WATER SEPARATOR
CAMPBELL STREET
DITCH
MW-15
14.13
MW-22
14.33
WHITE STREET
DITCH
MW-05
MW-20
APPROXIMATE LOCATION OF AST
OIL/WATER SEPARATOR
WASH PAD
MW-19
FORMER UST AS-143 (EXCAVATED)
RW-01
DW-06
MW-21
12.69
143RW-2
MW-18
RWB-3
AS 143
GROUNDWATER RECOVERY TRENCH (DEACTIVATED JULY 2005)
RWB-1
12.26
MW-24
RWB-4
DITCH
16
15
14
13
12
N
SCALE (Feet)
25 0 25 50

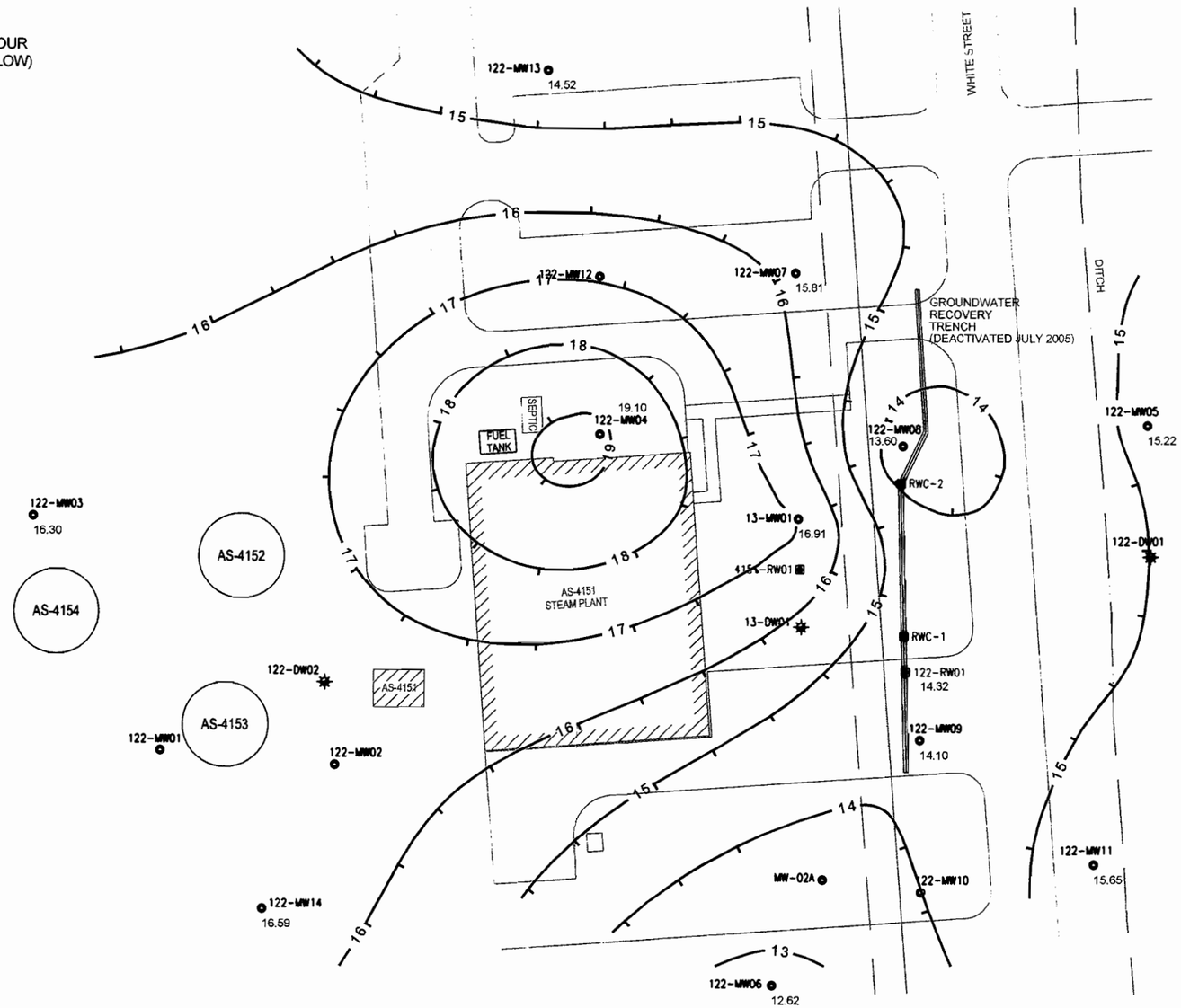
(Base map adapted from Shaw, 2004 and Catlin, 2005)

Engineering & Environment, Inc.	FIGURE 3-6A	SHALLOW WELL GROUNDWATER ELEVATIONS FOR 27 DECEMBER 2004 CAMPBELL STREET FUEL FARM/AS-143 AREA CAMPBELL STREET FUEL FARM SITE ANNUAL MONITORING REPORT MCAS NEW RIVER, NC
	DATE 11/1/05	
	REVISION 0	
	DRAWN BY WCM	
	FILE CSFF_4151_BMAP	

LEGEND

- SHALLOW MONITORING WELL
- DEEP MONITORING WELL
- RECOVERY WELL
- EXISTING FUEL PIPELINE
- ABANDONED FUEL PIPELINE
- 1.51 SURFICIAL AQUIFER GROUNDWATER ELEVATION
- 3.0 SURFICIAL AQUIFER GROUNDWATER ELEVATION CONTOUR (HACHURES POINT IN DIRECTION OF GROUNDWATER FLOW)

(GROUNDWATER ELEVATIONS EXPRESSED IN FEET ABOVE/BELOW MEAN SEA LEVEL)



SCALE (Feet)
25 0 25 50

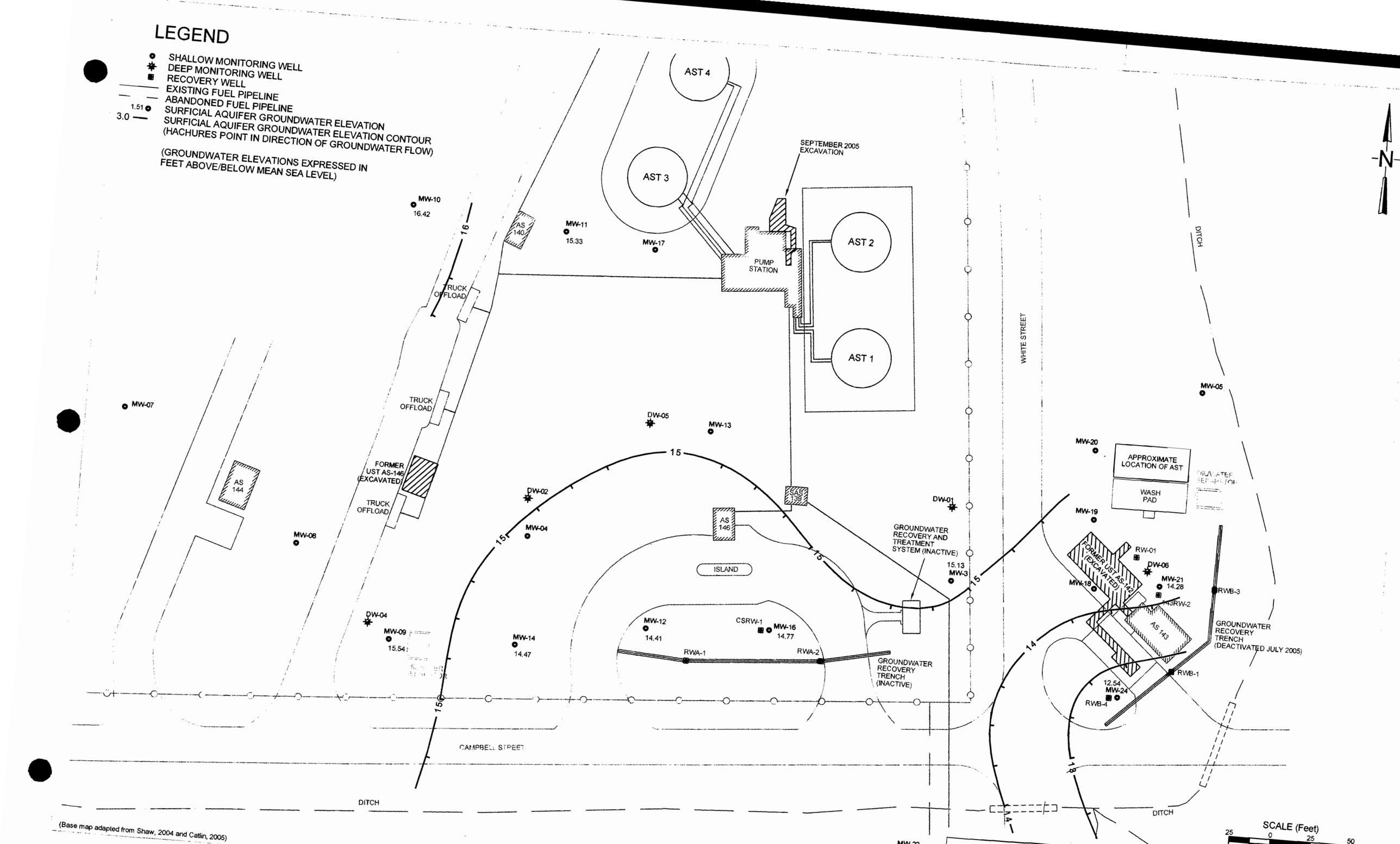
(Base map adapted from Shaw, 2004 and Catlin, 2005)

Engineering & Environment, Inc.	FIGURE 3-6B	SHALLOW WELL GROUNDWATER ELEVATIONS FOR 27 DECEMBER 2004 AS-4151 AREA
	DATE 11/1/05	CAMPBELL STREET FUEL FARM SITE
	REVISION 0	ANNUAL MONITORING REPORT
	DRAWN BY WCM	MCAS NEW RIVER, NC
	FILE CSFF_4151_BMAP	

LEGEND

- SHALLOW MONITORING WELL
- DEEP MONITORING WELL
- RECOVERY WELL
- EXISTING FUEL PIPELINE
- ABANDONED FUEL PIPELINE
- 1.51 — SURFICIAL AQUIFER GROUNDWATER ELEVATION
- 3.0 — SURFICIAL AQUIFER GROUNDWATER ELEVATION CONTOUR (HACHURES POINT IN DIRECTION OF GROUNDWATER FLOW)

(GROUNDWATER ELEVATIONS EXPRESSED IN FEET ABOVE/BELOW MEAN SEA LEVEL)



(Base map adapted from Shaw, 2004 and Catlin, 2005)

Engineering & Environment, Inc.	
FIGURE	3-7A
DATE	11/1/05
REVISION	0
DRAWN BY	WCM
FILE	CSFF_4151_BMAP

SHALLOW WELL GROUNDWATER ELEVATIONS FOR 16 MARCH 2005
CAMPBELL STREET FUEL FARM/AS-143 AREA
CAMPBELL STREET FUEL FARM SITE
ANNUAL MONITORING REPORT
MCAS NEW

LEGEND

- SHALLOW MONITORING WELL
- DEEP MONITORING WELL
- RECOVERY WELL
- EXISTING FUEL PIPELINE
- ABANDONED FUEL PIPELINE
- 1.51 SURFICIAL AQUIFER GROUNDWATER ELEVATION
- 3.0 SURFICIAL AQUIFER GROUNDWATER ELEVATION CONTOUR (HACHURES POINT IN DIRECTION OF GROUNDWATER FLOW)

(GROUNDWATER ELEVATIONS EXPRESSED IN FEET ABOVE/BELOW MEAN SEA LEVEL)



SCALE (Feet)
25 0 25 50

(Base map adapted from Shaw, 2004 and Catlin, 2005)

Engineering & Environment, Inc.	FIGURE 3-7B	SHALLOW WELL GROUNDWATER ELEVATIONS FOR 16 MARCH 2005 AS-4151 AREA
	DATE 11/1/05	CAMPBELL STREET FUEL FARM SITE
	REVISION 0	ANNUAL MONITORING REPORT
	DRAWN BY WCM	MCAS NEW RIVER, NC
	FILE CSFF_4151_BMAP	

LEGEND

- SHALLOW MONITORING WELL
- DEEP MONITORING WELL
- RECOVERY WELL
- EXISTING FUEL PIPELINE
- ABANDONED FUEL PIPELINE
- 1.51 SURFICIAL AQUIFER GROUNDWATER ELEVATION
- 3.0 SURFICIAL AQUIFER GROUNDWATER ELEVATION CONTOUR (HACHURES POINT IN DIRECTION OF GROUNDWATER FLOW)

(GROUNDWATER ELEVATIONS EXPRESSED IN FEET ABOVE/BELOW MEAN SEA LEVEL)

N

AST 4
AST 3
AST 2
AST 1
SEPTEMBER 2005 EXCAVATION
PUMP STATION
MW-10
16.16
MW-11
14.50
MW-17
AS 140
TRUCK OFFLOAD
TRUCK OFFLOAD
TRUCK OFFLOAD
DW-05
MW-13
MW-07
AS 144
FORMER UST AS-146 (EXCAVATED)
TRUCK OFFLOAD
DW-02
MW-04
MW-08
AS 145
AS 146
ISLAND
GROUNDWATER RECOVERY AND TREATMENT SYSTEM (INACTIVE)
DW-01
MW-3
14.68
MW-12
14.40
CSRW-1
MW-16
14.65
RWA-1
RWA-2
GROUNDWATER RECOVERY TRENCH (INACTIVE)
DW-04
MW-09
13.22
MW-14
14.22
MW-22
14.47
MW-15
14.21
WHITE STREET
DITCH
MW-05
MW-20
APPROXIMATE LOCATION OF AST
WASH PAD
MW-19
FORMER UST AS-143 (EXCAVATED)
RW-01
DW-06
MW-21
13.79
MW-18
143RW-2
RWB-3
GROUNDWATER RECOVERY TRENCH (DEACTIVATED JULY 2005)
AS 143
RWB-1
11.87
MW-24
RWB-4
CAMPBELL STREET
DITCH
16
14
13
12

SCALE (Feet)
25 0 25 50

(Base map adapted from Shaw, 2004 and Catlin, 2005)

Engineering & Environment, Inc.

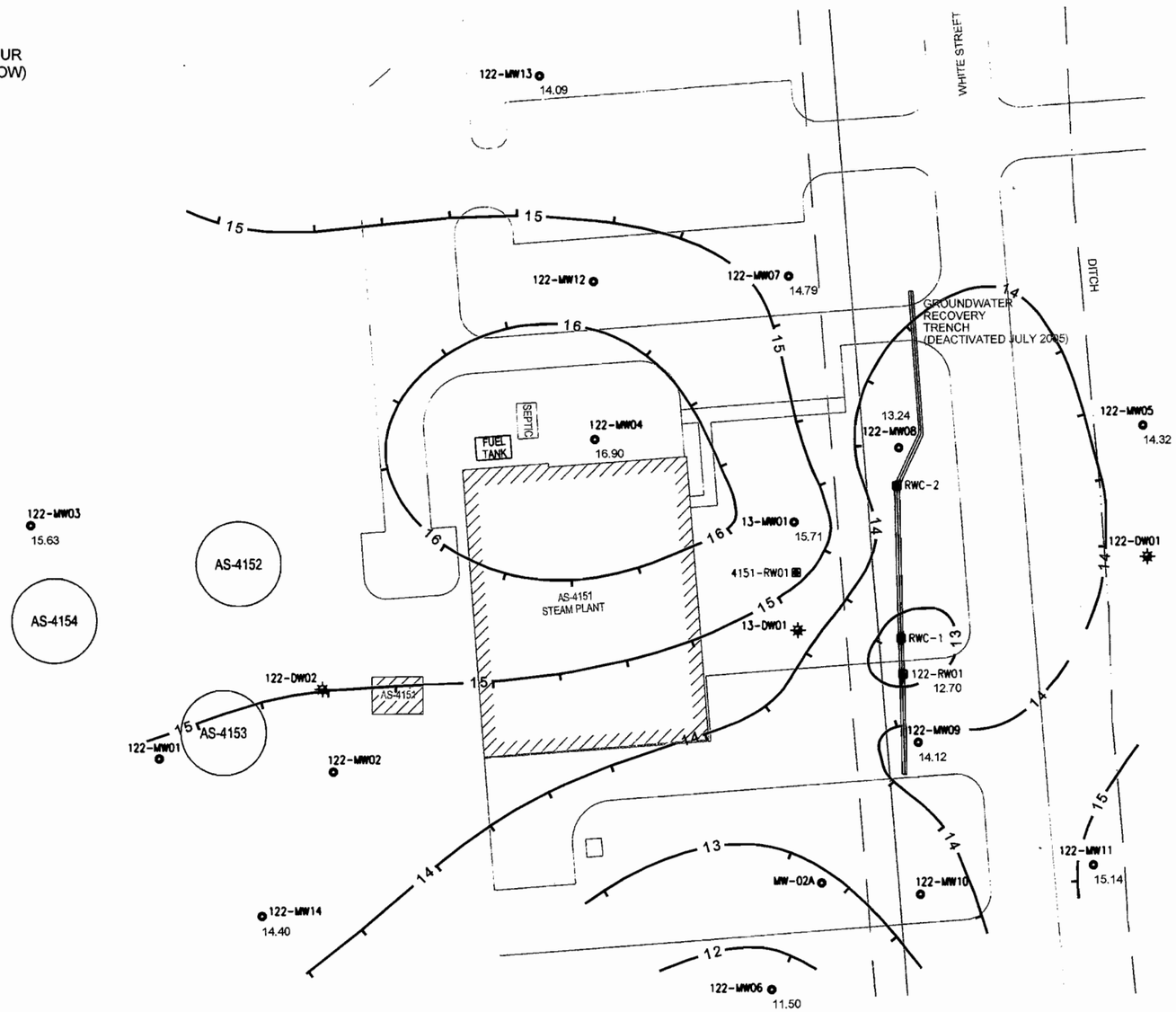
FIGURE	3-8A
DATE	11/1/05
REVISION	0
DRAWN BY	WCM
FILE	CSFF_4151_BMAP

SHALLOW WELL GROUNDWATER ELEVATIONS FOR 21 JUNE 2005
CAMPBELL STREET FUEL FARM/AS-143 AREA
CAMPBELL STREET FUEL FARM SITE
ANNUAL MONITORING REPORT
MCAS NEW RIVER, NC

LEGEND

- SHALLOW MONITORING WELL
- DEEP MONITORING WELL
- RECOVERY WELL
- EXISTING FUEL PIPELINE
- ABANDONED FUEL PIPELINE
- 1.51 SURFICIAL AQUIFER GROUNDWATER ELEVATION
- 3.0 SURFICIAL AQUIFER GROUNDWATER ELEVATION CONTOUR (HACHURES POINT IN DIRECTION OF GROUNDWATER FLOW)

(GROUNDWATER ELEVATIONS EXPRESSED IN FEET ABOVE/BELOW MEAN SEA LEVEL)



SCALE (Feet)
25 0 25 50

(Base map adapted from Shaw, 2004 and Catlin, 2005)

Engineering & Environment, Inc.	FIGURE 3-8B	SHALLOW WELL GROUNDWATER ELEVATIONS FOR 21 JUNE 2005 AS-4151 AREA
	DATE 11/1/05	CAMPBELL STREET FUEL FARM SITE
	REVISION 0	ANNUAL MONITORING REPORT
	DRAWN BY WCM	MCAS NEW RIVER, NC
	FILE CSFF_4151_BMAP	

LEGEND

- SHALLOW MONITORING WELL
- DEEP MONITORING WELL
- RECOVERY WELL
- EXISTING FUEL PIPELINE
- ABANDONED FUEL PIPELINE

1	BENZENE CONCENTRATION
29	ETHYLBENZENE CONCENTRATION
1000	TOLUENE CONCENTRATION
530	TOTAL XYLENES CONCENTRATION
200	METHYL TERT BUTYL ETHER CONCENTRATION

80	ACENAPHTHENE CONCENTRATION
14	2-METHYLNAPHTHENE CONCENTRATION
21	NAPHTHENE CONCENTRATION

- ESTIMATED EXTENT OF SHALLOW WELL VOCs ABOVE NCGWQSs
- ESTIMATED EXTENT OF SHALLOW WELL PAHs ABOVE NCGWQSs
- ESTIMATED EXTENT OF DEEP WELL VOCs ABOVE NCGWQSs
- ESTIMATED EXTENT OF DEEP WELL PAHs ABOVE NCGWQSs

(CONCENTRATIONS EXPRESSED IN MICROGRAMS PER LITER)
(<#: NOT DETECTED AT THE INDICATED REPORTING LIMIT)
(NCGWQS: NORTH CAROLINA GROUNDWATER QUALITY STANDARDS; NCGWQS PER CONSTITUENT BRACKETED IN LEGEND)
(VOCs: VOLATILE ORGANIC COMPOUNDs)
(PAHs: POLYNUCLEAR AROMATIC HYDROCARBONs)

AST 4
AST 3
AST 2
AST 1
PUMP STATION
SEPTEMBER 2005 EXCAVATION
AS 140
AS 144
AS 146
AS 139
AS 143
TRUCK OFFLOAD
TRUCK OFFLOAD
TRUCK OFFLOAD
FORMER UST AS-146 (EXCAVATED)
ISLAND
GROUNDWATER RECOVERY AND TREATMENT SYSTEM (INACTIVE)
GROUNDWATER RECOVERY TRENCH (INACTIVE)
GROUNDWATER RECOVERY TRENCH (DEACTIVATED JULY 2005)
FORMER UST AS-142 (EXCAVATED)
WASH PAD
OIL/WATER SEPARATOR
OIL/WATER SEPARATOR
WHITE STREET
DITCH
DITCH
DITCH
CAMPBELL STREET
APPROXIMATE LOCATION OF AST

MW-10 (NA, NA, NA)
MW-11 (<1, <1, <1, <3, <1)
MW-17 (NA, NA, NA)
DW-05
MW-13 (34.1, 7, <1, 35.6, <1)
MW-07 (<1, <1, 0.85, <3, <1)
DW-02 (21.8, <5.3, 9.9)
MW-04
MW-06
DW-01
MW-3 (<1, <1, <1, <3, <1)
MW-12 (NA, NA, NA)
CSRW-1
MW-16 (NA, NA, NA)
RWA-1
RWA-2
DW-04
MW-09
MW-14 (<1, <1, <1, <3, <1)
MW-15
MW-22
MW-05
MW-20
MW-19 (381, 156, 70, 467, 259)
RW-01 (<5.1, <5.1, <5.1)
DW-06
MW-21 (NA, NA, NA)
MW-18
143RW-2
RWB-3
RWB-1
RWB-4
MW-24 (626, 447, 549, 1020, 35.7)

N

SCALE (Feet)
25 0 25 50

(Base map adapted from Shaw, 2004 and Catlin, 2005)

Engineering & Environment, Inc.

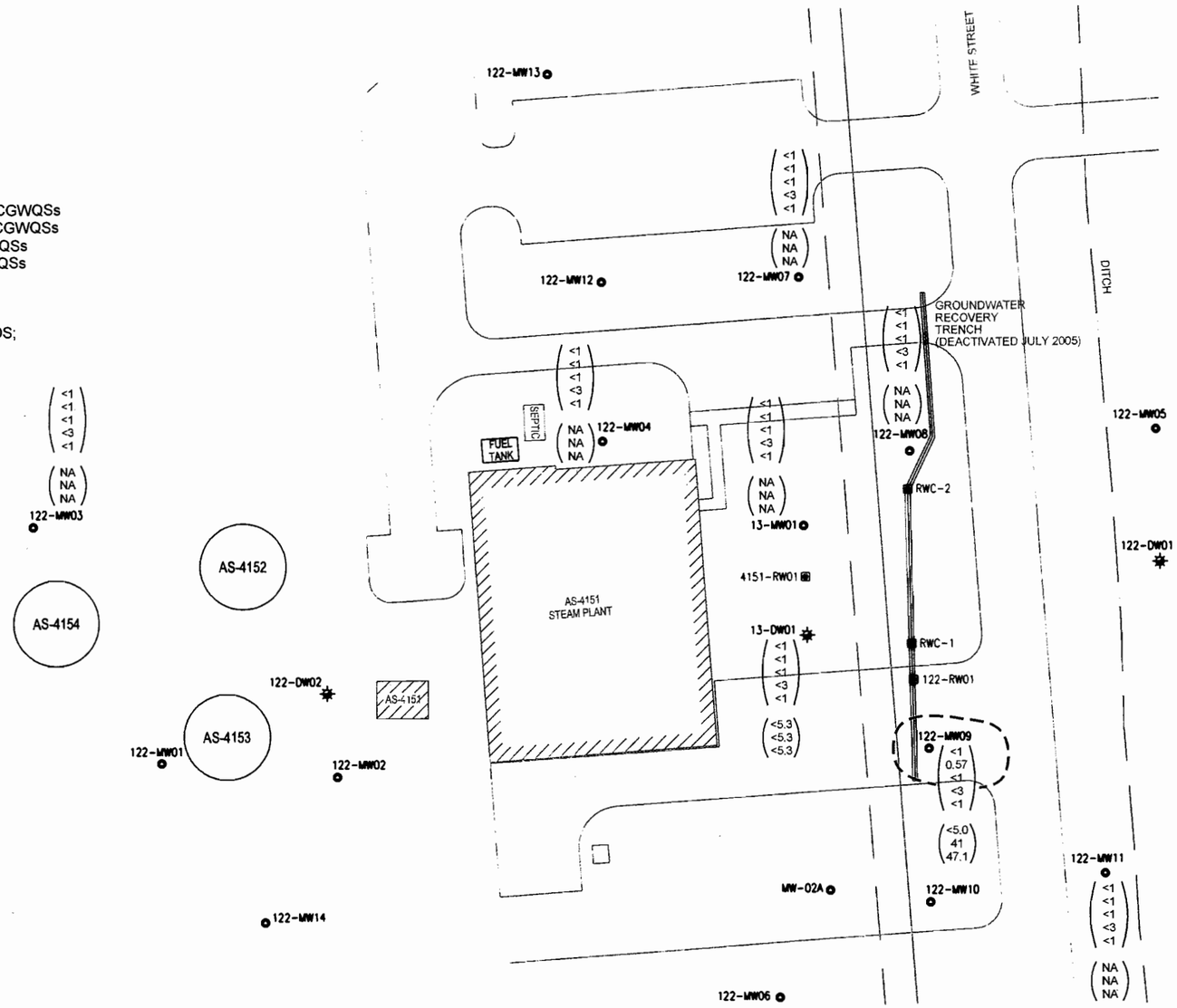
FIGURE	4-1A
DATE	11/1/05
REVISION	0
DRAWN BY	WCM
FILE	CSFF_4151_BMAP

DISSOLVED PETROLEUM CONSTITUENT CONCENTRATIONS FOR SEPTEMBER 2003
CAMPBELL STREET FUEL FARM/AS-143 AREA
CAMPBELL STREET FUEL FARM SITE
ANNUAL MONITORING REPORT
MCAS NEW RIVER, NC

LEGEND

- SHALLOW MONITORING WELL
- DEEP MONITORING WELL
- RECOVERY WELL
- EXISTING FUEL PIPELINE
- ABANDONED FUEL PIPELINE
- 1 / 29 / 1000 / 530 / 200 — BENZENE / ETHYLYBENZENE / TOLUENE / TOTAL XYLENES / METHYL TERT BUTYL ETHER CONCENTRATION
- 80 / 14 / 21 — ACENAPHTHENE / 2-METHYLNAPHTHENE / NAPHTHENE CONCENTRATION
- ESTIMATED EXTENT OF SHALLOW WELL VOCs ABOVE NCGWQSs
- ESTIMATED EXTENT OF SHALLOW WELL PAHs ABOVE NCGWQSs
- ESTIMATED EXTENT OF DEEP WELL VOCs ABOVE NCGWQSs
- ESTIMATED EXTENT OF DEEP WELL PAHs ABOVE NCGWQSs

(CONCENTRATIONS EXPRESSED IN MICROGRAMS PER LITER)
(<#: NOT DETECTED AT THE INDICATED REPORTING LIMIT)
(NCGWQS: NORTH CAROLINA GROUNDWATER QUALITY STANDARDS; NCGWQS PER CONSTITUENT BRACKETED IN LEGEND)
(VOCs: VOLATILE ORGANIC COMPOUNDs)
(PAHs: POLYNUCLEAR AROMATIC HYDROCARBONs)



SCALE (Feet)
25 0 25 50

(Base map adapted from Shaw, 2004 and Catlin, 2005)

Engineering & Environment, Inc.

FIGURE	4-1B
DATE	11/1/05
REVISION	0
DRAWN BY	WCM
FILE	CSFF_4151_BMAP

DISSOLVED PETROLEUM CONSTITUENT CONCENTRATIONS FOR SEPTEMBER 2003
AS-4151 AREA
CAMPBELL STREET FUEL FARM SITE
ANNUAL MONITORING REPORT
MCAS NEW RIVER, NC

LEGEND

- SHALLOW MONITORING WELL
- DEEP MONITORING WELL
- RECOVERY WELL
- EXISTING FUEL PIPELINE
- ABANDONED FUEL PIPELINE
- 1 / 29 / 1000 / 530 / 200 — BENZENE / ETHYLYBENZENE / TOLUENE / TOTAL XYLENES / METHYL TERT BUTYL ETHER CONCENTRATION
- 80 / 14 / 21 — ACENAPHTHENE / 2-METHYLNAPHTHENE / NAPHTHENE CONCENTRATION
- ESTIMATED EXTENT OF SHALLOW WELL VOCs ABOVE NCGWQSs
- ESTIMATED EXTENT OF SHALLOW WELL PAHs ABOVE NCGWQSs
- ESTIMATED EXTENT OF DEEP WELL VOCs ABOVE NCGWQSs
- ESTIMATED EXTENT OF DEEP WELL PAHs ABOVE NCGWQSs

(CONCENTRATIONS EXPRESSED IN MICROGRAMS PER LITER)
(<#: NOT DETECTED AT THE INDICATED REPORTING LIMIT)
(NCGWQS: NORTH CAROLINA GROUNDWATER QUALITY STANDARDS; NCGWQS PER CONSTITUENT BRACKETED IN LEGEND)
(VOCs: VOLATILE ORGANIC COMPOUNDS)
(PAHs: POLYNUCLEAR AROMATIC HYDROCARBONs)

AST 4
AST 3
AST 2
AST 1
PUMP STATION
SEPTEMBER 2005 EXCAVATION
AS 140
AS 144
AS 146
AS 139
AS 143
MW-10
MW-11 (<1 / <1 / <1 / <3 / <1)
MW-17
MW-07
MW-08
TRUCK OFFLOAD
TRUCK OFFLOAD
FORMER UST AS-146 (EXCAVATED)
TRUCK OFFLOAD
DW-05
MW-13
DW-02 (35.4 / 2.3 / 36.9)
MW-04
DW-01
GROUNDWATER RECOVERY AND TREATMENT SYSTEM (INACTIVE)
MW-3 (<1 / <1 / <1 / <3 / <1)
ISLAND
41.7 / 7.4 / <1 / 32.4 / 0.88
1.3 / 0.77 / <1.0 / 1.6 / <1
NA / NA / NA
MW-12
CSRW-1
MW-16
RWA-1
RWA-2
GROUNDWATER RECOVERY TRENCH (INACTIVE)
DW-04
MW-09
MW-14 (<1 / <1 / <1 / <3 / <1)
NA / NA / NA
MW-22
MW-15
CAMPBELL STREET
DITCH
WHITE STREET
DITCH
MW-05
MW-20
APPROXIMATE LOCATION OF AST
WASH PAD (<1 / <1 / <1 / <3 / <1)
OIL-WATER SEPARATOR
MW-19
273 / 246 / 95.2 / 1060 / 180
RW-01 (<5.4 / <5.4 / <5.4)
DW-06
NA / NA / NA
MW-21
MW-18
FORMER UST AS-143 (EXCAVATED)
143RW-2
RWB-3
GROUNDWATER RECOVERY TRENCH (DEACTIVATED JULY 2005)
RWB-1
MW-24
RWB-4
NA / NA / NA

N

SCALE (Feet)
25 0 25 50

(Base map adapted from Shaw, 2004 and Catlin, 2005)

Engineering & Environment, Inc.

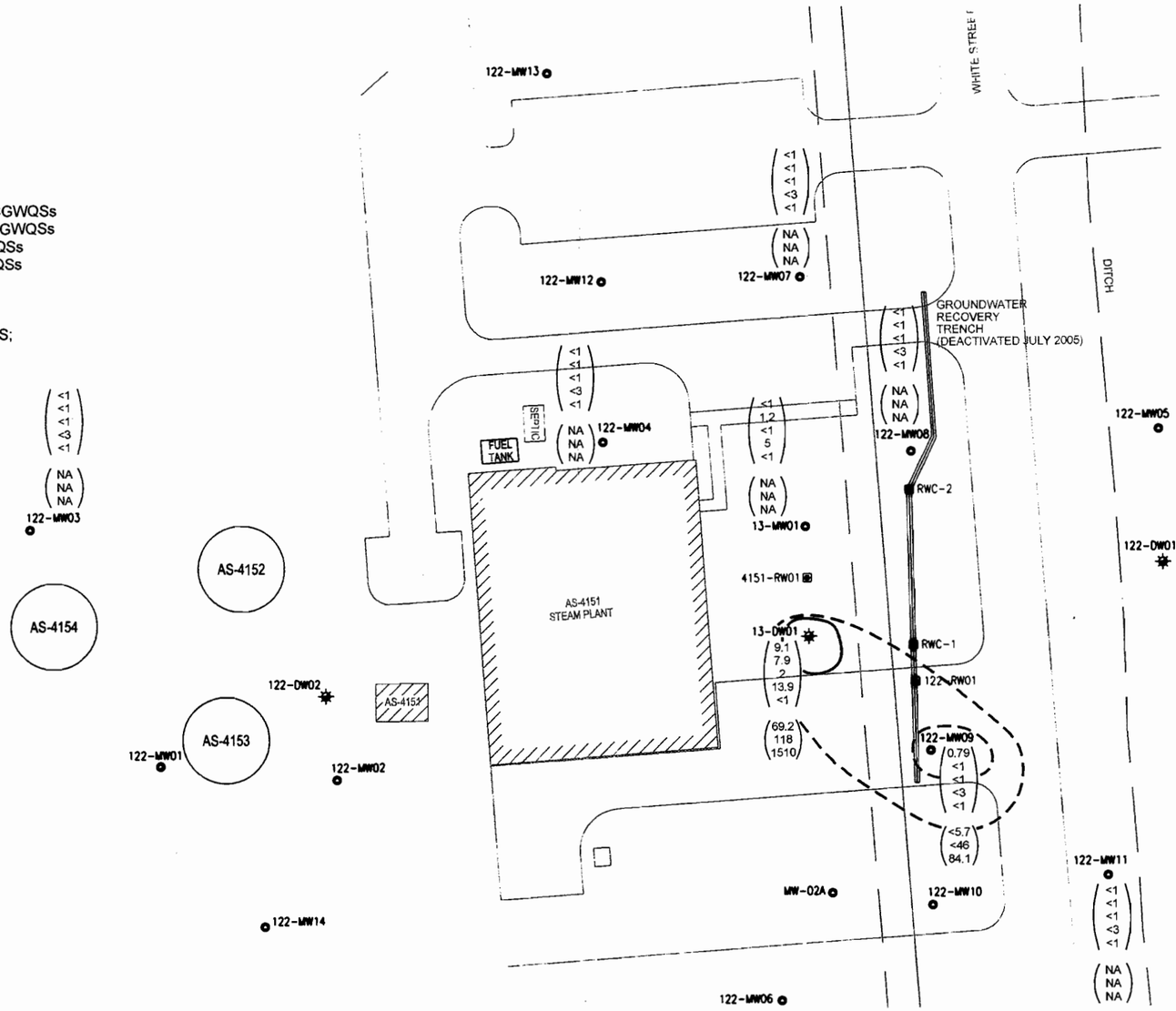
FIGURE	4-2A
DATE	11/1/05
REVISION	0
DRAWN BY	WCM
FILE	CSFF_4151_BMAP

DISSOLVED PETROLEUM CONSTITUENT CONCENTRATIONS FOR DECEMBER 23003
CAMPBELL STREET FUEL FARM/AS-143 AREA
CAMPBELL STREET FUEL FARM SITE
ANNUAL MONITORING REPORT
MCAS NEW RIVER, NC

LEGEND

- SHALLOW MONITORING WELL
- DEEP MONITORING WELL
- RECOVERY WELL
- EXISTING FUEL PIPELINE
- ABANDONED FUEL PIPELINE
- 1 BENZENE CONCENTRATION
- 29 ETHYLYBENZENE CONCENTRATION
- 1000 TOLUENE CONCENTRATION
- 530 TOTAL XYLENES CONCENTRATION
- 200 METHYL TERT BUTYL ETHER CONCENTRATION
- 80 ACENAPHTHENE CONCENTRATION
- 14 2-METHYLNAPHTHENE CONCENTRATION
- 21 NAPHTHENE CONCENTRATION
- ESTIMATED EXTENT OF SHALLOW WELL VOCs ABOVE NCGWQSs
- ESTIMATED EXTENT OF SHALLOW WELL PAHs ABOVE NCGWQSs
- ESTIMATED EXTENT OF DEEP WELL VOCs ABOVE NCGWQSs
- ESTIMATED EXTENT OF DEEP WELL PAHs ABOVE NCGWQSs

(CONCENTRATIONS EXPRESSED IN MICROGRAMS PER LITER)
(<#: NOT DETECTED AT THE INDICATED REPORTING LIMIT)
(NCGWQS: NORTH CAROLINA GROUNDWATER QUALITY STANDARDS; NCGWQS PER CONSTITUENT BRACKETED IN LEGEND)
(VOCs: VOLATILE ORGANIC COMPOUNDs)
(PAHs: POLYNUCLEAR AROMATIC HYDROCARBONs)



N

SCALE (Feet)
25 0 25 50

(Base map adapted from Shaw, 2004 and Catlin, 2005)

Engineering & Environment, Inc.

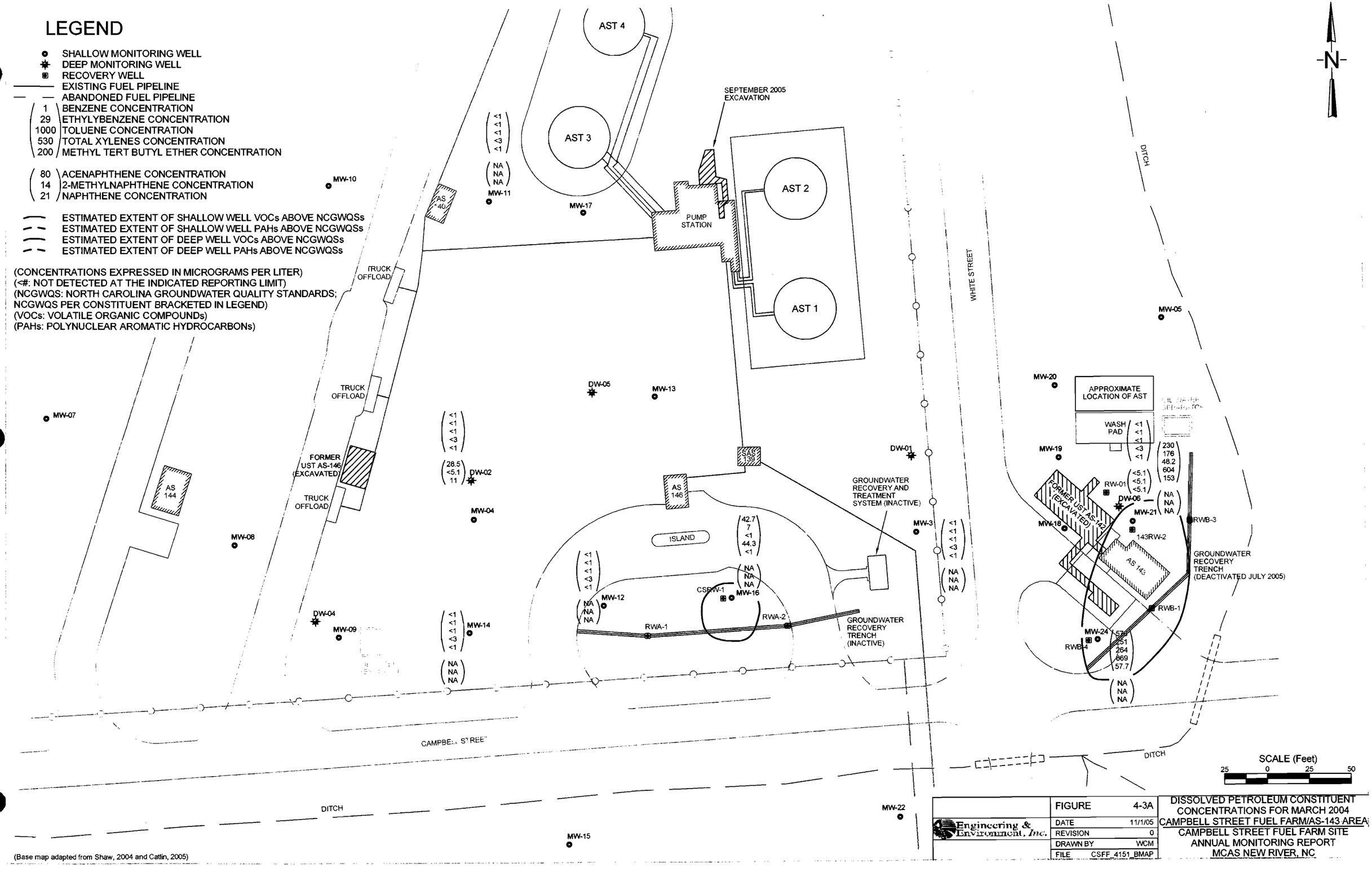
FIGURE	4-2B
DATE	11/1/05
REVISION	0
DRAWN BY	WCM
FILE	CSFF_4151_BMAP

DISSOLVED PETROLEUM CONSTITUENT CONCENTRATIONS FOR DECEMBER 2003
AS-4151 AREA
CAMPBELL STREET FUEL FARM SITE
ANNUAL MONITORING REPORT
MCAS NEW RIVER, NC

LEGEND

- SHALLOW MONITORING WELL
- DEEP MONITORING WELL
- RECOVERY WELL
- EXISTING FUEL PIPELINE
- ABANDONED FUEL PIPELINE
- 1 / 29 / 1000 / 530 / 200 — BENZENE / ETHYLYBENZENE / TOLUENE / TOTAL XYLENES / METHYL TERT BUTYL ETHER CONCENTRATION
- 80 / 14 / 21 — ACENAPHTHENE / 2-METHYLNAPHTHENE / NAPHTHENE CONCENTRATION
- ESTIMATED EXTENT OF SHALLOW WELL VOCs ABOVE NCGWQSs
- ESTIMATED EXTENT OF SHALLOW WELL PAHs ABOVE NCGWQSs
- ESTIMATED EXTENT OF DEEP WELL VOCs ABOVE NCGWQSs
- ESTIMATED EXTENT OF DEEP WELL PAHs ABOVE NCGWQSs

(CONCENTRATIONS EXPRESSED IN MICROGRAMS PER LITER)
(<#: NOT DETECTED AT THE INDICATED REPORTING LIMIT)
(NCGWQS: NORTH CAROLINA GROUNDWATER QUALITY STANDARDS; NCGWQS PER CONSTITUENT BRACKETED IN LEGEND)
(VOCs: VOLATILE ORGANIC COMPOUNDs)
(PAHs: POLYNUCLEAR AROMATIC HYDROCARBONs)



(Base map adapted from Shaw, 2004 and Catlin, 2005)

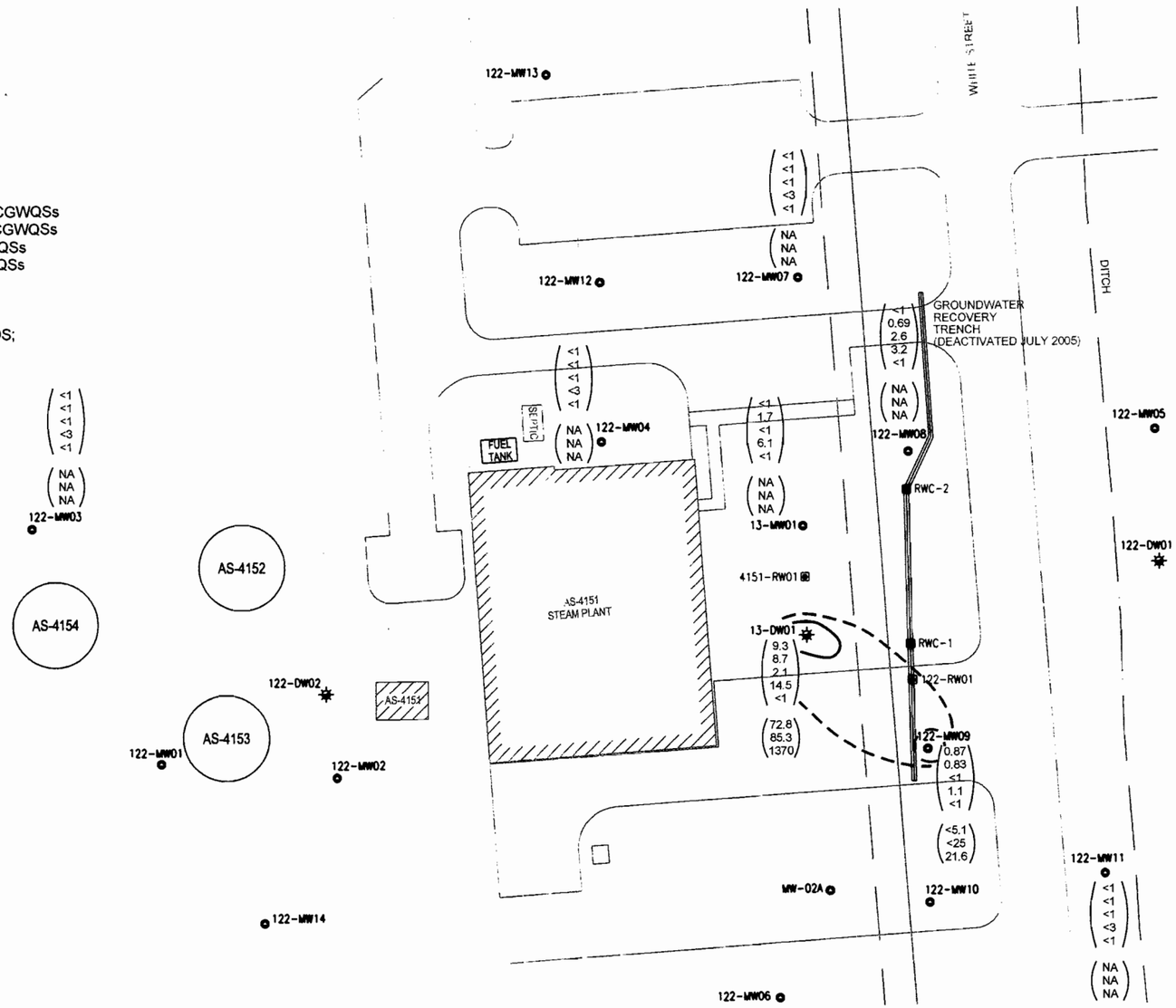
Engineering & Environment, Inc.	
FIGURE	4-3A
DATE	11/1/05
REVISION	0
DRAWN BY	WCM
FILE	CSFF_4151_BMAP

DISSOLVED PETROLEUM CONSTITUENT CONCENTRATIONS FOR MARCH 2004
CAMPBELL STREET FUEL FARM/AS-143 AREA
CAMPBELL STREET FUEL FARM SITE
ANNUAL MONITORING REPORT
MCAS NEW RIVER, NC

LEGEND

- SHALLOW MONITORING WELL
- DEEP MONITORING WELL
- RECOVERY WELL
- EXISTING FUEL PIPELINE
- ABANDONED FUEL PIPELINE
- (1 / 29 / 1000 / 530 / 200) BENZENE / ETHYLYBENZENE / TOLUENE / TOTAL XYLENES / METHYL TERT BUTYL ETHER CONCENTRATION
- (80 / 14 / 21) ACENAPHTHENE / 2-METHYLNAPHTHENE / NAPHTHENE CONCENTRATION
- ESTIMATED EXTENT OF SHALLOW WELL VOCs ABOVE NCGWQSs
- ESTIMATED EXTENT OF SHALLOW WELL PAHs ABOVE NCGWQSs
- ESTIMATED EXTENT OF DEEP WELL VOCs ABOVE NCGWQSs
- ESTIMATED EXTENT OF DEEP WELL PAHs ABOVE NCGWQSs

(CONCENTRATIONS EXPRESSED IN MICROGRAMS PER LITER)
(<#: NOT DETECTED AT THE INDICATED REPORTING LIMIT)
(NCGWQS: NORTH CAROLINA GROUNDWATER QUALITY STANDARDS;
NCGWQS PER CONSTITUENT BRACKETED IN LEGEND)
(VOCs: VOLATILE ORGANIC COMPOUNDs)
(PAHs: POLYNUCLEAR AROMATIC HYDROCARBONs)



SCALE (Feet)
25 0 25 50

(Base map adapted from Shaw, 2004 and Catlin, 2005)

Engineering & Environment, Inc.

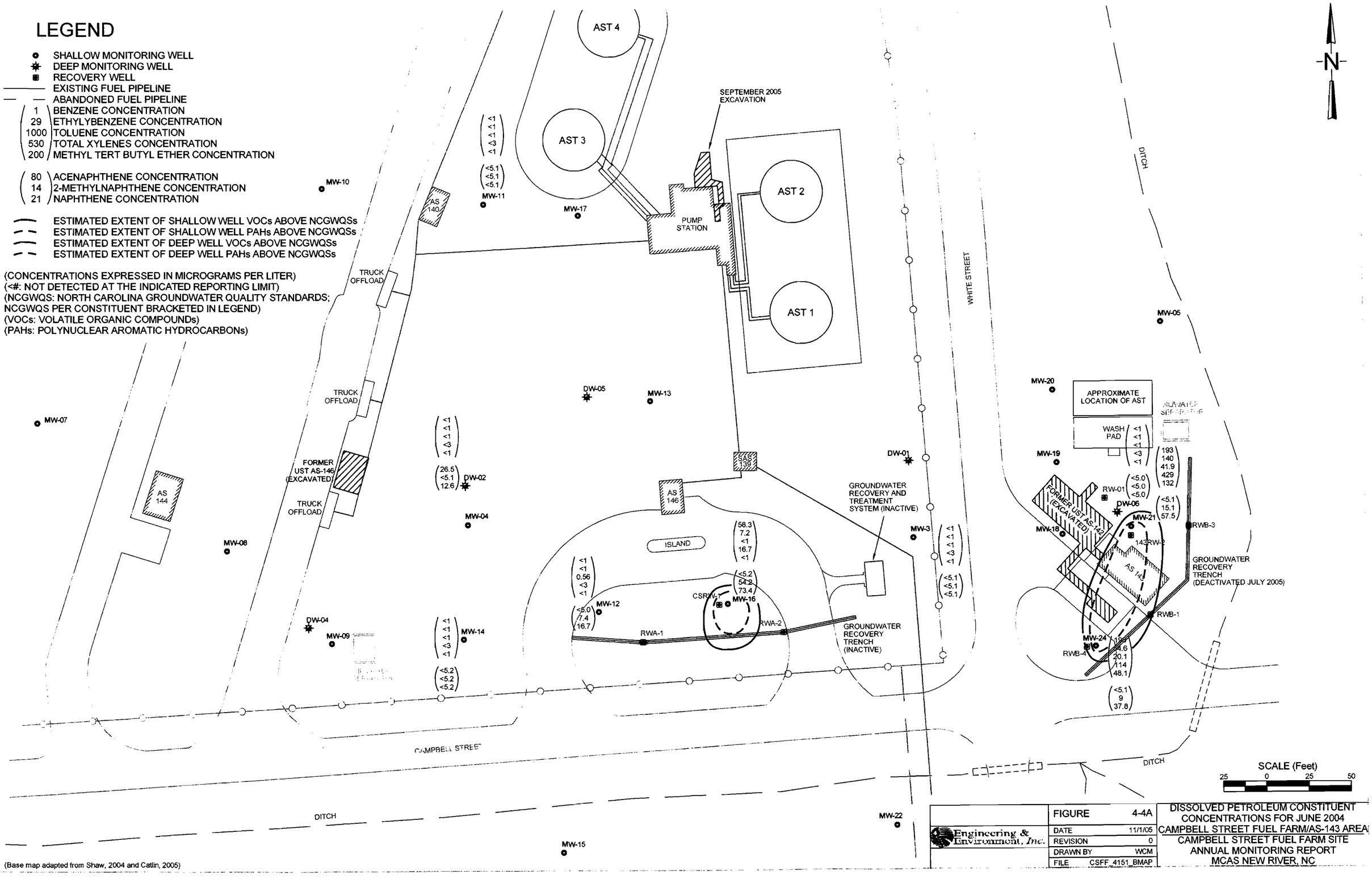
FIGURE	4-3B
DATE	11/1/05
REVISION	0
DRAWN BY	WCM
FILE	CSFF_4151_BMAP

DISSOLVED PETROLEUM CONSTITUENT CONCENTRATIONS FOR MARCH 2004
AS-4151 AREA
CAMPBELL STREET FUEL FARM SITE
ANNUAL MONITORING REPORT
MCAS NEW RIVER, NC

LEGEND

- SHALLOW MONITORING WELL
- DEEP MONITORING WELL
- RECOVERY WELL
- EXISTING FUEL PIPELINE
- ABANDONED FUEL PIPELINE
- (1 / 29 / 1000 / 530 / 200) BENZENE / ETHYLYBENZENE / TOLUENE / TOTAL XYLENES / METHYL TERT BUTYL ETHER CONCENTRATION
- (80 / 14 / 21) ACENAPHTHENE / 2-METHYLNAPHTHENE / NAPHTHENE CONCENTRATION
- ESTIMATED EXTENT OF SHALLOW WELL VOCs ABOVE NCGWQSs
- ESTIMATED EXTENT OF SHALLOW WELL PAHs ABOVE NCGWQSs
- ESTIMATED EXTENT OF DEEP WELL VOCs ABOVE NCGWQSs
- ESTIMATED EXTENT OF DEEP WELL PAHs ABOVE NCGWQSs

(CONCENTRATIONS EXPRESSED IN MICROGRAMS PER LITER)
(<#: NOT DETECTED AT THE INDICATED REPORTING LIMIT)
(NCGWQS: NORTH CAROLINA GROUNDWATER QUALITY STANDARDS; NCGWQS PER CONSTITUENT BRACKETED IN LEGEND)
(VOCs: VOLATILE ORGANIC COMPOUNDS)
(PAHs: POLYNUCLEAR AROMATIC HYDROCARBONS)



(Base map adapted from Shaw, 2004 and Catlin, 2005)

Engineering & Environment, Inc.

FIGURE	4-4A
DATE	11/1/05
REVISION	0
DRAWN BY	WCM
FILE	CSFF_4151_BMAP

DISSOLVED PETROLEUM CONSTITUENT CONCENTRATIONS FOR JUNE 2004
CAMPBELL STREET FUEL FARM/AS-143 AREA
CAMPBELL STREET FUEL FARM SITE
ANNUAL MONITORING REPORT
MCAS NEW RIVER, NC

LEGEND

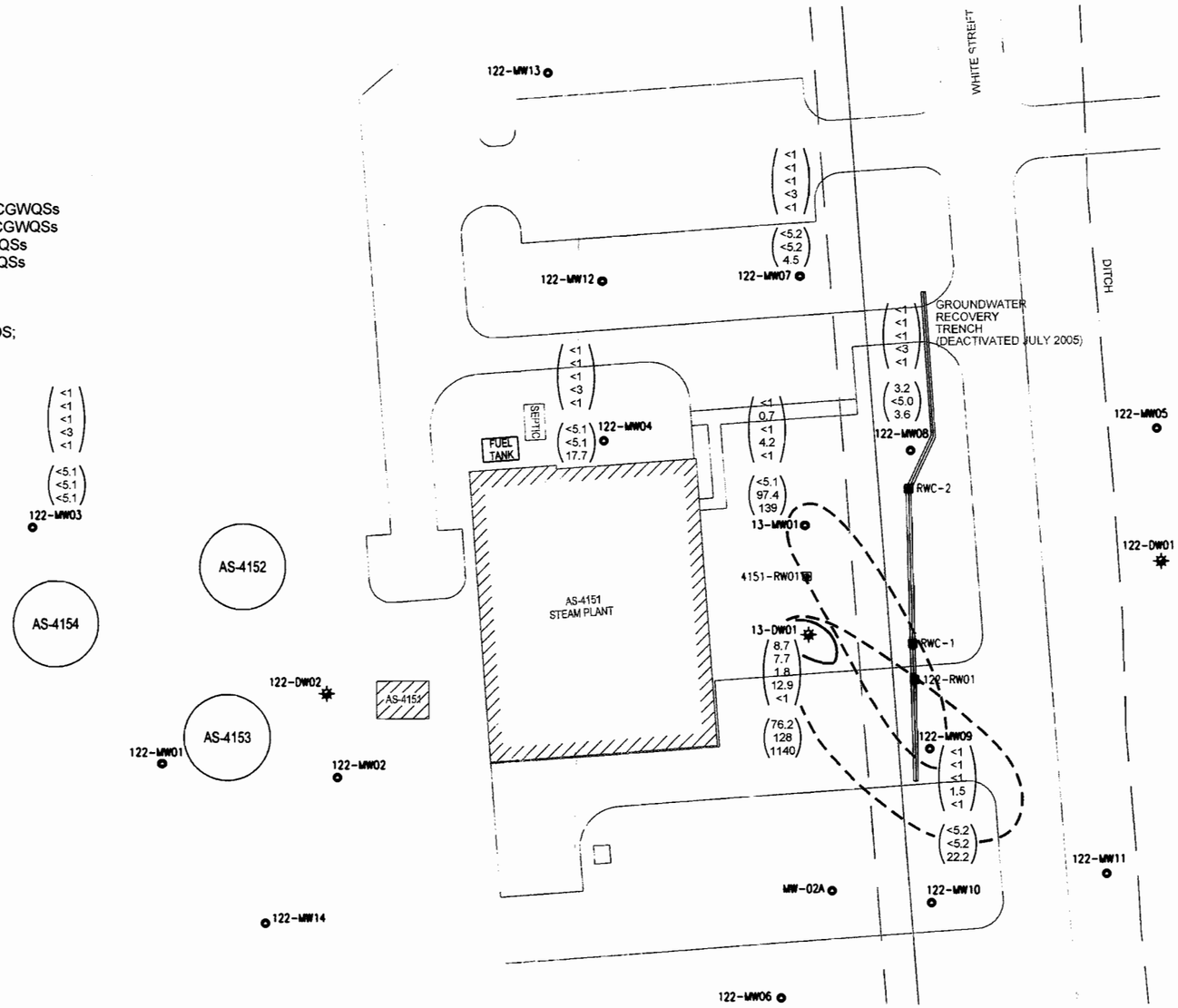
- SHALLOW MONITORING WELL
- DEEP MONITORING WELL
- RECOVERY WELL
- EXISTING FUEL PIPELINE
- ABANDONED FUEL PIPELINE

1	BENZENE CONCENTRATION
29	ETHYLYBENZENE CONCENTRATION
1000	TOLUENE CONCENTRATION
530	TOTAL XYLENES CONCENTRATION
200	METHYL TERT BUTYL ETHER CONCENTRATION

80	ACENAPHTHENE CONCENTRATION
14	2-METHYLNAPHTHENE CONCENTRATION
21	NAPHTHENE CONCENTRATION

- ESTIMATED EXTENT OF SHALLOW WELL VOCs ABOVE NCGWQSs
- ESTIMATED EXTENT OF SHALLOW WELL PAHs ABOVE NCGWQSs
- ESTIMATED EXTENT OF DEEP WELL VOCs ABOVE NCGWQSs
- ESTIMATED EXTENT OF DEEP WELL PAHs ABOVE NCGWQSs

(CONCENTRATIONS EXPRESSED IN MICROGRAMS PER LITER)
(<#: NOT DETECTED AT THE INDICATED REPORTING LIMIT)
(NCGWQS: NORTH CAROLINA GROUNDWATER QUALITY STANDARDS; NCGWQS PER CONSTITUENT BRACKETED IN LEGEND)
(VOCs: VOLATILE ORGANIC COMPOUNDs)
(PAHs: POLYNUCLEAR AROMATIC HYDROCARBONs)



SCALE (Feet)
25 0 25 50

(Base map adapted from Shaw, 2004 and Catlin, 2005)

Engineering & Environment, Inc.

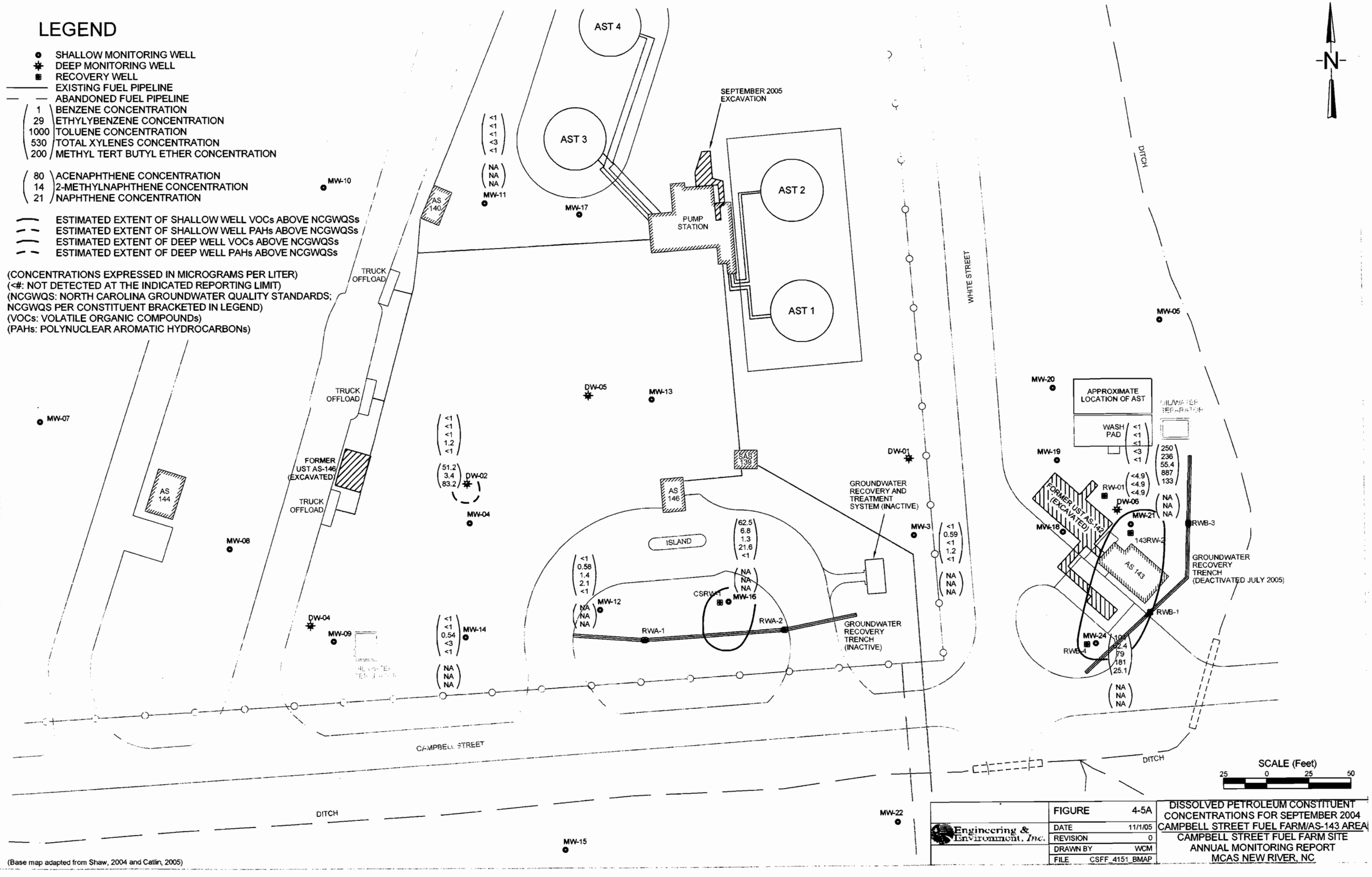
FIGURE	4-4B
DATE	11/1/05
REVISION	0
DRAWN BY	WCM
FILE	CSFF_4151_BMAP

DISSOLVED PETROLEUM CONSTITUENT CONCENTRATIONS FOR JUNE 2004
AS-4151 AREA
CAMPBELL STREET FUEL FARM SITE
ANNUAL MONITORING REPORT
MCAS NEW RIVER, NC

LEGEND

- SHALLOW MONITORING WELL
- DEEP MONITORING WELL
- RECOVERY WELL
- EXISTING FUEL PIPELINE
- ABANDONED FUEL PIPELINE
- 1 / 29 / 1000 / 530 / 200 — BENZENE / ETHYLYBENZENE / TOLUENE / TOTAL XYLENES / METHYL TERT BUTYL ETHER CONCENTRATION
- 80 / 14 / 21 — ACENAPHTHENE / 2-METHYLNAPHTHENE / NAPHTHENE CONCENTRATION
- ESTIMATED EXTENT OF SHALLOW WELL VOCs ABOVE NCGWQSs
- ESTIMATED EXTENT OF SHALLOW WELL PAHs ABOVE NCGWQSs
- ESTIMATED EXTENT OF DEEP WELL VOCs ABOVE NCGWQSs
- ESTIMATED EXTENT OF DEEP WELL PAHs ABOVE NCGWQSs

(CONCENTRATIONS EXPRESSED IN MICROGRAMS PER LITER)
(<#: NOT DETECTED AT THE INDICATED REPORTING LIMIT)
(NCGWQS: NORTH CAROLINA GROUNDWATER QUALITY STANDARDS; NCGWQS PER CONSTITUENT BRACKETED IN LEGEND)
(VOCs: VOLATILE ORGANIC COMPOUNDS)
(PAHs: POLYNUCLEAR AROMATIC HYDROCARBONS)



(Base map adapted from Shaw, 2004 and Catlin, 2005)

Engineering & Environment, Inc.	FIGURE	4-5A
	DATE	11/1/05
	REVISION	0
	DRAWN BY	WCM
	FILE	CSFF_4151_BMAP

DISSOLVED PETROLEUM CONSTITUENT CONCENTRATIONS FOR SEPTEMBER 2004
CAMPBELL STREET FUEL FARM/AS-143 AREA
CAMPBELL STREET FUEL FARM SITE
ANNUAL MONITORING REPORT
MCAS NEW RIVER, NC

LEGEND

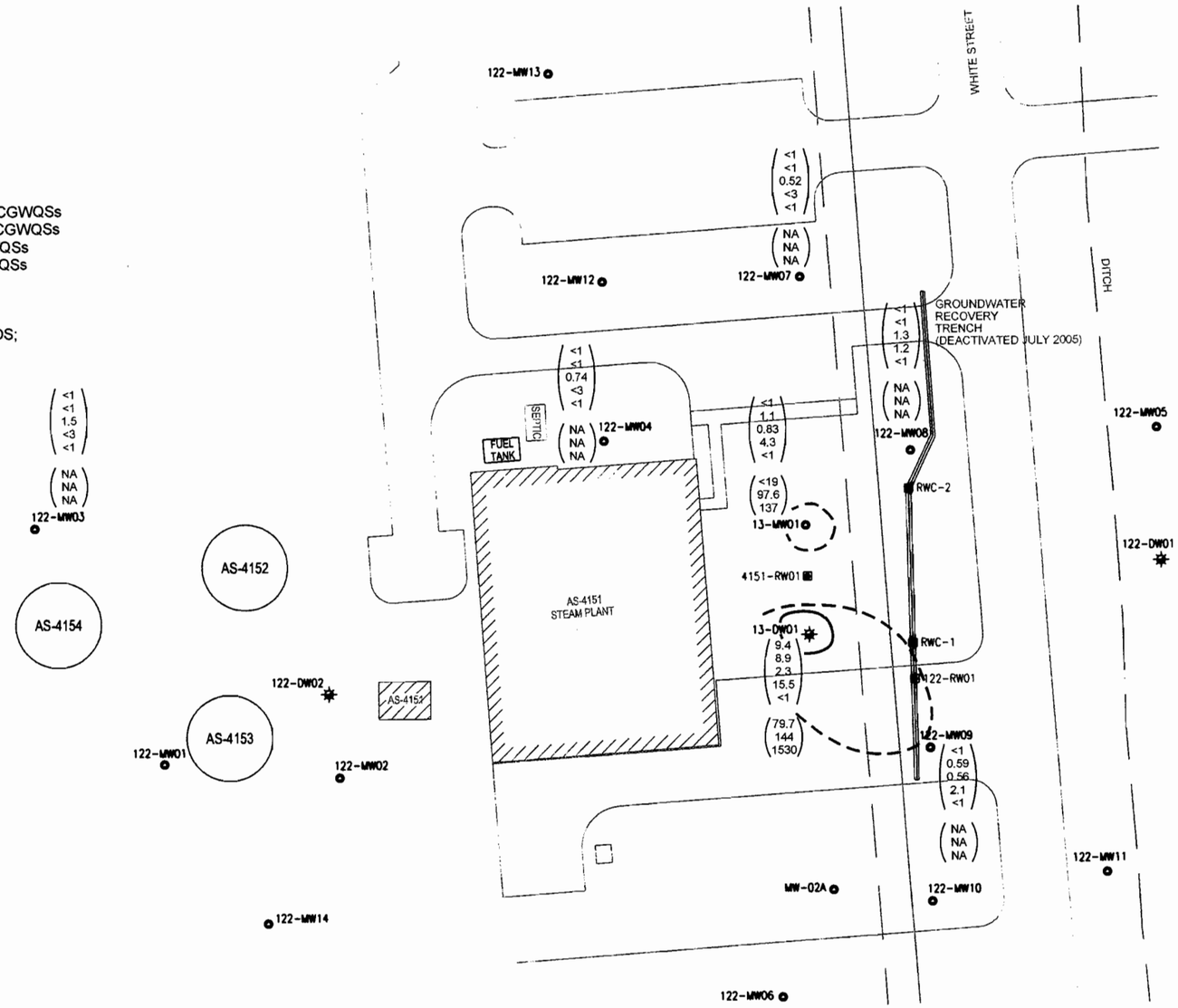
- SHALLOW MONITORING WELL
- DEEP MONITORING WELL
- RECOVERY WELL
- EXISTING FUEL PIPELINE
- ABANDONED FUEL PIPELINE

1	BENZENE CONCENTRATION
29	ETHYLYBENZENE CONCENTRATION
1000	TOLUENE CONCENTRATION
530	TOTAL XYLENES CONCENTRATION
200	METHYL TERT BUTYL ETHER CONCENTRATION

80	ACENAPHTHENE CONCENTRATION
14	2-METHYLNAPHTHENE CONCENTRATION
21	NAPHTHENE CONCENTRATION

- ESTIMATED EXTENT OF SHALLOW WELL VOCs ABOVE NCGWQSs
- ESTIMATED EXTENT OF SHALLOW WELL PAHs ABOVE NCGWQSs
- ESTIMATED EXTENT OF DEEP WELL VOCs ABOVE NCGWQSs
- ESTIMATED EXTENT OF DEEP WELL PAHs ABOVE NCGWQSs

(CONCENTRATIONS EXPRESSED IN MICROGRAMS PER LITER)
(<#: NOT DETECTED AT THE INDICATED REPORTING LIMIT)
(NCGWQS: NORTH CAROLINA GROUNDWATER QUALITY STANDARDS; NCGWQS PER CONSTITUENT BRACKETED IN LEGEND)
(VOCs: VOLATILE ORGANIC COMPOUNDS)
(PAHs: POLYNUCLEAR AROMATIC HYDROCARBONs)



N

SCALE (Feet)
25 0 25 50

(Base map adapted from Shaw, 2004 and Catlin, 2005)

Engineering & Environment, Inc.

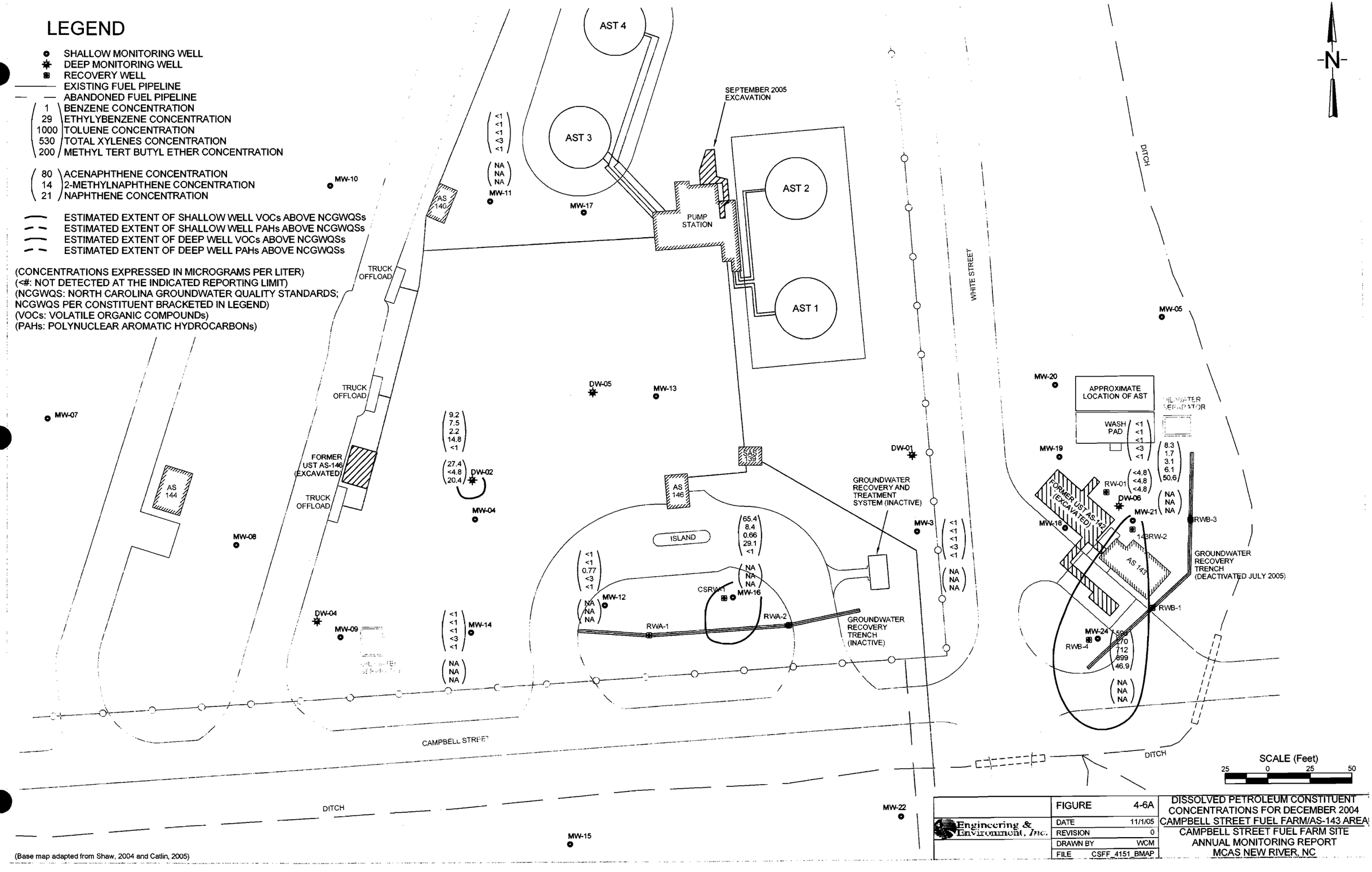
FIGURE	4-5B
DATE	11/1/05
REVISION	0
DRAWN BY	WCM
FILE	CSFF_4151_BMAP

DISSOLVED PETROLEUM CONSTITUENT CONCENTRATIONS FOR SEPTEMBER 2004
AS-4151 AREA
CAMPBELL STREET FUEL FARM SITE
ANNUAL MONITORING REPORT
MCAS NEW RIVER, NC

LEGEND

- SHALLOW MONITORING WELL
- DEEP MONITORING WELL
- RECOVERY WELL
- EXISTING FUEL PIPELINE
- ABANDONED FUEL PIPELINE
- (1 / 29 / 1000 / 530 / 200) BENZENE / ETHYLYBENZENE / TOLUENE / TOTAL XYLENES / METHYL TERT BUTYL ETHER CONCENTRATION
- (80 / 14 / 21) ACENAPHTHENE / 2-METHYLNAPHTHENE / NAPHTHENE CONCENTRATION
- ESTIMATED EXTENT OF SHALLOW WELL VOCs ABOVE NCGWQSs
- ESTIMATED EXTENT OF SHALLOW WELL PAHs ABOVE NCGWQSs
- ESTIMATED EXTENT OF DEEP WELL VOCs ABOVE NCGWQSs
- ESTIMATED EXTENT OF DEEP WELL PAHs ABOVE NCGWQSs

(CONCENTRATIONS EXPRESSED IN MICROGRAMS PER LITER)
(<#: NOT DETECTED AT THE INDICATED REPORTING LIMIT)
(NCGWQS: NORTH CAROLINA GROUNDWATER QUALITY STANDARDS; NCGWQS PER CONSTITUENT BRACKETED IN LEGEND)
(VOCs: VOLATILE ORGANIC COMPOUNDS)
(PAHs: POLYNUCLEAR AROMATIC HYDROCARBONs)



(Base map adapted from Shaw, 2004 and Catlin, 2005)

FIGURE	4-6A
DATE	11/1/05
REVISION	0
DRAWN BY	WCM
FILE	CSFF_4151_BMAP

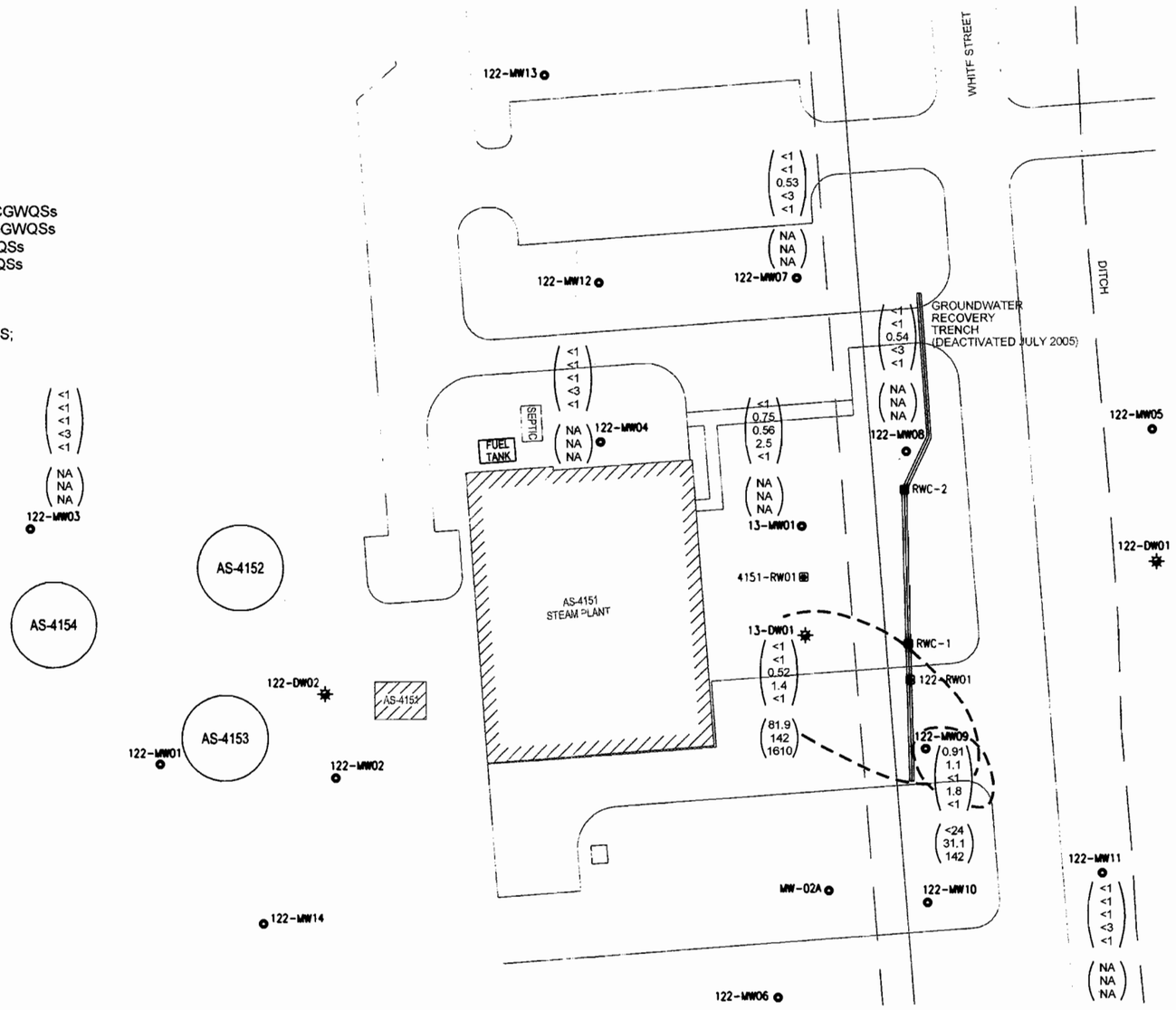
Engineering & Environment, Inc.

DISSOLVED PETROLEUM CONSTITUENT CONCENTRATIONS FOR DECEMBER 2004
CAMPBELL STREET FUEL FARM/AS-143 AREA
CAMPBELL STREET FUEL FARM SITE
ANNUAL MONITORING REPORT
MCAS NEW RIVER, NC

LEGEND

- SHALLOW MONITORING WELL
- DEEP MONITORING WELL
- RECOVERY WELL
- EXISTING FUEL PIPELINE
- ABANDONED FUEL PIPELINE
- 1 / 29 / 1000 / 530 / 200 — BENZENE / ETHYLYBENZENE / TOLUENE / TOTAL XYLENES / METHYL TERT BUTYL ETHER CONCENTRATION
- 80 / 14 / 21 — ACENAPHTHENE / 2-METHYLNAPHTHENE / NAPHTHENE CONCENTRATION
- ESTIMATED EXTENT OF SHALLOW WELL VOCs ABOVE NCGWQSs
- ESTIMATED EXTENT OF SHALLOW WELL PAHs ABOVE NCGWQSs
- ESTIMATED EXTENT OF DEEP WELL VOCs ABOVE NCGWQSs
- ESTIMATED EXTENT OF DEEP WELL PAHs ABOVE NCGWQSs

(CONCENTRATIONS EXPRESSED IN MICROGRAMS PER LITER)
(<#: NOT DETECTED AT THE INDICATED REPORTING LIMIT)
(NCGWQS: NORTH CAROLINA GROUNDWATER QUALITY STANDARDS; NCGWQS PER CONSTITUENT BRACKETED IN LEGEND)
(VOCs: VOLATILE ORGANIC COMPOUNDs)
(PAHs: POLYNUCLEAR AROMATIC HYDROCARBONs)



SCALE (Feet)
25 0 25 50

(Base map adapted from Shaw, 2004 and Catlin, 2005)

Engineering & Environment, Inc.

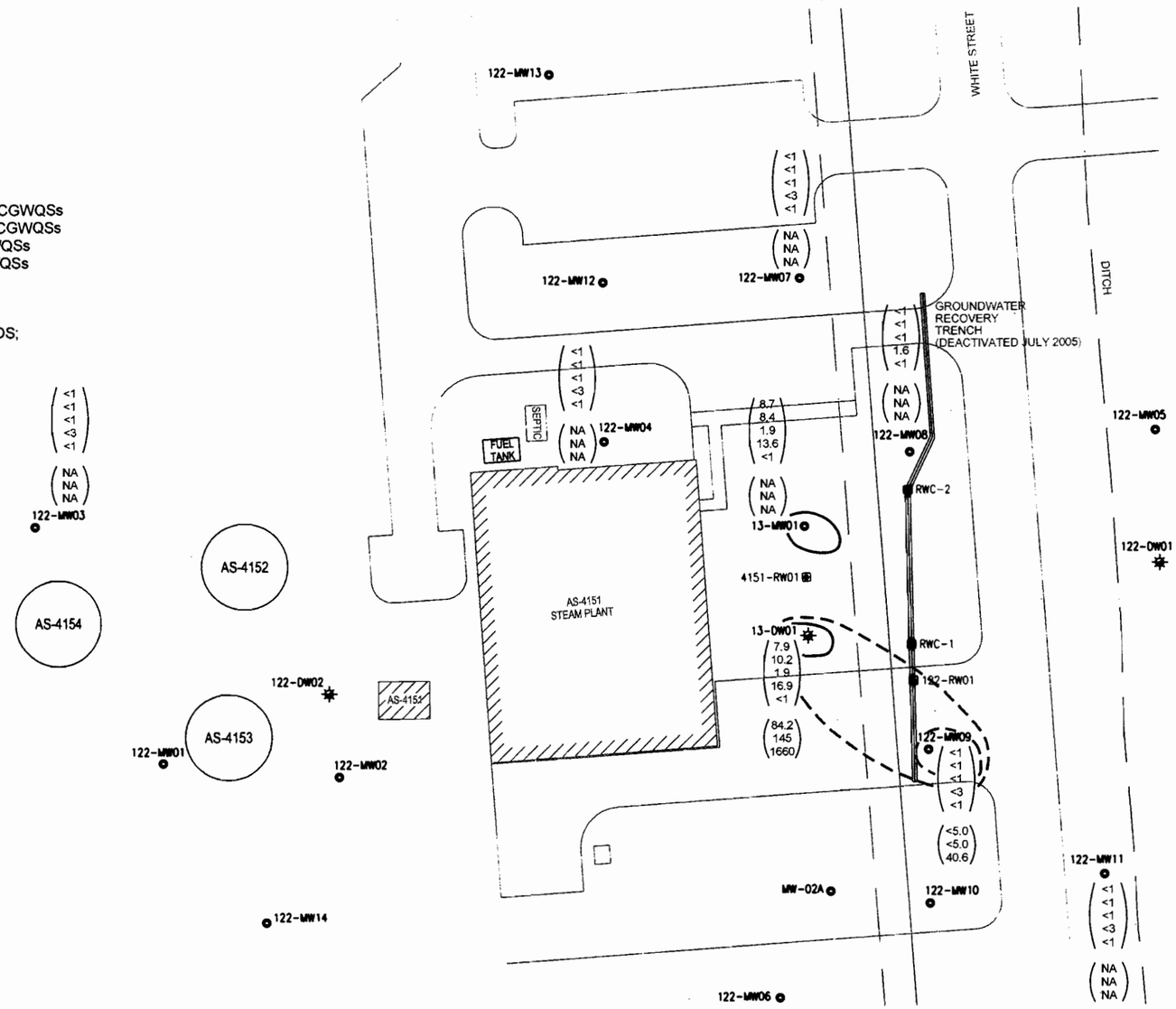
FIGURE	4-6B
DATE	11/1/05
REVISION	0
DRAWN BY	WCM
FILE	CSFF_4151_BMAP

DISSOLVED PETROLEUM CONSTITUENT CONCENTRATIONS FOR DECEMBER 2004
AS-4151 AREA
CAMPBELL STREET FUEL FARM SITE
ANNUAL MONITORING REPORT
MCAS NEW RIVER, NC

LEGEND

- SHALLOW MONITORING WELL
- DEEP MONITORING WELL
- RECOVERY WELL
- EXISTING FUEL PIPELINE
- ABANDONED FUEL PIPELINE
- (1 / 29 / 1000 / 530 / 200) BENZENE / ETHYLBENZENE / TOLUENE / TOTAL XYLENES / METHYL TERT BUTYL ETHER CONCENTRATION
- (80 / 14 / 21) ACENAPHTHENE / 2-METHYLNAPHTHENE / NAPHTHENE CONCENTRATION
- ESTIMATED EXTENT OF SHALLOW WELL VOCs ABOVE NCGWQSs
- ESTIMATED EXTENT OF SHALLOW WELL PAHs ABOVE NCGWQSs
- ESTIMATED EXTENT OF DEEP WELL VOCs ABOVE NCGWQSs
- ESTIMATED EXTENT OF DEEP WELL PAHs ABOVE NCGWQSs

(CONCENTRATIONS EXPRESSED IN MICROGRAMS PER LITER)
(<#: NOT DETECTED AT THE INDICATED REPORTING LIMIT)
(NCGWQS: NORTH CAROLINA GROUNDWATER QUALITY STANDARDS; NCGWQS PER CONSTITUENT BRACKETED IN LEGEND)
(VOCs: VOLATILE ORGANIC COMPOUNDS)
(PAHs: POLYNUCLEAR AROMATIC HYDROCARBONs)



SCALE (Feet)
25 0 25 50

(Base map adapted from Shaw, 2004 and Catlin, 2005)

Engineering & Environment, Inc.

FIGURE	4-7B
DATE	11/1/05
REVISION	0
DRAWN BY	WCM
FILE	CSFF_4151_BMAP

DISSOLVED PETROLEUM CONSTITUENT CONCENTRATIONS FOR MARCH 2005
AS-4151 AREA
CAMPBELL STREET FUEL FARM SITE
ANNUAL MONITORING REPORT
MCAS NEW RIVER, NC

LEGEND

- SHALLOW MONITORING WELL
- DEEP MONITORING WELL
- RECOVERY WELL
- EXISTING FUEL PIPELINE
- ABANDONED FUEL PIPELINE
- (1 / 29 / 1000 / 530 / 200) BENZENE / ETHYLYBENZENE / TOLUENE / TOTAL XYLENES / METHYL TERT BUTYL ETHER CONCENTRATION
- (80 / 14 / 21) ACENAPHTHENE / 2-METHYLNAPHTHENE / NAPHTHENE CONCENTRATION
- ESTIMATED EXTENT OF SHALLOW WELL VOCs ABOVE NCGWQSs
- ESTIMATED EXTENT OF SHALLOW WELL PAHs ABOVE NCGWQSs
- ESTIMATED EXTENT OF DEEP WELL VOCs ABOVE NCGWQSs
- ESTIMATED EXTENT OF DEEP WELL PAHs ABOVE NCGWQSs

(CONCENTRATIONS EXPRESSED IN MICROGRAMS PER LITER)
(<#: NOT DETECTED AT THE INDICATED REPORTING LIMIT)
(NCGWQS: NORTH CAROLINA GROUNDWATER QUALITY STANDARDS; NCGWQS PER CONSTITUENT BRACKETED IN LEGEND)
(VOCs: VOLATILE ORGANIC COMPOUNDs)
(PAHs: POLYNUCLEAR AROMATIC HYDROCARBONs)

AST 4
AST 3
AST 2
AST 1
SEPTEMBER 2005 EXCAVATION
PUMP STATION
AS 140
MW-10
MW-11 (<1 / <1 / <1 / <3 / <1)
MW-17 (NA / NA / NA)
TRUCK OFFLOAD
TRUCK OFFLOAD
MW-07
AS 144
FORMER UST AS-146 (EXCAVATED)
TRUCK OFFLOAD
MW-08
DW-05
MW-13
DW-02 (24.2 / <5.2 / 26.8)
MW-04
AS 139
AS 146
DW-01
GROUNDWATER RECOVERY AND TREATMENT SYSTEM (INACTIVE)
ISLAND
MW-3 (<1 / <1 / <1 / <3 / <1)
(64.4 / 8.6 / <1.0 / 27.3 / <1.0)
(<1 / <1 / <1 / <3 / <1)
(NA / NA / NA)
MW-12
CSRW-1
MW-16
RWA-1
RWA-2
GROUNDWATER RECOVERY TRENCH (INACTIVE)
DW-04
MW-09
MW-14 (<1 / <1 / <1 / <3 / <1)
(NA / NA / NA)
CAMPBELL STREET
DITCH
MW-15
MW-22
WHITE STREET
DITCH
MW-05
MW-20
APPROXIMATE LOCATION OF AST
WASH PAD (<1 / <1 / <1 / <3 / <1)
MW-19
(58.7 / 33.6 / 4.7 / 68.2 / 102)
RW-01 (<4.8 / <4.8 / <4.8)
DW-06
MW-21 (NA / NA / NA)
MW-18
FORMER UST AS-142 (EXCAVATED)
143RW-2
AS 143
RWB-3
GROUNDWATER RECOVERY TRENCH (DEACTIVATED JULY 2005)
RWB-1
RWB-4
MW-24 (176 / 19.4 / 47.1 / 244 / 36.9)
(NA / NA / NA)
DITCH

N

SCALE (Feet)
25 0 25 50

(Base map adapted from Shaw, 2004 and Catlin, 2005)

Engineering & Environment, Inc.

FIGURE	4-7A
DATE	11/1/05
REVISION	0
DRAWN BY	WCM
FILE	CSFF_4151_BMAP

DISSOLVED PETROLEUM CONSTITUENT CONCENTRATIONS FOR MARCH 2005
CAMPBELL STREET FUEL FARM/AS-143 AREA
CAMPBELL STREET FUEL FARM SITE
ANNUAL MONITORING REPORT
MCAS NEW RIVER, NC

LEGEND

- SHALLOW MONITORING WELL
- DEEP MONITORING WELL
- RECOVERY WELL
- EXISTING FUEL PIPELINE
- ABANDONED FUEL PIPELINE
- 1 / 29 / 1000 / 530 / 200 — BENZENE / ETHYLBENZENE / TOLUENE / TOTAL XYLENES / METHYL TERT BUTYL ETHER CONCENTRATION
- 80 / 14 / 21 — ACENAPHTHENE / 2-METHYLNAPHTHENE / NAPHTHENE CONCENTRATION
- ESTIMATED EXTENT OF SHALLOW WELL VOCs ABOVE NCGWQSs
- ESTIMATED EXTENT OF SHALLOW WELL PAHs ABOVE NCGWQSs
- ESTIMATED EXTENT OF DEEP WELL VOCs ABOVE NCGWQSs
- ESTIMATED EXTENT OF DEEP WELL PAHs ABOVE NCGWQSs

(CONCENTRATIONS EXPRESSED IN MICROGRAMS PER LITER)
(<#: NOT DETECTED AT THE INDICATED REPORTING LIMIT)
(NCGWQS: NORTH CAROLINA GROUNDWATER QUALITY STANDARDS; NCGWQS PER CONSTITUENT BRACKETED IN LEGEND)
(VOCs: VOLATILE ORGANIC COMPOUNDS)
(PAHs: POLYNUCLEAR AROMATIC HYDROCARBONS)

AST 4
AST 3
AST 2
AST 1
SEPTEMBER 2005 EXCAVATION
PUMP STATION
AS 140
AS 144
AS 146
AS 139
AS 143
TRUCK OFFLOAD
TRUCK OFFLOAD
FORMER UST AS-146 (EXCAVATED)
TRUCK OFFLOAD
ISLAND
GROUNDWATER RECOVERY AND TREATMENT SYSTEM (INACTIVE)
GROUNDWATER RECOVERY TRENCH (INACTIVE)
GROUNDWATER RECOVERY TRENCH (DEACTIVATED JULY 2005)
FORMER UST AS-142 (EXCAVATED)
APPROXIMATE LOCATION OF AST
WASH PAD
WHITE STREET
DITCH
DITCH
CAMPBELL STREET
DITCH

MW-10 <1 <1 <1 <3 <1
MW-11 NA NA NA
MW-17
MW-07
MW-08
DW-05 MW-13
DW-02 12.9 <5.0 18.8
MW-04
DW-01
MW-3 <1 <1 <1 <3 <1 / NA NA NA
MW-12 <1 <1 0.71 <3 <1 / NA NA NA
CSRW-1 MW-16 NA NA NA
RWA-1
RWA-2
DW-04
MW-09
MW-14 <1 <1 <1 <3 <1 / NA NA NA
MW-15
MW-22
MW-05
MW-20
MW-19 <1 <1 <1 <3 <1
RW-01 <5.1 <5.1 <5.1
DW-06 58.4 4.3 2.8 7.3 139
MW-21 NA NA NA
MW-18
143RW-2
RWB-3
RWB-1
MW-24 130 15.3 15.6 182 21.1
RWB-4
49.6 7 <1 20.4 <1 / NA NA NA

N

SCALE (Feet)
25 0 25 50

(Base map adapted from Shaw, 2004 and Catlin, 2005)

Engineering & Environment, Inc.

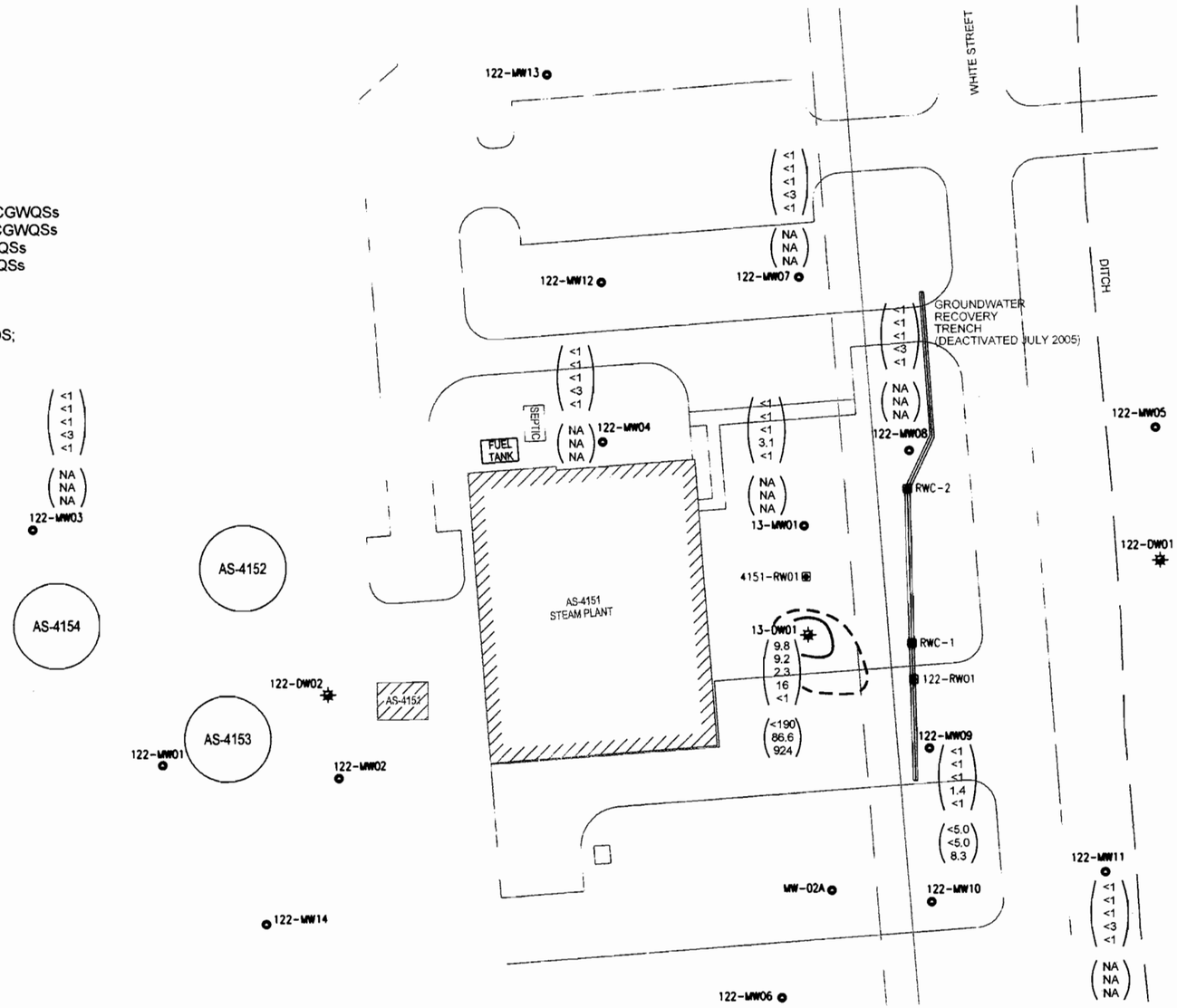
FIGURE	4-8A
DATE	11/1/05
REVISION	0
DRAWN BY	WCM
FILE	CSFF_4151_BMAP

DISSOLVED PETROLEUM CONSTITUENT CONCENTRATIONS FOR JUNE 2005
CAMPBELL STREET FUEL FARM/AS-143 AREA
CAMPBELL STREET FUEL FARM SITE
ANNUAL MONITORING REPORT
MCAS NEW RIVER, NC

LEGEND

- SHALLOW MONITORING WELL
- DEEP MONITORING WELL
- RECOVERY WELL
- EXISTING FUEL PIPELINE
- ABANDONED FUEL PIPELINE
- 1 / 29 / 1000 / 530 / 200 — BENZENE / ETHYLBENZENE / TOLUENE / TOTAL XYLENES / METHYL TERT BUTYL ETHER CONCENTRATION
- 80 / 14 / 21 — ACENAPHTHENE / 2-METHYLNAPHTHENE / NAPHTHENE CONCENTRATION
- ESTIMATED EXTENT OF SHALLOW WELL VOCs ABOVE NCGWQSs
- ESTIMATED EXTENT OF SHALLOW WELL PAHs ABOVE NCGWQSs
- ESTIMATED EXTENT OF DEEP WELL VOCs ABOVE NCGWQSs
- ESTIMATED EXTENT OF DEEP WELL PAHs ABOVE NCGWQSs

(CONCENTRATIONS EXPRESSED IN MICROGRAMS PER LITER)
(<#: NOT DETECTED AT THE INDICATED REPORTING LIMIT)
(NCGWQS: NORTH CAROLINA GROUNDWATER QUALITY STANDARDS; NCGWQS PER CONSTITUENT BRACKETED IN LEGEND)
(VOCs: VOLATILE ORGANIC COMPOUNDS)
(PAHs: POLYNUCLEAR AROMATIC HYDROCARBONS)



SCALE (Feet)
25 0 25 50

(Base map adapted from Shaw, 2004 and Catlin, 2005)

Engineering & Environment, Inc.

FIGURE	4-8B
DATE	11/1/05
REVISION	0
DRAWN BY	WCM
FILE	CSFF_4151_BMAP

DISSOLVED PETROLEUM CONSTITUENT CONCENTRATIONS FOR JUNE 2005
AS-4151 AREA
CAMPBELL STREET FUEL FARM SITE
ANNUAL MONITORING REPORT
MCAS NEW RIVER, NC

TABLES

TABLE 3-1
Monitoring Well Construction Summary
Campbell Street Fuel Farm Site

Well Identification	Date Installed	Inner Casing Diameter (inches)	Top of Casing Elevation (feet MSL)	Total Well Depth (feet BGS)	Screened Interval (feet BGS)		Hydrogeologic Zone
MW-3	12/12/91	2	21.69	14.0	4.0	13.8	Shallow
MW-9	11/19/92	2	20.45	14.0	3.9	13.5	Shallow
MW-10	11/19/92	2	21.17	15.0	4.9	14.4	Shallow
MW-11	11/18/92	2	22.03	16.0	5.9	15.5	Shallow
MW-12	11/19/92	2	21.41	14.0	3.9	13.5	Shallow
MW-14	11/20/92	2	20.07	13.0	3.1	12.6	Shallow
MW-15	11/21/92	2	21.08	16.0	5.9	15.4	Shallow
MW-16	11/20/92	2	21.45	15.0	4.9	14.5	Shallow
MW-21	11/21/92	2	21.76	14.0	3.9	13.5	Shallow
MW-22	11/23/92	2	21.69	13.0	2.9	12.5	Shallow
MW-24	11/22/92	2	21.56	11.0	2.8	10.8	Shallow
DW-2	01/07/92	2	22.91	30.0	25.0	29.8	Deep
DW-6	12/02/92	2	22.83	42.5	37.3	42.0	Deep
13MW-1	12/01/91	2	21.84	No Data	No Data	No Data	Shallow
13DW-1	12/01/91	2	22.17	No Data	No Data	No Data	Deep
122MW-3	06/18/92	2	22.23	14.3	4.0	14.0	Shallow
122MW-4	06/18/92	2	19.60	11.0	0.7	10.7	Shallow
122MW-5	06/19/92	2	18.60	13.3	3.0	13.0	Shallow
122MW-6	06/20/92	2	18.38	14.1	3.8	13.8	Shallow
122MW-7	06/20/92	2	18.37	14.1	3.8	13.8	Shallow
122MW-8	01/14/93	2	21.25	12.0	2.3	11.3	Shallow
122MW-9	01/13/93	2	18.94	14.0	4.0	14.0	Shallow
122MW-11	01/13/93	2	21.37	6.0	1.5	6.0	Shallow
122MW-13	01/14/93	2	20.51	13.0	3.0	12.3	Shallow
122MW-14	01/13/93	2	23.41	15.0	5.1	14.2	Shallow
122RW-1	01/31/93	6	18.87	15.0	2.0	11.5	Shallow

MSL - mean sea level
BGS - below ground surface
BTOC - below top of casing

TABLE 3-2
Groundwater Elevation Data - September 2003 to August 2005
Campbell Street Fuel Farm Site

Location	Top of Casing Elevation[1]	Groundwater Elevation (feet MSL)																					
		9/24/2003	12/28/2003	1/29/2004	2/8/2004	3/17/2004	4/26/2004	5/4/2004	6/9/2004	7/7/2004	8/3/2004	9/2/2004	10/12/2004	11/4/2004	12/27/2004	1/6/2005	2/2/2005	3/16/2005	4/7/2005	5/17/2005	6/21/2005	7/22/2005	8/5/2005
MW-3	21.69	16.23	16.11	16.02	15.72	16.30	15.19	16.94	14.59	14.71	17.39	16.97	15.21	14.39	15.97	20.19	15.81	15.13	15.93	15.94	14.68	16.79	15.69
MW-9	20.45	NM	14.66	15.34	15.31	15.62	15.06	15.97	14.34	15.09	15.02	16.12	15.22	14.40	14.41	14.50	14.74	15.54	15.53	15.52	13.22	15.42	15.22
MW-10	21.17	NM	15.50	16.58	16.47	16.62	15.72	16.92	14.59	14.37	16.87	17.35	16.15	15.86	16.19	15.91	16.41	16.42	16.37	16.39	16.16	16.47	15.07
MW-11	22.03	NM	16.09	15.68	15.64	15.93	15.27	16.22	14.35	14.08	15.13	16.34	15.27	14.47	14.63	14.71	15.03	15.33	15.78	15.77	14.50	15.50	16.03
MW-12	21.41	15.09	14.86	14.83	14.76	14.86	14.59	15.58	14.51	14.58	15.68	15.63	14.73	14.28	14.61	14.49	14.65	14.41	13.77	14.89	14.40	15.69	14.88
MW-14	20.07	NM	15.00	14.99	15.04	15.07	14.57	15.78	14.16	14.27	15.74	15.64	14.69	14.26	14.90	14.51	14.82	14.47	14.92	15.17	14.22	15.56	14.75
MW-15	21.08	NM	14.87	14.53	14.40	14.78	14.17	15.16	13.56	13.39	14.40	15.23	14.22	13.55	14.13	13.80	14.05	14.15	14.66	14.63	14.21	14.79	16.15
MW-16	21.45	14.54	15.05	15.10	15.10	14.88	14.93	15.45	14.78	14.78	15.44	15.25	14.78	14.47	14.70	14.85	14.97	14.77	14.18	14.93	14.65	15.23	16.43
MW-21	21.76	NM	15.23	14.61	14.49	15.34	14.66	16.04	14.08	14.08	14.96	15.56	14.22	13.04	12.69	12.59	14.22	14.28	15.48	14.76	13.79	15.24	14.94
MW-22	21.69	NM	15.53	15.39	15.14	15.39	14.87	16.04	14.77	14.87	16.39	15.99	14.97	14.58	14.33	14.79	15.09	14.75	15.18	15.24	14.47	15.75	16.74
MW-24	21.56	12.13	13.90	12.86	12.57	14.94	13.38	14.61	13.16	13.39	13.23	14.70	11.74	11.65	12.26	12.06	12.43	12.54	13.20	12.43	11.87	15.43	14.56
DW-2	22.91	15.16	15.70	15.23	15.14	15.45	14.91	15.79	14.13	13.86	14.77	15.97	14.97	14.17	14.08	14.30	14.56	14.68	15.38	15.37	14.24	15.14	15.90
DW-6	22.83	15.84	16.33	15.90	15.77	16.11	15.60	16.51	14.90	14.66	15.50	16.64	15.65	15.01	14.89	14.98	15.23	15.43	16.10	16.01	15.01	15.81	15.75
13MW-1	21.84	17.16	16.18	15.89	15.81	15.96	16.14	16.95	15.83	16.07	17.31	12.92	16.48	16.74	16.91	16.69	15.82	15.47	16.14	16.36	15.71	16.81	16.16
13DW-1	22.17	16.20	15.37	14.92	14.82	15.01	14.77	15.56	14.19	13.99	14.74	15.76	14.84	14.14	13.92	14.00	14.24	14.42	15.07	15.08	14.26	15.04	14.94
122MW-3	22.23	16.12	17.12	17.43	17.20	16.69	16.61	17.93	15.50	15.68	17.03	17.28	15.79	14.98	16.30	16.33	16.86	16.55	17.25	17.43	15.63	17.20	16.11
122MW-4	19.60	16.84	15.62	18.19	17.05	17.00	17.67	18.40	18.23	17.62	NM	19.50	18.00	18.67	19.10	18.20	16.57	16.18	17.41	17.03	16.90	18.45	17.75
122MW-5	18.60	NM	NM	NM	15.73	14.92	14.77	16.17	14.09	14.18	17.30	16.15	14.46	13.78	15.22	14.70	14.87	14.54	15.13	15.39	14.32	15.98	14.58
122MW-6	18.38	NM	12.15	12.23	12.01	12.01	11.83	12.82	11.68	11.80	13.18	12.81	11.86	11.60	12.62	11.77	12.03	12.00	12.03	12.19	11.50	12.80	12.00
122MW-7	18.37	15.63	14.35	15.67	15.40	15.07	15.19	16.74	14.82	14.92	17.14	16.69	15.17	14.82	15.81	15.34	15.49	14.94	15.50	15.55	14.79	16.64	15.25
122MW-8	21.25	13.59	13.60	13.37	13.10	14.42	14.64	14.03	12.89	13.08	14.63	13.98	13.03	12.87	13.60	13.22	13.28	12.94	13.30	13.97	13.24	14.50	14.69
122MW-9	18.94	14.03	13.55	14.15	14.08	14.24	14.14	14.82	14.14	14.13	14.74	14.49	14.06	13.92	14.10	NM	14.10	13.55	14.43	14.32	14.12	14.40	14.32
122MW-11	21.37	NM	NM	NM	10.35	15.26	15.29	15.44	14.99	15.17	17.05	16.91	15.24	14.85	15.65	15.32	15.55	15.27	15.57	15.82	15.14	17.05	15.17
122MW-13	20.51	NM	15.53	15.68	15.46	15.14	15.25	16.68	14.84	14.99	16.80	16.62	14.61	14.88	14.52	15.46	15.58	15.02	15.56	15.66	14.09	16.50	15.26
122MW-14	23.41	NM	17.09	17.55	17.68	17.23	17.49	17.94	16.86	16.81	17.40	17.60	16.63	15.89	16.59	17.16	17.27	16.92	17.81	17.93	14.40	17.66	17.71
122RW-1	18.87	NM	14.81	14.56	14.68	14.60	14.77	15.87	14.47	14.56	15.82	15.61	14.73	14.17	14.32	NM	14.53	13.98	15.12	14.97	12.70	15.14	14.99

[1] Top of casing elevation expressed in feet above/below MSL

MSL - mean sea level

NM - not measured; well not accessible (for September 2004, well was not designated for gauging)

TABLE 3-3
Horizontal Hydraulic Gradients and Average Linear Velocities
Campbell Street Fuel Farm Site

Zone	Shallow					Shallow				
Well Pair	MW-3 to MW-24					122MW-4 to 122MW-8				
Horizontal Distance (feet)	124					112				
Date Measured	Groundwater Elevation (feet MSL) MW-3	MW-24	Flow Direction	Horizontal Gradient *i*	Linear Velocity (feet/day)	Groundwater Elevation (feet MSL) 22MW-	22MW-8	Flow Direction	Horizontal Gradient *i*	Linear Velocity (feet/day)
9/24/2003	16.23	12.13	ESE	0.033	0.054	16.84	13.59	E	0.029	0.012
12/28/2003	16.11	13.90	ESE	0.018	0.029	15.62	13.60	E	0.018	0.007
1/29/2004	16.02	12.86	ESE	0.025	0.042	18.19	13.37	E	0.043	0.018
2/8/2004	15.72	12.57	ESE	0.025	0.042	17.05	13.10	E	0.035	0.015
3/17/2004	16.30	14.94	ESE	0.011	0.018	17.00	14.42	E	0.023	0.009
4/26/2004	15.19	13.38	ESE	0.015	0.024	17.67	14.64	E	0.027	0.011
5/4/2004	16.94	14.61	ESE	0.019	0.031	18.40	14.03	E	0.039	0.016
6/9/2004	14.59	13.16	ESE	0.012	0.019	18.23	12.89	E	0.048	0.020
7/7/2004	14.71	13.39	ESE	0.011	0.017	17.62	13.08	E	0.041	0.017
8/3/2004	17.39	13.23	ESE	0.034	0.055	NM	14.63			
9/2/2004	16.97	14.70	ESE	0.018	0.030	19.50	13.98	E	0.049	0.020
10/12/2004	15.21	11.74	ESE	0.028	0.046	18.00	13.03	E	0.044	0.018
11/4/2004	14.39	11.65	ESE	0.022	0.036	18.67	12.87	E	0.052	0.021
12/27/2004	15.97	12.26	ESE	0.030	0.049	19.10	13.60	E	0.049	0.020
1/6/2005	20.19	12.06	ESE	0.066	0.108	18.20	13.22	E	0.044	0.018
2/2/2005	15.81	12.43	ESE	0.027	0.045	16.57	13.28	E	0.029	0.012
3/16/2005	15.13	12.54	ESE	0.021	0.034	16.18	12.94	E	0.029	0.012
4/7/2005	15.93	13.20	ESE	0.022	0.036	17.41	13.30	E	0.037	0.015
5/17/2005	15.94	12.43	ESE	0.028	0.047	17.03	13.97	E	0.027	0.011
6/21/2005	14.68	11.87	ESE	0.023	0.037	16.90	13.24	E	0.033	0.013
7/22/2005	16.79	15.43	ESE	0.011	0.018	18.45	14.50	E	0.035	0.015
8/5/2005	15.69	14.56	ESE	0.009	0.015	17.75	14.69	E	0.027	0.011
Pair Average				0.023	0.038				0.036	0.015

Average linear velocity = $K_H\, i \,/\, n_e$; assumes homogeneous isotropic porous aquifer

	Fuel Farm / AS-143 area	AS-4151 area
Horizontal hydraulic conductivity (K_H) =	0.46 feet/day	0.14 feet/day
n_e: effective porosity (n_e) =	0.28 (dimensionless)	0.34 (dimensionless)

MSL - mean sea level

TABLE 3-4
Vertical Hydraulic Gradients
Campbell Street Fuel Farm Site

Well Pair	MW-21	to	DW-6
Zone	Shallow	|	Deep
Screen Midpoint Distance (feet)	31.0		
Date Measured	Groundwater Elevation (feet MSL) MW-21	DW-6	Vertical Gradient *i*
9/24/2003	NM	15.84	
12/28/2003	15.23	16.33	-0.04
1/29/2004	14.61	15.90	-0.04
2/8/2004	14.49	15.77	-0.04
3/17/2004	15.34	16.11	-0.02
4/26/2004	14.66	15.60	-0.03
5/4/2004	16.04	16.51	-0.02
6/9/2004	14.08	14.90	-0.03
7/7/2004	14.08	14.66	-0.02
8/3/2004	14.96	15.50	-0.02
9/2/2004	15.56	16.64	-0.03
10/12/2004	14.22	15.65	-0.05
11/4/2004	13.04	15.01	-0.06
12/27/2004	12.69	14.89	-0.07
1/6/2005	12.59	14.98	-0.08
2/2/2005	14.22	15.23	-0.03
3/16/2005	14.28	15.43	-0.04
4/7/2005	15.48	16.10	-0.02
5/17/2005	14.76	16.01	-0.04
6/21/2005	13.79	15.01	-0.04
7/22/2005	15.24	15.81	-0.02
8/5/2005	14.94	15.75	-0.03
Pair Average			-0.04

MSL - mean sea level

Table 4-1 (1 of 8)

Summary of Laboratory Analyses for Groundwater - Campbell Street Fuel Fram Site

September 2003

Campbell Street Fuel Rarm and Buiilding AS-143 Area

Sample Location	NCGWQS	GCL	MW-03	MW-11	MW-12	MW-14	MW-16	MW-21	MW-24	DW-02	DW-06
Date Sampled			09/24/03	09/24/03	09/24/03	09/24/03	09/24/03	09/24/03	09/24/03	09/24/03	09/24/03
EPA 602 (µg/L)											
Benzene	1	5,000	<1.0	<1.0	<1.0	<1.0	34.1	381	520	<1.0	<1.0
1,2-Dichlorobenzene	620	72,500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3-Dichlorobenzene	620	61,500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Ethylbenzene	29	29,000	<1.0	<1.0	<1.0	<1.0	7	156	347	<1.0	<1.0
Toluene	1000	257,500	<1.0	<1.0	0.85 J	<1.0	<1.0	70	549	<1.0	<1.0
Xylenes (total)	530	87,500	<3.0	<3.0	<3.0	<3.0	35.6	467	1020	<3.0	<3.0
Methyl Tert Butyl Ether	200	200,000	<1.0	<1.0	<1.0	<1.0	<1.0	259	35.7	<1.0	<1.0
EPA 610 (µg/L)											
Acenaphthene	80	2,120	NA	NA	NA	NA	NA	NA	NA	21.8	<5.1
Acenaphthylene	210	1,965	NA	NA	NA	NA	NA	NA	NA	<5.3	<5.1
Anthracene	2100	2,100	NA	NA	NA	NA	NA	NA	NA	<5.3	<5.1
Benzo(a)anthracene	0.05	22	NA	NA	NA	NA	NA	NA	NA	<5.3	<5.1
Fluoranthene	280	280	NA	NA	NA	NA	NA	NA	NA	<5.3	<5.1
Fluorene	280	950	NA	NA	NA	NA	NA	NA	NA	16	<5.1
1-Methylnaphthelene	RL	NE	NA	NA	NA	NA	NA	NA	NA	<5.3	<5.1
2-Methylnaphthalene	14	12,500	NA	NA	NA	NA	NA	NA	NA	<5.3	<5.1
Naphthalene	21	15,500	NA	NA	NA	NA	NA	NA	NA	9.9	<5.1
Phenanthrene	210	410	NA	NA	NA	NA	NA	NA	NA	<5.3	<5.1
Pyrene	210	210	NA	NA	NA	NA	NA	NA	NA	<5.3	<5.1
EPA 504.1 (µg/L)											
1,2-Dibromoethane	0.0004	50	<0.018	<0.018	<0.019	<0.018	<0.019	<0.018	<0.018	<0.018	<0.019

Buildig AS-4151 Area

Sample Location	NCGWQS	GCL	13-MW01	13-DW01	122-MW03	122-MW04	122-MW07	122-MW08	122-MW09	122-MW11
Date Sampled			09/25/03	09/24/03	09/25/03	09/25/03	09/25/03	09/25/03	09/25/03	09/25/03
EPA 602 (µg/L)										
Benzene	1	5,000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichlorobenzene	620	72,500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3-Dichlorobenzene	620	61,500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Ethylbenzene	29	29,000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.57 J	<1.0
Toluene	1000	257,500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Xylenes (total)	530	87,500	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
Methyl Tert Butyl Ether	200	200,000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
EPA 610 (µg/L)										
Acenaphthene	80	2,120	NA	<5.3	NA	NA	NA	NA	<5.0	NA
Acenaphthylene	210	1,965	NA	<5.3	NA	NA	NA	NA	<5.0	NA
Anthracene	2100	2,100	NA	<5.3	NA	NA	NA	NA	<5.0	NA
Benzo(a)anthracene	0.05	22	NA	<5.3	NA	NA	NA	NA	<5.0	NA
Fluoranthene	280	280	NA	<5.3	NA	NA	NA	NA	<5.0	NA
Fluorene	280	950	NA	<5.3	NA	NA	NA	NA	<5.0	NA
1-Methylnaphthalene	RL	NE	NA	<5.3	NA	NA	NA	NA	21.1	NA
2-Methylnaphthalene	14	12,500	NA	<5.3	NA	NA	NA	NA	41	NA
Naphthalene	21	15,500	NA	<5.3	NA	NA	NA	NA	47.1	NA
Phenanthrene	210	410	NA	<5.3	NA	NA	NA	NA	<5.0	NA
Pyrene	210	210	NA	<5.3	NA	NA	NA	NA	<5.0	NA
EPA 504.1 (µg/L)										
1,2-Dibromoethane	0.0004	50	<0.019	<0.018	<0.019	<0.019	<0.018	<0.019	<0.018	<0.018

NA: Not Analyzed; comstituent not included in analytic suite

µg/L: micrograms per liter

<#: not detected at the indicated reporting limit

J: estimated concentration less than reporting limit

E: Concentration exceeds calibration range

GCL: Gross Contaminant Level

NE: Not Establsihed; a gCL has not been established for the constituent

NCGWQS: North Carolina Groundwater Quality Standard

RL: Reporting Limit, no NCGWQS established for the consitituent; thereffore, the NCGWQS for the constituent is the reporting limit

Bold type indicates detectable concentrations.

Shaded area indicates detectable concentration above the North Carolina Groundwater Quality Standards

Table 4-1 (2 of 8)

Summary of Laboratory Analyses for Groundwater - Campbell Street Fuel Fram Site

December 2003

Campbell Street Fuel Ramm and Building AS-143 Area

Sample Location	NCGWQS	GCL	MW-03	MW-11	MW-12	MW-14	MW-16	MW-21	MW-24	DW-02	DW-02D*	DW-
Date Sampled			12/16/03	12/17/03	12/16/03	12/16/03	12/16/03	12/17/03	12/17/03	12/16/03	12/16/03	12/17/
EPA 602 (µg/L)												
Benzene	1	5,000	<1.0	<1.0	**1.3**	<1.0	**41.7**	**273**	**40.1**	<1.0	<1.0	<1.0
1,2-Dichlorobenzene	620	72,500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3-Dichlorobenzene	620	61,500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Ethylbenzene	29	29,000	<1.0	<1.0	**0.77 J**	<1.0	**7.4**	**246**	**19.1**	<1.0	<1.0	<1.0
Toluene	1000	257,500	<1.0	<1.0	<1.0	<1.0	<1.0	**95.2**	**58**	<1.0	<1.0	<1.0
Xylenes (total)	530	87,500	<3.0	<3.0	**1.6 J**	<3.0	**32.4**	**1060**	**62.9**	<3.0	<3.0	<3.0
Methyl Tert Butyl Ether	200	200,000	<1.0	<1.0	<1.0	<1.0	**0.88 J**	**180**	**16.5**	<1.0	<1.0	<1.0
EPA 610 (µg/L)												
Acenaphthene	80	2,120	NA	NA	NA	NA	NA	NA	NA	**35.4**	**35.1**	<5.4
Acenaphthylene	210	1,965	NA	NA	NA	NA	NA	NA	NA	<5.2	<5.1	<5.4
Anthracene	2100	2,100	NA	NA	NA	NA	NA	NA	NA	<5.2	<5.1	<5.4
Benzo(a)anthracene	0.05	22	NA	NA	NA	NA	NA	NA	NA	<5.2	<5.1	<5.4
Fluoranthene	280	280	NA	NA	NA	NA	NA	NA	NA	<5.2	<5.1	<5.4
Fluorene	280	950	NA	NA	NA	NA	NA	NA	NA	**27.9**	**27.8**	<5.4
1-Methylnaphthalene	RL	NE	NA	NA	NA	NA	NA	NA	NA	**4.6 J**	**4.6 J**	<5.4
2-Methylnaphthalene	14	12,500	NA	NA	NA	NA	NA	NA	NA	**2.3 J**	<5.1	<5.4
Naphthalene	21	15,500	NA	NA	NA	NA	NA	NA	NA	**36**	**36.9**	<5.4
Phenanthrene	210	410	NA	NA	NA	NA	NA	NA	NA	<5.2	<5.1	<5.4
Pyrene	210	210	NA	NA	NA	NA	NA	NA	NA	<5.2	<5.1	<5.4
EPA 504.1 (µg/L)												
1,2-Dibromoethane	0.0004	50	<0.019	<0.019	<0.018	<0.018	<0.018	<0.018	<0.019	<0.019	<0.019	<0.019

Building AS-4151 Area

Sample Location	NCGWQS	GCL	13-MW01	13-DW01	122-MW03	122-MW04	122-MW07	122-MW08	122-MW09	122-MW11
Date Sampled			12/18/03	12/17/03	12/19/03	12/18/03	12/19/03	12/19/03	12/17/03	12/19/03
EPA 602 (µg/L)										
Benzene	1	5,000	<1.0	**9.1**	<1.0	<1.0	<1.0	<1.0	**0.79 J**	<1.0
1,2-Dichlorobenzene	620	72,500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3-Dichlorobenzene	620	61,500	**14.6**	<1.0	<1.0	<1.0	**2.9**	**0.62 J**	<1.0	<1.0
Ethylbenzene	29	29,000	**1.2**	**7.9**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Toluene	1000	257,500	<1.0	**2**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Xylenes (total)	530	87,500	5	**13.9**	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
Methyl Tert Butyl Ether	200	200,000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
EPA 610 (µg/L)										
Acenaphthene	80	2,120	NA	**69.2**	NA	NA	NA	NA	<5.7	NA
Acenaphthylene	210	1,965	NA	<5.1	NA	NA	NA	NA	<5.7	NA
Anthracene	2100	2,100	NA	<5.1	NA	NA	NA	NA	<5.7	NA
Benzo(a)anthracene	0.05	22	NA	<5.1	NA	NA	NA	NA	<5.7	NA
Fluoranthene	280	280	NA	<5.1	NA	NA	NA	NA	<5.7	NA
Fluorene	280	950	NA	**27.5**	NA	NA	NA	NA	<5.7	NA
1-Methylnaphthalene	RL	NE	NA	**70.2**	NA	NA	NA	NA	**65**	NA
2-Methylnaphthalene	14	12,500	NA	**118**	NA	NA	NA	NA	<46	NA
Naphthalene	21	15,500	NA	**1510**	NA	NA	NA	NA	**84.1**	NA
Phenanthrene	210	410	NA	<5.1	NA	NA	NA	NA	<5.7	NA
Pyrene	210	210	NA	<5.1	NA	NA	NA	NA	<5.7	NA
EPA 504.1 (µg/L)										
1,2-Dibromoethane	0.0004	50	<0.018	<0.018	<0.018	<0.019	<0.019	<0.018	<0.019	<0.018

* DW-02D is a duplicate sample collected at well DW-02

NA: Not Analyzed; comstituent not included in analytic suite

µg/L: micrograms per liter

<#: not detected at the indicated reporting limit

J: estimated concentration less than reporting limit

E: Concentration exceeds calibration range

GCL: Gross Contaminant Level

NE: Not Establsihed; a gCL has not been established for the constituent

NCGWQS: North Carolina Groundwater Quality Standard

RL: Reporting Limit, no NCGWQS established for the consitituent; thereffore, the NCGWQS for the constituent is the reporting limit

Bold type indicates detectable concentrations.

Shaded area indicates detectable concentration above the North Carolina Groundwater Quality Standards

Table 4-1 (3 of 8)

Summary of Laboratory Analyses for Groundwater - Campbell Street Fuel Fram Site

March 2004

	Sample Location	NCGWQS	GCL	MW-03	MW-11	MW-12	MW-14	MW-16	MW-21	MW-24	DW-02	DW-06
	Date Sampled			03/17/04	03/18/04	03/18/04	03/18/04	03/18/04	03/18/04	03/18/04	03/17/04	03/18/04
Campbell Street Fuel Rarm and Building AS-143 Area	**EPA 602 (µg/L)**											
	Benzene	1	5,000	<1.0	<1.0	<1.0	<1.0	42.7	230	576	<1.0	<1.0
	1,2-Dichlorobenzene	620	72,500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	1,3-Dichlorobenzene	620	61,500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	Ethylbenzene	29	29,000	<1.0	<1.0	<1.0	<1.0	7	176	251	<1.0	<1.0
	Toluene	1000	257,500	<1.0	<1.0	<1.0	<1.0	<1.0	48.2	264	<1.0	<1.0
	Xylenes (total)	530	87,500	<3.0	<3.0	<3.0	<3.0	44.3	604	869	<3.0	<3.0
	Methyl Tert Butyl Ether	200	200,000	<1.0	<1.0	<1.0	<1.0	<1.0	153	57.7	<1.0	<1.0
	EPA 610 (µg/L)											
	Acenaphthene	80	2,120	NA	NA	NA	NA	NA	NA	NA	28.5	<5.1
	Acenaphthylene	210	1,965	NA	NA	NA	NA	NA	NA	NA	<5.1	<5.1
	Anthracene	2100	2,100	NA	NA	NA	NA	NA	NA	NA	<5.1	<5.1
	Benzo(a)anthracene	0.05	22	NA	NA	NA	NA	NA	NA	NA	<5.1	<5.1
	Fluoranthene	280	280	NA	NA	NA	NA	NA	NA	NA	<5.1	<5.1
	Fluorene	280	950	NA	NA	NA	NA	NA	NA	NA	24	<5.1
	1-Methylnaphthelene	RL	NE	NA	NA	NA	NA	NA	NA	NA	<5.1	<5.1
	2-Methylnaphthalene	14	12,500	NA	NA	NA	NA	NA	NA	NA	<5.1	<5.1
	Naphthalene	21	15,500	NA	NA	NA	NA	NA	NA	NA	11	<5.1
	Phenanthrene	210	410	NA	NA	NA	NA	NA	NA	NA	<5.1	<5.1
	Pyrene	210	210	NA	NA	NA	NA	NA	NA	NA	<5.1	<5.1
	EPA 504.1 (µg/L)											
	1,2-Dibromoethane	0.0004	50	<0.019	<0.019	<0.019	<0.019	<0.018	<0.018	<0.018	<0.018	<0.019

	Sample Location	NCGWQS	GCL	13-MW01	DUP *	13-DW01	122-MW03	122-MW04	122-MW07	122-MW08	122-MW09	122-MW11
	Date Sampled			03/17/04	03/17/04	03/17/04	03/17/04	03/17/04	03/17/04	03/17/04	03/17/04	03/18/04
Buildig AS-4151 Area	**EPA 602 (µg/L)**											
	Benzene	1	5,000	<1.0	<1.0	9.3	<1.0	<1.0	<1.0	<1.0	0.87 J	<1.0
	1,2-Dichlorobenzene	620	72,500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	1,3-Dichlorobenzene	620	61,500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	Ethylbenzene	29	29,000	1.6	1.7	8.7	<1.0	<1.0	<1.0	0.69 J	0.83 J	<1.0
	Toluene	1000	257,500	<1.0	<1.0	2.1	<1.0	<1.0	<1.0	2.6	<1.0	<1.0
	Xylenes (total)	530	87,500	5.7	6.1	14.5	<3.0	<3.0	<3.0	3.2	1.1 J	<3.0
	Methyl Tert Butyl Ether	200	200,000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	EPA 610 (µg/L)											
	Acenaphthene	80	2,120	NA	NA	72.8	NA	NA	NA	NA	<5.1	NA
	Acenaphthylene	210	1,965	NA	NA	<26	NA	NA	NA	NA	<5.1	NA
	Anthracene	2100	2,100	NA	NA	<5.1	NA	NA	NA	NA	<5.1	NA
	Benzo(a)anthracene	0.05	22	NA	NA	<5.1	NA	NA	NA	NA	<5.1	NA
	Fluoranthene	280	280	NA	NA	<5.1	NA	NA	NA	NA	<5.1	NA
	Fluorene	280	950	NA	NA	29	NA	NA	NA	NA	3.1 J	NA
	1-Methylnaphthalene	RL	NE	NA	NA	65.4	NA	NA	NA	NA	16 J	NA
	2-Methylnaphthalene	14	12,500	NA	NA	85.3	NA	NA	NA	NA	<25	NA
	Naphthalene	21	15,500	NA	NA	1370	NA	NA	NA	NA	21.6 J	NA
	Phenanthrene	210	410	NA	NA	<5.1	NA	NA	NA	NA	<5.1	NA
	Pyrene	210	210	NA	NA	<5.1	NA	NA	NA	NA	<5.1	NA
	EPA 504.1 (µg/L)											
	1,2-Dibromoethane	0.0004	50	<0.018	<0.019	<0.019	<0.018	<0.019	<0.018	<0.018	<0.018	<0.019

* DUP is a duplicate sample collected at well MW13-MW01

NA: Not Analyzed; comstituent not included in analytic suite

µg/L: micrograms per liter

<#: not detected at the indicated reporting limit

J: estimated concentration less than reporting limit

E: Concentration exceeds calibration range

GCL: Gross Contaminant Level

NE: Not Establsihed; a gCL has not been established for the constituent

NCGWQS: North Carolina Groundwater Quality Standard

RL: Reporting Limit, no NCGWQS established for the consitituent; thereffore, the NCGWQS for the constituent is the reporting limit

Bold type indicates detectable concentrations.

Shaded area indicates detectable concentration above the North Carolina Groundwater Quality Standards

Table 4-1 (4 of 8)

Summary of Laboratory Analyses for Groundwater - Campbell Street Fuel Fram Site

June 2004

Campbell Street Fuel Rarm and Buitlding AS-143 Area

Sample Location	NCGWQS	GCL	MW-03	MW-11	MW-12	MW-14	MW-16	MW-21	MW-24	DW-02	DW-06
Date Sampled			06/21/04	06/21/04	06/21/04	06/21/04	06/21/04	06/23/04	06/23/04	06/21/04	06/23/04
EPA 602 (µg/L)											
Benzene	1	5,000	<1.0	<1.0	<1.0	<1.0	58.3	193	198	<1.0	<1.0
1,2-Dichlorobenzene	620	72,500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3-Dichlorobenzene	620	61,500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Ethylbenzene	29	29,000	<1.0	<1.0	<1.0	<1.0	7.2	140	54.6	<1.0	<1.0
Toluene	1000	257,500	<1.0	<1.0	0.56 J	<1.0	<1.0	41.9	20.1	<1.0	<1.0
Xylenes (total)	530	87,500	<3.0	<3.0	<3.0	<3.0	16.7	429	114	<3.0	<3.0
Methyl Tert Butyl Ether	200	200,000	<1.0	<1.0	<1.0	<1.0	<1.0	132	48.1	<1.0	<1.0
EPA 610 (µg/L)											
Acenaphthene	80	2,120	<5.1	<5.1	<5.0	<5.2	<5.2	<5.1	<5.1	26.5	<5.0
Acenaphthylene	210	1,965	<5.1	<5.1	<5.0	<5.2	<5.2	<5.1	<5.1	<5.1	<5.0
Anthracene	2100	2,100	<5.1	<5.1	<5.0	<5.2	<5.2	<5.1	<5.1	<5.1	<5.0
Benzo(a)anthracene	0.05	22	<5.1	<5.1	<5.0	<5.2	<5.2	<5.1	<5.1	<5.1	<5.0
Fluoranthene	280	280	<5.1	<5.1	<5.0	<5.2	<5.2	<5.1	<5.1	<5.1	<5.0
Fluorene	280	950	<5.1	<5.1	<5.0	<5.2	<5.2	<5.1	<5.1	20.1	<5.0
1-Methylnaphthalene	RL	NE	<5.1	<5.1	8.4	<5.2	94.5	9.3	6.9	<5.1	<5.0
2-Methylnaphthalene	14	12,500	<5.1	<5.1	7.4	<5.2	54.2	15.1	9	<5.1	<5.0
Naphthalene	21	15,500	<5.1	<5.1	16.7	<5.2	73.4	57.5	37.8	12.6	<5.0
Phenanthrene	210	410	<5.1	<5.1	<5.0	<5.2	<5.2	<5.1	<5.1	<5.1	<5.0
Pyrene	210	210	<5.1	<5.1	<5.0	<5.2	<5.2	<5.1	<5.1	<5.1	<5.0
EPA 504.1 (µg/L)											
1,2-Dibromoethane	0.0004	50	<0.019	<0.019	<0.018	<0.019	<0.018	<0.019	<0.018	<0.019	<0.019

Building AS-4151 Area

Sample Location	NCGWQS	GCL	13-MW01	DUP *	13-DW01	122-MW03	122-MW04	122-MW07	122-MW08	122-MW09
Date Sampled			06/22/04	06/22/04	06/22/04	06/22/04	06/22/04	06/22/04	06/22/04	06/22/04
EPA 602 (µg/L)										
Benzene	1	5,000	<1.0	<1.0	8.7	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichlorobenzene	620	72,500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3-Dichlorobenzene	620	61,500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Ethylbenzene	29	29,000	0.67 J	0.7 J	7.7	<1.0	<1.0	<1.0	<1.0	<1.0
Toluene	1000	257,500	<1.0	<1.0	1.8	<1.0	<1.0	<1.0	<1.0	<1.0
Xylenes (total)	530	87,500	3.9	4.2	12.9	<3.0	<3.0	<3.0	<3.0	1.5 J
Methyl Tert Butyl Ether	200	200,000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
EPA 610 (µg/L)										
Acenaphthene	80	2,120	<5.5	<5.1	76.2	<5.1	<5.1	<5.2	3.2 J	<5.2
Acenaphthylene	210	1,965	<5.5	<5.1	<20	<5.1	<5.1	<5.2	<5.0	<5.2
Anthracene	2100	2,100	<5.5	<5.1	<5.0	<5.1	<5.1	<5.2	<5.0	<5.2
Benzo(a)anthracene	0.05	22	<5.5	<5.1	<5.0	<5.1	<5.1	<5.2	<5.0	<5.2
Fluoranthene	280	280	<5.5	<5.1	<5.0	<5.1	<5.1	<5.2	<5.0	<5.2
Fluorene	280	950	<5.5	<5.1	30.9	<5.1	<5.1	<5.2	<5.0	<5.2
1-Methylnaphthalene	RL	NE	71.7	77.4	78.9	<5.1	<5.1	2.7 J	<5.0	16.2
2-Methylnaphthalene	14	12,500	89	97.4	128	<5.1	<5.1	<5.2	<5.0	<5.2
Naphthalene	21	15,500	132	139	1140	<5.1	17.7	4.5 J	3.6 J	22.2
Phenanthrene	210	410	<5.5	<5.1	2.5 J	<5.1	<5.1	<5.2	<5.0	<5.2
Pyrene	210	210	<5.5	<5.1	<5.0	<5.1	<5.1	<5.2	<5.0	<5.2
EPA 504.1 (µg/L)										
1,2-Dibromoethane	0.0004	50	<0.018	<0.018	<0.019	<0.018	<0.019	<0.019	<0.019	<0.019

* DUP is a duplicate sample collected at well MW13-MW01

NA: Not Analyzed; constituent not included in analytic suite

µg/L: micrograms per liter

<#: not detected at the indicated reporting limit

J: estimated concentration less than reporting limit

E: Concentration exceeds calibration range

GCL: Gross Contaminant Level

NE: Not Establsihed; a gCL has not been established for the constituent

NCGWQS: North Carolina Groundwater Quality Standard

RL: Reporting Limit, no NCGWQS established for the consitituent; thereffore, the NCGWQS for the constituent is the reporting limit

Bold type indicates detectable concentrations.

Shaded area indicates detectable concentration above the North Carolina Groundwater Quality Standards

Table 4-1 (5 of 8)

Summary of Laboratory Analyses for Groundwater - Campbell Street Fuel Fram Site

September 2004

Campbell Street Fuel Rarm and Buillding AS-143 Area

Sample Location	NCGWQS	GCL	MW-03	MW-11	DUP *	MW-12	MW-14	MW-16	MW-21	MW-24	DW-02	DW-06
Date Sampled			09/17/04	09/20/04	09/20/04	09/20/04	09/20/04	09/20/04	09/16/04	09/20/04	09/20/04	09/16/04
EPA 602 (µg/L)												
Benzene	1	5,000	<1.0	<1.0	<1.0	<1.0	<1.0	62.5	250	104	<1.0	<1.0
1,2-Dichlorobenzene	620	72,500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3-Dichlorobenzene	620	61,500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Ethylbenzene	29	29,000	0.59 J	<1.0	<1.0	0.58 J	<1.0	6.8	236	62.4	<1.0	<1.0
Toluene	1000	257,500	<1.0	<1.0	<1.0	1.4	0.54 J	1.3	55.4	79	<1.0	<1.0
Xylenes (total)	530	87,500	1.2 J	<3.0	<3.0	2.1 J	<3.0	21.6	887	181	1.2 J	<3.0
Methyl Tert Butyl Ether	200	200,000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	133	25.1	<1.0	<1.0
EPA 610 (µg/L)												
Acenaphthene	80	2,120	NA	NA	NA	NA	NA	NA	NA	NA	51.2	<4.9
Acenaphthylene	210	1,965	NA	NA	NA	NA	NA	NA	NA	NA	<4.8	<4.9
Anthracene	2100	2,100	NA	NA	NA	NA	NA	NA	NA	NA	4.7 J	<4.9
Benzo(a)anthracene	0.05	22	NA	NA	NA	NA	NA	NA	NA	NA	<4.8	<4.9
Fluoranthene	280	280	NA	NA	NA	NA	NA	NA	NA	NA	3.2 J	<4.9
Fluorene	280	950	NA	NA	NA	NA	NA	NA	NA	NA	41.6	<4.9
1-Methylnaphthalene	RL	NE	NA	NA	NA	NA	NA	NA	NA	NA	9.5	<4.9
2-Methylnaphthalene	14	12,500	NA	NA	NA	NA	NA	NA	NA	NA	3.4	<4.9
Naphthalene	21	15,500	NA	NA	NA	NA	NA	NA	NA	NA	83.2	<4.9
Phenanthrene	210	410	NA	NA	NA	NA	NA	NA	NA	NA	3.2	<4.9
Pyrene	210	210	NA	NA	NA	NA	NA	NA	NA	NA	<4.8	<4.9
EPA 504.1 (µg/L)												
1,2-Dibromoethane	0.0004	50	<0.019	<0.019	<0.019	<0.019	<0.019	<0.020	<0.020	<0.019	<0.019	<0.019

Buildig AS-4151 Area

Sample Location	NCGWQS	GCL	13-MW01	13-DW01	122-MW03	122-MW04	122-MW07	122-MW08	122-MW09
Date Sampled			09/16/04	09/16/04	09/16/04	09/16/04	09/16/04	09/16/04	09/16/04
EPA 602 (µg/L)									
Benzene	1	5,000	<1.0	9.4	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichlorobenzene	620	72,500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3-Dichlorobenzene	620	61,500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Ethylbenzene	29	29,000	1.1	8.9	<1.0	<1.0	<1.0	<1.0	0.59 J
Toluene	1000	257,500	0.83 J	2.3	1.5	0.74 J	0.52 J	1.3	0.56 J
Xylenes (total)	530	87,500	4.3	15.5	<3.0	<3.0	<3.0	1.2 J	2.1 J
Methyl Tert Butyl Ether	200	200,000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
EPA 610 (µg/L)									
Acenaphthene	80	2,120	<19	79.7	NA	NA	NA	NA	NA
Acenaphthylene	210	1,965	<19	<19	NA	NA	NA	NA	NA
Anthracene	2100	2,100	<19	<19	NA	NA	NA	NA	NA
Benzo(a)anthracene	0.05	22	<19	<19	NA	NA	NA	NA	NA
Fluoranthene	280	280	<19	<19	NA	NA	NA	NA	NA
Fluorene	280	950	<19	31.6	NA	NA	NA	NA	NA
1-Methylnaphthalene	RL	NE	74.5	81.7	NA	NA	NA	NA	NA
2-Methylnaphthalene	14	12,500	97.6	144.0	NA	NA	NA	NA	NA
Naphthalene	21	15,500	137	1530	NA	NA	NA	NA	NA
Phenanthrene	210	410	<19	2.5 J	NA	NA	NA	NA	NA
Pyrene	210	210	<19	<19	NA	NA	NA	NA	NA
EPA 504.1 (µg/L)									
1,2-Dibromoethane	0.0004	50	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019

* DUP is a duplicate sample collected at well MW-11

NA: Not Analyzed; comstituent not included in analytic suite

: Gross Contaminant Level

NE: Not Estabisihed; a gCL has not been established for the constituent

NCGWQS: North Carolina Groundwater Quality Standard

RL: Reporting Limit, no NCGWQS established for the consrituent; thereffore, the NCGWQS for the constituent is the reporting limit

Bold type indicates detectable concentrations.

Shaded area indicates detectable concentration above the North Carolina Groundwater Quality Standards

µg/L: micrograms per liter

<#: not detected at the indicated reporting limit

J: estimated concentration less than reporting limit

E: Concentration exceeds calibration range

Table 4-1 (6 of 8)

Summary of Laboratory Analyses for Groundwater - Campbell Street Fuel Fram Site

December 2004

	Sample Location	NCGWQS	GCL	MW-03	MW-11	MW-12	MW-14	MW-16	MW-21	MW-24	DW-02	DW-06	DUP *
	Date Sampled			12/28/04	12/28/04	12/28/04	12/28/04	12/28/04	12/28/04	12/28/04	12/27/04	12/28/04	12/28/0
Campbell Street Fuel Ramn and Buiilding AS-143 Area	**EPA 602 (µg/L)**												
	Benzene	1	5,000	<1.0	<1.0	<1.0	<1.0	**65.4**	**8.3**	**598**	**9.2**	<1.0	<1.0
	1,2-Dichlorobenzene	620	72,500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	1,3-Dichlorobenzene	620	61,500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	Ethylbenzene	29	29,000	<1.0	<1.0	<1.0	<1.0	**8.4**	**1.7**	**270**	**7.5**	<1.0	<1.0
	Toluene	1000	257,500	<1.0	<1.0	**0.77 J**	<1.0	**0.66 J**	**3.1**	**712**	**2.2**	<1.0	<1.0
	Xylenes (total)	530	87,500	<3.0	<3.0	<1.0	<3.0	**29.1**	**6.1**	**899**	**14.8**	<3.0	<3.0
	Methyl Tert Butyl Ether	200	200,000	<1.0	<1.0	<1.0	<1.0	<1.0	**50.6**	**46.9**	<1.0	<1.0	<1.0
	EPA 610 (µg/L)												
	Acenaphthene	80	2,120	NA	NA	NA	NA	NA	NA	NA	**27.4**	<4.9	<4.8
	Acenaphthylene	210	1,965	NA	NA	NA	NA	NA	NA	NA	<4.8	<4.9	<4.8
	Anthracene	2100	2,100	NA	NA	NA	NA	NA	NA	NA	<4.8	<4.9	<4.8
	Benzo(a)anthracene	0.05	22	NA	NA	NA	NA	NA	NA	NA	<4.8	<4.9	<4.8
	Fluoranthene	280	280	NA	NA	NA	NA	NA	NA	NA	<4.8	<4.9	<4.8
	Fluorene	280	950	NA	NA	NA	NA	NA	NA	NA	**21.5**	<4.9	<4.8
	1-Methylnaphthalene	RL	NE	NA	NA	NA	NA	NA	NA	NA	<4.8	<4.9	<4.8
	2-Methylnaphthalene	14	12,500	NA	NA	NA	NA	NA	NA	NA	<4.8	<4.9	<4.8
	Naphthalene	21	15,500	NA	NA	NA	NA	NA	NA	NA	**20.4**	<4.9	<4.8
	Phenanthrene	210	410	NA	NA	NA	NA	NA	NA	NA	**3.2**	<4.9	<4.8
	Pyrene	210	210	NA	NA	NA	NA	NA	NA	NA	<4.8	<4.9	<4.8
	EPA 504.1 (µg/L)												
	1,2-Dibromoethane	0.0004	50	<0.020	<0.019	<0.019	<0.020	<0.019	<0.019	<0.019	<0.020	<0.019	<0.020

	Sample Location	NCGWQS	GCL	13-MW01	13-DW01	122-MW03	122-MW04	122-MW07	122-MW08	122-MW09	122-MW11
	Date Sampled			12/27/04	12/27/04	12/28/04	12/27/04	12/28/04	12/27/04	12/27/04	12/28/04
Buildig AS-4151 Area	**EPA 602 (µg/L)**										
	Benzene	1	5,000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**0.91 J**	<1.0
	1,2-Dichlorobenzene	620	72,500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	1,3-Dichlorobenzene	620	61,500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	Ethylbenzene	29	29,000	**0.75 J**	<1.0	<1.0	<1.0	<1.0	<1.0	**1.1**	<1.0
	Toluene	1000	257,500	**0.56 J**	**0.52 J**	<1.0	<1.0	**0.53 J**	**0.54 J**	<1.0	<1.0
	Xylenes (total)	530	87,500	**2.5 J**	**1.4 J**	<3.0	<3.0	<3.0	<3.0	**1.8 J**	<3.0
	Methyl Tert Butyl Ether	200	200,000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	EPA 610 (µg/L)										
	Acenaphthene	80	2,120	NA	**81.9**	NA	NA	NA	NA	<24	NA
	Acenaphthylene	210	1,965	NA	**3.7 J**	NA	NA	NA	NA	<24	NA
	Anthracene	2100	2,100	NA	<4.8	NA	NA	NA	NA	<24	NA
	Benzo(a)anthracene	0.05	22	NA	<4.8	NA	NA	NA	NA	<24	NA
	Fluoranthene	280	280	NA	<4.8	NA	NA	NA	NA	<24	NA
	Fluorene	280	950	NA	**36.1**	NA	NA	NA	NA	<24	NA
	1-Methylnaphthalene	RL	NE	NA	**92.8**	NA	NA	NA	NA	**75.6**	NA
	2-Methylnaphthalene	14	12,500	NA	**142**	NA	NA	NA	NA	**31.1**	NA
	Naphthalene	21	15,500	NA	**1610**	NA	NA	NA	NA	**142**	NA
	Phenanthrene	210	410	NA	<4.8	NA	NA	NA	NA	<24	NA
	Pyrene	210	210	NA	<4.8	NA	NA	NA	NA	<24	NA
	EPA 504.1 (µg/L)										
	1,2-Dibromoethane	0.0004	50	<0.020	<0.020	<0.020	<0.020	<0.020	<0.019	<0.020	<0.019

* DUP is a duplicate sample collected at well DW-06

NA: Not Analyzed; comstituent not included in analytic suite

µg/L: micrograms per liter

<#: not detected at the indicated reporting limit

J: estimated concentration less than reporting limit

E: Concentration exceeds calibration range

GCL: Gross Contaminant Level

NE: Not Establsihed; a gCL has not been established for the constituent

NCGWQS: North Carolina Groundwater Quality Standard

RL: Reporting Limit, no NCGWQS established for the consitituent; thereffore, the NCGWQS for the constituent is the reporting limit

Bold type indicates detectable concentrations.

Shaded area indicates detectable concentration above the North Carolina Groundwater Quality Standards

Table 4-1 (7 of 8)

Summary of Laboratory Analyses for Groundwater - Campbell Street Fuel Fram Site

March 2005

	Sample Location	NCGWQS	GCL	MW-03	MW-11	MW-12	MW-14	MW-16	MW-21	MW-24	DW-02	DW-06
	Date Sampled			03/16/05	03/16/05	03/16/05	03/16/05	03/16/05	03/15/05	03/16/05	03/15/05	03/15/05
Campbell Street Fuel Ramm and Building AS-143 Area	**EPA 602 (µg/L)**											
	Benzene	1	5,000	<1.0	<1.0	<1.0	<1.0	**64.4**	**58.7**	**175**	<1.0	<1.0
	1,2-Dichlorobenzene	620	72,500	<1.0	**0.82 J**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**0.9 J**
	1,3-Dichlorobenzene	620	61,500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	Ethylbenzene	29	29,000	<1.0	<1.0	<1.0	<1.0	**8.6**	**33.6**	**79.4**	<1.0	<1.0
	Toluene	1000	257,500	<1.0	<1.0	<1.0	<1.0	<1.0	**4.7**	**47.1**	<1.0	<1.0
	Xylenes (total)	530	87,500	<3.0	<3.0	<1.0	<3.0	**27.3**	**68.2**	**244**	<3.0	<3.0
	Methyl Tert Butyl Ether	200	200,000	<1.0	<1.0	<1.0	<1.0	<1.0	**102**	**36.9**	<1.0	<1.0
	EPA 610 (µg/L)											
	Acenaphthene	80	2,120	NA	NA	NA	NA	NA	NA	NA	**24.2**	<4.8
	Acenaphthylene	210	1,965	NA	NA	NA	NA	NA	NA	NA	<5.2	<4.8
	Anthracene	2100	2,100	NA	NA	NA	NA	NA	NA	NA	<5.2	<4.8
	Benzo(a)anthracene	0.05	22	NA	NA	NA	NA	NA	NA	NA	<5.2	<4.8
	Fluoranthene	280	280	NA	NA	NA	NA	NA	NA	NA	<5.2	<4.8
	Fluorene	280	950	NA	NA	NA	NA	NA	NA	NA	**19.7**	<4.8
	1-Methylnaphthalene	RL	NE	NA	NA	NA	NA	NA	NA	NA	**2.3 J**	<4.8
	2-Methylnaphthalene	14	12,500	NA	NA	NA	NA	NA	NA	NA	<5.2	<4.8
	Naphthalene	21	15,500	NA	NA	NA	NA	NA	NA	NA	**26.8**	<4.8
	Phenanthrene	210	410	NA	NA	NA	NA	NA	NA	NA	<5.2	<4.8
	Pyrene	210	210	NA	NA	NA	NA	NA	NA	NA	<5.2	<4.8
	EPA 504.1 (µg/L)											
	1,2-Dibromoethane	0.0004	50	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019

	Sample Location	NCGWQS	GCL	13-MW01	13-DW01	122-MW03	122-MW04	122-MW07	122-MW08	122-MW09	DUP *	122-MW11
	Date Sampled			03/15/05	03/15/05	03/15/05	03/15/05	03/15/05	03/15/05	03/15/05	03/15/05	03/16/05
Buildig AS-4151 Area	**EPA 602 (µg/L)**											
	Benzene	1	5,000	**8.7**	**7.9**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	1,2-Dichlorobenzene	620	72,500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	1,3-Dichlorobenzene	620	61,500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**9.6**	**6.1**	<1.0
	Ethylbenzene	29	29,000	**8.4**	**10.2**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	Toluene	1000	257,500	**1.9**	**1.9**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	Xylenes (total)	530	87,500	**13.6**	**16.9**	<3.0	<3.0	<3.0	**1.6 J**	<3.0	<3.0	<3.0
	Methyl Tert Butyl Ether	200	200,000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	EPA 610 (µg/L)											
	Acenaphthene	80	2,120	NA	**84.2 J**	NA	NA	NA	NA	<5.0	<5.1	NA
	Acenaphthylene	210	1,965	NA	<190	NA	NA	NA	NA	<5.0	<5.1	NA
	Anthracene	2100	2,100	NA	<190	NA	NA	NA	NA	<5.0	<5.1	NA
	Benzo(a)anthracene	0.05	22	NA	<190	NA	NA	NA	NA	<5.0	<5.1	NA
	Fluoranthene	280	280	NA	<190	NA	NA	NA	NA	<5.0	<5.1	NA
	Fluorene	280	950	NA	<190	NA	NA	NA	NA	<5.0	<5.1	NA
	1-Methylnaphthalene	RL	NE	NA	**90.8 J**	NA	NA	NA	NA	**33**	**21.6**	NA
	2-Methylnaphthalene	14	12,500	NA	**145 J**	NA	NA	NA	NA	<5.0	<5.1	NA
	Naphthalene	21	15,500	NA	**1660**	NA	NA	NA	NA	**36.5**	**40.6**	NA
	Phenanthrene	210	410	NA	<190	NA	NA	NA	NA	<5.0	<5.1	NA
	Pyrene	210	210	NA	<190	NA	NA	NA	NA	<5.0	<5.1	NA
	EPA 504.1 (µg/L)											
	1,2-Dibromoethane	0.0004	50	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019

* DUP is a duplicate sample collected at well 122-MW09

NA: Not Analyzed; comstituent not included in analytic suite

µg/L: micrograms per liter

<#: not detected at the indicated reporting limit

J: estimated concentration less than reporting limit

E: Concentration exceeds calibration range

GCL: Gross Contaminant Level

NE: Not Establsihed; a gCL has not been established for the constituent

NCGWQS: North Carolina Groundwater Quality Standard

RL: Reporting Limit, no NCGWQS established for the consitituent; thereffore, the NCGWQS for the constituent is the reporting limit

Bold type indicates detectable concentrations.

Shaded area indicates detectable concentration above the North Carolina Groundwater Quality Standards

Table 4-1 (8 of 8)

Summary of Laboratory Analyses for Groundwater - Campbell Street Fuel Fram Site

June 2005

	Sample Location	NCGWQS	GCL	MW-03	MW-11	MW-12	MW-14	MW-16	MW-21	MW-24	DW-02	DW-06
	Date Sampled			06/22/05	06/22/05	06/22/05	06/22/05	06/22/05	06/21/05	06/21/05	06/22/05	06/21/05
Campbell Street Fuel Rarm and Building AS-143 Area	**EPA 602 (µg/L)**											
	Benzene	1	5,000	<1.0	<1.0	<1.0	<1.0	49.6	58.4	130	<1.0	<1.0
	1,2-Dichlorobenzene	620	72,500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	1,3-Dichlorobenzene	620	61,500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	Ethylbenzene	29	29,000	<1.0	<1.0	<1.0	<1.0	7	4.3	45.3	<1.0	<1.0
	Toluene	1000	257,500	<1.0	<1.0	0.71 J	<1.0	<1.0	2.8	15.6	<1.0	<1.0
	Xylenes (total)	530	87,500	<3.0	<3.0	<1.0	<3.0	20.4	7.3	182	<3.0	<3.0
	Methyl Tert Butyl Ether	200	200,000	<1.0	<1.0	<1.0	<1.0	<1.0	139 E	21.1	<1.0	<1.0
	EPA 610 (µg/L)											
	Acenaphthene	80	2,120	NA	NA	NA	NA	NA	NA	NA	12.9	<5.1
	Acenaphthylene	210	1,965	NA	NA	NA	NA	NA	NA	NA	<5.0	<5.1
	Anthracene	2100	2,100	NA	NA	NA	NA	NA	NA	NA	<5.0	<5.1
	Benzo(a)anthracene	0.05	22	NA	NA	NA	NA	NA	NA	NA	<5.0	<5.1
	Fluoranthene	280	280	NA	NA	NA	NA	NA	NA	NA	<5.0	<5.1
	Fluorene	280	950	NA	NA	NA	NA	NA	NA	NA	10.7	<5.1
	1-Methylnaphthalene	RL	NE	NA	NA	NA	NA	NA	NA	NA	<5.0	<5.1
	2-Methylnaphthalene	14	12,500	NA	NA	NA	NA	NA	NA	NA	<5.0	<5.1
	Naphthalene	21	15,500	NA	NA	NA	NA	NA	NA	NA	18.8	<5.1
	Phenanthrene	210	410	NA	NA	NA	NA	NA	NA	NA	<5.0	<5.1
	Pyrene	210	210	NA	NA	NA	NA	NA	NA	NA	<5.0	<5.1
	EPA 504.1 (µg/L)											
	1,2-Dibromoethane	0.0004	50	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020

	Sample Location	NCGWQS	GCL	13-MW01	13-DW01	122-MW03	122-MW04	122-MW07	122-MW08	122-MW09	DUP *	122-MW11
	Date Sampled			06/22/05	06/22/05	06/22/05	06/22/05	06/22/05	06/22/05	06/22/05	06/22/05	06/22/05
Buildig AS-4151 Area	**EPA 602 (µg/L)**											
	Benzene	1	5,000	<1.0	9.8	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	1,2-Dichlorobenzene	620	72,500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	1,3-Dichlorobenzene	620	61,500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	Ethylbenzene	29	29,000	<1.0	9.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	Toluene	1000	257,500	<1.0	2.3	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	Xylenes (total)	530	87,500	3.1	16.0	<3.0	<3.0	<3.0	<3.0	1.4 J	1.4 J	<3.0
	Methyl Tert Butyl Ether	200	200,000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	EPA 610 (µg/L)											
	Acenaphthene	80	2,120	NA	<190	NA	NA	NA	NA	<5.1	<5.0	NA
	Acenaphthylene	210	1,965	NA	<190	NA	NA	NA	NA	<5.1	<5.0	NA
	Anthracene	2100	2,100	NA	<190	NA	NA	NA	NA	<5.1	<5.0	NA
	Benzo(a)anthracene	0.05	22	NA	<190	NA	NA	NA	NA	<5.1	<5.0	NA
	Fluoranthene	280	280	NA	<190	NA	NA	NA	NA	<5.1	<5.0	NA
	Fluorene	280	950	NA	<190	NA	NA	NA	NA	<5.1	<5.0	NA
	1-Methylnaphthalene	RL	NE	NA	<190	NA	NA	NA	NA	3.8 J	5	NA
	2-Methylnaphthalene	14	12,500	NA	86.6 J	NA	NA	NA	NA	<5.1	<5.0	NA
	Naphthalene	21	15,500	NA	924	NA	NA	NA	NA	8.3	3.7 J	NA
	Phenanthrene	210	410	NA	<190	NA	NA	NA	NA	<5.1	<5.0	NA
	Pyrene	210	210	NA	<190	NA	NA	NA	NA	<5.1	<5.0	NA
	EPA 504.1 (µg/L)											
	1,2-Dibromoethane	0.0004	50	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020

* DUP is a duplicate sample collected at well 122-MW09

NA: Not Analyzed; comstituent not included in analytic suite

µg/L: micrograms per liter

<#: not detected at the indicated reporting limit

J: estimated concentration less than reporting limit

E: Concentration exceeds calibration range

GCL: Gross Contaminant Level

NE: Not Establsihed; a gCL has net been established for the constituent

NCGWQS: North Carolina Groundwater Quality Standard

RL: Reporting Limit, no NCGWQS established for the consitituent; thereffore, the NCGWQS for the constituent is the reporting limit

Bold type indicates detectable concentrations.

Shaded area indicates detectable concentration above the North Carolina Groundwater Quality Standards

Table 4-2 (Page 1 of 9)

Summary of Laboratory Analyses for Influent / Effluent Samples

Campbell Street Fuel Farm Site - September 2003

Sample Location Date Sampled	Permit Limits [1]	EFF-001 09/30/03	NCGWQS	RWC-1 09/30/03	RWC-2 09/30/03	RWC-3 09/30/03	RWC-3D 09/30/03
EPA 602 (ug/L)							
Benzene	71.4	<1.0	1	<1.0	**70.4**	**169**	**229**
Ethylbenzene	383	<1.0	29	<1.0	**10.1**	**21**	**27.6**
Toluene	11	<1.0	1000	<1.0	**20.4**	**14.4**	**17.7**
Xylenes (total)	88.5	<3.0	530	<3.0	**42.5**	**179**	**213**
Methyl Tert Butyl Ether	NS	<1.0	620	<1.0	**27.8**	**38.9**	**43.2**
Total BTEX	NS		200		**143.4**	**383.4**	**487.3**
EPA 610 (ug/L)							
Acenaphthene	NS	<5.1	--	NA	NA	NA	NA
Acenaphthylene	NS	<5.1	--	NA	NA	NA	NA
Anthracene	NS	<5.1	--	NA	NA	NA	NA
Benzo(a)anthracene	NS	<5.1	--	NA	NA	NA	NA
Fluoranthene	NS	<5.1	--	NA	NA	NA	NA
Fluorene	NS	<5.1	--	NA	NA	NA	NA
1-Methylnaphthalene	NS	<5.1	--	NA	NA	NA	NA
2-Methylnaphthalene	NS	<5.1	--	NA	NA	NA	NA
Naphthalene	105	<5.1	--	NA	NA	NA	NA
Phenanthrene	NS	<5.1	--	NA	NA	NA	NA
Pyrene	NS	<5.1	--	NA	NA	NA	NA
EPA 6010 (ug/L)							
Aresenic	NS	<10		NA	NA	NA	NA
Barium	NS	<200	--	NA	NA	NA	NA
Beryllium	NS	<5.0	--	NA	NA	NA	NA
Cadmium	NS	<5.0	--	NA	NA	NA	NA
Chromium	NS	<10	--	NA	NA	NA	NA
Iron	NS	<300	--	NA	NA	NA	NA
Lead	NS	<5.0	--	NA	NA	NA	NA
Manganese	NS	<15	--	NA	NA	NA	NA
Selenium	NS	<10	--	NA	NA	NA	NA
EPA 6010 (mg/L)							
Total Hardness	NS	**276**	--	NA	NA	NA	NA
EPA 160.1 (mg/L)							
Total Dissolved Solids	NS	**330**	--	NA	NA	NA	NA
EPA 160.2 (mg/L)							
Total Suspended Solilds	30	<4.0	--	NA	NA	NA	NA

[1] Effluent limits identified in NPDES Wastewater Discharge Permit effective 1 October 2001

J indicates an estimated concentration less than reporting limit

NA: Not Analyzed; comstituent not included in analytic suite

NR: Not regulatted; constituent is not a regulated for groundwater media

NS: Not specified; permit does not specify an effluent limit for the constituent

NCGWQS: North Carolina Groundwater Quality Standard

RL: Reporting Limit, no NCGWQS established for the consitituent; thereffore, the NCGWQS for the constituent is the reporting limit

ug/L: micrograms per liter

mg/L: milligrams per liter

<#: not detected at the indicated reporting limit

Bold type indicates detectable concentrations.

Shaded area indicates detectable concentration above the North Carolina Groundwater Quality Standards

Table 4-2 (Page 2 of 9)

Summary of Laboratory Analyses for Influent / Effluent Samples

Campbell Street Fuel Farm Site - October 2003

Sample Location Date Sampled	Permit Limits [1]	EFF-002 10/31/03	NCGWQS	RWC-1 10/31/03	RWB-1 10/31/03	RWB-3 10/31/03	RWB-3D 10/31/03
EPA 602 (ug/L)							
Benzene	71.4	<1.0	1	<1.0	**0.91**	**292**	**293**
Ethylbenzene	383	<1.0	29	<1.0	<1.0	**51.5**	**55.1**
Toluene	11	<1.0	1000	<1.0	<1.0	**124**	**127**
Xylenes (total)	88.5	<3.0	530	<3.0	<3.0	**275**	**287**
Methyl Tert Butyl Ether	NS	<1.0	620	<1.0	**11.1**	**52.3**	**50.9**
Total BTEX	NS		200		**0.91**	**742.5**	**762.1**
EPA 610 (ug/L)							
Acenaphthene	NS	<5.0	--	NA	NA	NA	NA
Acenaphthylene	NS	<5.0	--	NA	NA	NA	NA
Anthracene	NS	<5.0	--	NA	NA	NA	NA
Benzo(a)anthracene	NS	<5.0	--	NA	NA	NA	NA
Fluoranthene	NS	<5.0	--	NA	NA	NA	NA
Fluorene	NS	<5.0	--	NA	NA	NA	NA
1-Methylnaphthalene	NS	<5.0	--	NA	NA	NA	NA
2-Methylnaphthalene	NS	<5.0	--	NA	NA	NA	NA
Naphthalene	105	<5.0	--	NA	NA	NA	NA
Phenanthrene	NS	<5.0	--	NA	NA	NA	NA
Pyrene	NS	<5.0	--	NA	NA	NA	NA
EPA 6010 (ug/L)							
Aresenic	NS	<10		NA	NA	NA	NA
Barium	NS	<200	--	NA	NA	NA	NA
Beryllium	NS	<5.0	--	NA	NA	NA	NA
Cadmium	NS	<5.0	--	NA	NA	NA	NA
Chromium	NS	<10	--	NA	NA	NA	NA
Iron	NS	<300	--	NA	NA	NA	NA
Lead	NS	<5.0	--	NA	NA	NA	NA
Manganese	NS	**<15**	--	NA	NA	NA	NA
Selenium	NS	<10	--	NA	NA	NA	NA
EPA 6010 (mg/L)							
Total Hardness	NS	**290**	--	NA	NA	NA	NA
EPA 160.1 (mg/L)							
Total Dissolved Solids	NS	**356**	--	NA	NA	NA	NA
EPA 160.2 (mg/L)							
Total Suspended Solids	30	<4.0	--	NA	NA	NA	NA

[1] Effluent limits identified in NPDES Wastewater Discharge Permit effective 1 October 2001

J indicates an estimated concentration less than reporting limit

NA: Not Analyzed; comstituent not included in analytic suite

NR: Not regulatted; constituent is not a regulated for groundwater media

NS: Not specified; permit does not specify an effluent limit for the constituent

NCGWQS: North Carolina Groundwater Quality Standard

RL: Reporting Limit, no NCGWQS established for the consitituent; thereffore, the NCGWQS for the constituent is the reporting limit

ug/L: micrograms per liter

mg/L: milligrams per liter

<#: not detected at the indicated reporting limit

Bold type indicates detectable concentrations.

Shaded area indicates del mgd

Table 4-2 (Page 3 of 9)

Summary of Laboratory Analyses for Influent / Effluent Samples

Campbell Street Fuel Farm Site - December 2003

Sample Location Date Sampled	Permit Limits [1]	EFF-003 12/20/2003 [2]	NCGWQS	RWC-1 12/20/03	RWB-1 12/20/03	RWB-3 12/20/03	RWB-3D [3] 12/20/03
EPA 602 (ug/L)							
Benzene	71.4	<1.0	1	<1.0	<1.0	**188**	**197**
Ethylbenzene	383	<1.0	29	<1.0	<1.0	**49.5**	**49.6**
Toluene	11	<1.0	1000	<1.0	<1.0	**122**	**127**
Xylenes (total)	88.5	<3.0	530	<3.0	<3.0	**194**	**199**
1,3-Dichlorobenzene	NS	<1.0	620	<1.0	<1.0	**2.8 J**	<1.0
Methyl Tert Butyl Ether	NS	<1.0	200	<1.0	**21.4**	**38.8**	**40.5**
Total BTEX						**553.5**	**572.6**
EPA 610 (ug/L)							
Acenaphthene	NS	<5.0	--	NA	NA	NA	NA
Acenaphthylene	NS	<5.0	--	NA	NA	NA	NA
Anthracene	NS	<5.0	--	NA	NA	NA	NA
Benzo(a)anthracene	NS	<5.0	--	NA	NA	NA	NA
Fluoranthene	NS	<5.0	--	NA	NA	NA	NA
Fluorene	NS	<5.0	--	NA	NA	NA	NA
1-Methylnaphthalene	NS	<5.0	--	NA	NA	NA	NA
2-Methylnaphthalene	NS	<5.0	--	NA	NA	NA	NA
Naphthalene	105	<5.0	--	NA	NA	NA	NA
Phenanthrene	NS	<5.0	--	NA	NA	NA	NA
Pyrene	NS	<5.0	--	NA	NA	NA	NA
EPA 6010 (ug/L)							
Aresenic	NS	<10	--	NA	NA	NA	NA
Barium	NS	<200	--	NA	NA	NA	NA
Cadmium	NS	<5.0	--	NA	NA	NA	NA
Chromium	NS	<10	--	NA	NA	NA	NA
Iron	NS	<300	--	NA	NA	NA	NA
Lead	NS	<5.0	--	NA	NA	NA	NA
Manganese	NS	<15	--	NA	NA	NA	NA
Selenium	NS	<10	--	NA	NA	NA	NA
EPA 6010 (mg/L)							
Total Hardness	NS	**187**	--	NA	NA	NA	NA
EPA 160.1 (mg/L)							
Total Dissolved Solids	NS	**203**	--	NA	NA	NA	NA
EPA 160.2 (mg/L)							
Total Suspended Solilds	30	10.0	--	NA	NA	NA	NA

[1] Effluent limits identified in NPDES Wastewater Discharge Permit effective 1 October 2001

[2] Re-sampling for EPA 610 analysis only was required; re-sampling conducted 1/12/04

[3] RWB-3D is a duplicate sample collected at location RWB-3

J indicates an estimated concentration less than reporting limit

NA: Not Analyzed; comstituent not included in analytic suite

NR: Not regulatted; constituent is not a regulated for groundwater media

NS: Not specified; permit does not specify an effluent limit for the constituent

NCGWQS: North Carolina Groundwater Quality Standard

RL: Reporting Limit, no NCGWQS established for the consitituent; thereffore, the NCGWQS for the constituent is the reporting limit

ug/L: micrograms per liter

mg/L: milligrams per liter

<#: not detected at the indicated reporting limit

Bold type indicates detectable concentrations.

Shaded area indicates detectable concentration above the North Carolina Groundwater Quality Standards

Table 4-2 (Page 4 of 9)

Summary of Laboratory Analyses for Influent / Effluent Samples

Campbell Street Fuel Farm Site - June 2004

Sample Location Date Sampled	Permit Limits [1]	EFFLUENT 06/23/04	NCGWQS	RWC-1 06/23/04	RWB-1 06/23/04	RWB-4 06/23/04	RWB-3 06/23/04
EPA 602 (ug/L)							
Benzene	71.4	<1.0	1	<1.0	<1.0	**386**	**79.0**
Ethylbenzene	383	<1.0	29	<1.0	<1.0	**312**	**9.9**
Toluene	11	<1.0	1000	<1.0	<1.0	**366**	**2.1**
Xylenes (total)	88.5	<3.0	530	<3.0	<3.0	**911**	**17.5**
1,3-Dichlorobenzene	NS	<1.0	620	<1.0	<1.0	<1.0	<2.0
Methyl Tert Butyl Ether	NS	<1.0	200	<1.0	**6.6**	**38.8**	**29.4**
Total BTEX						**1975**	**108.5**
EPA 610 (ug/L)							
Acenaphthene	NS	<5.0	--	NA	NA	NA	NA
Acenaphthylene	NS	<5.0	--	NA	NA	NA	NA
Anthracene	NS	<5.0	--	NA	NA	NA	NA
Benzo(a)anthracene	NS	<5.0	--	NA	NA	NA	NA
Fluoranthene	NS	<5.0	--	NA	NA	NA	NA
Fluorene	NS	<5.0	--	NA	NA	NA	NA
1-Methylnaphthalene	NS	<5.0	--	NA	NA	NA	NA
2-Methylnaphthalene	NS	<5.0	--	NA	NA	NA	NA
Naphthalene	105	<5.0	--	NA	NA	NA	NA
Phenanthrene	NS	<5.0	--	NA	NA	NA	NA
Pyrene	NS	<5.0	--	NA	NA	NA	NA
EPA 6010 (ug/L)							
Aresenic	NS	<10	--	NA	NA	NA	NA
Barium	NS	<200	--	NA	NA	NA	NA
Cadmium	NS	<5.0	--	NA	NA	NA	NA
Chromium	NS	<10	--	NA	NA	NA	NA
Iron	NS	<300	--	NA	NA	NA	NA
Lead	NS	<5.0	--	NA	NA	NA	NA
Manganese	NS	NR	--	NA	NA	NA	NA
Selenium	NS	<10	--	NA	NA	NA	NA
EPA 6010 (mg/L)							
Total Hardness	NS	**298**	--	NA	NA	NA	NA
EPA 160.1 (mg/L)							
Total Dissolved Solids	NS	**352**	--	NA	NA	NA	NA
EPA 160.2 (mg/L)							
Total Suspended Solilds	30	<4.0	--	NA	NA	NA	NA

[1] Effluent limits identified in NPDES Wastewater Discharge Permit effective 1 October 2001

J indicates an estimated concentration less than reporting limit

NA: Not Analyzed; comstituent not included in analytic suite

NR: Not regulatted; constituent is not a regulated for groundwater media

NS: Not specified; permit does not specify an effluent limit for the constituent

NCGWQS: North Carolina Groundwater Quality Standard

RL: Reporting Limit, no NCGWQS established for the consitituent; thereffore, the NCGWQS for the constituent is the reporting limit

ug/L: micrograms per liter

mg/L: milligrams per liter

<#: not detected at the indicated reporting limit

Bold type indicates detectable concentrations.

Shaded area indicates detectable concentration above the North Carolina Groundwater Quality Standards

Table 4-2 (Page 5 of 9)

Summary of Laboratory Analyses for Influent / Effluent Samples

Campbell Street Fuel Farm Site - September 2004

Sample Location Date Sampled	Permit Limits [1]	EFFLUENT 09/23/04	NCGWQS	RWB-1 09/23/04	RWB-3 09/23/04	RWB-4 09/23/04	RWC-1 09/23/04
EPA 602 (ug/L)							
Benzene	71.4	<1.0	1	**0.83 J**	**160**	**203.0**	<1.0
Ethylbenzene	383	<1.0	29	<1.0	**18.3**	**183**	<1.0
Toluene	11	<1.0	1000	<1.0	**18.9**	**146**	<1.0
Xylenes (total)	88.5	<3.0	530	<3.0	**93.3**	**640**	<3.0
1,3-Dichlorobenzene	NS	<1.0	620	<1.0	<2.0	<5.0	<1.0
Methyl Tert Butyl Ether	NS	<1.0	200	**6.2**	**35.3**	**30.0**	<1.0
Total BTEX				**0.83**	**290.5**	**1172**	
EPA 610 (ug/L)							
Acenaphthene	NS	<4.8	--	NA	NA	NA	NA
Acenaphthylene	NS	<4.8	--	NA	NA	NA	NA
Anthracene	NS	<4.8	--	NA	NA	NA	NA
Benzo(a)anthracene	NS	<4.8	--	NA	NA	NA	NA
Fluoranthene	NS	<4.8	--	NA	NA	NA	NA
Fluorene	NS	<4.8	--	NA	NA	NA	NA
1-Methylnaphthalene	NS	<4.8	--	NA	NA	NA	NA
2-Methylnaphthalene	NS	<4.8	--	NA	NA	NA	NA
Naphthalene	105	<4.8	--	NA	NA	NA	NA
Phenanthrene	NS	<4.8	--	NA	NA	NA	NA
Pyrene	NS	<4.8	--	NA	NA	NA	NA
EPA 6010 (ug/L)							
Aresenic	NS	<10	--	NA	NA	NA	NA
Barium	NS	<200	--	NA	NA	NA	NA
Cadmium	NS	<5.0	--	NA	NA	NA	NA
Chromium	NS	<10	--	NA	NA	NA	NA
Iron	NS	<300	--	NA	NA	NA	NA
Lead	NS	<5.0	--	NA	NA	NA	NA
Manganese	NS	17.8	--	NA	NA	NA	NA
Selenium	NS	<10	--	NA	NA	NA	NA
EPA 6010 (mg/L)							
Total Hardness	NS	**319**	--	NA	NA	NA	NA
EPA 160.1 (mg/L)							
Total Dissolved Solids	NS	**377**	--	NA	NA	NA	NA
EPA 160.2 (mg/L)							
Total Suspended Solilds	30	<4.0	--	NA	NA	NA	NA

[1] Effluent limits identified in NPDES Wastewater Discharge Permit effective 1 October 2001

J indicates an estimated concentration less than reporting limit

NA: Not Analyzed; comstituent not included in analytic suite

NS: Not specified; permit does not specify an effluent limit for the constituent

NCGWQS: North Carolina Groundwater Quality Standard

RL: Reporting Limit, no NCGWQS established for the consitituent; thereffore, the NCGWQS for the constituent is the reporting limit

ug/L: micrograms per liter

mg/L: milligrams per liter

<#: not detected at the indicated reporting limit

Bold type indicates detectable concentrations.

Shaded area indicates detectable concentration above the North Carolina Groundwater Quality Standards

Table 4-2 (Page 6 of 9)

Summary of Laboratory Analyses for Influent / Effluent Samples

Campbell Street Fuel Farm Site - December 2004

Sample Location Date Sampled	Permit Limits [1]	EFFLUENT 12/15/04	NCGWQS	RWB-1 12/15/04	RWB-3 12/15/04	RWB-4 12/15/04	RWC-1 12/15/04
EPA 602 (ug/L)							
Benzene	71.4	<1.0	1	**4.3**	**148**	**431**	<1.0
Ethylbenzene	383	<1.0	29	<1.0	**18.7**	**26.1**	<1.0
Toluene	11	<1.0	1000	**1.8**	**7.4**	**246**	<1.0
Xylenes (total)	88.5	<3.0	530	**3.4**	**93.9**	**513**	<3.0
1,3-Dichlorobenzene	NS	<1.0	620	<1.0	<2.0	<5.0	<1.0
Methyl Tert Butyl Ether	NS	<1.0	200	**17.0**	**44.1**	**170**	<1.0
Total BTEX				**0.83**	**268**	**1216.1**	
EPA 610 (ug/L)							
Acenaphthene	NS	<5.3	--	NA	NA	NA	NA
Acenaphthylene	NS	<5.3	--	NA	NA	NA	NA
Anthracene	NS	<5.3	--	NA	NA	NA	NA
Benzo(a)anthracene	NS	<5.3	--	NA	NA	NA	NA
Fluoranthene	NS	<5.3	--	NA	NA	NA	NA
Fluorene	NS	<5.3	--	NA	NA	NA	NA
1-Methylnaphthalene	NS	<5.3	--	NA	NA	NA	NA
2-Methylnaphthalene	NS	<5.3	--	NA	NA	NA	NA
Naphthalene	105	<5.3	--	NA	NA	NA	NA
Phenanthrene	NS	<5.3	--	NA	NA	NA	NA
Pyrene	NS	<5.3	--	NA	NA	NA	NA
EPA 6010 (ug/L)							
Aresenic	NS	<10	--	NA	NA	NA	NA
Barium	NS	<200	--	NA	NA	NA	NA
Cadmium	NS	<5.0	--	NA	NA	NA	NA
Chromium	NS	<10	--	NA	NA	NA	NA
Iron	NS	<300	--	NA	NA	NA	NA
Lead	NS	<5.0	--	NA	NA	NA	NA
Manganese	NS	<15	--	NA	NA	NA	NA
Selenium	NS	<10	--	NA	NA	NA	NA
EPA 6010 (mg/L)							
Total Hardness	NS	**25.8**	--	NA	NA	NA	NA
EPA 160.1 (mg/L)							
Total Dissolved Solids	NS	**347**	--	NA	NA	NA	NA
EPA 160.2 (mg/L)							
Total Suspended Solilds	30	4.0	--	NA	NA	NA	NA

[1] Effluent limits identified in NPDES Wastewater Discharge Permit effective 1 October 2001

J indicates an estimated concentration less than reporting limit

NA: Not Analyzed; comstituent not included in analytic suite

NS: Not specified; permit does not specify an effluent limit for the constituent

NCGWQS: North Carolina Groundwater Quality Standard

RL: Reporting Limit, no NCGWQS established for the consitituent; thereffore, the NCGWQS for the constituent is the reporting limit

ug/L: micrograms per liter

mg/L: milligrams per liter

<#: not detected at the indicated reporting limit

Bold type indicates detectable concentrations.

Shaded area indicates detectable concentration above the North Carolina Groundwater Quality Standards

Table 4-2 (Page 7 of 9)

Summary of Laboratory Analyses for Influent / Effluent Samples

Campbell Street Fuel Farm Site - March 2005

Sample Location Date Sampled	Permit Limits [1]	EFFLUENT 03/16/05	NCGWQS	RWB-1 03/15/05	RWB-3 03/15/05	RWB-4 03/15/05	RWC-1 12/15/04
EPA 602 (ug/L)							
Benzene	71.4	**24.7**	1	**21.0**	**198**	<1.0	<1.0
Ethylbenzene	383	**0.77 J**	29	**0.94 J**	**42.7**	<1.0	<1.0
Toluene	11	**0.81 J**	1000	**0.93 J**	**21.8**	<1.0	<1.0
Xylenes (total)	88.5	**1.9 J**	530	**2.6 J**	**234**	<3.0	<3.0
1,3-Dichlorobenzene	NS	<1.0	620	<1.0	<5.0	<1.0	<1.0
Methyl Tert Butyl Ether	NS	**23.9**	200	**22.3**	**43.4**	<1.0	<1.0
Total BTEX				**0.83**	**496.5**	ND	ND
EPA 610 (ug/L)							
Acenaphthene	NS	<4.9	--	NA	NA	NA	NA
Acenaphthylene	NS	<4.9	--	NA	NA	NA	NA
Anthracene	NS	<4.9	--	NA	NA	NA	NA
Benzo(a)anthracene	NS	<4.9	--	NA	NA	NA	NA
Fluoranthene	NS	<4.9	--	NA	NA	NA	NA
Fluorene	NS	<4.9	--	NA	NA	NA	NA
1-Methylnaphthalene	NS	<4.9	--	NA	NA	NA	NA
2-Methylnaphthalene	NS	<4.9	--	NA	NA	NA	NA
Naphthalene	105	<4.9	--	NA	NA	NA	NA
Phenanthrene	NS	<4.9	--	NA	NA	NA	NA
Pyrene	NS	<4.9	--	NA	NA	NA	NA
EPA 6010 (ug/L)							
Aresenic	NS	<10	--	NA	NA	NA	NA
Barium	NS	<200	--	NA	NA	NA	NA
Cadmium	NS	<5.0	--	NA	NA	NA	NA
Chromium	NS	<10	--	NA	NA	NA	NA
Iron	NS	<300	--	NA	NA	NA	NA
Lead	NS	<5.0	--	NA	NA	NA	NA
Manganese	NS	<15	--	NA	NA	NA	NA
Selenium	NS	<10	--	NA	NA	NA	NA
EPA 6010 (mg/L)							
Total Hardness	NS	**268**	--	NA	NA	NA	NA
EPA 160.1 (mg/L)							
Total Dissolved Solids	NS	**378**	--	NA	NA	NA	NA
EPA 160.2 (mg/L)							
Total Suspended Solids	30	20.0	--	NA	NA	NA	NA

[1] Effluent limits identified in NPDES Wastewater Discharge Permit effective 1 October 2001

J indicates an estimated concentration less than reporting limit

NA: Not Analyzed; comstituent not included in analytic suite

NS: Not specified; permit does not specify an effluent limit for the constituent

NCGWQS: North Carolina Groundwater Quality Standard

RL: Reporting Limit, no NCGWQS established for the consitituent; thereffore, the NCGWQS for the constituent is the reporting limit

ug/L: micrograms per liter

mg/L: milligrams per liter

<#: not detected at the indicated reporting limit

Bold type indicates detectable concentrations.

Shaded area indicates detectable concentration above the North Carolina Groundwater Quality Standards

Table 4-2 (Page 8 of 9)

Summary of Laboratory Analyses for Effluent Confirmation Samples

Campbell Street Fuel Farm Site - Site April 2005

Sample Location Date Sampled	Permit Limits [1]	Air Stripper Effluent 04/29/05	Discharge Effluent 04/29/05
EPA 602 (ug/L)			
Benzene	71.4	<1.0	<1.0
Ethylbenzene	383	<1.0	<1.0
Toluene	11	<1.0	<1.0
Xylenes (total)	88.5	<3.0	<3.0
1,3-Dichlorobenzene	NS	<1.0	<1.0
Methyl Tert Butyl Ether	NS	<1.0	**0.89 J**
Total BTEX			

[1] Effluent limits identified in NPDES Wastewater Discharge Permit effective 1 October 2001

J indicates an estimated concentration less than reporting limit

NS: Not specified; permit does not specify an effluent limit for the constituent

ug/L: micrograms per liter

<#: not detected at the indicated reporting limit

Bold type indicates detectable concentrations.

Table 4-2 (Page 9 of 9)

Summary of Laboratory Analyses for Influent / Effluent Samples

Campbell Street Fuel Farm Site - June 2005

Sample Location Date Sampled	Permit Limits [1]	EFFLUENT 06/20/05	NCGWQS	RWB-1 06/20/05	RWB-3 06/20/05	RWB-4 06/20/05	RWC-1 06/20/05
EPA 602 (ug/L)							
Benzene	71.4	<1.0	1	**48.6**	**221**	**66.2**	<1.0
Ethylbenzene	383	<1.0	29	**4.0**	**30.8**	**48.1**	<1.0
Toluene	11	<1.0	1000	**4.8**	**19.6**	**53.6**	<1.0
Xylenes (total)	88.5	<3.0	530	**37.5**	**258**	**141**	<3.0
1,2-Dichlorobenzene	NS	<1.0	620	**0.75 J**	<20	**11.4**	<3.0
1,3-Dichlorobenzene	NS	<1.0	620	<1.0	<5.0	<1.0	<1.0
Methyl Tert Butyl Ether	NS	**0.60 J**	200	**21.3**	**38.9**	**14.2**	<1.0
Total BTEX		ND		**94.9**	**529.4**	**308.9**	ND
EPA 610 (ug/L)							
Acenaphthene	NS	<4.8	--	NA	NA	NA	NA
Acenaphthylene	NS	<4.8	--	NA	NA	NA	NA
Anthracene	NS	<4.8	--	NA	NA	NA	NA
Benzo(a)anthracene	NS	<4.8	--	NA	NA	NA	NA
Fluoranthene	NS	<4.8	--	NA	NA	NA	NA
Fluorene	NS	<4.8	--	NA	NA	NA	NA
1-Methylnaphthalene	NS	<4.8	--	NA	NA	NA	NA
2-Methylnaphthalene	NS	<4.8	--	NA	NA	NA	NA
Naphthalene	105	<4.8	--	NA	NA	NA	NA
Phenanthrene	NS	<4.8	--	NA	NA	NA	NA
Pyrene	NS	<4.8	--	NA	NA	NA	NA
EPA 6010 (ug/L)							
Aresenic	NS	<10	--	NA	NA	NA	NA
Barium	NS	<200	--	NA	NA	NA	NA
Cadmium	NS	<5.0	--	NA	NA	NA	NA
Chromium	NS	<10	--	NA	NA	NA	NA
Iron	NS	<300	--	NA	NA	NA	NA
Lead	NS	<5.0	--	NA	NA	NA	NA
Manganese	NS	**15.0**	--	NA	NA	NA	NA
Selenium	NS	<10	--	NA	NA	NA	NA
EPA 6010 (mg/L)							
Total Hardness	NS	**261**	--	NA	NA	NA	NA
EPA 160.1 (mg/L)							
Total Dissolved Solids	NS	**553**	--	NA	NA	NA	NA
EPA 160.2 (mg/L)							
Total Suspended Solilds	30	<4.0	--	NA	NA	NA	NA

[1] Effluent limits identified in NPDES Wastewater Discharge Permit effective 1 October 2001

J indicates an estimated concentration less than reporting limit

NA: Not Analyzed; comstituent not included in analytic suite

NS: Not specified; permit does not specify an effluent limit for the constituent

NCGWQS: North Carolina Groundwater Quality Standard

RL: Reporting Limit, no NCGWQS established for the consitituent; thereffore, the NCGWQS for the constituent is the reporting limit

ug/L: micrograms per liter

mg/L: milligrams per liter

<#: not detected at the indicated reporting limit

Bold type indicates detectable concentrations.

Shaded area indicates detectable concentration above the North Carolina Groundwater Quality Standards

TABLE 4-3
Product Thickness Data - September 2003 to August 2005
Campbell Street Fuel Farm Site

Location	Top of Casing Elevation[1]	Product Thickness (feet)																					
		9/24/2003	12/28/2003	1/29/2004	2/8/2004	3/17/2004	4/26/2004	5/4/2004	6/9/2004	7/7/2004	8/3/2004	9/2/2004	10/12/2004	11/4/2004	12/27/2004	1/6/2005	2/2/2005	3/16/2005	4/7/2005	5/17/2005	6/21/2005	7/22/2005	8/5/2005
MW-3	21.69	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-9	20.45	NM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-10	21.17	NM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-11	22.03	NM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-12	21.41	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-14	20.07	NM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-15	21.08	NM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-16	21.45	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-21	21.76	NM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-22	21.69	NM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-24	21.56	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DW-2	22.91	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DW-6	22.83	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
13MW-1	21.84	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
13DW-1	22.17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
122MW-3	22.23	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
122MW-4	19.60	--	--	--	--	--	--	--	--	--	NM	--	--	--	--	--	--	--	--	--	--	--	--
122MW-5	18.60	NM	NM	NM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
122MW-6	18.38	NM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
122MW-7	18.37	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
122MW-8	21.25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
122MW-9	18.94	--	--	--	--	--	--	--	SI	--	--	--	--	--	--	NM	--	--	--	--	--	--	--
122MW-11	21.37	NM	NM	NM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
122MW-13	20.51	NM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
122MW-14	23.41	NM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
122RW-1	18.87	NM	--	--	--	--	--	--	SI	--	--	--	--	--	--	NM	--	--	--	--	--	--	--

[1] Top of casing elevation expressed in feet above/below MSL
"-- indicates no measurable product detected
SI indicates sorbent sock installed at the time of gauging

MSL - mean sea level
NM - not measured; well not accessible (for September 2004, well was not designated for gauging)

APPENDIX A

SUMMARY FIELD GAUGING MEASUREMENTS

TABLE A-1
Depth to Groundwater Data - September 2003 to August 2005
Campbell Street Fuel Farm Site

Location	Top of Casing Elevation[1]	Depth to Water (feet BTOC)																					
		9/24/2003	12/28/2003	1/29/2004	2/8/2004	3/17/2004	4/26/2004	5/4/2004	6/9/2004	7/7/2004	8/3/2004	9/2/2004	10/12/2004	11/4/2004	12/27/2004	1/6/2005	2/2/2005	3/16/2005	4/7/2005	5/17/2005	6/21/2005	7/22/2005	8/5/2005
MW-3	21.69	5.46	5.58	5.67	5.97	5.39	6.50	4.75	7.10	6.98	4.30	4.72	6.48	7.30	5.72	1.50	5.88	6.56	5.76	5.75	7.01	4.90	6.00
MW-9	20.45	NM	5.79	5.11	5.14	4.83	5.39	4.48	6.11	5.36	5.43	4.33	5.23	6.05	6.04	5.95	5.71	4.91	4.92	4.93	7.23	5.03	5.23
MW-10	21.17	NM	5.67	4.59	4.70	4.55	5.45	4.25	6.58	6.80	4.30	3.82	5.02	5.31	4.98	5.26	4.76	4.75	4.80	4.78	5.01	4.70	6.10
MW-11	22.03	NM	5.94	6.35	6.39	6.10	6.76	5.81	7.68	7.95	6.90	5.69	6.76	7.56	7.40	7.32	7.00	6.70	6.25	6.26	7.53	6.53	6.00
MW-12	21.41	6.32	6.55	6.58	6.65	6.55	6.82	5.83	6.90	6.83	5.73	5.78	6.68	7.13	6.80	6.92	6.76	7.00	7.64	6.52	7.01	5.72	6.53
MW-14	20.07	NM	5.07	5.08	5.03	5.00	5.50	4.29	5.91	5.80	4.33	4.43	5.38	5.81	5.17	5.56	5.25	5.60	5.15	4.90	5.85	4.51	5.32
MW-15	21.08	NM	6.21	6.55	6.68	6.30	6.91	5.92	7.52	7.69	6.68	5.85	6.86	7.53	6.95	7.28	7.03	6.93	6.42	6.45	6.87	6.29	4.93
MW-16	21.45	6.91	6.40	6.35	6.35	6.57	6.52	6.00	6.67	6.67	6.01	6.20	6.67	6.98	6.75	6.60	6.48	6.68	7.27	6.52	6.80	6.22	5.02
MW-21	21.76	NM	6.53	7.15	7.27	6.42	7.10	5.72	7.68	7.68	6.80	6.20	7.54	8.72	9.07	9.17	7.54	7.48	6.28	7.00	7.97	6.52	6.82
MW-22	21.69	NM	6.16	6.30	6.55	6.30	6.82	5.65	6.92	6.82	5.30	5.70	6.72	7.11	7.36	6.90	6.60	6.94	6.51	6.45	7.22	5.94	4.95
MW-24	21.56	9.43	7.66	8.70	8.99	6.62	8.18	6.95	8.40	8.17	8.33	6.86	9.82	9.91	9.30	9.50	9.13	9.02	8.36	9.13	9.69	6.13	7.00
DW-2	22.91	7.75	7.21	7.68	7.77	7.46	8.00	7.12	8.78	9.05	8.14	6.94	7.94	8.74	8.83	8.61	8.35	8.23	7.53	7.54	8.67	7.77	7.01
DW-6	22.83	6.99	6.50	6.93	7.06	6.72	7.23	6.32	7.93	8.17	7.33	6.19	7.18	7.82	7.94	7.85	7.60	7.40	6.73	6.82	7.82	7.02	7.08
13MW-1	21.84	4.68	5.66	5.95	6.03	5.88	5.70	4.89	6.01	5.77	4.53	8.92	5.36	5.10	4.93	5.15	6.02	6.37	5.70	5.48	6.13	5.03	5.68
13DW-1	22.17	5.97	6.80	7.25	7.35	7.16	7.40	6.61	7.98	8.18	7.43	6.41	7.33	8.03	8.25	8.17	7.93	7.75	7.10	7.09	7.91	7.13	7.23
122MW-3	22.23	6.11	5.11	4.80	5.03	5.54	5.62	4.30	6.73	6.55	5.20	4.95	6.44	7.25	5.93	5.90	5.37	5.68	4.98	4.80	6.60	5.03	6.12
122MW-4	19.60	2.76	3.98	1.41	2.55	2.60	1.93	1.20	1.37	1.98	NM	0.10	1.60	0.93	0.50	1.40	3.03	3.42	2.19	2.57	2.70	1.15	1.85
122MW-5	18.60	NM	NM	NM	2.87	3.68	3.83	2.43	4.51	4.42	1.30	2.45	4.14	4.82	3.38	3.90	3.73	4.06	3.47	3.21	4.28	2.62	4.02
122MW-6	18.38	NM	6.23	6.15	6.37	6.37	6.55	5.56	6.70	6.58	5.20	5.57	6.52	6.78	5.76	6.61	6.35	6.38	6.35	6.19	6.88	5.58	6.38
122MW-7	18.37	2.74	4.02	2.70	2.97	3.30	3.18	1.63	3.55	3.45	1.23	1.68	3.20	3.55	2.56	3.03	2.88	3.43	2.87	2.82	3.58	1.73	3.12
122MW-8	21.25	7.66	7.65	7.88	8.15	6.83	6.61	7.22	8.36	8.17	6.62	7.27	8.22	8.38	7.65	8.03	7.97	8.31	7.95	7.28	8.01	6.75	6.56
122MW-9	18.94	4.91	5.39	4.79	4.86	4.70	4.80	4.12	4.80	4.81	4.20	4.45	4.88	5.02	4.84	NM	4.84	5.39	4.51	4.62	4.82	4.54	4.62
122MW-11	21.37	NM	NM	NM	11.02	6.11	6.08	5.93	6.38	6.20	4.32	4.46	6.13	6.52	5.72	6.05	5.82	6.10	5.80	5.55	6.23	4.32	6.20
122MW-13	20.51	NM	4.98	4.83	5.05	5.37	5.26	3.83	5.67	5.52	3.71	3.89	5.90	5.63	5.99	5.05	4.93	5.49	4.95	4.85	6.42	4.01	5.25
122MW-14	23.41	NM	6.32	5.86	5.73	6.18	5.92	5.47	6.55	6.60	6.01	5.81	6.78	7.52	6.82	6.25	6.14	6.49	5.60	5.48	9.01	5.75	5.70
122RW-1	18.87	NM	4.06	4.31	4.19	4.27	4.10	3.00	4.40	4.31	3.05	3.26	4.14	4.70	4.55	NM	4.34	4.89	3.75	3.90	6.17	3.73	3.88

[1] Top of casing elevation exoressed in feet above/below MSL

BTOC - below top of casing
MSL - mean sea level
NM - not measured; well not accessible (for September 2004, well was not designated for gauging)

TABLE A-2
Depth to Product Data - September 2003 to August 2005
Campbell Street Fuel Farm Site

Location	Top of Casing Elevation[1]	Depth to Product (feet BTOC)																					
		9/24/2003	12/28/2003	1/29/2004	2/8/2004	3/17/2004	4/26/2004	5/4/2004	6/9/2004	7/7/2004	8/3/2004	9/2/2004	10/12/2004	11/4/2004	12/27/2004	1/6/2005	2/2/2005	3/16/2005	4/7/2005	5/17/2005	6/21/2005	7/22/2005	8/5/2005
MW-3	21.69	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-9	20.45	NM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-10	21.17	NM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-11	22.03	NM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-12	21.41	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-14	20.07	NM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-15	21.08	NM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-16	21.45	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-21	21.76	NM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-22	21.69	NM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-24	21.56	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DW-2	22.91	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DW-6	22.83	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
13MW-1	21.84	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
13DW-1	22.17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
122MW-3	22.23	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
122MW-4	19.60	--	--	--	--	--	--	--	--	--	NM	--	--	--	--	--	--	--	--	--	--	--	--
122MW-5	18.60	NM	NM	NM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
122MW-6	18.38	NM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
122MW-7	18.37	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
122MW-8	21.25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
122MW-9	18.94	--	--	--	--	--	--	--	SI	--	--	--	--	--	--	NM	--	--	--	--	--	--	--
122MW-11	21.37	NM	NM	NM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
122MW-13	20.51	NM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
122MW-14	23.41	NM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
122RW-1	18.87	NM	--	--	--	--	--	--	SI	--	--	--	--	--	--	NM	--	--	--	--	--	--	--

[1] Top of casing elevation expressed in feet above/below MSL
"-- indicates no measurable product detected
SI indicates sorbent sock installed at the time of gauging

BTOC - below top of casing
MSL - mean sea level
NM - not measured; well not accessible (for September 2004, well was not designated for gauging)

ANNUAL GROUNDWATER MONITORING REPORT 2003-2005
CAMPBELL STREET FUEL FARM SITE
MARINE CORPS AIR STATION NEW RIVER
NORTH CAROLINA

VOLUME IIA
Revision 0

Prepared for:

DEPARTMENT OF THE NAVY
Contract No. N62470-03-D-4000

Atlantic Division
Naval Facilities Engineering Command
6506 Hampton Boulevard
Building C, Room 311
Norfolk, Virginia 23508

Prepared by:

Engineering and Environment, Inc.
824 Gum Branch Road, Suite S
Jacksonville, North Carolina, Virginia 28540

19 December 2005

APPENDIX B

LABORATORY ANALYTICAL REPORTS

September 2003 Laboratory Reports

Southeast
ACCUTEST.
Laboratories

12/08/05

Technical Report for

EEI

Camp Lejeune-Campbell St. Fuel Farm

844271

Accutest Job Number: F19788

Sampling Dates: 09/24/03 - 09/25/03

Report to:

EEI

bmorris@eeimail.com

ATTN: Bill Morris

Total number of pages in report: 128

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Sections: 1 2 3 4 5 6

Table of Contents

-1-

Section 1: Sample Summary **4**

Section 2: Sample Results 6

2.1: F19788-1: USTCSFF-MW01 6

2.2: F19788-2: USTCSFF-MW03 8

2.3: F19788-3: USTCSFF-MW11 10

2.4: F19788-4: USTCSFF-MW12 12

2.5: F19788-5: USTCSFF-MW14 14

2.6: F19788-6: USTCSFF-MW16 16

2.7: F19788-7: USTCSFF-MW21 18

2.8: F19788-8: USTCSFF-MW24 20

2.9: F19788-9: USTCSFF-DW02 22

2.10: F19788-10: USTCSFF-DW06 25

2.11: F19788-11: USTCSFF-MW13DW01 28

2.12: F19788-12: USTCSFF-MW122MW03 31

2.13: F19788-13: USTCSFF-MW122MW04 33

2.14: F19788-14: USTCSFF-MW122MW07 35

2.15: F19788-15: USTCSFF-MW122MW08 37

2.16: F19788-16: USTCSFF-MW122MW09 39

2.17: F19788-17: USTCSFF-MW122MW11 42

2.18: F19788-18: USTCSFF-TB-092503 44

Section 3: Misc. Forms 45

3.1: Chain of Custody 46

Section 4: GC/MS Semi-volatiles - QC Data Summaries **49**

4.1: Method Blank Summary 50

4.2: Blank Spike Summary 51

4.3: Matrix Spike/Matrix Spike Duplicate Summary 52

4.4: Instrument Performance Checks (DFTPP) 53

4.5: Internal Standard Area Summaries 56

4.6: Surrogate Recovery Summaries 57

4.7: Initial and Continuing Calibration Summaries 58

Section 5: GC Volatiles - QC Data Summaries 64

5.1: Method Blank Summary 65

5.2: Blank Spike Summary 69

5.3: Matrix Spike/Matrix Spike Duplicate Summary 74

5.4: Duplicate Summary 78

5.5: Surrogate Recovery Summaries 79

5.6: GC Surrogate Retention Time Summaries 81

5.7: Initial and Continuing Calibration Summaries 90

Section 6: GC Semi-volatiles - QC Data Summaries 104

6.1: Method Blank Summary 105

6.2: Blank Spike Summary 107

6.3: Matrix Spike/Matrix Spike Duplicate Summary 108

Sections: 1 2 3 4 5 6

Table of Contents

6.4: Duplicate Summary 109
6.5: Surrogate Recovery Summaries 110
6.6: GC Surrogate Retention Time Summaries 111
6.7: Initial and Continuing Calibration Summaries 115

Sample Summary

EEI

Job No: F19788

Camp Lejeune-Campbell St. Fuel Farm
Project No: 844271

Sample Number	Collected Date	Time By	Received	Matrix Code	Matrix Type	Client Sample ID
F19788-1	09/25/03	09:05 WM	09/26/03	AQ	Ground Water	USTCSFF-MW01 (13mw1)
F19788-2	09/24/03	12:00 WM	09/26/03	AQ	Ground Water	USTCSFF-MW03
F19788-3	09/24/03	14:10 WM	09/26/03	AQ	Ground Water	USTCSFF-MW11
F19788-4	09/24/03	11:25 WM	09/26/03	AQ	Ground Water	USTCSFF-MW12
F19788-5	09/24/03	12:20 WM	09/26/03	AQ	Ground Water	USTCSFF-MW14
F19788-6	09/24/03	10:25 WM	09/26/03	AQ	Ground Water	USTCSFF-MW16
F19788-7	09/24/03	15:45 WM	09/26/03	AQ	Ground Water	USTCSFF-MW21
F19788-8	09/24/03	14:45 WM	09/26/03	AQ	Ground Water	USTCSFF-MW24
F19788-9	09/24/03	13:15 WM	09/26/03	AQ	Ground Water	USTCSFF-DW02
F19788-10	09/24/03	16:35 WM	09/26/03	AQ	Ground Water	USTCSFF-DW06
F19788-11	09/24/03	09:40 WM	09/26/03	AQ	Ground Water	USTCSFF-MW13DW01
F19788-12	09/25/03	13:45 WM	09/26/03	AQ	Ground Water	USTCSFF-MW122MW03
F19788-13	09/25/03	10:40 WM	09/26/03	AQ	Ground Water	USTCSFF-MW122MW04

Sample Summary
(continued)

EEI

Job No: F19788

Camp Lejeune-Campbell St. Fuel Farm
Project No: 844271

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
F19788-14	09/25/03	09:50	WM	09/26/03	AQ	Ground Water	USTCSFF-MW122MW07
F19788-15	09/25/03	11:40	WM	09/26/03	AQ	Ground Water	USTCSFF-MW122MW08
F19788-16	09/25/03	11:00	WM	09/26/03	AQ	Ground Water	USTCSFF-MW122MW09
F19788-17	09/25/03	12:40	WM	09/26/03	AQ	Ground Water	USTCSFF-MW122MW11
F19788-18	09/25/03	00:00	WM	09/26/03	AQ	Trip Blank Water	USTCSFF-TB-092503

Report of Analysis

Client Sample ID:	USTCSFF-MW01 (3 MW)		
Lab Sample ID:	F19788-1	**Date Sampled:**	09/25/03
Matrix:	AQ - Ground Water	**Date Received:**	09/26/03
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF030677.D	1	10/03/03	CV	n/a	n/a	GEF1118
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	87%		74-127%
98-08-8	aaa-Trifluorotoluene	92%		73-135%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-~~MW01~~ 13MW1		
Lab Sample ID:	F19788-1	**Date Sampled:**	09/25/03
Matrix:	AQ - Ground Water	**Date Received:**	09/26/03
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK00216.D	1	09/30/03	SD	09/30/03	OP8666	GKK5
Run #2							

	Initial Volume	Final Volume
Run #1	37.6 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0093	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	121%		60-140%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW03		
Lab Sample ID:	F19788-2	**Date Sampled:**	09/24/03
Matrix:	AQ - Ground Water	**Date Received:**	09/26/03
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF030678.D	1	10/04/03	CV	n/a	n/a	GEF1118
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	88%		74-127%
98-08-8	aaa-Trifluorotoluene	96%		73-135%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW03		
Lab Sample ID:	F19788-2	**Date Sampled:**	09/24/03
Matrix:	AQ - Ground Water	**Date Received:**	09/26/03
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK00217.D	1	09/30/03	SD	09/30/03	OP8666	GKK5
Run #2							

	Initial Volume	Final Volume
Run #1	38.0 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.018	0.0092	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	113%		60-140%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW11		
Lab Sample ID:	F19788-3	**Date Sampled:**	09/24/03
Matrix:	AQ - Ground Water	**Date Received:**	09/26/03
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF030681.D	1	10/04/03	CV	n/a	n/a	GEF1118
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	87%		74-127%
98-08-8	aaa-Trifluorotoluene	93%		73-135%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW11		
Lab Sample ID:	F19788-3	**Date Sampled:**	09/24/03
Matrix:	AQ - Ground Water	**Date Received:**	09/26/03
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK00218.D	1	09/30/03	SD	09/30/03	OP8666	GKK5
Run #2							

	Initial Volume	Final Volume
Run #1	38.3 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.018	0.0091	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	118%		60-140%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in assoeiated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW12		
Lab Sample ID:	F19788-4	**Date Sampled:**	09/24/03
Matrix:	AQ - Ground Water	**Date Received:**	09/26/03
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	EF030682.D	1	10/04/03	CV	n/a	n/a	GEF1118
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	0.85	1.0	0.50	ug/l	J
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	93%		74-127%
98-08-8	aaa-Trifluorotoluene	95%		73-135%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW12		
Lab Sample ID:	F19788-4	**Date Sampled:**	09/24/03
Matrix:	AQ - Ground Water	**Date Received:**	09/26/03
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fucl Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK00219.D	1	09/30/03	SD	09/30/03	OP8666	GKK5
Run #2							

	Initial Volume	Final Volume
Run #1	37.5 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0093	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	110%		60-140%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW14		
Lab Sample ID:	F19788-5	**Date Sampled:**	09/24/03
Matrix:	AQ - Ground Water	**Date Received:**	09/26/03
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF030683.D	1	10/04/03	CV	n/a	n/a	GEF1118
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	88%		74-127%
98-08-8	aaa-Trifluorotoluene	94%		73-135%

ND = Not deteeted MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

2.5

Report of Analysis

Client Sample ID:	USTCSFF-MW14		
Lab Sample ID:	F19788-5	**Date Sampled:**	09/24/03
Matrix:	AQ - Ground Water	**Date Received:**	09/26/03
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK00220.D	1	09/30/03	SD	09/30/03	OP8666	GKK5
Run #2							

	Initial Volume	Final Volume
Run #1	38.1 ml	2.0 ml
Run #2		

CAS No.	Compouud	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.018	0.0092	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	96%		60-140%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW16		
Lab Sample ID:	F19788-6	**Date Sampled:**	09/24/03
Matrix:	AQ - Ground Water	**Date Received:**	09/26/03
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	EF030705.D	1	10/06/03	CV	n/a	n/a	GEF1119
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	34.1	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzenc	ND	1.0	0.50	ug/l	
541-73-1	1,3-Diehlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	7.0	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	35.6	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Ruu# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	104%		74-127%
98-08-8	aaa-Trifluorotoluene	106%		73-135%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW16		
Lab Sample ID:	F19788-6	**Date Sampled:**	09/24/03
Matrix:	AQ - Ground Water	**Date Received:**	09/26/03
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK00221.D	1	09/30/03	SD	09/30/03	OP8666	GKK5
Run #2							

	Initial Volume	Final Volume
Run #1	37.5 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0093	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	99%		60-140%

ND = Not detected MDL - Method Deteetion Limit
RL = Reporting Limit
E = Indicates value exeeeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a eompound

Report of Analysis

Client Sample ID:	USTCSFF-MW21		
Lab Sample ID:	F19788-7	**Date Sampled:**	09/24/03
Matrix:	AQ - Ground Water	**Date Received:**	09/26/03
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	EF030711.D	5	10/06/03	CV	n/a	n/a	GEF1119
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	381	5.0	2.5	ug/l	
108-90-7	Chlorobenzene	ND	5.0	2.5	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.0	2.5	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	2.5	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	2.5	ug/l	
100-41-4	Ethylbenzene	156	5.0	2.5	ug/l	
1634-04-4	Methyl Tert Butyl Ether	259	5.0	2.5	ug/l	
108-88-3	Toluene	70.0	5.0	2.5	ug/l	
1330-20-7	Xylenes (total)	467	15	5.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	101%		74-127%
98-08-8	aaa-Trifluorotoluene	104%		73-135%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indieates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW21		
Lab Sample ID:	F19788-7	**Date Sampled:**	09/24/03
Matrix:	AQ - Ground Water	**Date Received:**	09/26/03
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fucl Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK00223.D	1	09/30/03	SD	09/30/03	OP8666	GKK5
Run #2							

	Initial Volume	Final Volume
Run #1	38.8 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.018	0.0090	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	96%		60-140%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW24		
Lab Sample ID:	F19788-8	**Date Sampled:**	09/24/03
Matrix:	AQ - Ground Water	**Date Received:**	09/26/03
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF030687.D	1	10/04/03	CV	n/a	n/a	GEF1118
Run #2 [a]	EF030713.D	10	10/06/03	CV	n/a	n/a	GEF1119

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	520 [b]	10	5.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	347 [b]	10	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	35.7	1.0	0.50	ug/l	
108-88-3	Toluene	549 [b]	10	5.0	ug/l	
1330-20-7	Xylenes (total)	1020 [b]	30	10	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	104%	102%	74-127%
98-08-8	aaa-Trifluorotoluene	117%	103%	73-135%

(a) All hits confirmed by dual column analysis.
(b) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW24		
Lab Sample ID:	F19788-8	**Date Sampled:**	09/24/03
Matrix:	AQ - Ground Water	**Date Received:**	09/26/03
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK00224.D	1	09/30/03	SD	09/30/03	OP8666	GKK5
Run #2							

	Initial Volume	Final Volume
Run #1	38.6 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.018	0.0091	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	91%		60-140%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indieates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-DW02		
Lab Sample ID:	F19788-9	**Date Sampled:**	09/24/03
Matrix:	AQ - Ground Water	**Date Received:**	09/26/03
Method:	EPA 625 EPA 625	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W017323.D	1	10/03/03	ME	10/01/03	OP8686	SW903
Run #2							

	Initial Volume	Final Volume
Run #1	950 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	21.8	5.3	1.1	ug/l	
208-96-8	Acenaphthylene	ND	5.3	1.1	ug/l	
120-12-7	Anthracene	ND	5.3	1.1	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.3	1.1	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.3	1.1	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.3	1.1	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.3	2.1	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.3	1.1	ug/l	
218-01-9	Chrysene	ND	5.3	1.1	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.3	2.1	ug/l	
206-44-0	Fluoranthene	ND	5.3	1.1	ug/l	
86-73-7	Fluorene	16.0	5.3	1.1	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.3	2.1	ug/l	
90-12-0	1-Methylnaphthalene	ND	5.3	1.1	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.3	1.1	ug/l	
91-20-3	Naphthalene	9.9	5.3	1.1	ug/l	
85-01-8	Phenanthrene	ND	5.3	1.1	ug/l	
129-00-0	Pyrene	ND	5.3	1.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	83%		49-119%
321-60-8	2-Fluorobiphenyl	77%		45-118%
1718-51-0	Terphenyl-d14	48%		46-135%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-DW02		
Lab Sample ID:	F19788-9	**Date Sampled:**	09/24/03
Matrix:	AQ - Ground Water	**Date Received:**	09/26/03
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF030688.D	1	10/04/03	CV	n/a	n/a	GEF1118
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	91%		74-127%
98-08-8	aaa-Trifluorotoluene	91%		73-135%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-DW02		
Lab Sample ID:	F19788-9	**Date Sampled:**	09/24/03
Matrix:	AQ - Ground Water	**Date Received:**	09/26/03
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK00225.D	1	09/30/03	SD	09/30/03	OP8666	GKK5
Run #2							

	Initial Volume	Final Volume
Run #1	37.9 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.018	0.0092	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	101%		60-140%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-DW06		
Lab Sample ID:	F19788-10	**Date Sampled:**	09/24/03
Matrix:	AQ - Ground Water	**Date Received:**	09/26/03
Method:	EPA 625 EPA 625	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W017324.D	1	10/03/03	ME	10/01/03	OP8686	SW903
Run #2							

	Initial Volume	Final Volume
Run #1	980 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.1	1.0	ug/l	
208-96-8	Acenaphthylene	ND	5.1	1.0	ug/l	
120-12-7	Anthracene	ND	5.1	1.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.1	1.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.1	1.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.1	1.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.1	2.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.1	1.0	ug/l	
218-01-9	Chrysene	ND	5.1	1.0	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.1	2.0	ug/l	
206-44-0	Fluoranthene	ND	5.1	1.0	ug/l	
86-73-7	Fluorene	ND	5.1	1.0	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.1	2.0	ug/l	
90-12-0	1-Methylnaphthalene	ND	5.1	1.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.1	1.0	ug/l	
91-20-3	Naphthalene	ND	5.1	1.0	ug/l	
85-01-8	Phenanthrene	ND	5.1	1.0	ug/l	
129-00-0	Pyrene	ND	5.1	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	79%		49-119%
321-60-8	2-Fluorobiphenyl	73%		45-118%
1718-51-0	Terphenyl-d14	50%		46-135%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-DW06		
Lab Sample ID:	F19788-10	**Date Sampled:**	09/24/03
Matrix:	AQ - Ground Water	**Date Received:**	09/26/03
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF030689.D	1	10/04/03	CV	n/a	n/a	GEF1118
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	85%		74-127%
98-08-8	aaa-Trifluorotoluene	90%		73-135%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-DW06		
Lab Sample ID:	F19788-10	**Date Sampled:**	09/24/03
Matrix:	AQ - Ground Water	**Date Received:**	09/26/03
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK00226.D	1	09/30/03	SD	09/30/03	OP8666	GKK5
Run #2							

	Initial Volume	Final Volume
Run #1	37.3 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0094	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	110%		60-140%

ND = Not deteeted MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW13DW01		
Lab Sample ID:	F19788-11	**Date Sampled:**	09/24/03
Matrix:	AQ - Ground Water	**Date Received:**	09/26/03
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF030690.D	1	10/04/03	CV	n/a	n/a	GEF1118
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	84%		74-127%
98-08-8	aaa-Trifluorotoluene	88%		73-135%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW13DW01		
Lab Sample ID:	F19788-11	**Date Sampled:**	09/24/03
Matrix:	AQ - Ground Water	**Date Received:**	09/26/03
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK00227.D	1	09/30/03	SD	09/30/03	OP8666	GKK5
Run #2							

	Initial Volume	Final Volume
Run #1	37.9 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.018	0.0092	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	88%		60-140%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW13DW01		
Lab Sample ID:	F19788-11	**Date Sampled:**	09/24/03
Matrix:	AQ - Ground Water	**Date Received:**	09/26/03
Method:	EPA 610 EPA 610	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IJ18471.D	1	10/01/03	SD	09/30/03	OP8665	GIJ886
Run #2							

	Initial Volume	Final Volume
Run #1	950 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.3	2.1	ug/l	
208-96-8	Acenaphthylene	ND	5.3	2.1	ug/l	
120-12-7	Anthracene	ND	5.3	2.1	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.3	2.1	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.3	2.1	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.3	2.1	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.3	2.1	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.3	2.1	ug/l	
218-01-9	Chrysene	ND	5.3	2.1	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.3	2.1	ug/l	
206-44-0	Fluoranthene	ND	5.3	2.1	ug/l	
86-73-7	Fluorene	ND	5.3	2.1	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.3	2.1	ug/l	
91-20-3	Naphthalene	ND	5.3	2.1	ug/l	
90-12-0	1-Methylnaphthalene	ND	5.3	2.1	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.3	2.1	ug/l	
85-01-8	Phenanthrene	ND	5.3	2.1	ug/l	
129-00-0	Pyrene	ND	5.3	2.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	84%		41-139%
84-15-1	o-Terphenyl	87%		46-135%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW122MW03		
Lab Sample ID:	F19788-12	**Date Sampled:**	09/25/03
Matrix:	AQ - Ground Water	**Date Received:**	09/26/03
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF030679.D	1	10/04/03	CV	n/a	n/a	GEF1118
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Diehlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Diehlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Diehlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	86%		74-127%
98-08-8	aaa-Trifluorotoluene	92%		73-135%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW122MW03		
Lab Sample ID:	F19788-12	**Date Sampled:**	09/25/03
Matrix:	AQ - Ground Water	**Date Received:**	09/26/03
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK00228.D	1	09/30/03	SD	09/30/03	OP8666	GKK5
Run #2							

	Initial Volume	Final Volume
Run #1	37.8 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0093	ug/l	

CAS No.	Surrogate Reeoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	103%		60-140%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@43779 18:17 08-Dec-2005

Report of Analysis

Client Sample ID:	USTCSFF-MW122MW04		
Lab Sample ID:	F19788-13	**Date Sampled:**	09/25/03
Matrix:	AQ - Ground Water	**Date Received:**	09/26/03
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF030719.D	1	10/06/03	CV	n/a	n/a	GEF1119
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	85%		74-127%
98-08-8	aaa-Trifluorotoluene	91%		73-135%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW122MW04		
Lab Sample ID:	F19788-13	**Date Sampled:**	09/25/03
Matrix:	AQ - Ground Water	**Date Received:**	09/26/03
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK00229.D	1	09/30/03	SD	09/30/03	OP8666	GKK5
Run #2							

	Initial Volume	Final Volume
Run #1	36.4 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0096	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	114%		60-140%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW122MW07		
Lab Sample ID:	F19788-14	**Date Sampled:**	09/25/03
Matrix:	AQ - Ground Water	**Date Received:**	09/26/03
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF030720.D	1	10/06/03	CV	n/a	n/a	GEF1119
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Diehlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Diehlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	89%		74-127%
98-08-8	aaa-Trifluorotoluene	94%		73-135%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indieates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW122MW07		
Lab Sample ID:	F19788-14	**Date Sampled:**	09/25/03
Matrix:	AQ - Ground Water	**Date Received:**	09/26/03
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK00230.D	1	09/30/03	SD	09/30/03	OP8666	GKK5
Run #2							

	Initial Volume	Final Volume
Run #1	38.7 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.018	0.0090	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	103%		60-140%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds ealibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indieates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW122MW08		
Lab Sample ID:	F19788-15	**Date Sampled:**	09/25/03
Matrix:	AQ - Ground Water	**Date Received:**	09/26/03
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF030721.D	1	10/06/03	CV	n/a	n/a	GEF1119
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	86%		74-127%
98-08-8	aaa-Trifluorotoluene	93%		73-135%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW122MW08		
Lab Sample ID:	F19788-15	**Date Sampled:**	09/25/03
Matrix:	AQ - Ground Water	**Date Received:**	09/26/03
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK00231.D	1	09/30/03	SD	09/30/03	OP8666	GKK5
Run #2							

	Initial Volume	Final Volume
Run #1	37.8 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0093	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	104%		60-140%

ND = Not detected MDL - Method Deteetion Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW122MW09		
Lab Sample ID:	F19788-16	**Date Sampled:**	09/25/03
Matrix:	AQ - Ground Water	**Date Received:**	09/26/03
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	EF030760.D	1	10/07/03	CV	n/a	n/a	GEF1121
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	0.57	1.0	0.50	ug/l	J
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	94%		74-127%
98-08-8	aaa-Trifluorotoluene	100%		73-135%

(a) All hits confirmed by dual column analysis.

ND = Not deteeted MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW122MW09		
Lab Sample ID:	F19788-16	**Date Sampled:**	09/25/03
Matrix:	AQ - Ground Water	**Date Received:**	09/26/03
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK00233.D	1	09/30/03	SD	09/30/03	OP8666	GKK5
Run #2							

	Initial Volume	Final Volume
Run #1	37.9 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.018	0.0092	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	113%		60-140%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW122MW09		
Lab Sample ID:	F19788-16	**Date Sampled:**	09/25/03
Matrix:	AQ - Ground Water	**Date Received:**	09/26/03
Method:	EPA 610 EPA 610	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	IJ18472.D	1	10/01/03	SD	09/30/03	OP8665	GIJ886
Run #2 [a]	IJ18497.D	2	10/02/03	SD	09/30/03	OP8665	GIJ887

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2	1000 ml	1.0 ml

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.0	2.0	ug/l	
208-96-8	Acenaphthylene	ND	5.0	2.0	ug/l	
120-12-7	Anthracene	ND	5.0	2.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.0	2.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.0	2.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.0	2.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.0	2.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.0	2.0	ug/l	
218-01-9	Chrysene	ND	5.0	2.0	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.0	2.0	ug/l	
206-44-0	Fluoranthene	ND	5.0	2.0	ug/l	
86-73-7	Fluorene	ND	5.0	2.0	ug/l	
193-39-5	Indeno(1,2,3-ed)pyrene	ND	5.0	2.0	ug/l	
91-20-3	Naphthalene	47.1 [b]	10	4.0	ug/l	
90-12-0	1-Methylnaphthalene	21.1	5.0	2.0	ug/l	
91-57-6	2-Methylnaphthalene	41.0	5.0	2.0	ug/l	
85-01-8	Phenanthrene	ND	5.0	2.0	ug/l	
129-00-0	Pyrene	ND	5.0	2.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	100%	94%	41-139%
84-15-1	o-Terphenyl	84%	77%	46-135%

(a) All hits eonfirmed by dual column analysis.
(b) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW122MW11		
Lab Sample ID:	F19788-17	**Date Sampled:**	09/25/03
Matrix:	AQ - Ground Water	**Date Received:**	09/26/03
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF030714.D	1	10/06/03	CV	n/a	n/a	GEF1119
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	87%		74-127%
98-08-8	aaa-Trifluorotoluene	94%		73-135%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW122MW11		
Lab Sample ID:	F19788-17	**Date Sampled:**	09/25/03
Matrix:	AQ - Ground Water	**Date Received:**	09/26/03
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK00234.D	1	09/30/03	SD	09/30/03	OP8666	GKK5
Run #2							

	Initial Volume	Final Volume
Run #1	38.9 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.018	0.0090	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.018	0.0090	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	113%		60-140%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-TB-092503		
Lab Sample ID:	F19788-18	**Date Sampled:**	09/25/03
Matrix:	AQ - Trip Blank Water	**Date Received:**	09/26/03
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF030722.D	1	10/06/03	CV	n/a	n/a	GEF1119
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Diehlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	83%		74-127%
98-08-8	aaa-Trifluorotoluene	91%		73-135%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

COC Number: F19788
844271-CSFF-092503-I

Shaw
Shaw Environmental & Infrastructure, Inc.

CHAIN-OF-CUSTODY RECORD

Shaw E & I - Piney Green Rd. Lot 203 Bld 626 - 910-451-2390

Receiving LAB: ACCUTEST

Project Name	Project Location
CAMP LEJEUNE - Campbell Street. Fuel Farm	CAMP LEJEUNE, NC

Project Number	Contact	P.O. Number	Reviewed by
844271	Mark Martin	E & E	

Client Rep	Project Manager
US NAVY - LANTDIV	Ron Kenyon

Item No.	Sample Number	Date	Time	Comp	Grab	Sample Description	Number of Containers	Analysis Desired: VOC 602	504.1	625 PAH
1	USTCSFF-MW01	9/25/03	0905		X	USTCSFF-MW01	6	X	X	
2	USTCSFF-MW03	9/24/03	1200		X	USTCSFF-MW03	6	X	X	
3	USTCSFF-MW11	9/24/03	1410		X	USTCSFF-MW11	6	X	X	
4	USTCSFF-MW12	9/24/03	1125		X	USTCSFF-MW12	6	X	X	
5	USTCSFF-MW14	9/24/03	1220		X	USTCSFF-MW14	6	X	X	
6	USTCSFF-MW16	9/24/03	1025		X	USTCSFF-MW16	6	X	X	
7	USTCSFF-MW21	9/24/03	1545		X	USTCSFF-MW21	6	X	X	
8	USTCSFF-MW24	9/24/03	1445		X	USTCSFF-MW24	6	X	X	
9	USTCSFF-DW02	9/24/03	1315		X	USTCSFF-DW02	8	X	X	X
10	USTCSFF-DW06	9/24/03	1635		X	USTCSFF-DW06	8	X	X	X

Transfer Number	Item Number	Transfers Relinquished By	Transfers Accepted By	Date	Time	Remarks
1	1 – 10	[signature]	FedEx 8369 1400 3025	9/25/03	16:00	Please E-Mail Results To Mark.Martin@shawgrp.com
2		FedEx	Muna M.	9/26/03	0900	or Fax to 910-451-1609
3						21 Day TAT

3.6
2.8.

COC Number:
844271-CSFF-092503-2

Shaw
Shaw Environmental & Infrastructure, Inc.

F19788

CHAIN-OF-CUSTODY RECORD

Shaw E & I - Piney Green Rd. Lot 203 Bld 626 - 910-451-2390

Receiving LAB: ACCUTEST

Project Name	Project Location		
CAMP LEJEUNE - Campbell Street. Fuel Farm	CAMP LEJEUNE, NC		
Project Number	**Contact**	**P.O. Number**	**Reviewed by**
844271	Mark Martin	E & E	
Client Rep	**Project Manager**		
US NAVY - LANTDIV	Ron Kenyon		

Analysis Desired

Item No.	Sample Number	Date	Time	Comp	Grab	Sample Description	Number of Containers	VOC 602	504.1	625 PAH	610 PAH
1	USTCSFF-MW13DW01	9/24/03	0940		X	USTCSFF-MW13DW01	8	X	X		X
2	USTCSFF-MW122MW03	9/25/03	1345		X	USTCSFF-MW122MW03	6	X	X		
3	USTCSFF-MW122MW04	9/25/03	1040		X	USTCSFF-MW122MW04	6	X	X		
4	USTCSFF-MW122MW07	9/25/03	0950		X	USTCSFF-MW122MW07	6	X	X		
5	USTCSFF-MW122MW08	9/25/03	1140		X	USTCSFF-MW122MW08	6	X	X		
6	USTCSFF-MW122MW09	9/25/03	1100		X	USTCSFF-MW122MW09	8	X	X		X
7	USTCSFF-MW122MW11	9/25/03	1240		X	USTCSFF-MW122MW11	8	X	X		
8	USTCSFF-TB-092503	9/25/03	—		X	Trip Blank	2	X			
9											
10											

Transfer Number	Item Number	Transfers Relinquished By	Transfers Accepted By	Date	Time	Remarks
1	1 - 8		FedEx 8369 1400 3025	9/25/03	16:00	Please E-Mail Results To Mark.Martin@shawgrp.com
2		FedEx	Mura M.	9/26/03	0900	or Fax to 910-451-1809
3						21 Day TAT

ACCUTEST LABORATORIES SOUTHEAST SAMPLE RECEIPT CONFIRMATION

Accutest's Job Number: F19788

Client: Shaw Project: Camp Lejeune-Campbell St. Fuel Farm

Date Received: 9/26/03 Time Received: 0900

of Coolers Received: 2 Cooler Temperatures: 3.6, 2.8

Delivery Method: (FedEx) UPS Accutest Courier Greyhound Delivery Other

Air Bill Number:

Cooler Custody Seals Intact ?	(Yes)	No	
Chain of Custody Provided ?	(Yes)	No	
COC Match Bottle Label ID's ?	(Yes)	No	
Sample Labels Present on all bottles ?	(Yes)	No	
All Analyses Marked On COC ?	(Yes)	No	
Are All Bottles Intact ?	(Yes)	No	
Samples Preserved Correctly ?	(Yes)	No	
Correct Number of Containers Used ?	(Yes)	No	
Sufficient Sample Volume ?	(Yes)	No	
Trip Blank Provided ?	(Yes)	No	
Trip Blank on COC ?	(Yes)	No	
Trip Blank Intact ?	(Yes)	No	N/A
Trip Blank Matrix ?	Soil	(Water)	N/A
Number of Encores ?	0		
Number of Soil Field Kits ?	0		

Summary of Comments:

Signature: Munam Shamma Date: 9/26/03

ASBD/HW 05/11/03

F19788: Chain of Custody
Page 3 of 3

GC/MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (DFTPP)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: F19788
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8686-MB	W017322.D	1	10/03/03	ME	10/01/03	OP8686	SW903

The QC reported here applies to the following samples: **Method:** EPA 625

F19788-9, F19788-10

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.0	1.0	ug/l	
208-96-8	Acenaphthylene	ND	5.0	1.0	ug/l	
120-12-7	Anthracene	ND	5.0	1.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.0	1.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.0	1.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.0	1.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.0	2.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.0	1.0	ug/l	
218-01-9	Chrysene	ND	5.0	1.0	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.0	2.0	ug/l	
206-44-0	Fluoranthene	ND	5.0	1.0	ug/l	
86-73-7	Fluorene	ND	5.0	1.0	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.0	2.0	ug/l	
90-12-0	1-Methylnaphthalene	ND	5.0	1.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
85-01-8	Phenanthrene	ND	5.0	1.0	ug/l	
129-00-0	Pyrene	ND	5.0	1.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
4165-60-0	Nitrobenzene-d5	75%	49-119%
321-60-8	2-Fluorobiphenyl	69%	45-118%
1718-51-0	Terphenyl-d14	86%	46-135%

Blank Spike Summary

Job Number: F19788
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8686-BS	W017321.D	1	10/03/03	ME	10/01/03	OP8686	SW903

The QC reported here applies to the following samples: **Method:** EPA 625

F19788-9, F19788-10

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
83-32-9	Acenaphthene	50	35.3	71	69-101
208-96-8	Acenaphthylene	50	40.4	81	75-113
120-12-7	Anthracene	50	37.9	76	75-107
56-55-3	Benzo(a)anthracene	50	38.3	77	73-106
50-32-8	Benzo(a)pyrene	50	39.8	80	75-114
205-99-2	Benzo(b)fluoranthene	50	38.6	77	73-110
191-24-2	Benzo(g,h,i)perylene	50	37.4	75	63-115
207-08-9	Benzo(k)fluoranthene	50	39.4	79	73-112
218-01-9	Chrysene	50	37.9	76	73-103
53-70-3	Dibenzo(a,h)anthraeene	50	38.1	76	63-115
206-44-0	Fluoranthene	50	38.9	78	73-111
86-73-7	Fluorene	50	36.9	74	70-105
193-39-5	Indeno(1,2,3-ed)pyrene	50	39.7	79	63-118
90-12-0	1-Methylnaphthalene	50	35.1	70	63-99
91-57-6	2-Methylnaphthalene	50	33.0	66	66-100
91-20-3	Naphthalene	50	34.3	69	67-101
85-01-8	Phenanthrene	50	38.0	76	73-104
129-00-0	Pyrene	50	36.1	72	69-105

CAS No.	Surrogate Recoveries	BSP	Limits
4165-60-0	Nitrobenzene-d5	71%	49-119%
321-60-8	2-Fluorobiphenyl	69%	45-118%
1718-51-0	Terphenyl-d14	76%	46-135%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F19788
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8686-MS	W017325.D	1	10/03/03	ME	10/01/03	OP8686	SW903
OP8686-MSD	W017326.D	1	10/03/03	ME	10/01/03	OP8686	SW903
F19788-10	W017324.D	1	10/03/03	ME	10/01/03	OP8686	SW903

The QC reported here applies to the following samples: **Method:** EPA 625

F19788-9, F19788-10

CAS No.	Compound	F19788-10 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	ND		102	83.5	82	77.7	76	7	60-103/20
208-96-8	Acenaphthylene	ND		102	96.1	94	90.7	89	6	67-113/20
120-12-7	Anthracene	ND		102	88.1	86	83.8	82	5	71-105/14
56-55-3	Benzo(a)anthracene	ND		102	85.7	84	84.5	83	1	70-103/16
50-32-8	Benzo(a)pyrene	ND		102	89.7	88	88.5	87	1	70-113/16
205-99-2	Benzo(b)fluoranthene	ND		102	90.5	89	88.4	87	2	67-110/17
191-24-2	Benzo(g,h,i)perylene	ND		102	80.9	79	79.7	78	1	63-111/17
207-08-9	Benzo(k)fluoranthene	ND		102	91.0	89	89.3	88	2	68-110/17
218-01-9	Chrysene	ND		102	84.3	83	84.5	83	0	70-100/18
53-70-3	Dibenzo(a,h)anthracene	ND		102	80.0	78	79.7	78	0	62-111/20
206-44-0	Fluoranthene	ND		102	89.2	87	82.7	81	8	67-108/17
86-73-7	Fluorene	ND		102	85.0	83	79.6	78	7	65-105/17
193-39-5	Indeno(1,2,3-ed)pyrene	ND		102	83.6	82	82.3	81	2	66-111/19
90-12-0	1-Methylnaphthalene	ND		102	84.3	83	78.7	77	7	55-97/23
91-57-6	2-Methylnaphthalene	ND		102	80.1	78	75.5	74	6	56-100/23
91-20-3	Naphthalene	ND		102	85.0	83	78.4	77	8	52-102/23
85-01-8	Phenanthrene	ND		102	87.7	86	83.9	82	4	69-103/15
129-00-0	Pyrene	ND		102	85.1	83	88.4	87	4	64-107/21

CAS No.	Surrogate Recoveries	MS	MSD	F19788-10	Limits
4165-60-0	Nitrobenzene-d5	83%	78%	79%	49-119%
321-60-8	2-Fluorobiphenyl	79%	75%	73%	45-118%
1718-51-0	Terphenyl-d14	50%	52%	50%	46-135%

Instrument Performance Check (DFTPP)

Job Number: F19788
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample:	SW892-DFTPP	**Injection Date:**	09/11/03
Lab File ID:	W017084.D	**Injection Time:**	12:17
Instrument ID:	GCMSW		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	75768	52.8		Pass
68	Less than 2.0% of mass 69	0	0.0	(0.0) [a]	Pass
69	Mass 69 relative abundance	61133	42.6		Pass
70	Less than 2.0% of mass 69	385	0.27	(0.63) [a]	Pass
127	40.0 - 60.0% of mass 198	77248	53.9		Pass
197	Less than 1.0% of mass 198	409	0.29		Pass
198	Base peak, 100% relative abundance	143427	100.0		Pass
199	5.0 - 9.0% of mass 198	10085	7.0		Pass
275	10.0 - 30.0% of mass 198	25805	18.0		Pass
365	1.0 - 100.0% of mass 198	2492	1.7		Pass
441	Present, but less than mass 443	12159	8.5	(81.0) [b]	Pass
442	40.0 - 100.0% of mass 198	78251	54.6		Pass
443	17.0 - 23.0% of mass 442	15011	10.5	(19.2) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

Tbis check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
SW892-ICC892	W017085.D	09/11/03	12:35	00:18	Initial cal 75
SW892-IC892	W017086.D	09/11/03	13:05	00:48	Initial cal 5
SW892-IC892	W017087.D	09/11/03	13:35	01:18	Initial cal 25
SW892-IC892	W017088.D	09/11/03	14:05	01:48	Initial cal 50
SW892-IC892	W017089.D	09/11/03	14:35	02:18	Initial cal 100
SW892-IC892	W017090.D	09/11/03	15:06	02:49	Initial cal 125

Instrument Performance Check (DFTPP)

Job Number: F19788
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample:	SW903-DFTPP	**Injection Date:**	10/03/03
Lab File ID:	W017308.D	**Injection Time:**	13:59
Instrument ID:	GCMSW		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	74203	57.2		Pass
68	Less than 2.0% of mass 69	0	0.0	(0.0) [a]	Pass
69	Mass 69 relative abundance	61013	47.1		Pass
70	Less than 2.0% of mass 69	374	0.29	(0.61) [a]	Pass
127	40.0 - 60.0% of mass 198	72189	55.7		Pass
197	Less than 1.0% of mass 198	0	0.0		Pass
198	Base peak, 100% relative abundance	129672	100.0		Pass
199	5.0 - 9.0% of mass 198	8421	6.5		Pass
275	10.0 - 30.0% of mass 198	22527	17.4		Pass
365	1.0 - 100.0% of mass 198	2328	1.8		Pass
441	Present, but less than mass 443	9182	7.1	(80.6) [b]	Pass
442	40.0 - 100.0% of mass 198	61559	47.5		Pass
443	17.0 - 23.0% of mass 442	11393	8.8	(18.5) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
SW903-CC892	W017309.D	10/03/03	14:18	00:19	Continuing eal 50
OP8677-BS	W017310.D	10/03/03	14:51	00:52	Blank Spike
OP8677-MB	W017311.D	10/03/03	15:21	01:22	Method Blank
ZZZZZZ	W017312.D	10/03/03	15:51	01:52	(unrelated sample)
ZZZZZZ	W017313.D	10/03/03	16:20	02:21	(unrelated sample)
ZZZZZZ	W017314.D	10/03/03	16:50	02:51	(unrelated sample)
F19678-4	W017315.D	10/03/03	17:20	03:21	(used for QC only; not part of job F19788)
OP8677-MS	W017316.D	10/03/03	17:49	03:50	Matrix Spike
OP8677-MSD	W017317.D	10/03/03	18:19	04:20	Matrix Spike Duplicate
ZZZZZZ	W017318.D	10/03/03	18:48	04:49	(unrelated sample)
ZZZZZZ	W017319.D	10/03/03	19:18	05:19	(unrelated sample)
ZZZZZZ	W017320.D	10/03/03	19:47	05:48	(unrelated sample)
OP8686-BS	W017321.D	10/03/03	20:17	06:18	Blank Spike
OP8686-MB	W017322.D	10/03/03	20:46	06:47	Method Blank
F19788-9	W017323.D	10/03/03	21:15	07:16	USTCSFF-DW02
F19788-10	W017324.D	10/03/03	21:45	07:46	USTCSFF-DW06
OP8686-MS	W017325.D	10/03/03	22:14	08:15	Matrix Spike
OP8686-MSD	W017326.D	10/03/03	22:44	08:45	Matrix Spike Duplicate
OP8706-BS	W017327.D	10/03/03	23:13	09:14	Blank Spike

Instrument Performance Check (DFTPP)

Job Number: F19788
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample:	SW903-DFTPP	**Injection Date:**	10/03/03
Lab File ID:	W017308.D	**Injection Time:**	13:59
Instrument ID:	GCMSW		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
OP8706-MB	W017328.D	10/03/03	23:43	09:44	Method Blank
ZZZZZZ	W017329.D	10/04/03	00:12	10:13	(unrelated sample)
ZZZZZZ	W017330.D	10/04/03	00:41	10:42	(unrelated sample)
ZZZZZZ	W017331.D	10/04/03	01:11	11:12	(unrelated sample)
F19818-5	W017332.D	10/04/03	01:40	11:41	(used for QC only; not part of job F19788)
OP8706-MS	W017333.D	10/04/03	02:10	12:11	Matrix Spike
OP8706-MSD	W017334.D	10/04/03	02:40	12:41	Matrix Spike Duplicate

Semivolatile Internal Standard Area Summary

Job Number: F19788
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	SW903-CC892	**Injection Date:**	10/03/03
Lab File ID:	W017309.D	**Injection Time:**	14:18
Instrument ID:	GCMSW	**Method:**	EPA 625

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	243540	5.09	932025	6.30	463351	8.63	636532	11.16	485945	16.10	239516	18.60
Upper Limit [a]	487080	5.59	1864050	6.80	926702	9.13	1273064	11.66	971890	16.60	479032	19.10
Lower Limit [b]	121770	4.59	466013	5.80	231676	8.13	318266	10.66	242973	15.60	119758	18.10
Lab Sample ID	**IS 1 AREA**	**RT**	**IS 2 AREA**	**RT**	**IS 3 AREA**	**RT**	**IS 4 AREA**	**RT**	**IS 5 AREA**	**RT**	**IS 6 AREA**	**RT**
OP8677-BS	214840	5.08	809705	6.30	398436	8.64	556835	11.16	440098	16.09	229966	18.60
OP8677-MB	256555	5.08	973392	6.29	479924	8.63	692245	11.16	543203	16.09	313899	18.59
ZZZZZZ	284170	5.08	1100348	6.29	559723	8.63	800716	11.16	639688	16.09	369390	18.60
ZZZZZZ	290934	5.08	1118074	6.30	553606	8.63	785631	11.16	619859	16.09	352957	18.60
ZZZZZZ	217790	5.08	825604	6.30	409070	8.63	575828	11.16	462213	16.09	256883	18.59
F19678-4	266547	5.08	1013479	6.29	499748	8.63	698290	11.16	542831	16.09	309692	18.60
OP8677-MS	227510	5.09	869911	6.30	424518	8.63	601553	11.16	502307	16.10	271738	18.60
OP8677-MSD	225598	5.08	856487	6.30	419564	8.63	590580	11.16	503181	16.09	284105	18.60
ZZZZZZ	254701	5.08	978671	6.29	491073	8.63	712645	11.15	551355	16.09	325301	18.60
ZZZZZZ	234865	5.08	895566	6.29	451606	8.63	650672	11.15	526790	16.09	310601	18.59
ZZZZZZ	240963	5.08	917290	6.29	452170	8.63	653005	11.15	523292	16.09	300991	18.60
OP8686-BS	241097	5.08	933202	6.30	455275	8.63	641564	11.16	527299	16.09	294951	18.60
OP8686-MB	214145	5.08	816858	6.29	404966	8.63	569231	11.15	429929	16.08	253776	18.59
F19788-9	235401	5.08	906661	6.29	455866	8.63	640461	11.15	494209	16.08	269993	18.60
F19788-10	247493	5.08	954122	6.29	476731	8.63	691034	11.15	557315	16.09	321509	18.60
OP8686-MS	260116	5.09	1002953	6.29	492439	8.63	668326	11.16	539579	16.10	267950	18.60
OP8686-MSD	229894	5.08	898879	6.30	435351	8.63	597912	11.16	425150	16.09	213488	18.59
OP8706-BS	232828	5.08	886670	6.30	440475	8.63	622088	11.16	501592	16.09	256553	18.60
OP8706-MB	228072	5.08	889256	6.29	439693	8.63	629286	11.15	471588	16.08	251774	18.59
ZZZZZZ	216899	5.08	835665	6.29	409683	8.63	587720	11.15	463063	16.08	262239	18.59
ZZZZZZ	215285	5.08	821507	6.29	410512	8.63	589961	11.15	437943	16.08	238129	18.59
ZZZZZZ	233086	5.08	901686	6.29	444011	8.63	634042	11.15	493910	16.09	270503	18.59
F19818-5	220684	5.08	852241	6.29	427759	8.63	618641	11.15	438642	16.08	242775	18.59
OP8706-MS	213075	5.08	817332	6.29	402268	8.63	548567	11.15	416500	16.09	210089	18.60
OP8706-MSD	223265	5.08	843209	6.30	414044	8.63	560155	11.16	422408	16.09	214323	18.59

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Surrogate Recovery Summary

Job Number: F19788
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Method: EPA 625 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
F19788-9	W017323.D	83.0	77.0	48.0
F19788-10	W017324.D	79.0	73.0	50.0
OP8686-BS	W017321.D	71.0	69.0	76.0
OP8686-MB	W017322.D	75.0	69.0	86.0
OP8686-MS	W017325.D	83.0	79.0	50.0
OP8686-MSD	W017326.D	78.0	75.0	52.0

Surrogate Compounds	Recovery Limits
S1 = Nitrobenzene-d5	49-119%
S2 = 2-Fluorobiphenyl	45-118%
S3 = Terphenyl-d14	46-135%

Initial Calibration Summary

Job Number: F19788
Account: EEINCJX EBI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: SW892-ICC892
Lab FileID: W017085.D

Response Factor Report MSBNA01

Method : C:\HPCHEM\1\METHODS\8270C.M (RTE Integrator)
Title : SW846 8270C OR EPA 625
Last Update : Thu Sep 11 15:30:23 2003
Response via : Initial Calibration

Calibration Files
5 =W017086.D 25 =W017087.D 50 =W017088.D
75 =W017085.D 100 =W017089.D 125 =W017090.D

		Compound	5	25	50	75	100	125	Avg	%RSD
1)	I	1,4-Dichlorobenzene-d	----------ISTD----------							
2)		1,4-Dioxane	0.551	0.523	0.532	0.540	0.544	0.521	0.535	2.27
3)		N-nitrosodimethylam	0.731	0.850	0.859	0.862	0.898	0.846	0.841	6.77
4)		Pyridine	1.328	1.355	1.412	1.462	1.465	1.366	1.398	4.12
5)		Benzaldehyde		0.838	0.674	0.593	0.502	0.419	0.605	26.68
6)		Aniline	1.906	1.962	1.971	1.946	1.994	1.889	1.945	2.06
7)	S	2-Fluorophenol	1.394	1.421	1.423	1.458	1.489	1.432	1.436	2.32
8)		bis(2-Chloroethyl)e	1.371	1.436	1.466	1.484	1.542	1.463	1.460	3.87
9)	S	Phenol-d5	1.752	1.747	1.779	1.800	1.852	1.782	1.785	2.14
10)	C	Phenol	2.016	2.020	2.052	2.089	2.160	2.079	2.069	2.57
11)		2-Chlorophenol	1.571	1.588	1.583	1.627	1.654	1.608	1.605	1.92
12)		1,3-Dichlorobenzene	1.721	1.677	1.698	1.748	1.790	1.737	1.729	2.29
13)	C	1,4-Dichlorobenzene	1.762	1.731	1.747	1.777	1.821	1.779	1.769	1.76
14)		1,2-Dichlorobenzene	1.604	1.609	1.641	1.664	1.716	1.684	1.653	2.64
15)		Benzyl alcohol	0.975	0.982	1.014	1.019	1.044	1.019	1.009	2.57
16)		bis(2-chloroisoprop	2.619	2.604	2.619	2.660	2.680	2.598	2.630	1.25
17)		2-Methylphenol	1.390	1.380	1.401	1.413	1.458	1.418	1.410	1.96
18)		Acetophenone	1.945	2.055	2.109	2.148	2.110	2.064	2.072	3.42
19)		Hexachloroethane	0.647	0.673	0.683	0.693	0.710	0.688	0.682	3.12
20)	P	N-Nitroso-di-n-prop	1.056	1.070	1.078	1.082	1.112	1.061	1.077	1.84
21)		3&4-Methylphenol	1.458	1.476	1.514	1.528	1.589	1.523	1.514	3.04
22)	I	Naphthalene-d8	----------ISTD----------							
23)	S	Nitrobenzene-d5	0.393	0.399	0.408	0.411	0.417	0.402	0.405	2.17
24)		Nitrobenzene	0.394	0.381	0.396	0.402	0.405	0.394	0.395	2.13
25)		Isophorone	0.696	0.682	0.705	0.703	0.707	0.697	0.698	1.29
26)	C	2-Nitrophenol	0.222	0.225	0.228	0.232	0.235	0.229	0.229	2.03
27)		2,4-Dimethylphenol	0.381	0.378	0.391	0.394	0.396	0.385	0.388	1.84
28)		bis(2-Chloroethoxy)	0.442	0.444	0.467	0.462	0.471	0.451	0.456	2.68
29)		Benzoic Acid	0.166	0.242	0.283	0.292	0.305	0.297	0.264	20.03
		----- Quadratic regression ----- Coefficient = 0.9989								
		Response Ratio = -0.05441 + 0.30611 *A + 0.00042 *A^2								
30)	C	2,4-Dichlorophenol	0.323	0.321	0.338	0.339	0.349	0.345	0.336	3.39
31)		1,2,4-Trichlorobenz	0.316	0.312	0.326	0.333	0.339	0.334	0.327	3.34
32)		Naphthalene	1.118	1.122	1.162	1.172	1.206	1.176	1.159	2.94
33)		4-Chloroaniline	0.437	0.452	0.472	0.470	0.479	0.452	0.460	3.46
34)		2,6-Dichlorophenol	0.314	0.322	0.338	0.341	0.347	0.334	0.333	3.68
35)	C	Hexachlorobutadiene	0.174	0.173	0.179	0.184	0.184	0.178	0.179	2.61
36)		Caprolactam	0.100	0.109	0.111	0.110	0.128	0.126	0.114	9.68
37)	C	4-Chloro-3-methylph	0.311	0.309	0.325	0.319	0.331	0.322	0.319	2.58
38)		2-Methylnaphthalene	0.724	0.725	0.757	0.761	0.776	0.753	0.749	2.75
39)		1-Methylnaphthalene	0.669	0.687	0.714	0.711	0.730	0.708	0.703	3.11
40)		1,2,4,5-Tetrachloro	0.272	0.288	0.301	0.304	0.310	0.302	0.296	4.73
41)	I	Acenaphthene-d10	----------ISTD----------							

Initial Calibration Summary

Job Number: F19788 **Sample:** SW892-ICC892
Account: EEINCJX EEI **Lab FileID:** W017085.D
Project: Camp Lejeune-Campbell St. Fuel Farm

42)	P	Hexachlorocyclopent	0.124	0.205	0.248	0.270	0.275	0.272	0.232	25.43
		----- Quadratic regression ----- Coefficient = 0.9986								
		Response Ratio = -0.03087 + 0.27680 *A + 0.00233 *A^2								
43)	C	2,4,6-Trichlorophen	0.392	0.394	0.414	0.444	0.436	0.450	0.422	6.05
44)		2,4,5-Trichlorophen	0.424	0.423	0.430	0.437	0.449	0.425	0.431	2.38
45)	S	2-Fluorobiphenyl	1.438	1.456	1.514	1.556	1.579	1.558	1.517	3.85
46)		1,1'-Biphenyl	1.616	1.693	1.758	1.832	1.784	1.775	1.743	4.41
47)		2-Chloronaphthalene	1.291	1.302	1.360	1.416	1.429	1.399	1.366	4.30
48)		2-Nitroaniline	0.402	0.410	0.415	0.424	0.435	0.416	0.417	2.80
49)		Acenaphthylene	1.847	1.857	1.937	1.997	2.020	1.985	1.941	3.80
50)		Dimethylphthalate	1.383	1.395	1.422	1.454	1.478	1.434	1.428	2.50
51)		2,6-Dinitrotoluene	0.319	0.326	0.333	0.339	0.349	0.333	0.333	3.08
52)	C	Acenaphthene	1.290	1.313	1.352	1.375	1.420	1.385	1.356	3.55
53)		3-Nitroaniline	0.363	0.380	0.386	0.389	0.401	0.384	0.384	3.25
54)	P	2,4-Dinitrophenol	0.126	0.194	0.221	0.232	0.241	0.231	0.208	20.78
		----- Quadratic regression ----- Coefficient = 0.9984								
		Response Ratio = -0.04743 + 0.24819 *A + -0.00096 *A^2								
55)		Dibenzofuran	1.777	1.786	1.820	1.877	1.922	1.855	1.839	3.03
56)		2,4-Dinitrotoluene	0.424	0.455	0.462	0.463	0.473	0.469	0.458	3.90
57)	P	4-Nitrophenol	0.181	0.187	0.193	0.192	0.202	0.186	0.190	3.88
58)		2,3,4,6-Tetrachloro	0.267	0.285	0.305	0.311	0.322	0.312	0.300	6.90
59)		Fluorene	1.392	1.428	1.473	1.512	1.557	1.504	1.478	4.05
60)		4-Chlorophenyl-phen	0.606	0.623	0.646	0.652	0.669	0.649	0.641	3.51
61)		Diethylphthalate	1.397	1.411	1.408	1.428	1.466	1.398	1.418	1.85
62)		4-Nitroaniline	0.360	0.386	0.376	0.375	0.393	0.355	0.374	3.89
63)	I	Phenanthrene-d10	----------ISTD----------							
64)		4,6-Dinitro-2-methy	0.138	0.172	0.189	0.191	0.199	0.190	0.180	12.41
65)	C	n-Nitrosodiphenylam	0.651	0.662	0.672	0.687	0.700	0.689	0.677	2.74
66)		1,2-Diphenylhydrazi	0.993	1.015	1.000	1.020	1.038	0.992	1.010	1.78
67)	S	2,4,6-Tribromopheno	0.078	0.080	0.084	0.088	0.089	0.087	0.084	5.34
68)		4-Bromophenyl-pheny	0.197	0.204	0.208	0.213	0.219	0.216	0.210	3.87
69)		Hexachlorobenzene	0.201	0.204	0.208	0.213	0.217	0.215	0.210	3.05
70)		Atrazine	0.218	0.229	0.206	0.198	0.200	0.192	0.207	6.71
71)	C	Pentachlorophenol	0.093	0.124	0.136	0.143	0.146	0.138	0.130	15.07
		----- Quadratic regression ----- Coefficient = 0.9978								
		Response Ratio = -0.02726 + 0.15738 *A + -0.00209 *A^2								
72)		Phenanthrene	1.262	1.290	1.323	1.360	1.360	1.358	1.326	3.17
73)		Anthracene	1.259	1.316	1.317	1.336	1.369	1.337	1.322	2.78
74)		Carbazole	1.209	1.250	1.252	1.282	1.317	1.221	1.255	3.14
75)		Di-n-butylphthalate	1.555	1.631	1.637	1.667	1.703	1.644	1.639	2.99
76)	C	Fluoranthene	1.197	1.248	1.277	1.292	1.341	1.242	1.266	3.90
77)	I	Chrysene-d12	----------ISTD----------							
78)		Benzidine	0.409	0.293	0.288	0.286	0.273	0.243	0.299	19.02
79)		Pyrene	1.624	1.631	1.671	1.729	1.696	1.702	1.675	2.48
80)	S	Terphenyl-d14	0.830	0.876	0.886	0.918	0.917	0.919	0.891	3.94
81)		Butylbenzylphthalat	0.821	0.829	0.857	0.877	0.866	0.877	0.855	2.86
82)		3,3'-Dichlorobenzid	0.449	0.423	0.419	0.420	0.406	0.386	0.417	5.00
83)		Benzo[a]anthracene	1.270	1.276	1.320	1.351	1.337	1.324	1.313	2.52
84)		Chrysene	1.240	1.240	1.287	1.302	1.302	1.278	1.275	2.24
85)		bis(2-Ethylhexyl)ph	1.128	1.158	1.195	1.233	1.225	1.225	1.194	3.59
86)	I	Perylene-d12	----------ISTD----------							
87)	C	Di-n-octylphthalate	3.130	3.283	3.421	3.598	3.559	3.577	3.428	5.50
88)		Benzo[b]fluoranthen	1.822	1.880	1.966	1.952	2.024	2.012	1.943	4.01
89)		Benzo[k]fluoranthen	1.884	1.958	2.000	2.019	2.046	1.948	1.976	2.95

Initial Calibration Summary

Job Number: F19788
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: SW892-ICC892
Lab FileID: W017085.D

90)	C	Benzo[a]pyrene	1.663	1.726	1.793	1.796	1.826	1.794	1.766	3.41
91)		Indeno[1,2,3-cd]pyr	1.377	1.408	1.463	1.497	1.503	1.496	1.457	3.63
92)		Dibenz[a,h]anthrace	1.376	1.536	1.576	1.557	1.597	1.561	1.534	5.23
93)		Benzo[g,h,i]perylen	1.536	1.546	1.566	1.599	1.596	1.568	1.568	1.62

(#) = Out of Range

8270C.M Fri Sep 12 12:36:17 2003 MSBNA01

4.7

Continuing Calibration Summary

Job Number: F19788
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: SW903-CC892
Lab FileID: W017309.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\100303\W017309.D
Acq On : 3 Oct 2003 2:18 pm
Sample : cc892-50
Misc : op8659,sw903,1000,,,1,1,water
MS Integration Params: LSCINT.P

Vial: 2
Operator: marke
Inst : MSBNA01
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8270C.M (RTE Integrator)
Title : SW846 8270C OR EPA 625
Last Update : Tue Sep 30 09:25:48 2003
Response via : Multiple Level Calibration

Min. RRF : 0.001 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	124	-0.03	5.09
2		1,4-Dioxane	0.535	0.542	-1.3	127	-0.04	1.65
3		N-nitrosodimethylamine	0.841	0.882	-4.9	128	-0.04	2.31
4		Pyridine	1.398	1.426	-2.0	126	-0.04	2.35
5		Benzaldehyde	0.605	0.671	-10.9	124	-0.03	4.72
6		Aniline	1.945	1.985	-2.1	125	-0.03	4.81
7	S	2-Fluorophenol	1.436	1.448	-0.8	127	-0.03	3.98
8		bis(2-Chloroethyl)ether	1.460	1.474	-1.0	125	-0.03	4.87
9	S	Phenol-d5	1.785	1.793	-0.4	125	-0.02	4.80
10	C	Phenol	2.069	2.064	0.2	125	-0.03	4.81
11		2-Chlorophenol	1.605	1.611	-0.4	126	-0.03	4.91
12		1,3-Dichlorobenzene	1.729	1.744	-0.9	128	-0.03	5.04
13	C	1,4-Dichlorobenzene	1.769	1.775	-0.3	126	-0.03	5.10
14		1,2-Dichlorobenzene	1.653	1.658	-0.3	126	-0.03	5.23
15		Benzyl alcohol	1.009	0.999	1.0	122	-0.03	5.21
16		bis(2-chloroisopropyl)eth	2.630	2.560	2.7	122	-0.03	5.32
17		2-Methylphenol	1.410	1.399	0.8	124	-0.03	5.31
18		Acetophenone	2.072	2.178	-5.1	128	-0.03	5.44
19		Hexachloroethane	0.682	0.704	-3.2	128	-0.03	5.54
20	P	N-Nitroso-di-n-propylamin	1.077	1.082	-0.5	125	-0.03	5.45
21		3&4-Methylphenol	1.514	1.509	0.3	124	-0.03	5.44
22	I	Naphthalene-d8	1.000	1.000	0.0	125	-0.03	6.30
23	S	Nitrobenzene-d5	0.405	0.409	-1.0	125	-0.03	5.58
24		Nitrobenzene	0.395	0.399	-1.0	126	-0.03	5.60
25		Isophorone	0.698	0.686	1.7	121	-0.04	5.83
26	C	2-Nitrophenol	0.229	0.230	-0.4	125	-0.03	5.90
27		2,4-Dimethylphenol	0.388	0.389	-0.3	124	-0.03	5.94
28		bis(2-Chloroethoxy)methan	0.456	0.459	-0.7	122	-0.04	6.03
			True	Calc.	% Drift			
29		Benzoic Acid	100.000	103.223	-3.2	130	-0.04	6.13
			AvgRF	CCRF	% Dev			
30	C	2,4-Dichlorophenol	0.336	0.334	0.6	123	-0.04	6.15
31		1,2,4-Trichlorobenzene	0.327	0.325	0.6	124	-0.04	6.23
32		Naphthalene	1.159	1.174	-1.3	126	-0.04	6.32
33		4-Chloroaniline	0.460	0.461	-0.2	122	-0.04	6.38
34		2,6-Dichlorophenol	0.333	0.331	0.6	122	-0.03	6.39
35	C	Hexachlorobutadiene	0.179	0.179	0.0	124	-0.04	6.45
36		Caprolactam	0.114	0.108	5.3	121	-0.07	6.88
37	C	4-Chloro-3-methylphenol	0.319	0.317	0.6	121	-0.03	6.96

Continuing Calibration Summary

Job Number: F19788
Account: EEINCJX EEI
Projeet: Camp Lejeune-Campbell St. Fuel Farm

Sample: SW903-CC892
Lab FileID: W017309.D

38		2-Methylnaphthalene	0.749	0.745	0.5	123	-0.04	7.14
39		1-Methylnaphthalene	0.703	0.695	1.1	121	-0.04	7.27
40		1,2,4,5-Tetrachlorobenzen	0.296	0.296	0.0	122	-0.04	7.36
41	I	Acenaphthene-d10	1.000	1.000	0.0	121	-0.05	8.63
		----------	True	Calc.	% Drift	----------		
42	P	Hexachlorocyclopentadiene	50.000	48.605	2.8	120	-0.05	7.34
		----------	AvgRF	CCRF	% Dev	----------		
43	C	2,4,6-Trichlorophenol	0.422	0.413	2.1	120	-0.04	7.52
44		2,4,5-Trichlorophenol	0.431	0.433	-0.5	121	-0.04	7.58
45	S	2-Fluorobiphenyl	1.517	1.525	-0.5	121	-0.04	7.64
46		1,1'-Biphenyl	1.743	1.796	-3.0	123	-0.05	7.78
47		2-Chloronaphthalene	1.366	1.380	-1.0	122	-0.05	7.81
48		2-Nitroaniline	0.417	0.421	-1.0	122	-0.04	7.97
49		Acenaphthylene	1.941	1.941	0.0	121	-0.05	8.41
50		Dimethylphthalate	1.428	1.377	3.6	117	-0.04	8.25
51		2,6-Dinitrotoluene	0.333	0.326	2.1	118	-0.05	8.34
52	C	Acenaphthene	1.356	1.352	0.3	121	-0.05	8.69
53		3-Nitroaniline	0.384	0.369	3.9	115	-0.04	8.60
		----------	True	Calc.	% Drift	----------		
54	P	2,4-Dinitrophenol	100.000	88.871	11.1	109	-0.04	8.78
		----------	AvgRF	CCRF	% Dev	----------		
55		Dibenzofuran	1.839	1.844	-0.3	122	-0.05	8.97
56		2,4-Dinitrotoluene	0.458	0.439	4.1	115	-0.04	8.99
57	P	4-Nitrophenol	0.190	0.180	5.3	112	-0.03	8.93
58		2,3,4,6-Tetrachlorophenol	0.300	0.276	8.0	109	-0.04	9.18
59		Fluorene	1.478	1.470	0.5	120	-0.04	9.54
60		4-Chlorophenyl-phenylethe	0.641	0.636	0.8	119	-0.05	9.56
61		Diethylphthalate	1.418	1.397	1.5	120	-0.04	9.42
62		4-Nitroaniline	0.374	0.356	4.8	114	-0.05	9.62
63	I	Phenanthrene-d10	1.000	1.000	0.0	115	-0.05	11.16
64		4,6-Dinitro-2-methylpheno	0.180	0.172	4.4	104	-0.05	9.68
65	C	n-Nitrosodiphenylamine	0.677	0.681	-0.6	117	-0.05	9.78
66		1,2-Diphenylhydrazine	1.010	1.060	-5.0	122	-0.05	9.84
67	S	2,4,6-Tribromophenol	0.084	0.083	1.2	112	-0.05	9.95
68		4-Bromophenyl-phenylether	0.210	0.216	-2.9	119	-0.05	10.41
69		Hexachlorobenzene	0.210	0.212	-1.0	117	-0.05	10.48
70		Atrazine	0.207	0.216	-4.3	120	-0.04	10.77
		----------	True	Calc.	% Drift	----------		
71	C	Pentachlorophenol	100.000	80.273	19.7	95	-0.04	10.85
		----------	AvgRF	CCRF	% Dev	----------		
72		Phenanthrene	1.326	1.332	-0.5	116	-0.04	11.21
73		Anthracene	1.322	1.340	-1.4	117	-0.05	11.30
74		Carbazole	1.255	1.273	-1.4	117	-0.04	11.63
75		Di-n-butylphthalate	1.639	1.667	-1.7	117	-0.04	12.39
76	C	Fluoranthene	1.266	1.268	-0.2	114	-0.04	13.39
77	I	Chrysene-d12	1.000	1.000	0.0	111	-0.05	16.10
78		Benzidine	0.299	0.223	25.4#	86	-0.05	13.71
79		Pyrene	1.675	1.704	-1.7	113	-0.05	13.80
80	S	Terphenyl-d14	0.891	0.924	-3.7	115	-0.05	14.19
81		Butylbenzylphthalate	0.855	0.875	-2.3	113	-0.05	15.20
82		3,3'-Dichlorobenzidine	0.417	0.425	-1.9	112	-0.04	16.11

Continuing Calibration Summary

Job Number: F19788
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: SW903-CC892
Lab FileID: W017309.D

83		Benzo[a]anthracene	1.313	1.309	0.3	110	-0.05	16.08
84		Chrysene	1.275	1.244	2.4	107	-0.05	16.15
85		bis(2-Ethylhexyl)phthalat	1.194	1.239	-3.8	115	-0.04	16.37
86	I	Perylene-d12	1.000	1.000	0.0	97	-0.04	18.60
87	C	Di-n-octylphthalate	3.428	3.936	-14.8	112	-0.04	17.56
88		Benzo[b]fluoranthene	1.943	2.071	-6.6	102	-0.05	17.99
89		Benzo[k]fluoranthene	1.976	2.073	-4.9	101	-0.05	18.04
90	C	Benzo[a]pyrene	1.766	1.834	-3.9	99	-0.05	18.51
91		Indeno[1,2,3-cd]pyrene	1.457	1.383	5.1	92	-0.04	20.18
92		Dibenz[a,h]anthracene	1.534	1.505	1.9	93	-0.04	20.23
93		Benzo[g,h,i]perylene	1.568	1.466	6.5	91	-0.05	20.54

(1.1 %) 1 of 87 compounds'%D > 20

(#) = Out of Range SPCC's out = 0 CCC's out = 0
W017088.D 8270C.M Mon Oct 06 12:30:17 2003 MSBNA01

4.7

4

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: F19788
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GEF1118-MB	EF030671.D	1	10/03/03	CV	n/a	n/a	GEF1118

5.1

The QC reported here applies to the following samples: **Method:** EPA 601/602

F19788-1, F19788-2, F19788-3, F19788-4, F19788-5, F19788-8, F19788-9, F19788-10, F19788-11, F19788-12

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
352-33-0	1-Chloro-4-fluorobenzene	88%	74-127%
98-08-8	aaa-Trifluorotoluene	94%	73-135%

Method Blank Summary

Job Number: F19788
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GEF1119-MB	EF030703.D	1	10/06/03	CV	n/a	n/a	GEF1119

5.1

The QC reported here applies to the following samples: **Method:** EPA 601/602

F19788-6, F19788-7, F19788-8, F19788-13, F19788-14, F19788-15, F19788-17, F19788-18

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
352-33-0	1-Chloro-4-fluorobenzene	89%	74-127%
98-08-8	aaa-Trifluorotoluene	93%	73-135%

Method Blank Summary

Job Number: F19788
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GEF1121-MB	EF030759.D	1	10/07/03	CV	n/a	n/a	GEF1121

5.1

The QC reported here applies to the following samples: **Method:** EPA 601/602

F19788-16

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
352-33-0	1-Chloro-4-fluorobenzene	83%	74-127%
98-08-8	aaa-Trifluorotoluene	90%	73-135%

Method Blank Summary

Job Number: F19788
Account: EEINCJX EEI
Projeet: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8666-MB	KK00212.D	1	09/30/03	SD	09/30/03	OP8666	GKK5

The QC reported here applies to the following samples: **Method:** EPA 504.1

F19788-1, F19788-2, F19788-3, F19788-4, F19788-5, F19788-6, F19788-7, F19788-8, F19788-9, F19788-10, F19788-11, F19788-12, F19788-13, F19788-14, F19788-15, F19788-16, F19788-17

CAS No.	Compound	Result	RL	MDL	Units	Q
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.020	0.010	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.020	0.010	ug/l	

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	117%	60-140%

Blank Spike Summary

Job Number: F19788
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GEF1118-BS	EF030670.D	1	10/03/03	CV	n/a	n/a	GEF1118

5.2

The QC reported here applies to the following samples: **Method:** EPA 601/602

F19788-1, F19788-2, F19788-3, F19788-4, F19788-5, F19788-8, F19788-9, F19788-10, F19788-11, F19788-12

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	20	21.0	105	88-121
108-90-7	Chlorobenzene	20	19.3	97	87-120
95-50-1	1,2-Dichlorobenzene	20	18.5	93	81-119
541-73-1	1,3-Dichlorobenzene	20	19.5	98	82-120
106-46-7	1,4-Dichlorobenzene	20	19.0	95	81-120
100-41-4	Ethylbenzene	20	19.7	99	86-125
1634-04-4	Methyl Tert Butyl Ether	20	19.4	97	80-117
108-88-3	Toluene	20	20.2	101	89-123
1330-20-7	Xylenes (total)	60	60.0	100	89-124

CAS No.	Surrogate Reeoveries	BSP	Limits
352-33-0	1-Chloro-4-fluorobenzene	103%	74-127%
98-08-8	aaa-Trifluorotoluene	101%	73-135%

Blank Spike Summary

Job Number: F19788
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GEF1119-BS	EF030702.D	1	10/06/03	CV	n/a	n/a	GEF1119

5.2

The QC reported here applies to the following samples: **Method:** EPA 601/602

F19788-6, F19788-7, F19788-8, F19788-13, F19788-14, F19788-15, F19788-17, F19788-18

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	20	20.9	105	88-121
108-90-7	Chlorobenzene	20	19.5	98	87-120
95-50-1	1,2-Dichlorobenzene	20	18.7	94	81-119
541-73-1	1,3-Dichlorobenzene	20	19.6	98	82-120
106-46-7	1,4-Dichlorobenzene	20	19.2	96	81-120
100-41-4	Ethylbenzene	20	19.8	99	86-125
1634-04-4	Methyl Tert Butyl Ether	20	18.4	92	80-117
108-88-3	Toluene	20	20.3	102	89-123
1330-20-7	Xylenes (total)	60	60.2	100	89-124

CAS No.	Surrogate Recoveries	BSP	Limits
352-33-0	1-Chloro-4-fluorobenzene	100%	74-127%
98-08-8	aaa-Trifluorotoluene	100%	73-135%

Blank Spike Summary

Job Number: F19788
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GEF1121-BS	EF030758.D	1	10/07/03	CV	n/a	n/a	GEF1121

5.2

The QC reported here applies to the following samples: **Method:** EPA 601/602

F19788-16

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	20	21.0	105	88-121
108-90-7	Chlorobenzene	20	19.4	97	87-120
95-50-1	1,2-Dichlorobenzene	20	18.6	93	81-119
541-73-1	1,3-Dichlorobenzene	20	19.9	100	82-120
106-46-7	1,4-Dichlorobenzene	20	19.6	98	81-120
100-41-4	Ethylbenzene	20	19.9	100	86-125
1634-04-4	Methyl Tert Butyl Ether	20	18.0	90	80-117
108-88-3	Toluene	20	20.2	101	89-123
1330-20-7	Xylenes (total)	60	60.5	101	89-124

CAS No.	Surrogate Recoveries	BSP	Limits
352-33-0	1-Chloro-4-fluorobenzene	100%	74-127%
98-08-8	aaa-Trifluorotoluene	100%	73-135%

Blank Spike Summary

Job Number: F19788
Account: EEINCJX EE1
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8666-BS	KK00213.D	1	09/30/03	SD	09/30/03	OP8666	GKK5

5.2

The QC reported here applies to the following samples: **Method:** EPA 504.1

F19788-1, F19788-2, F19788-3, F19788-4, F19788-5, F19788-6, F19788-7, F19788-8, F19788-9, F19788-10, F19788-11, F19788-12, F19788-13, F19788-14, F19788-15, F19788-16, F19788-17

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
96-12-8	1,2-Dibromo-3-chloropropane	0.25	0.28	112	80-120
106-93-4	1,2-Dibromoethane	0.25	0.29	116	80-120

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	115%	60-140%

Blank Spike Summary

Job Number: F19788
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8666-BS2	KK00214.D	1	09/30/03	SD	09/30/03	OP8666	GKK5

5.2

The QC reported here applies to the following samples: **Method:** EPA 504.1

F19788-1, F19788-2, F19788-3, F19788-4, F19788-5, F19788-6, F19788-7, F19788-8, F19788-9, F19788-10, F19788-11, F19788-12, F19788-13, F19788-14, F19788-15, F19788-16, F19788-17

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
96-12-8	1,2-Dibromo-3-chloropropane	0.25	0.29	116	80-120
106-93-4	1,2-Dibromoethane	0.25	0.27	108	80-120

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	117%	60-140%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F19788
Account: EEINCJX EE1
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F19738-9MS	EF030673.D	1	10/03/03	CV	n/a	n/a	GEF1118
F19738-9MSD	EF030674.D	1	10/03/03	CV	n/a	n/a	GEF1118
F19738-9	EF030672.D	1	10/03/03	CV	n/a	n/a	GEF1118

The QC reported here applies to the following samples: **Metbod:** EPA 601/602

F19788-1, F19788-2, F19788-3, F19788-4, F19788-5, F19788-8, F19788-9, F19788-10, F19788-11, F19788-12

CAS No.	Compound	F19738-9 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND		20	20.2	101	20.2	101	0	77-127/9
108-90-7	Chlorobenzene	ND		20	18.4	92	18.6	93	1	82-122/10
95-50-1	1,2-Dichlorobenzene	ND		20	17.8	89	17.9	90	1	69-133/13
541-73-1	1,3-Dichlorobenzene	ND		20	18.4	92	18.7	94	2	77-123/13
106-46-7	1,4-Dichlorobenzene	ND		20	18.0	90	18.4	92	2	73-127/13
100-41-4	Ethylbenzene	ND		20	19.0	95	19.0	95	0	68-136/11
1634-04-4	Methyl Tert Butyl Ether	ND		20	18.3	92	19.2	96	5	71-124/14
108-88-3	Toluene	ND		20	19.5	98	19.6	98	1	78-128/9
1330-20-7	Xylenes (total)	ND		60	57.6	96	57.3	96	1	71-136/11

CAS No.	Surrogate Recoveries	MS	MSD	F19738-9	Limits
352-33-0	1-Chloro-4-fluorobenzene	99%	100%	89%	74-127%
98-08-8	aaa-Trifluorotoluene	99%	99%	93%	73-135%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F19788
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F19788-17MS	EF030715.D	1	10/06/03	CV	n/a	n/a	GEF1119
F19788-17MSD	EF030716.D	1	10/06/03	CV	n/a	n/a	GEF1119
F19788-17	EF030714.D	1	10/06/03	CV	n/a	n/a	GEF1119

The QC reported here applies to the following samples: **Method:** EPA 601/602

F19788-6, F19788-7, F19788-8, F19788-13, F19788-14, F19788-15, F19788-17, F19788-18

CAS No.	Compound	F19788-17 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND		20	20.7	104	20.8	104	0	77-127/9
108-90-7	Chlorobenzene	ND		20	19.2	96	19.0	95	1	82-122/10
95-50-1	1,2-Dichlorobenzene	ND		20	18.2	91	18.1	91	1	69-133/13
541-73-1	1,3-Dichlorobenzene	ND		20	19.0	95	19.1	96	1	77-123/13
106-46-7	1,4-Dichlorobenzene	ND		20	18.9	95	18.7	94	1	73-127/13
100-41-4	Ethylbenzene	ND		20	19.8	99	19.5	98	2	68-136/11
1634-04-4	Methyl Tert Butyl Ether	ND		20	18.8	94	18.3	92	3	71-124/14
108-88-3	Toluene	ND		20	20.1	101	20.1	101	0	78-128/9
1330-20-7	Xylenes (total)	ND		60	59.9	100	59.6	99	1	71-136/11

CAS No.	Surrogate Recoveries	MS	MSD	F19788-17	Limits
352-33-0	1-Chloro-4-fluorobenzene	98%	97%	87%	74-127%
98-08-8	aaa-Trifluorotoluene	98%	99%	94%	73-135%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F19788
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F19836-1MS	EF030762.D	1	10/07/03	CV	n/a	n/a	GEF1121
F19836-1MSD	EF030763.D	1	10/07/03	CV	n/a	n/a	GEF1121
F19836-1 [a]	EF030761.D	1	10/07/03	CV	n/a	n/a	GEF1121

The QC reported here applies to the following samples: **Method:** EPA 601/602

F19788-16

CAS No.	Compound	F19836-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND		20	20.5	103	19.7	99	4	77-127/9
108-90-7	Chlorobenzene	ND		20	19.0	95	18.3	92	4	82-122/10
95-50-1	1,2-Dichlorobenzene	ND		20	18.0	90	18.1	91	1	69-133/13
541-73-1	1,3-Dichlorobenzene	ND		20	19.4	97	18.9	95	3	77-123/13
106-46-7	1,4-Dichlorobenzene	ND		20	19.1	96	18.7	94	2	73-127/13
100-41-4	Ethylbenzene	ND		20	19.5	98	18.6	93	5	68-136/11
1634-04-4	Methyl Tert Butyl Ether	4.3		20	22.5	91	22.7	92	1	71-124/14
108-88-3	Toluene	ND		20	20.0	100	19.1	96	5	78-128/9
1330-20-7	Xylenes (total)	ND		60	59.5	99	56.7	95	5	71-136/11

CAS No.	Surrogate Recoveries	MS	MSD	F19836-1	Limits
352-33-0	1-Chloro-4-fluorobenzene	97%	98%	86%	74-127%
98-08-8	aaa-Trifluorotoluene	99%	99%	92%	73-135%

(a) All hits confirmed by dual eolumn analysis.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F19788
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8666-MS	KK00235.D	1	09/30/03	SD	09/30/03	OP8666	GKK5
OP8666-MSD	KK00236.D	1	09/30/03	SD	09/30/03	OP8666	GKK5
F19788-17	KK00234.D	1	09/30/03	SD	09/30/03	OP8666	GKK5

5.3
5

The QC reported here applies to the following samples: **Method:** EPA 504.1

F19788-1, F19788-2, F19788-3, F19788-4, F19788-5, F19788-6, F19788-7, F19788-8, F19788-9, F19788-10, F19788-11, F19788-12, F19788-13, F19788-14, F19788-15, F19788-16, F19788-17

CAS No.	Compound	F19788-17 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
96-12-8	1,2-Dibromo-3-chloropropane	ND		0.227	0.25	110	0.26	114	4	68-120/28
106-93-4	1,2-Dibromoethane	ND		0.227	0.25	110	0.26	114	4	74-120/22

CAS No.	Surrogate Recoveries	MS	MSD	F19788-17	Limits
460-00-4	4-Bromofluorobenzene	114%	111%	113%	60-140%

Duplicate Summary

Job Number: F19788
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F19836-5DUP	EF030770.D	1	10/07/03	CV	n/a	n/a	GEF1121
F19836-5	EF030769.D	1	10/07/03	CV	n/a	n/a	GEF1121

The QC reported here applies to the following samples: **Method:** EPA 601/602

F19788-16

CAS No.	Compound	F19836-5 ug/l	Q	DUP ug/l	Q	RPD	Limits
71-43-2	Benzene	ND		ND		nc	
108-90-7	Chlorobenzene	ND		ND		nc	
95-50-1	1,2-Dichlorobenzene	ND		ND		nc	
541-73-1	1,3-Dichlorobenzene	ND		ND		nc	
106-46-7	1,4-Dichlorobenzene	ND		ND		nc	
100-41-4	Ethylbenzene	ND		ND		nc	
1634-04-4	Methyl Tert Butyl Ether	ND		ND		nc	
108-88-3	Toluene	ND		ND		nc	
1330-20-7	Xylenes (total)	ND		ND		nc	

CAS No.	Surrogate Recoveries	DUP	F19836-5	Limits
352-33-0	1-Chloro-4-fluorobenzene	84%	89%	74-127%
98-08-8	aaa-Trifluorotoluene	93%	94%	73-135%

Volatile Surrogate Recovery Summary

Job Number: F19788
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Method: EPA 601/602 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S2 [a]
F19788-1	EF030677.D	87.0	92.0
F19788-2	EF030678.D	88.0	96.0
F19788-3	EF030681.D	87.0	93.0
F19788-4	EF030682.D	93.0	95.0
F19788-5	EF030683.D	88.0	94.0
F19788-6	EF030705.D	104.0	106.0
F19788-7	EF030711.D	101.0	104.0
F19788-8	EF030713.D	102.0	103.0
F19788-8	EF030687.D	104.0	117.0
F19788-9	EF030688.D	91.0	91.0
F19788-10	EF030689.D	85.0	90.0
F19788-11	EF030690.D	84.0	88.0
F19788-12	EF030679.D	86.0	92.0
F19788-13	EF030719.D	85.0	91.0
F19788-14	EF030720.D	89.0	94.0
F19788-15	EF030721.D	86.0	93.0
F19788-16	EF030760.D	94.0	100.0
F19788-17	EF030714.D	87.0	94.0
F19788-18	EF030722.D	83.0	91.0
F19738-9MS	EF030673.D	99.0	99.0
F19738-9MSD	EF030674.D	100.0	99.0
F19788-17MS	EF030715.D	98.0	98.0
F19788-17MSD	EF030716.D	97.0	99.0
F19836-1MS	EF030762.D	97.0	99.0
F19836-1MSD	EF030763.D	98.0	99.0
F19836-5DUP	EF030770.D	84.0	93.0
GEF1118-BS	EF030670.D	103.0	101.0
GEF1118-MB	EF030671.D	88.0	94.0
GEF1119-BS	EF030702.D	100.0	100.0
GEF1119-MB	EF030703.D	89.0	93.0
GEF1121-BS	EF030758.D	100.0	100.0
GEF1121-MB	EF030759.D	83.0	90.0

Surrogate Compounds	Recovery Limits
S1 = 1-Chloro-4-fluorobenzene	74-127%
S2 = aaa-Trifluorotoluene	73-135%

(a) Recovery from GC signal #2

Volatile Surrogate Recovery Summary

Job Number: F19788
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Method: EPA 504.1	**Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	SI [a]
F19788-1	KK00216.D	121.0
F19788-2	KK00217.D	113.0
F19788-3	KK00218.D	118.0
F19788-4	KK00219.D	110.0
F19788-5	KK00220.D	96.0
F19788-6	KK00221.D	99.0
F19788-7	KK00223.D	96.0
F19788-8	KK00224.D	91.0
F19788-9	KK00225.D	101.0
F19788-10	KK00226.D	110.0
F19788-11	KK00227.D	88.0
F19788-12	KK00228.D	103.0
F19788-13	KK00229.D	114.0
F19788-14	KK00230.D	103.0
F19788-15	KK00231.D	104.0
F19788-16	KK00233.D	113.0
F19788-17	KK00234.D	113.0
OP8666-BS	KK00213.D	115.0
OP8666-BS2	KK00214.D	117.0
OP8666-MB	KK00212.D	117.0
OP8666-MS	KK00235.D	114.0
OP8666-MSD	KK00236.D	111.0

Surrogate Compounds	Recovery Limits
SI = 4-Bromofluorobenzene	60-140%

(a) Recovery from GC signal #1

GC Surrogate Retention Time Summary

Job Number: F19788
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GEF1117-CC1115	**Injection Date:**	10/03/03
Lab File ID:	EF030669.D	**Injection Time:**	20:44
Instrument ID:	GCEF	**Method:**	EPA 601/602

	S1 [a] RT	S2 [a] RT
Check Std	8.51	5.45

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
GEF1118-BS	EF030670.D	10/03/03	21:09	8.50	5.45
GEF1118-MB	EF030671.D	10/03/03	21:33	8.51	5.45
F19738-9	EF030672.D	10/03/03	21:58	8.51	5.45
F19738-9MS	EF030673.D	10/03/03	22:22	8.50	5.45
F19738-9MSD	EF030674.D	10/03/03	22:46	8.50	5.45
ZZZZZZ	EF030675.D	10/03/03	23:10	8.50	5.45
ZZZZZZ	EF030676.D	10/03/03	23:34	8.50	5.45
F19788-1	EF030677.D	10/03/03	23:59	8.51	5.45
F19788-2	EF030678.D	10/04/03	00:23	8.51	5.45
F19788-12	EF030679.D	10/04/03	00:47	8.50	5.45

Surrogate Compounds

S1 = 1-Chloro-4-fluorobenzene
S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F19788
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GEF1118-CC1115	**Injection Date:**	10/04/03
Lab File ID:	EF030680.D	**Injection Time:**	01:11
Instrument ID:	GCEF	**Method:**	EPA 601/602

	S1 [a] RT	S2 [a] RT
Check Std	8.50	5.44

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
F19788-3	EF030681.D	10/04/03	01:36	8.51	5.45
F19788-4	EF030682.D	10/04/03	02:00	8.50	5.45
F19788-5	EF030683.D	10/04/03	02:24	8.50	5.45
ZZZZZZ	EF030684.D	10/04/03	02:48	8.50	5.45
ZZZZZZ	EF030685.D	10/04/03	03:12	8.50	5.44
F19788-8	EF030687.D	10/04/03	04:01	8.50	5.44
F19788-9	EF030688.D	10/04/03	04:25	8.50	5.45
F19788-10	EF030689.D	10/04/03	04:49	8.50	5.45
F19788-11	EF030690.D	10/04/03	05:13	8.50	5.45

Surrogate Compounds

S1 = 1-Chloro-4-fluorobenzene
S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F19788
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GEF1119-CC1115	**Injection Date:**	10/06/03
Lab File ID:	EF030701.D	**Injection Time:**	08:26
Instrument ID:	GCEF	**Method:**	EPA 601/602

	S1 [a] RT	S2 [a] RT
Check Std	8.51	5.45

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
GEF1119-BS	EF030702.D	10/06/03	09:10	8.51	5.45
GEF1119-MB	EF030703.D	10/06/03	09:35	8.51	5.45
ZZZZZZ	EF030704.D	10/06/03	09:59	8.51	5.45
F19788-6	EF030705.D	10/06/03	10:23	8.51	5.45
ZZZZZZ	EF030706.D	10/06/03	10:47	8.51	5.45
ZZZZZZ	EF030707.D	10/06/03	11:15	8.51	5.45
ZZZZZZ	EF030708.D	10/06/03	11:42	8.51	5.45
ZZZZZZ	EF030709.D	10/06/03	12:10	8.51	5.45
ZZZZZZ	EF030710.D	10/06/03	12:39	8.51	5.45
F19788-7	EF030711.D	10/06/03	13:06	8.51	5.45

Surrogate Compounds

S1 = 1-Chloro-4-fluorobenzene
S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F19788
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GEF1119-CC1115	**Injection Date:**	10/06/03
Lab File ID:	EF030712.D	**Injection Time:**	13:31
Instrument ID:	GCEF	**Method:**	EPA 601/602

	S1 [a] RT	S2 [a] RT
Check Std	8.51	5.45

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
F19788-8	EF030713.D	10/06/03	13:59	8.50	5.45
F19788-17	EF030714.D	10/06/03	14:23	8.51	5.45
F19788-17MS	EF030715.D	10/06/03	14:47	8.51	5.45
F19788-17MSD	EF030716.D	10/06/03	15:12	8.50	5.45
ZZZZZZ	EF030717.D	10/06/03	15:36	8.50	5.45
ZZZZZZ	EF030718.D	10/06/03	16:00	8.51	5.45
F19788-13	EF030719.D	10/06/03	16:25	8.51	5.45
F19788-14	EF030720.D	10/06/03	16:49	8.51	5.45
F19788-15	EF030721.D	10/06/03	17:13	8.50	5.45
F19788-18	EF030722.D	10/06/03	17:37	8.50	5.45

Surrogate Compounds

S1 = 1-Chloro-4-fluorobenzene
S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F19788
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GEF1121-CC1115	**Injection Date:**	10/07/03
Lab File ID:	EF030757.D	**Injection Time:**	08:09
Instrument ID:	GCEF	**Method:**	EPA 601/602

	S1 [a] RT	S2 [a] RT
Check Std	8.51	5.45

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
GEF1121-BS	EF030758.D	10/07/03	08:45	8.51	5.45
GEF1121-MB	EF030759.D	10/07/03	09:09	8.51	5.45
F19788-16	EF030760.D	10/07/03	10:18	8.51	5.45
F19836-1	EF030761.D	10/07/03	11:04	8.51	5.45
F19836-1MS	EF030762.D	10/07/03	11:31	8.51	5.45
F19836-1MSD	EF030763.D	10/07/03	11:56	8.51	5.45
ZZZZZZ	EF030764.D	10/07/03	12:20	8.51	5.45
ZZZZZZ	EF030766.D	10/07/03	13:09	8.51	5.45
ZZZZZZ	EF030767.D	10/07/03	13:34	8.51	5.45

Surrogate Compounds

S1 = 1-Chloro-4-fluorobenzene
S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F19788
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GEF1121-CC1115	**Injection Date:**	10/07/03
Lab File ID:	EF030768.D	**Injection Time:**	14:11
Instrument ID:	GCEF	**Method:**	EPA 601/602

	S1 [a] RT	S2 [a] RT
Check Std	8.51	5.45

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
F19836-5	EF030769.D	10/07/03	14:47	8.51	5.45
F19836-5DUP	EF030770.D	10/07/03	15:11	8.51	5.45
ZZZZZZ	EF030771.D	10/07/03	15:36	8.51	5.45
ZZZZZZ	EF030772.D	10/07/03	16:01	8.51	5.45
ZZZZZZ	EF030773.D	10/07/03	16:27	8.51	5.45
ZZZZZZ	EF030774.D	10/07/03	16:52	8.51	5.45
ZZZZZZ	EF030775.D	10/07/03	17:17	8.51	5.45
ZZZZZZ	EF030776.D	10/07/03	17:43	8.51	5.45
ZZZZZZ	EF030777.D	10/07/03	18:09	8.51	5.45
ZZZZZZ	EF030778.D	10/07/03	18:34	8.51	5.45

Surrogate Compounds

S1 = 1-Chloro-4-fluorobenzene
S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F19788
Account: EEINCJX EE1
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GKK5-ICC5	**Injection Date:**	09/30/03
Lab File ID:	KK00207.D	**Injection Time:**	12:20
Instrument ID:	GCKK	**Method:**	EPA 504.1

	S1 [a] RT
Check Std	7.11

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT
OP8666-MB	KK00212.D	09/30/03	14:07	7.11
OP8666-BS	KK00213.D	09/30/03	14:27	7.11
OP8666-BS2	KK00214.D	09/30/03	14:47	7.11
ZZZZZZ	KK00215.D	09/30/03	15:07	7.11
F19788-1	KK00216.D	09/30/03	15:27	7.11
F19788-2	KK00217.D	09/30/03	15:46	7.11
F19788-3	KK00218.D	09/30/03	16:06	7.11
F19788-4	KK00219.D	09/30/03	16:26	7.11
F19788-5	KK00220.D	09/30/03	16:46	7.11
F19788-6	KK00221.D	09/30/03	17:06	7.11

Surrogate Compounds

S1 = 4-Bromofluorobenzene

(a) Retention time from GC signal #1

5.6

GC Surrogate Retention Time Summary

Job Number: F19788
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GKK5-CC5	**Injection Date:**	09/30/03
Lab File ID:	KK00222.D	**Injection Time:**	17:26
Instrument ID:	GCKK	**Method:**	EPA 504.1

	S1 [a] RT
Check Std	7.11

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT
F19788-7	KK00223.D	09/30/03	17:46	7.11
F19788-8	KK00224.D	09/30/03	18:06	7.11
F19788-9	KK00225.D	09/30/03	18:25	7.11
F19788-10	KK00226.D	09/30/03	18:45	7.11
F19788-11	KK00227.D	09/30/03	19:05	7.11
F19788-12	KK00228.D	09/30/03	19:25	7.11
F19788-13	KK00229.D	09/30/03	19:45	7.11
F19788-14	KK00230.D	09/30/03	20:04	7.11
F19788-15	KK00231.D	09/30/03	20:24	7.11

Surrogate Compounds

S1 = 4-Bromofluorobenzene

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: F19788
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GKK5-CC5	**Injection Date:**	09/30/03
Lab File ID:	KK00232.D	**Injection Time:**	20:44
Instrument ID:	GCKK	**Method:**	EPA 504.1

	S1 [a] RT	S1 [b] RT
Check Std	7.11	6.87

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
F19788-16	KK00233.D	09/30/03	21:04	7.11	
F19788-17	KK00234.D	09/30/03	21:23	7.11	
OP8666-MS	KK00235.D	09/30/03	21:43	7.11	
OP8666-MSD	KK00236.D	09/30/03	22:03	7.11	
GKK5-ECC5	KK00237.D	09/30/03	22:23	7.11	6.87

Surrogate Compounds

S1 = 4-Bromofluorobenzene

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

Initial Calibration Summary

Job Number: F19788
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GEF1115-ICC1115
Lab FileID: EF030588.D

Response Factor Report VOA1

Method : C:\HPCHEM\1\METHODS\DUAL1002.M (Chemstation Integrator)
Title : EPA 602 & 5030B/8021B
Last Update : Thu Sep 04 08:01:10 2003
Response via : Initial Calibration

Calibration Files
1 =EF030586.D 2 =EF030587.D 3 =EF030588.D
4 =EF030589.D 5 =EF030590.D 6 =EF030591.D

		Compound	1	2	3	4	5	6	Avg		%RSD
1)		Methyl tert Butyl E		7.314	6.491	6.487	6.505	6.372	6.634	E2	5.79
2)		Di-Isopropyl ether	0.845	1.155	1.058	1.044	1.037	1.026	1.027	E3	9.83
3)		Benzene	1.975	2.546	2.389	2.328	2.342	2.343	2.321	E3	8.07
4)	S	a,a,a-TFT(S)	6.790	6.891	6.979	7.090	7.440	7.269	7.076	E2	3.44
5)		Toluene	1.895	2.194	2.074	2.040	2.048	2.054	2.051	E3	4.65
6)	S	1-Chloro-4-Fluorobe	0.988	1.013	1.046	1.076	1.133	1.094	1.058	E3	5.07
7)		Chlorobenzene		2.370	2.073	2.016	2.031	2.031	2.104	E3	7.12
8)		Ethylbenzene		2.023	1.804	1.751	1.750	1.747	1.815	E3	6.53
9)		m,p-Xylene	1.785	2.072	1.927	1.890	1.881	1.884	1.907	E3	4.92
10)		o-Xylene	1.549	1.859	1.721	1.689	1.704	1.683	1.701	E3	5.81
11)		1,3-Dichlorobenzene	1.471	1.583	1.475	1.491	1.532	1.517	1.511	E3	2.79
12)		1,4-Dichlorobenzene	1.573	1.670	1.541	1.568	1.601	1.581	1.589	E3	2.78
13)		1,2-Dichlorobenzene	1.308	1.236	1.134	1.157	1.173	1.149	1.193	E3	5.60
Signal #2											
1)		Methyl tert Butyl E		1.837	1.638	1.652	1.614	1.555	1.659	E3	6.39
2)		Di-Isopropyl ether		2.857	2.630	2.598	2.554	2.498	2.627	E3	5.22
3)		Benzene	4.846	6.401	6.040	5.867	5.806	5.820	5.797	E3	8.91
4)	S	a,a,a-TFT(S)	1.654	1.685	1.721	1.774	1.815	1.745	1.732	E3	3.41
5)		Toluene	4.558	5.490	5.225	5.119	5.102	5.117	5.102	E3	5.96
6)	S	1-Chloro-4-Fluorobe	2.409	2.494	2.671	2.769	2.812	2.700	2.642	E3	5.99
7)		Chlorobenzene		6.373	5.359	5.159	5.237	5.120	5.450	E3	9.62
8)		Ethylbenzene	4.472	5.030	4.632	4.523	4.463	4.452	4.595	E3	4.85
9)		m,p-Xylene	4.607	5.368	4.976	4.895	4.889	4.850	4.931	E3	5.03
10)		o-Xylene	3.698	4.576	4.267	4.201	4.156	4.129	4.171	E3	6.78
11)		1,3-Dichlorobenzene	3.598	3.930	3.711	3.736	3.794	3.713	3.747	E3	2.94
12)		1,4-Dichlorobenzene	3.737	4.034	3.756	3.773	3.858	3.838	3.833	E3	2.85
13)		1,2-Dichlorobenzene	3.105	3.138	2.871	2.931	2.962	2.896	2.984	E3	3.74

(#) = Out of Range

DUAL1002.M Fri Oct 03 09:26:35 2003 EF

Continuing Calibration Summary

Job Number: F19788
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GEF1117-CC1115
Lab FileID: EF030669.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\100303\EF030669.D\FID1A.CH Vial: 27
Signal #2 : C:\HPCHEM\1\DATA\100303\EF030669.D\FID2B.CH
Acq On : 3 Oct 2003 8:44 pm Operator: ClaireV
Sample : cc1115-20 Inst : VOA1
Misc : gc2839,gef1117,,,,,1 Multiplr: 1.00
IntFile Signal #1: AUTOINT1.E IntFile Signal #2: autoint2.e

Method : C:\HPCHEM\1\METHODS\DUAL1002.M (Chemstation Integrator)
Title : EPA 602 & 5030B/8021B
Last Update : Thu Sep 04 08:01:10 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	20.000	20.569	-2.8	105	0.01
2		Di-Isopropyl ether	20.000	21.760	-8.8	106	0.01
3		Benzene	20.000	20.896	-4.5	101	0.02
4	S	a,a,a-TFT(S)	20.000	19.788	1.1	100	0.02
5		Toluene	20.000	20.498	-2.5	101	0.02
6	S	1-Chloro-4-Fluorobenzene	20.000	20.437	-2.2	103	0.02
7		Chlorobenzene	20.000	20.104	-0.5	102	0.02
8		Ethylbenzene	20.000	20.171	-0.9	101	0.02
9		m,p-Xylene	40.000	40.551	-1.4	100	0.02
10		o-Xylene	20.000	20.762	-3.8	103	0.02
11		1,3-Dichlorobenzene	20.000	20.252	-1.3	104	0.02
12		1,4-Dichlorobenzene	20.000	19.960	0.2	103	0.02
13		1,2-Dichlorobenzene	20.000	19.517	2.4	103	0.02

Signal #2

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	20.000	21.951	-9.8	111	0.01
2		Di-Isopropyl ether	20.000	21.816	-9.1	109	0.01
3		Benzene	20.000	20.804	-4.0	100	0.01
4	S	a,a,a-TFT(S)	20.000	19.833	0.8	100	0.01
5		Toluene	20.000	20.473	-2.4	100	0.02
6	S	1-Chloro-4-Fluorobenzene	20.000	19.868	0.7	98	0.02
7		Chlorobenzene	20.000	19.902	0.5	101	0.02
8		Ethylbenzene	20.000	20.269	-1.3	101	0.02
9		m,p-Xylene	40.000	40.330	-0.8	100	0.02
10		o-Xylene	20.000	20.865	-4.3	102	0.02
11		1,3-Dichlorobenzene	20.000	19.914	0.4	101	0.02
12		1,4-Dichlorobenzene	20.000	19.938	0.3	102	0.02
13		1,2-Dichlorobenzene	20.000	19.466	2.7	101	0.02

Average % D = 2.7

(#) = Out of Range SPCC's out = 0 CCC's out = 0
EF030588.D DUAL1002.M Mon Oct 06 08:55:38 2003 EF

5.7

Continuing Calibration Summary

Job Number: F19788
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GEF1118-CC1115
Lab FileID: EF030680.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\100303\EF030680.D\FID1A.CH Vial: 37
Signal #2 : C:\HPCHEM\1\DATA\100303\EF030680.D\FID2B.CH
Acq On : 4 Oct 2003 1:11 am Operator: ClaireV
Sample : cc1115-20 Inst : VOA1
Misc : gc2840,gef1118,,,,,1 Multiplr: 1.00
IntFile Signal #1: AUTOINT1.E IntFile Signal #2: autoint2.e

Method : C:\HPCHEM\1\METHODS\DUAL1002.M (Chemstation Integrator)
Title : EPA 602 & 5030B/8021B
Last Update : Thu Sep 04 08:01:10 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	Methyl tert Butyl Ether	20.000	19.712	1.4	101	0.01
2	Di-Isopropyl ether	20.000	20.698	-3.5	100	0.01
3	Benzene	20.000	20.426	-2.1	99	0.01
4 S	a,a,a-TFT(S)	20.000	19.979	0.1	101	0.02
5	Toluene	20.000	19.926	0.4	99	0.02
6 S	1-Chloro-4-Fluorobenzene	20.000	20.181	-0.9	102	0.02
7	Chlorobenzene	20.000	19.567	2.2	99	0.02
8	Ethylbenzene	20.000	19.534	2.3	98	0.02
9	m,p-Xylene	40.000	39.470	1.3	98	0.02
10	o-Xylene	20.000	20.052	-0.3	99	0.02
11	1,3-Dichlorobenzene	20.000	19.123	4.4	98	0.02
12	1,4-Dichlorobenzene	20.000	19.063	4.7	98	0.02
13	1,2-Dichlorobenzene	20.000	18.423	7.9	97	0.02

Signal #2

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	Methyl tert Butyl Ether	20.000	19.090	4.6	97	0.00
2	Di-Isopropyl ether	20.000	19.371	3.1	97	0.01
3	Benzene	20.000	20.020	-0.1	96	0.01
4 S	a,a,a-TFT(S)	20.000	19.375	3.1	98	0.01
5	Toluene	20.000	19.521	2.4	95	0.01
6 S	1-Chloro-4-Fluorobenzene	20.000	19.551	2.2	97	0.02
7	Chlorobenzene	20.000	19.165	4.2	97	0.02
8	Ethylbenzene	20.000	19.240	3.8	95	0.02
9	m,p-Xylene	40.000	38.947	2.6	96	0.02
10	o-Xylene	20.000	19.733	1.3	96	0.02
11	1,3-Dichlorobenzene	20.000	18.999	5.0	96	0.02
12	1,4-Dichlorobenzene	20.000	18.662	6.7	95	0.02
13	1,2-Dichlorobenzene	20.000	18.302	8.5	95	0.02

Average % D = 3.0

(#) = Out of Range SPCC's out = 0 CCC's out = 0
EF030588.D DUAL1002.M Mon Oct 06 08:55:39 2003 EF

Continuing Calibration Summary

Job Number: F19788
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GEF1118-CC1115
Lab FileID: EF030691.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\100303\EF030691.D\FID1A.CH Vial: 48
Signal #2 : C:\HPCHEM\1\DATA\100303\EF030691.D\FID2B.CH
Acq On : 4 Oct 2003 5:38 am Operator: ClaireV
Sample : cc1115-20 Inst : VOA1
Misc : gc2840,gef1118,,,,,1 Multiplr: 1.00
IntFile Signal #1: AUTOINT1.E IntFile Signal #2: autoint2.e

Method : C:\HPCHEM\1\METHODS\DUAL1002.M (Chemstation Integrator)
Title : EPA 602 & 5030B/8021B
Last Update : Thu Sep 04 08:01:10 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	20.000	20.942	-4.7	107	0.00
2		Di-Isopropyl ether	20.000	21.640	-8.2	105	0.01
3		Benzene	20.000	21.107	-5.5	103	0.01
4	S	a,a,a-TFT(S)	20.000	19.456	2.7	99	0.02
5		Toluene	20.000	20.711	-3.6	102	0.02
6	S	1-Chloro-4-Fluorobenzene	20.000	19.905	0.5	101	0.02
7		Chlorobenzene	20.000	20.191	-1.0	102	0.02
8		Ethylbenzene	20.000	20.896	-4.5	105	0.02
9		m,p-Xylene	40.000	40.888	-2.2	101	0.02
10		o-Xylene	20.000	20.640	-3.2	102	0.02
11		1,3-Dichlorobenzene	20.000	20.263	-1.3	104	0.02
12		1,4-Dichlorobenzene	20.000	20.069	-0.3	103	0.02
13		1,2-Dichlorobenzene	20.000	19.754	1.2	104	0.02

Signal #2

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	20.000	19.806	1.0	100	0.00
2		Di-Isopropyl ether	20.000	19.761	1.2	99	0.00
3		Benzene	20.000	20.192	-1.0	97	0.01
4	S	a,a,a-TFT(S)	20.000	18.543	7.3	93	0.01
5		Toluene	20.000	20.016	-0.1	98	0.01
6	S	1-Chloro-4-Fluorobenzene	20.000	19.236	3.8	95	0.02
7		Chlorobenzene	20.000	19.598	2.0	100	0.02
8		Ethylbenzene	20.000	19.697	1.5	98	0.02
9		m,p-Xylene	40.000	39.597	1.0	98	0.02
10		o-Xylene	20.000	20.336	-1.7	99	0.02
11		1,3-Dichlorobenzene	20.000	19.750	1.3	100	0.02
12		1,4-Dichlorobenzene	20.000	19.515	2.4	100	0.02
13		1,2-Dichlorobenzene	20.000	19.503	2.5	101	0.02

Average % D = 2.5

(#) = Out of Range SPCC's out = 0 CCC's out = 0
EF030588.D DUAL1002.M Mon Oct 06 08:55:40 2003 EF

5.7

Continuing Calibration Summary

Job Number: F19788
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GEF1119-CC1115
Lab FileID: EF030701.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\100603\EF030701.D\FID1A.CH Vial: 1
Signal #2 : C:\HPCHEM\1\DATA\100603\EF030701.D\FID2B.CH
Acq On : 6 Oct 2003 8:26 am Operator: ClaireV
Sample : CC1115-40 Inst : VOA1
Misc : gc2840,gef1119,,,,,1 Multiplr: 1.00
IntFile Signal #1: AUTOINT1.E IntFile Signal #2: autoint2.e

Method : C:\HPCHEM\1\METHODS\DUAL1002.M (Chemstation Integrator)
Title : EPA 602 & 5030B/8021B
Last Update : Thu Sep 04 08:01:10 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	40.000	36.621	8.4	94	0.01
2		Di-Isopropyl ether	40.000	39.778	0.6	98	0.01
3		Benzene	40.000	39.996	0.0	100	0.02
4	S	a,a,a-TFT(S)	20.000	21.363	-6.8	107	0.02
5		Toluene	40.000	40.238	-0.6	101	0.02
6	S	1-Chloro-4-Fluorobenzene	20.000	21.966	-9.8	108	0.03
7		Chlorobenzene	40.000	38.628	3.4	101	0.03
8		Ethylbenzene	40.000	39.218	2.0	102	0.03
9		m,p-Xylene	80.000	80.285	-0.4	101	0.03
10		o-Xylene	40.000	40.129	-0.3	101	0.03
11		1,3-Dichlorobenzene	40.000	39.149	2.1	99	0.03
12		1,4-Dichlorobenzene	40.000	38.732	3.2	98	0.03
13		1,2-Dichlorobenzene	40.000	37.315	6.7	96	0.03

Signal #2

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	40.000	37.273	6.8	94	0.00
2		Di-Isopropyl ether	40.000	38.546	3.6	97	0.01
3		Benzene	40.000	40.344	-0.9	100	0.01
4	S	a,a,a-TFT(S)	20.000	21.723	-8.6	106	0.02
5		Toluene	40.000	40.201	-0.5	100	0.02
6	S	1-Chloro-4-Fluorobenzene	20.000	22.191	-11.0	106	0.02
7		Chlorobenzene	40.000	38.023	4.9	100	0.02
8		Ethylbenzene	40.000	39.519	1.2	100	0.02
9		m,p-Xylene	80.000	80.669	-0.8	102	0.03
10		o-Xylene	40.000	40.592	-1.5	101	0.03
11		1,3-Dichlorobenzene	40.000	39.687	0.8	100	0.02
12		1,4-Dichlorobenzene	40.000	39.098	2.3	99	0.03
13		1,2-Dichlorobenzene	40.000	38.019	5.0	97	0.02

Average % D = 3.5

(#) = Out of Range SPCC's out = 0 CCC's out = 0
EF030589.D DUAL1002.M Tue Oct 07 08:33:32 2003 EF

Continuing Calibration Summary

Job Number: F19788
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GEF1119-CC1115
Lab FileID: EF030712.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\100603\EF030712.D\FID1A.CH Vial: 12
Signal #2 : C:\HPCHEM\1\DATA\100603\EF030712.D\FID2B.CH
Acq On : 6 Oct 2003 1:31 pm Operator: ClaireV
Sample : cc1115-20 Inst : VOA1
Misc : gc2840,gef1119,,,,,1 Multiplr: 1.00
IntFile Signal #1: AUTOINT1.E IntFile Signal #2: autoint2.e

Method : C:\HPCHEM\1\METHODS\DUAL1002.M (Chemstation Integrator)
Title : EPA 602 & 5030B/8021B
Last Update : Thu Sep 04 08:01:10 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	20.000	20.580	-2.9	105	0.02
2		Di-Isopropyl ether	20.000	21.049	-5.2	102	0.02
3		Benzene	20.000	20.763	-3.8	101	0.02
4	S	a,a,a-TFT(S)	20.000	19.973	0.1	101	0.02
5		Toluene	20.000	20.427	-2.1	101	0.02
6	S	1-Chloro-4-Fluorobenzene	20.000	20.357	-1.8	103	0.03
7		Chlorobenzene	20.000	19.831	0.8	101	0.03
8		Ethylbenzene	20.000	19.937	0.3	100	0.03
9		m,p-Xylene	40.000	40.409	-1.0	100	0.03
10		o-Xylene	20.000	20.489	-2.4	101	0.02
11		1,3-Dichlorobenzene	20.000	19.890	0.5	102	0.02
12		1,4-Dichlorobenzene	20.000	19.569	2.2	101	0.02
13		1,2-Dichlorobenzene	20.000	19.250	3.8	101	0.02

Signal #2

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	20.000	20.197	-1.0	102	0.01
2		Di-Isopropyl ether	20.000	20.102	-0.5	100	0.01
3		Benzene	20.000	20.475	-2.4	98	0.02
4	S	a,a,a-TFT(S)	20.000	19.706	1.5	99	0.02
5		Toluene	20.000	20.312	-1.6	99	0.02
6	S	1-Chloro-4-Fluorobenzene	20.000	20.119	-0.6	100	0.02
7		Chlorobenzene	20.000	19.452	2.7	99	0.02
8		Ethylbenzene	20.000	20.019	-0.1	99	0.03
9		m,p-Xylene	40.000	40.371	-0.9	100	0.03
10		o-Xylene	20.000	20.710	-3.6	101	0.03
11		1,3-Dichlorobenzene	20.000	19.831	0.8	100	0.02
12		1,4-Dichlorobenzene	20.000	19.654	1.7	100	0.02
13		1,2-Dichlorobenzene	20.000	19.327	3.4	100	0.02

Average % D = 1.8

(#) = Out of Range SPCC's out = 0 CCC's out = 0
EF030588.D DUAL1002.M Tue Oct 07 08:34:01 2003 EF

Continuing Calibration Summary

Job Number: F19788
Account: EEINCJX EEI
Projeet: Camp Lejeune-Campbell St. Fuel Farm

Sample: GEF1119-CC1115
Lab FileID: EF030723.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\100603\EF030723.D\FID1A.CH Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\100603\EF030723.D\FID2B.CH
Acq On : 6 Oct 2003 6:01 pm Operator: ClaireV
Sample : cc1115-20 Inst : VOA1
Misc : gc2840,gef1119,,,,,1 Multiplr: 1.00
IntFile Signal #1: AUTOINT1.E IntFile Signal #2: autoint2.e

Method : C:\HPCHEM\1\METHODS\DUAL1002.M (Chemstation Integrator)
Title : EPA 602 & 5030B/8021B
Last Update : Thu Sep 04 08:01:10 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	20.000	19.649	1.8	100	0.01
2		Di-Isopropyl ether	20.000	20.279	-1.4	98	0.01
3		Benzene	20.000	19.894	0.5	97	0.02
4	S	a,a,a-TFT(S)	20.000	19.250	3.8	98	0.02
5		Toluene	20.000	19.594	2.0	97	0.02
6	S	1-Chloro-4-Fluorobenzene	20.000	18.979	5.1	96	0.02
7		Chlorobenzene	20.000	19.080	4.6	97	0.02
8		Ethylbenzene	20.000	19.185	4.1	96	0.02
9		m,p-Xylene	40.000	38.676	3.3	96	0.02
10		o-Xylene	20.000	19.602	2.0	97	0.02
11		1,3-Dichlorobenzene	20.000	18.951	5.2	97	0.02
12		1,4-Dichlorobenzene	20.000	19.031	4.8	98	0.02
13		1,2-Dichlorobenzene	20.000	18.417	7.9	97	0.02

Signal #2

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	20.000	19.666	1.7	100	0.00
2		Di-Isopropyl ether	20.000	19.495	2.5	97	0.01
3		Benzene	20.000	19.840	0.8	95	0.01
4	S	a,a,a-TFT(S)	20.000	19.474	2.6	98	0.02
5		Toluene	20.000	19.675	1.6	96	0.02
6	S	1-Chloro-4-Fluorobenzene	20.000	19.223	3.9	95	0.02
7		Chlorobenzene	20.000	19.036	4.8	97	0.02
8		Ethylbenzene	20.000	19.285	3.6	96	0.02
9		m,p-Xylene	40.000	38.799	3.0	96	0.02
10		o-Xylene	20.000	20.000	0.0	98	0.02
11		1,3-Dichlorobenzene	20.000	19.172	4.1	97	0.02
12		1,4-Dichlorobenzene	20.000	19.100	4.5	97	0.02
13		1,2-Dichlorobenzene	20.000	18.907	5.5	98	0.02

Average % D = 3.3

(#) = Out of Range SPCC's out = 0 CCC's out = 0
EF030588.D DUAL1002.M Tue Oct 07 08:34:02 2003 EF

Continuing Calibration Summary

Job Number: F19788
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GEF1121-CC1115
Lab FileID: EF030757.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\100703\EF030757.D\FID1A.CH Vial: 1
Signal #2 : C:\HPCHEM\1\DATA\100703\EF030757.D\FID2B.CH
Acq On : 7 Oct 2003 8:09 am Operator: ClaireV
Sample : CC1115-40 Inst : VOA1
Misc : gc2840,gef1121,,,,,1 Multiplr: 1.00
IntFile Signal #1: AUTOINT1.E IntFile Signal #2: autoint2.e

Method : C:\HPCHEM\1\METHODS\DUAL1002.M (Chemstation Integrator)
Title : EPA 602 & 5030B/8021B
Last Update : Thu Oct 02 12:47:10 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	40.000	35.971	10.1	92	0.02
2		Di-Isopropyl ether	40.000	39.617	1.0	97	0.02
3		Benzene	40.000	40.047	-0.1	100	0.02
4	S	a,a,a-TFT(S)	20.000	19.374	3.1	97	0.02
5		Toluene	40.000	39.959	0.1	100	0.03
6	S	1-Chloro-4-Fluorobenzene	20.000	19.241	3.8	95	0.03
7		Chlorobenzene	40.000	38.310	4.2	100	0.03
8		Ethylbenzene	40.000	38.665	3.3	100	0.03
9		m,p-Xylene	80.000	78.636	1.7	99	0.03
10		o-Xylene	40.000	39.508	1.2	99	0.04
11		1,3-Dichlorobenzene	40.000	39.602	1.0	100	0.03
12		1,4-Dichlorobenzene	40.000	38.989	2.5	99	0.03
13		1,2-Dichlorobenzene	40.000	37.735	5.7	97	0.03

Signal #2

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	40.000	36.722	8.2	92	0.01
2		Di-Isopropyl ether	40.000	38.434	3.9	97	0.01
3		Benzene	40.000	40.278	-0.7	99	0.01
4	S	a,a,a-TFT(S)	20.000	19.502	2.5	95	0.02
5		Toluene	40.000	40.135	-0.3	100	0.02
6	S	1-Chloro-4-Fluorobenzene	20.000	19.480	2.6	93	0.02
7		Chlorobenzene	40.000	37.805	5.5	100	0.03
8		Ethylbenzene	40.000	39.207	2.0	100	0.03
9		m,p-Xylene	80.000	79.195	1.0	100	0.03
10		o-Xylene	40.000	40.054	-0.1	99	0.03
11		1,3-Dichlorobenzene	40.000	39.652	0.9	99	0.03
12		1,4-Dichlorobenzene	40.000	39.102	2.2	99	0.03
13		1,2-Dichlorobenzene	40.000	38.874	2.8	99	0.03

Average % D = 2.7

(#) = Out of Range SPCC's out = 0 CCC's out = 0
EF030589.D DUAL1002.M Wed Oct 08 10:15:52 2003 EF

5.7

Continuing Calibration Summary

Job Number: F19788
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GEF1121-CC1115
Lab FileID: EF030768.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\100703\EF030768.D\FID1A.CH Vial: 11
Signal #2 : C:\HPCHEM\1\DATA\100703\EF030768.D\FID2B.CH
Acq On : 7 Oct 2003 2:11 pm Operator: ClaireV
Sample : cc1115-20 Inst : VOA1
Misc : gc2848,gef1121,,,,,1 Multiplr: 1.00
IntFile Signal #1: AUTOINT1.E IntFile Signal #2: autoint2.e

Method : C:\HPCHEM\1\METHODS\DUAL1002.M (Chemstation Integrator)
Title : EPA 602 & 5030B/8021B
Last Update : Thu Oct 02 12:47:10 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	20.000	19.284	3.6	99	0.01
2		Di-Isopropyl ether	20.000	20.014	-0.1	97	0.01
3		Benzene	20.000	19.706	1.5	96	0.02
4	S	a,a,a-TFT(S)	20.000	19.360	3.2	98	0.02
5		Toluene	20.000	19.326	3.4	96	0.02
6	S	1-Chloro-4-Fluorobenzene	20.000	19.300	3.5	98	0.02
7		Chlorobenzene	20.000	19.028	4.9	97	0.03
8		Ethylbenzene	20.000	18.948	5.3	95	0.03
9		m,p-Xylene	40.000	38.459	3.9	95	0.03
10		o-Xylene	20.000	19.484	2.6	96	0.03
11		1,3-Dichlorobenzene	20.000	18.973	5.1	97	0.03
12		1,4-Dichlorobenzene	20.000	19.012	4.9	98	0.03
13		1,2-Dichlorobenzene	20.000	18.339	8.3	96	0.03

Signal #2

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	20.000	19.513	2.4	99	0.00
2		Di-Isopropyl ether	20.000	19.511	2.4	97	0.01
3		Benzene	20.000	19.970	0.2	96	0.01
4	S	a,a,a-TFT(S)	20.000	19.558	2.2	98	0.02
5		Toluene	20.000	19.486	2.6	95	0.02
6	S	1-Chloro-4-Fluorobenzene	20.000	19.492	2.5	96	0.02
7		Chlorobenzene	20.000	18.906	5.5	96	0.02
8		Ethylbenzene	20.000	19.335	3.3	96	0.02
9		m,p-Xylene	40.000	38.760	3.1	96	0.02
10		o-Xylene	20.000	19.621	1.9	96	0.02
11		1,3-Dichlorobenzene	20.000	19.299	3.5	97	0.02
12		1,4-Dichlorobenzene	20.000	19.022	4.9	97	0.02
13		1,2-Dichlorobenzene	20.000	18.699	6.5	97	0.02

Average % D = 3.5

(#) = Out of Range SPCC's out = 0 CCC's out = 0
EF030588.D DUAL1002.M Wed Oct 08 10:16:29 2003 EF

5.7

Continuing Calibration Summary

Job Number: F19788
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GEF1121-CC1115
Lab FileID: EF030779.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\100703\EF030779.D\FID1A.CH Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\100703\EF030779.D\FID2B.CH
Acq On : 7 Oct 2003 7:00 pm Operator: ClaireV
Sample : cc1115-20 Inst : VOA1
Misc : gc2848,gef1121,,,,,1 Multiplr: 1.00
IntFile Signal #1: AUTOINT1.E IntFile Signal #2: autoint2.e

Method : C:\HPCHEM\1\METHODS\DUAL1002.M (Chemstation Integrator)
Title : EPA 602 & 5030B/8021B
Last Update : Thu Oct 02 12:47:10 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	20.000	18.999	5.0	97	0.01
2		Di-Isopropyl ether	20.000	19.795	1.0	96	0.01
3		Benzene	20.000	19.283	3.6	94	0.02
4	S	a,a,a-TFT(S)	20.000	19.277	3.6	98	0.02
5		Toluene	20.000	18.967	5.2	94	0.02
6	S	1-Chloro-4-Fluorobenzene	20.000	18.933	5.3	96	0.03
7		Chlorobenzene	20.000	18.553	7.2	94	0.03
8		Ethylbenzene	20.000	18.486	7.6	93	0.03
9		m,p-Xylene	40.000	37.302	6.7	92	0.03
10		o-Xylene	20.000	18.972	5.1	94	0.03
11		1,3-Dichlorobenzene	20.000	18.388	8.1	94	0.02
12		1,4-Dichlorobenzene	20.000	18.373	8.1	95	0.02
13		1,2-Dichlorobenzene	20.000	17.940	10.3	94	0.02

Signal #2

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	20.000	19.376	3.1	98	0.01
2		Di-Isopropyl ether	20.000	19.316	3.4	97	0.01
3		Benzene	20.000	19.537	2.3	94	0.02
4	S	a,a,a-TFT(S)	20.000	19.569	2.2	99	0.02
5		Toluene	20.000	19.226	3.9	94	0.02
6	S	1-Chloro-4-Fluorobenzene	20.000	19.167	4.2	95	0.02
7		Chlorobenzene	20.000	18.494	7.5	94	0.03
8		Ethylbenzene	20.000	18.710	6.4	93	0.03
9		m,p-Xylene	40.000	37.459	6.4	93	0.03
10		o-Xylene	20.000	19.248	3.8	94	0.03
11		1,3-Dichlorobenzene	20.000	18.693	6.5	94	0.02
12		1,4-Dichlorobenzene	20.000	18.467	7.7	94	0.02
13		1,2-Dichlorobenzene	20.000	18.343	8.3	95	0.02

Average % D = 5.5

(#) = Out of Range SPCC's out = 0 CCC's out = 0
EF030588.D DUAL1002.M Wed Oct 08 10:16:30 2003 EF

Initial Calibration Summary

Job Number: F19788
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GKK5-ICC5
Lab FileID: KK00207.D

Response Factor Report GC-KK-LL

Method : C:\MSDCHEM\1\METHODS\504_1.M (Chemstation Integrator)
Title : EDB/DBCP by EPA 504.1 or SW846 8011
Last Update : Tue Sep 30 13:30:36 2003
Response via : Initial Calibration

Calibration Files
.125 =KK00205.D .250 =KK00206.D .500 =KK00207.D
0.75 =KK00208.D 1.0 =KK00209.D

	Compound	.125	.250	.500	0.75	1.0	Avg		%RSD
1)	1,2-Dibromoethane	4.391	3.877	3.503	3.343	3.720	3.767	E4	10.73
2) S	4-Bromofluorobenzene	3.061	2.817	2.584	2.414	2.421	2.659	E3	10.45
3)	1,2-Dibromo-3-chlorop	0.932	0.898	0.947	0.954	1.019	0.950	E5	4.65
Signal #2									
1)	1,2-Dibromoethane	3.585	3.056	2.832	2.693	2.972	3.028	E4	11.25
2) S	4-Bromofluorobenzene	4.362	3.901	3.556	3.351	3.391	3.712	E3	11.40
3)	1,2-Dibromo-3-chlorop	8.632	8.020	8.151	7.889	8.415	8.222	E4	3.66

(#) = Out of Range

504_1.M Wed Oct 01 08:26:12 2003

Continuing Calibration Summary

Job Number: F19788
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GKK5-CC5
Lab FileID: KK00222.D

Evaluate Continuing Calibration Report

Signal #1 : C:\MSDCHEM\1\DATA\0930EDB\KK00222.D\ECD1A.CH Vial: 19
Signal #2 : C:\MSDCHEM\1\DATA\0930EDB\KK00222.D\ECD2B.CH
Acq On : 9-30-03 05:26:19 PM Operator: sarahm
Sample : cc5-0.25 Inst : GC-KK-LL
Misc : op8666,gkk5,30.0,,,2,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\MSDCHEM\1\METHODS\504_1.M (Chemstation Integrator)
Title : EDB/DBCP by EPA 504.1 or SW846 8011
Last Update : Tue Sep 30 13:30:36 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
1	1,2-Dibromoethane	0.250	0.259	-3.6	101	0.00
2 S	4-Bromofluorobenzene	2.000	2.052	-2.6	97	0.00
3	1,2-Dibromo-3-chloropropane	0.250	0.242	3.2	102	0.00
Signal #2						
1	1,2-Dibromoethane	0.250	0.264	-5.6	105	0.00
2 S	4-Bromofluorobenzene	2.000	2.017	-0.8	96	0.00
3	1,2-Dibromo-3-chloropropa	0.250	0.242	3.2	99	0.00

Evaluate Continuing Calibration Report - Not Founds

Signal #1 : C:\MSDCHEM\1\DATA\0930EDB\KK00222.D\ECD1A.CH Vial: 19
Signal #2 : C:\MSDCHEM\1\DATA\0930EDB\KK00222.D\ECD2B.CH
Acq On : 9-30-03 05:26:19 PM Operator: sarahm
Sample : cc5-0.25 Inst : GC-KK-LL
Misc : op8666,gkk5,30.0,,,2,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\MSDCHEM\1\METHODS\504_1.M (Chemstation Integrator)
Title : EDB/DBCP by EPA 504.1 or SW846 8011
Last Update : Tue Sep 30 13:30:36 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
Signal #2						

(#) = Out of Range SPCC's out = 0 CCC's out = 0
KK00206.D 504_1.M Wed Oct 01 08:26:56 2003

5.7

Continuing Calibration Summary

Job Number: F19788 **Sample:** GKK5-CC5
Account: EEINCJX EEI **Lab FileID:** KK00232.D
Project: Camp Lejeune-Campbell St. Fuel Farm

Evaluate Continuing Calibration Report

Signal #1 : C:\MSDCHEM\1\DATA\0930EDB\KK00232.D\ECD1A.CH Vial: 19
Signal #2 : C:\MSDCHEM\1\DATA\0930EDB\KK00232.D\ECD2B.CH
Acq On : 9-30-03 08:44:28 PM Operator: sarahm
Sample : cc5-0.25 Inst : GC-KK-LL
Misc : op8666,gkk5,30.0,,,2,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\MSDCHEM\1\METHODS\504_1.M (Chemstation Integrator)
Title : EDB/DBCP by EPA 504.1 or SW846 8011
Last Update : Tue Sep 30 13:30:36 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
1	1,2-Dibromoethane	0.250	0.266	-6.4	104	0.00
2 S	4-Bromofluorobenzene	2.000	2.091	-4.6	99	0.00
3	1,2-Dibromo-3-chloropropane	0.250	0.245	2.0	104	0.00
Signal #2						
1	1,2-Dibromoethane	0.250	0.271	-8.4	108	0.00
2 S	4-Bromofluorobenzene	2.000	2.107	-5.4	100	0.00
3	1,2-Dibromo-3-chloropropa	0.250	0.244	2.4	100	0.00

Evaluate Continuing Calibration Report - Not Founds

Signal #1 : C:\MSDCHEM\1\DATA\0930EDB\KK00232.D\ECD1A.CH Vial: 19
Signal #2 : C:\MSDCHEM\1\DATA\0930EDB\KK00232.D\ECD2B.CH
Acq On : 9-30-03 08:44:28 PM Operator: sarahm
Sample : cc5-0.25 Inst : GC-KK-LL
Misc : op8666,gkk5,30.0,,,2,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\MSDCHEM\1\METHODS\504_1.M (Chemstation Integrator)
Title : EDB/DBCP by EPA 504.1 or SW846 8011
Last Update : Tue Sep 30 13:30:36 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
Signal #2						

(#) = Out of Range SPCC's out = 0 CCC's out = 0
KK00206.D 504_1.M Wed Oct 01 08:26:56 2003

Continuing Calibration Summary

Job Number: F19788 **Sample:** GKK5-ECC5
Account: EEINCJX EEI **Lab FileID:** KK00237.D
Project: Camp Lejeune-Campbell St. Fuel Farm

Evaluate Continuing Calibration Report

```
Signal #1 : C:\MSDCHEM\1\DATA\0930EDB\KK00237.D\ECD1A.CH Vial: 19
Signal #2 : C:\MSDCHEM\1\DATA\0930EDB\KK00237.D\ECD2B.CH
Acq On    : 30 Sep 2003  10:23 pm                    Operator: sarahm
Sample    : ecc5-0.25                                Inst    : GC-KK-LL
Misc      : op8666,gkk5,30.0,,,2,1,water             Multiplr: 1.00
IntFile Signal #1: EVENTS.E     IntFile Signal #2: EVENTS2.E

Method       : C:\MSDCHEM\1\METHODS\504_1.M (Chemstation Integrator)
Title        : EDB/DBCP by EPA 504.1 or SW846 8011
Last Update  : Tue Sep 30 13:30:36 2003
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
1	1,2-Dibromoethane	0.250	0.258	-3.2	100	0.00
2 S	4-Bromofluorobenzene	2.000	2.088	-4.4	99	0.00
3	1,2-Dibromo-3-chloropropane	0.250	0.244	2.4	103	0.00
Signal #2						
1	1,2-Dibromoethane	0.250	0.269	-7.6	107	0.00
2 S	4-Bromofluorobenzene	2.000	2.105	-5.2	100	0.00
3	1,2-Dibromo-3-chloropropa	0.250	0.243	2.8	100	0.00

Evaluate Continuing Calibration Report - Not Founds

```
Signal #1 : C:\MSDCHEM\1\DATA\0930EDB\KK00237.D\ECD1A.CH Vial: 19
Signal #2 : C:\MSDCHEM\1\DATA\0930EDB\KK00237.D\ECD2B.CH
Acq On    : 30 Sep 2003  10:23 pm                    Operator: sarahm
Sample    : ecc5-0.25                                Inst    : GC-KK-LL
Misc      : op8666,gkk5,30.0,,,2,1,water             Multiplr: 1.00
IntFile Signal #1: EVENTS.E     IntFile Signal #2: EVENTS2.E

Method       : C:\MSDCHEM\1\METHODS\504_1.M (Chemstation Integrator)
Title        : EDB/DBCP by EPA 504.1 or SW846 8011
Last Update  : Tue Sep 30 13:30:36 2003
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
Signal #2						

(#) = Out of Range SPCC's out = 0 CCC's out = 0

KK00206.D 504_1.M Wed Oct 01 08:26:56 2003

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: F19788
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8665-MB	IJ18459.D	1	10/01/03	SD	09/30/03	OP8665	GIJ886

The QC reported bere applies to the following samples: **Method:** EPA 610

F19788-11, F19788-16

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.0	2.0	ug/l	
208-96-8	Acenaphthylene	ND	5.0	2.0	ug/l	
120-12-7	Anthracene	ND	5.0	2.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.0	2.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.0	2.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.0	2.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.0	2.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.0	2.0	ug/l	
218-01-9	Chrysene	ND	5.0	2.0	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.0	2.0	ug/l	
206-44-0	Fluoranthene	ND	5.0	2.0	ug/l	
86-73-7	Fluorene	ND	5.0	2.0	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.0	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.0	ug/l	
90-12-0	1-Methylnaphthalene	ND	5.0	2.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.0	2.0	ug/l	
85-01-8	Phenanthrene	ND	5.0	2.0	ug/l	
129-00-0	Pyrene	ND	5.0	2.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
321-60-8	2-Fluorobiphenyl	87%	41-139%
84-15-1	o-Terphenyl	87%	46-135%

6.1
9

Method Blank Summary

Job Number: F19788
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8665-MB	IJ18493.D	1	10/02/03	SD	09/30/03	OP8665	GIJ887

The QC reported here applies to the following samples: **Method:** EPA 610

F19788-11, F19788-16

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Accnaphthene	ND	5.0	2.0	ug/l	
208-96-8	Acenaphthylene	ND	5.0	2.0	ug/l	
120-12-7	Anthracene	ND	5.0	2.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.0	2.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.0	2.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.0	2.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.0	2.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.0	2.0	ug/l	
218-01-9	Chrysene	ND	5.0	2.0	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.0	2.0	ug/l	
206-44-0	Fluoranthene	ND	5.0	2.0	ug/l	
86-73-7	Fluorene	ND	5.0	2.0	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.0	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.0	ug/l	
90-12-0	1-Methylnaphthalene	ND	5.0	2.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.0	2.0	ug/l	
85-01-8	Phenanthrene	ND	5.0	2.0	ug/l	
129-00-0	Pyrene	ND	5.0	2.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
321-60-8	2-Fluorobiphenyl	66%	41-139%
84-15-1	o-Terphenyl	93%	46-135%

Blank Spike Summary

Job Number: F19788
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8665-BS	IJ18458.D	1	10/01/03	SD	09/30/03	OP8665	GIJ886

The QC reported here applies to the following samples: **Method:** EPA 610

F19788-11, F19788-16

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
83-32-9	Acenaphthene	25	22.2	89	59-114
208-96-8	Acenaphthylene	25	19.4	78	58-109
120-12-7	Anthraeene	25	22.4	90	63-110
56-55-3	Benzo(a)anthraeene	25	21.9	88	74-111
50-32-8	Benzo(a)pyrene	25	21.3	85	71-110
205-99-2	Benzo(b)fluoranthene	25	21.8	87	75-112
191-24-2	Benzo(g,h,i)perylene	25	21.3	85	66-114
207-08-9	Benzo(k)fluoranthene	25	21.7	87	73-111
218-01-9	Chrysene	25	22.1	88	73-112
53-70-3	Dibenzo(a,h)anthracene	25	20.9	84	67-111
206-44-0	Fluoranthene	25	22.7	91	74-113
86-73-7	Fluorene	25	21.0	84	67-113
193-39-5	Indeno(1,2,3-cd)pyrene	25	22.6	90	68-115
91-20-3	Naphthalene	25	20.1	80	52-113
90-12-0	1-Methylnaphthalene	25	22.3	89	55-117
91-57-6	2-Methylnaphthalene	25	20.2	81	50-115
85-01-8	Phenanthrene	25	22.0	88	70-111
129-00-0	Pyrene	25	22.7	91	73-115

CAS No.	Surrogate Recoveries	BSP	Limits
321-60-8	2-Fluorobiphenyl	82%	41-139%
84-15-1	o-Terphenyl	86%	46-135%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F19788
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8665-MS	IJ18480.D	1	10/01/03	SD	09/30/03	OP8665	GIJ886
OP8665-MSD	IJ18481.D	1	10/01/03	SD	09/30/03	OP8665	GIJ886
F19794-6	IJ18479.D	1	10/01/03	SD	09/30/03	OP8665	GIJ886

The QC reported here applies to the following samples: **Method:** EPA 610

F19788-11, F19788-16

CAS No.	Compound	F19794-6 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	ND		52.1	50.4	97	48.5	93	4	36-143/21
208-96-8	Acenaphthylene	ND		52.1	44.5	85	42.7	82	4	59-108/22
120-12-7	Anthracene	ND		52.1	49.2	94	47.9	92	3	61-113/22
56-55-3	Benzo(a)anthracene	ND		52.1	49.2	94	46.7	90	5	69-111/17
50-32-8	Benzo(a)pyrene	ND		52.1	47.7	92	45.2	87	5	71-109/22
205-99-2	Benzo(b)fluoranthene	ND		52.1	49.1	94	46.9	90	5	63-116/19
191-24-2	Benzo(g,h,i)perylene	ND		52.1	48.2	93	45.7	88	5	54-123/19
207-08-9	Benzo(k)fluoranthene	ND		52.1	48.8	94	46.2	89	5	66-114/16
218-01-9	Chrysene	ND		52.1	49.2	94	46.8	90	5	65-116/15
53-70-3	Dibenzo(a,h)anthraeene	ND		52.1	48.9	94	46.3	89	5	52-130/24
206-44-0	Fluoranthene	ND		52.1	50.5	97	48.1	92	5	73-113/16
86-73-7	Fluorene	ND		52.1	48.9	94	47.0	90	4	63-114/20
193-39-5	Indeno(1,2,3-cd)pyrene	ND		52.1	47.6	91	45.0	86	6	43-133/24
91-20-3	Naphthalene	ND		52.1	46.3	89	45.0	86	3	40-130/27
90-12-0	1-Methylnaphthalene	ND		52.1	51.0	98	49.3	95	3	50-128/25
91-57-6	2-Methylnaphthalene	ND		52.1	46.2	89	44.5	85	4	32-148/26
85-01-8	Phenanthrene	ND		52.1	49.5	95	47.4	91	4	44-136/19
129-00-0	Pyrene	ND		52.1	51.0	98	48.2	93	6	71-116/16

CAS No.	Snrrogate Recoveries	MS	MSD	F19794-6	Limits
321-60-8	2-Fluorobiphenyl	89%	86%	95%	41-139%
84-15-1	o-Terphenyl	91%	87%	98%	46-135%

Duplicate Summary

Job Number: F19788
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8665-DUP	IJ18469.D	1	10/01/03	SD	09/30/03	OP8665	GIJ886
F19728-6 [a]	IJ18468.D	1	10/01/03	SD	09/30/03	OP8665	GIJ886

The QC reported here applies to the following samples: **Method:** EPA 610

F19788-11, F19788-16

CAS No.	Compound	F19728-6 ug/l	Q	DUP ug/l	Q	RPD	Limits
83-32-9	Acenaphthene	ND		ND		nc	
208-96-8	Acenaphthylene	ND		ND		nc	
120-12-7	Anthracene	ND		ND		nc	
56-55-3	Benzo(a)anthracene	ND		ND		nc	
50-32-8	Benzo(a)pyrene	ND		ND		nc	
205-99-2	Benzo(b)fluoranthene	ND		ND		nc	
191-24-2	Benzo(g,h,i)perylene	ND		ND		nc	
207-08-9	Benzo(k)fluoranthene	ND		ND		nc	
218-01-9	Chrysene	ND		ND		nc	
53-70-3	Dibenzo(a,h)anthracene	ND		ND		nc	
206-44-0	Fluoranthene	ND		ND		nc	
86-73-7	Fluorene	ND		ND		nc	
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ND		nc	
91-20-3	Naphthalene	4.2	J	4.0	J	5	
90-12-0	1-Methyluaphthalene	ND		ND		nc	
91-57-6	2-Methylnaphthalene	ND		ND		nc	
85-01-8	Phenanthrene	ND		ND		nc	
129-00-0	Pyrene	ND		ND		nc	

CAS No.	Surrogate Recoveries	DUP	F19728-6	Limits
321-60-8	2-Fluorobiphenyl	74%	79%	41-139%
84-15-1	o-Terphenyl	79%	89%	46-135%

(a) All hits confirmed by dual column analysis.

Semivolatile Surrogate Recovery Summary

Job Number: F19788
Account: EEINCJX EEI
Projeet: Camp Lejeune-Campbell St. Fuel Farm

Method: EPA 610	**Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S2 [a]
F19788-11	IJ18471.D	84.0	87.0
F19788-16	IJ18497.D	94.0	77.0
F19788-16	IJ18472.D	100.0	84.0
OP8665-BS	IJ18458.D	82.0	86.0
OP8665-DUP	IJ18469.D	74.0	79.0
OP8665-MB	IJ18459.D	87.0	87.0
OP8665-MB	IJ18493.D	66.0	93.0
OP8665-MS	IJ18480.D	89.0	91.0
OP8665-MSD	IJ18481.D	86.0	87.0

Surrogate Compounds	Recovery Limits
S1 = 2-Fluorobiphenyl	41-139%
S2 = o-Terphenyl	46-135%

(a) Recovery from GC signal #1

GC Surrogate Retention Time Summary

Job Number: F19788
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GIJ886-CC869	**Injection Date:**	10/01/03
Lab File ID:	IJ18457.D	**Injection Time:**	08:00
Instrument ID:	GCIJ	**Method:**	EPA 610

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	5.81	6.50	10.36	11.62

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
OP8665-BS	IJ18458.D	10/01/03	08:34	5.82		10.36	
OP8665-MB	IJ18459.D	10/01/03	09:02	5.82		10.37	
ZZZZZZ	IJ18460.D	10/01/03	09:31	5.82		10.36	
ZZZZZZ	IJ18461.D	10/01/03	09:59	5.82		10.36	
ZZZZZZ	IJ18462.D	10/01/03	10:28		6.51		11.62

Surrogate Compounds

S1 = 2-Fluorobiphenyl
S2 = o-Terphenyl

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F19788
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GIJ886-CC869	**Injection Date:**	10/01/03
Lab File ID:	IJ18463.D	**Injection Time:**	10:57
Instrument ID:	GCIJ	**Method:**	EPA 610

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	5.82	6.51	10.36	11.62

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
ZZZZZZ	IJ18464.D	10/01/03	11:25		6.51		11.62
ZZZZZZ	IJ18465.D	10/01/03	11:54		6.51		11.62
ZZZZZZ	IJ18466.D	10/01/03	12:22	5.82		10.36	
ZZZZZZ	IJ18467.D	10/01/03	12:51	5.82		10.36	
F19728-6	IJ18468.D	10/01/03	13:20	5.82		10.36	
OP8665-DUP	IJ18469.D	10/01/03	13:48	5.82		10.36	
F19788-11	IJ18471.D	10/01/03	14:46	5.82		10.36	
F19788-16	IJ18472.D	10/01/03	15:14	5.83		10.37	

Surrogate Compounds

S1 = 2-Fluorobiphenyl
S2 = o-Terphenyl

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F19788
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GIJ886-CC869	**Injection Date:**	10/01/03
Lab File ID:	IJ18473.D	**Injection Time:**	16:13
Instrument ID:	GCIJ	**Method:**	EPA 610

	S1 [a] RT	S2 [a] RT
Check Std	5.81	10.36

Lab Sample ID	Lab File ID	Date Analyzed	Time Aualyzed	S1 [a] RT	S2 [a] RT
ZZZZZZ	IJ18474.D	10/01/03	16:42	5.82	10.36
ZZZZZZ	IJ18475.D	10/01/03	17:10	5.82	10.36
ZZZZZZ	IJ18476.D	10/01/03	17:39	5.82	10.37
ZZZZZZ	IJ18477.D	10/01/03	18:08	5.82	10.37
ZZZZZZ	IJ18478.D	10/01/03	18:36	5.82	10.37
F19794-6	IJ18479.D	10/01/03	19:05	5.83	10.37
OP8665-MS	IJ18480.D	10/01/03	19:33	5.82	10.37
OP8665-MSD	IJ18481.D	10/01/03	20:02	5.82	10.37
ZZZZZZ	IJ18482.D	10/01/03	20:31	5.82	10.37

Surrogate Compounds

S1 = 2-Fluorobiphenyl
S2 = o-Terphenyl

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: F19788
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GIJ887-CC869	**Injection Date:**	10/02/03
Lab File ID:	IJ18492.D	**Injection Time:**	11:01
Instrument ID:	GCIJ	**Method:**	EPA 610

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	5.83	6.50	10.37	11.62

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
OP8665-MB	IJ18493.D	10/02/03	11:29	5.82		10.37	
ZZZZZZ	IJ18494.D	10/02/03	11:58		6.50		11.62
ZZZZZZ	IJ18495.D	10/02/03	12:27		6.50		11.61
ZZZZZZ	IJ18496.D	10/02/03	12:56	5.82		10.36	
F19788-16	IJ18497.D	10/02/03	13:24	5.82		10.36	
ZZZZZZ	IJ18498.D	10/02/03	13:53	5.82		10.36	
ZZZZZZ	IJ18499.D	10/02/03	14:22	5.82		10.36	

Surrogate Compounds

S1 = 2-Fluorobiphenyl
S2 = o-Terphenyl

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

Initial Calibration Summary

Job Number: F19788
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GIJ869-ICC869
Lab FileID: IJ18163.D

Response Factor Report FID 1

Method : C:\HPCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title : PAH's BY EPA 610 OR 8100
Last Update : Thu Jul 31 12:50:14 2003
Response via : Initial Calibration

Calibration Files
5 =IJ18161.D 10 =IJ18162.D 20 =IJ18163.D
30 =IJ18164.D 40 =IJ18165.D 50 =IJ18166.D

		Compound	5	10	20	30	40	50	Avg		%RSD
1)		Naphthalene	1.766	1.641	1.534	1.709	1.540	1.605	1.633	E4	5.67
2)		2-Methyl Naphthalen	1.668	1.587	1.495	1.674	1.504	1.578	1.584	E4	4.84
3)		1-Methyl Naphthalen	1.573	1.492	1.409	1.575	1.419	1.487	1.493	E4	4.81
4)	S	2-Fluorobiphenyl	1.422	1.317	1.297	1.469	1.330	1.398	1.372	E4	4.96
5)		Acenaphthylene	1.668	1.621	1.525	1.696	1.532	1.603	1.607	E4	4.31
6)		Acenaphthene	1.707	1.642	1.548	1.721	1.559	1.630	1.635	E4	4.42
7)		Fluorene	1.636	1.625	1.526	1.692	1.530	1.601	1.602	E4	4.02
8)		Phenanthrene	1.500	1.556	1.479	1.656	1.486	1.557	1.539	E4	4.32
9)		Anthracene	1.752	1.706	1.552	1.701	1.526	1.565	1.634	E4	5.92
10)	S	O-Terphenyl	1.756	1.715	1.594	1.768	1.577	1.649	1.677	E4	4.89
11)		Fluoranthene	1.661	1.646	1.528	1.703	1.525	1.598	1.610	E4	4.53
12)		Pyrene	1.736	1.641	1.529	1.712	1.529	1.601	1.625	E4	5.44
13)		Benzo(a)Anthracene	1.580	1.576	1.500	1.698	1.520	1.589	1.577	E4	4.39
14)		Chrysene	1.822	1.714	1.568	1.746	1.553	1.616	1.670	E4	6.43
15)		Benzo(b)Fluoranthen	1.592	1.586	1.533	1.731	1.557	1.629	1.605	E4	4.36
16)		Benzo(k)Fluoranthen	1.956	1.785	1.611	1.785	1.584	1.642	1.727	E4	8.19
17)		Benzo(a) Pyrene	1.717	1.631	1.528	1.706	1.526	1.590	1.616	E4	5.17
18)		Indeno(1,2,3-cd)pyr	1.513	1.514	1.440	1.634	1.469	1.543	1.519	E4	4.43
19)		Dibenzo(a,h)anthrac	1.834	1.734	1.588	1.749	1.563	1.624	1.682	E4	6.33
20)		Benzo(g,h,i) Peryle	1.774	1.699	1.550	1.736	1.528	1.594	1.647	E4	6.25

Signal #2 Calibration Files
5 =IJ18161.D 10 =IJ18162.D 20 =IJ18163.D
30 =IJ18164.D 40 =IJ18165.D 50 =IJ18166.D

		Compound	5	10	20	30	40	50	Avg		%RSD
1)		Naphthalene	2.323	2.172	2.040	2.282	2.046	2.137	2.167	E4	5.44
2)		2-Methyl Naphthalen	2.083	2.012	1.918	2.187	1.973	2.067	2.040	E4	4.62
3)		1-Methyl Naphthalen	1.997	1.913	1.834	2.055	1.858	1.943	1.933	E4	4.32
4)	S	2-Fluorobiphenyl	1.853	1.802	1.701	1.936	1.753	1.840	1.814	E4	4.52
5)		Acenaphthylene	2.185	2.140	2.013	2.242	2.034	2.128	2.124	E4	4.12
6)		Acenaphthene	2.226	2.180	2.038	2.272	2.055	2.150	2.153	E4	4.31
7)		Fluorene	2.058	2.058	1.987	2.216	2.007	2.104	2.072	E4	3.96
8)		Phenanthrene	1.769	1.895	1.852	2.125	1.903	2.012	1.926	E4	6.52
9)		Anthracene	2.387	2.301	1.996	2.196	1.973	2.055	2.152	E4	7.91
10)	S	O-Terphenyl	2.300	2.262	2.109	2.344	2.091	2.191	2.216	E4	4.65
11)		Fluoranthene	2.124	2.126	1.983	2.227	1.993	2.105	2.093	E4	4.39
12)		Pyrene	2.269	2.238	2.081	2.300	2.051	2.150	2.181	E4	4.72
13)		Benzo(a)Anthracene	2.193	2.145	2.021	2.274	2.032	2.121	2.131	E4	4.53
14)		Chrysene	2.261	2.189	2.046	2.278	2.028	2.115	2.153	E4	4.96
15)		Benzo(b)Fluoranthen	2.162	2.098	2.012	2.271	2.055	2.153	2.125	E4	4.31
16)		Benzo(k)Fluoranthen	2.337	2.221	2.063	2.298	2.049	2.131	2.183	E4	5.56
17)		Benzo(a) Pyrene	2.228	2.120	2.001	2.255	2.016	2.098	2.120	E4	4.96
18)		Indeno(1,2,3-cd)pyr	2.018	2.015	1.944	2.230	2.015	2.130	2.059	E4	5.00
19)		Dibenzo(a,h)anthrac	2.350	2.214	2.028	2.220	1.978	2.045	2.139	E4	6.72
20)		Benzo(g,h,i) Peryle	2.190	2.119	1.986	2.225	1.996	2.085	2.100	E4	4.67

Initial Calibration Summary

Job Number: F19788
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GIJ869-ICC869
Lab FileID: IJ18163.D

Average % RSD = 5.1

(#) = Out of Range

8100_H2.M Mon Aug 04 09:38:20 2003

6.7

Continuing Calibration Summary

Job Number: F19788
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GIJ886-CC869
Lab FileID: IJ18457.D

Evaluate Continuing Calibration Report

```
Signal #1 : C:\HPCHEM\1\DATA\1001PAH\IJ18457.D\FID1B.CH  Vial: 1
Signal #2 : C:\HPCHEM\1\DATA\1001PAH\IJ18457.D\FID2A.CH
Acq On    :  1 Oct 2003   8:00 am                  Operator: SARAHM
Sample    : CC869-10                               Inst    : FID 1
Misc      : op8665,gij886,1000,,,1,,water          Multiplr: 1.00
IntFile Signal #1: events.e     IntFile Signal #2: events2.e

Method       : C:\HPCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title        : PAH's BY EPA 610 OR 8100
Last Update  : Wed Sep 17 08:24:36 2003
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  15%     Max. Rel. Area : 200%
```

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Naphthalene	10.000	10.544	-5.4	105	0.00
2		2-Methyl Naphthalene	10.000	10.374	-3.7	104	0.00
3		1-Methyl Naphthalene	10.000	10.313	-3.1	103	0.00
4	S	2-Fluorobiphenyl	10.000	10.328	-3.3	108	0.00
5		Acenaphthylene	10.000	10.117	-1.2	100	0.00
6		Acenaphthene	10.000	10.335	-3.4	103	0.00
7		Fluorene	10.000	10.094	-0.9	99	0.00
8		Phenanthrene	10.000	10.161	-1.6	100	0.00
9		Anthracene	10.000	11.023	-10.2	106	0.00
10	S	O-Terphenyl	10.000	10.834	-8.3	106	0.00
11		Fluoranthene	10.000	10.517	-5.2	103	0.00
12		Pyrene	10.000	10.809	-8.1	107	0.00
13		Benzo(a)Anthracene	10.000	10.054	-0.5	101	0.00
14		Chrysene	10.000	10.764	-7.6	105	0.00
15		Benzo(b)Fluoranthene	10.000	9.729	2.7	98	0.00
16		Benzo(k)Fluoranthene	10.000	10.706	-7.1	104	-0.01
17		Benzo(a) Pyrene	10.000	10.288	-2.9	102	0.00
18		Indeno(1,2,3-cd)pyrene	10.000	10.137	-1.4	102	-0.01
19		Dibenzo(a,h)anthracene	10.000	10.481	-4.8	102	0.00
20		Benzo(g,h,i) Perylene	10.000	10.761	-7.6	104	-0.01

Signal #2

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Naphthalene	10.000	10.606	-6.1	106	0.00
2		2-Methyl Naphthalene	10.000	10.394	-3.9	105	0.00
3		1-Methyl Naphthalene	10.000	10.303	-3.0	104	0.00
4	S	2-Fluorobiphenyl	10.000	10.618	-6.2	107	0.00
5		Acenaphthylene	10.000	10.525	-5.3	104	0.00
6		Acenaphthene	10.000	10.719	-7.2	106	0.00
7		Fluorene	10.000	10.774	-7.7	108	0.00
8		Phenanthrene	10.000	10.319	-3.2	105	0.00
9		Anthracene	10.000	11.776	-17.8#	110	0.00
10	S	O-Terphenyl	10.000	10.904	-9.0	107	0.00
11		Fluoranthene	10.000	10.749	-7.5	106	0.00
12		Pyrene	10.000	10.962	-9.6	107	0.00
13		Benzo(a)Anthracene	10.000	10.603	-6.0	105	-0.01
14		Chrysene	10.000	10.669	-6.7	105	-0.01
15		Benzo(b)Fluoranthene	10.000	9.959	0.4	101	-0.02

Continuing Calibration Summary

Job Number: F19788
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GIJ886-CC869
Lab FileID: IJ18457.D

16	Benzo(k)Fluoranthene	10.000	10.502	-5.0	103	-0.02
17	Benzo(a) Pyrene	10.000	10.468	-4.7	105	-0.01
18	Indeno(1,2,3-cd)pyrene	10.000	10.102	-1.0	103	-0.01
19	Dibenzo(a,h)anthracene	10.000	10.832	-8.3	105	0.00
20	Benzo(g,h,i) Perylene	10.000	10.544	-5.4	105	-0.02

Average % D = 5.3

(#) = Out of Range SPCC's out = 0 CCC's out = 0
IJ18162.D 8100_H2.M Wed Oct 01 15:18:54 2003

Continuing Calibration Summary

Job Number: F19788
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GIJ886-CC869
Lab FileID: IJ18463.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\1001PAH\IJ18463.D\FID1B.CH Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\1001PAH\IJ18463.D\FID2A.CH
Acq On : 1 Oct 2003 10:57 am Operator: SARAHM
Sample : CC869-30 Inst : FID 1
Misc : op8665,gij886,1000,,,1,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : C:\HPCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title : PAH's BY EPA 610 OR 8100
Last Update : Wed Sep 17 08:24:36 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Naphthalene	30.000	29.076	3.1	93	0.00
2		2-Methyl Naphthalene	30.000	29.070	3.1	92	0.00
3		1-Methyl Naphthalene	30.000	28.934	3.6	91	0.00
4	S	2-Fluorobiphenyl	30.000	29.019	3.3	90	0.00
5		Acenaphthylene	30.000	28.979	3.4	92	0.00
6		Acenaphthene	30.000	29.073	3.1	92	0.00
7		Fluorene	30.000	29.174	2.8	92	0.00
8		Phenanthrene	30.000	29.535	1.5	92	0.00
9		Anthracene	30.000	29.590	1.4	95	0.00
10	S	O-Terphenyl	30.000	29.347	2.2	93	0.00
11		Fluoranthene	30.000	29.500	1.7	93	0.00
12		Pyrene	30.000	30.118	-0.4	95	0.00
13		Benzo(a)Anthracene	30.000	28.865	3.8	89	0.00
14		Chrysene	30.000	28.763	4.1	92	0.00
15		Benzo(b)Fluoranthene	30.000	28.886	3.7	89	0.00
16		Benzo(k)Fluoranthene	30.000	27.979	6.7	90	0.00
17		Benzo(a) Pyrene	30.000	28.587	4.7	90	0.00
18		Indeno(1,2,3-cd)pyrene	30.000	28.735	4.2	89	0.00
19		Dibenzo(a,h)anthracene	30.000	28.032	6.6	90	0.00
20		Benzo(g,h,i) Perylene	30.000	28.515	4.9	90	0.00

Signal #2

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Naphthalene	30.000	29.026	3.2	92	0.00
2		2-Methyl Naphthalene	30.000	29.441	1.9	92	0.00
3		1-Methyl Naphthalene	30.000	29.148	2.8	91	0.00
4	S	2-Fluorobiphenyl	30.000	29.246	2.5	91	0.00
5		Acenaphthylene	30.000	29.364	2.1	93	0.00
6		Acenaphthene	30.000	29.505	1.7	93	0.00
7		Fluorene	30.000	30.056	-0.2	94	0.00
8		Phenanthrene	30.000	30.430	-1.4	92	0.00
9		Anthracene	30.000	29.233	2.6	95	0.00
10	S	O-Terphenyl	30.000	29.932	0.2	94	0.00
11		Fluoranthene	30.000	30.007	-0.0	94	0.00
12		Pyrene	30.000	30.102	-0.3	95	0.00
13		Benzo(a)Anthracene	30.000	29.411	2.0	92	0.00
14		Chrysene	30.000	29.110	3.0	92	0.00
15		Benzo(b)Fluoranthene	30.000	29.427	1.9	92	0.00

Continuing Calibration Summary

Job Number: F19788
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GIJ886-CC869
Lab FileID: IJ18463.D

16	Benzo(k)Fluoranthene	30.000	29.102	3.0	92	0.00
17	Benzo(a) Pyrene	30.000	29.120	2.9	91	0.00
18	Indeno(1,2,3-cd)pyrene	30.000	29.396	2.0	90	0.00
19	Dibenzo(a,h)anthracene	30.000	29.056	3.1	93	0.00
20	Benzo(g,h,i) Perylene	30.000	29.207	2.6	92	-0.01

Average % D = 2.7

(#) = Out of Range SPCC's out = 0 CCC's out = 0
IJ18164.D 8100_H2.M Wed Oct 01 15:18:26 2003

Continuing Calibration Summary

Job Number: F19788 **Sample:** GIJ886-CC869
Account: EEINCJX EEI **Lab FileID:** IJ18473.D
Project: Camp Lejeune-Campbell St. Fuel Farm

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\1001PAH\IJ18473.D\FID1B.CH Vial: 17
Signal #2 : C:\HPCHEM\1\DATA\1001PAH\IJ18473.D\FID2A.CH
Acq On : 1 Oct 2003 4:13 pm Operator: SARAHM
Sample : CC869-30 Inst : FID 1
Misc : op8665,gij886,1000,,,1,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : C:\HPCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title : PAH's BY EPA 610 OR 8100
Last Update : Wed Sep 17 08:24:36 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Naphthalene	30.000	29.441	1.9	94	0.00
2		2-Methyl Naphthalene	30.000	29.490	1.7	93	0.00
3		1-Methyl Naphthalene	30.000	29.294	2.4	93	0.00
4	S	2-Fluorobiphenyl	30.000	29.518	1.6	92	0.00
5		Acenaphthylene	30.000	29.347	2.2	93	0.00
6		Acenaphthene	30.000	29.369	2.1	93	0.00
7		Fluorene	30.000	29.465	1.8	93	0.00
8		Phenanthrene	30.000	29.923	0.3	93	0.00
9		Anthracene	30.000	29.746	0.8	95	0.00
10	S	O-Terphenyl	30.000	29.646	1.2	94	0.00
11		Fluoranthene	30.000	29.865	0.5	94	0.00
12		Pyrene	30.000	29.568	1.4	94	0.00
13		Benzo(a)Anthracene	30.000	29.418	1.9	91	0.00
14		Chrysene	30.000	29.009	3.3	93	0.00
15		Benzo(b)Fluoranthene	30.000	29.474	1.8	91	0.00
16		Benzo(k)Fluoranthene	30.000	28.281	5.7	91	0.00
17		Benzo(a) Pyrene	30.000	28.841	3.9	91	0.00
18		Indeno(1,2,3-cd)pyrene	30.000	29.230	2.6	91	0.00
19		Dibenzo(a,h)anthracene	30.000	28.505	5.0	91	0.00
20		Benzo(g,h,i) Perylene	30.000	28.765	4.1	91	0.00

Signal #2

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Naphthalene	30.000	29.440	1.9	93	0.01
2		2-Methyl Naphthalene	30.000	29.879	0.4	93	0.00
3		1-Methyl Naphthalene	30.000	29.599	1.3	93	0.00
4	S	2-Fluorobiphenyl	30.000	29.695	1.0	93	0.00
5		Acenaphthylene	30.000	29.747	0.8	94	0.00
6		Acenaphthene	30.000	29.767	0.8	94	0.00
7		Fluorene	30.000	30.425	-1.4	95	0.00
8		Phenanthrene	30.000	30.953	-3.2	94	0.00
9		Anthracene	30.000	29.532	1.6	96	0.00
10	S	O-Terphenyl	30.000	30.253	-0.8	95	0.00
11		Fluoranthene	30.000	30.412	-1.4	95	0.00
12		Pyrene	30.000	30.472	-1.6	96	0.00
13		Benzo(a)Anthracene	30.000	29.856	0.5	93	-0.01
14		Chrysene	30.000	29.550	1.5	93	-0.01
15		Benzo(b)Fluoranthene	30.000	29.618	1.3	92	-0.01

6.7

Continuing Calibration Summary

Job Number: F19788
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GIJ886-CC869
Lab FileID: IJ18473.D

16	Benzo(k)Fluoranthene	30.000	29.483	1.7	93	-0.01
17	Benzo(a) Pyrene	30.000	29.705	1.0	93	-0.01
18	Indeno(1,2,3-cd)pyrene	30.000	29.983	0.1	92	-0.01
19	Dibenzo(a,h)anthracene	30.000	29.478	1.7	95	-0.01
20	Benzo(g,h,i) Perylene	30.000	29.554	1.5	93	-0.01

Average % D = 1.8

(#) = Out of Range SPCC's out = 0 CCC's out = 0
IJ18164.D 8100_H2.M Thu Oct 02 08:36:00 2003

6.7

Continuing Calibration Summary

Job Number: F19788 **Sample:** GIJ886-CC869
Account: EEINCJX EEI **Lab FileID:** IJ18483.D
Project: Camp Lejeune-Campbell St. Fuel Farm

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\1001PAH\IJ18483.D\FID1B.CH Vial: 17
Signal #2 : C:\HPCHEM\1\DATA\1001PAH\IJ18483.D\FID2A.CH
Acq On : 1 Oct 2003 8:59 pm Operator: SARAHM
Sample : CC869-30 Inst : FID 1
Misc : op8665,gij886,1000,,,1,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : C:\HPCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title : PAH's BY EPA 610 OR 8100
Last Update : Wed Sep 17 08:24:33 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Naphthalene	30.000	29.869	0.4	95	0.00
2		2-Methyl Naphthalene	30.000	29.905	0.3	94	0.00
3		1-Methyl Naphthalene	30.000	29.735	0.9	94	0.00
4	S	2-Fluorobiphenyl	30.000	29.996	0.0	93	0.00
5		Acenaphthylene	30.000	29.824	0.6	94	0.00
6		Acenaphthene	30.000	29.862	0.5	95	0.00
7		Fluorene	30.000	29.989	0.0	95	0.00
8		Phenanthrene	30.000	30.306	-1.0	94	0.00
9		Anthracene	30.000	30.251	-0.8	97	0.00
10	S	O-Terphenyl	30.000	30.080	-0.3	95	0.00
11		Fluoranthene	30.000	30.294	-1.0	95	0.00
12		Pyrene	30.000	30.936	-3.1	98	0.00
13		Benzo(a)Anthracene	30.000	29.767	0.8	92	0.01
14		Chrysene	30.000	29.487	1.7	94	0.01
15		Benzo(b)Fluoranthene	30.000	29.815	0.6	92	0.01
16		Benzo(k)Fluoranthene	30.000	29.017	3.3	94	0.01
17		Benzo(a) Pyrene	30.000	29.255	2.5	92	0.01
18		Indeno(1,2,3-cd)pyrene	30.000	29.676	1.1	92	0.00
19		Dibenzo(a,h)anthracene	30.000	28.680	4.4	92	0.00
20		Benzo(g,h,i) Perylene	30.000	29.357	2.1	93	0.00

Signal #2

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Naphthalene	30.000	29.705	1.0	94	0.00
2		2-Methyl Naphthalene	30.000	30.190	-0.6	94	0.00
3		1-Methyl Naphthalene	30.000	29.953	0.2	94	0.00
4	S	2-Fluorobiphenyl	30.000	30.087	-0.3	94	0.00
5		Acenaphthylene	30.000	30.067	-0.2	95	0.00
6		Acenaphthene	30.000	30.147	-0.5	95	0.00
7		Fluorene	30.000	30.779	-2.6	96	0.00
8		Phenanthrene	30.000	31.382	-4.6	95	0.00
9		Anthracene	30.000	29.637	1.2	97	0.00
10	S	O-Terphenyl	30.000	30.595	-2.0	96	0.00
11		Fluoranthene	30.000	30.694	-2.3	96	-0.01
12		Pyrene	30.000	30.749	-2.5	97	-0.02
13		Benzo(a)Anthracene	30.000	30.163	-0.5	94	-0.03
14		Chrysene	30.000	29.898	0.3	94	-0.03
15		Benzo(b)Fluoranthene	30.000	30.423	-1.4	95	-0.03

Continuing Calibration Summary

Job Number: F19788
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GIJ886-CC869
Lab FileID: IJ18483.D

16	Benzo(k)Fluoranthene	30.000	30.198	-0.7	96	-0.03
17	Benzo(a) Pyrene	30.000	29.948	0.2	94	-0.03
18	Indeno(1,2,3-cd)pyrene	30.000	30.812	-2.7	95	-0.04
19	Dibenzo(a,h)anthracene	30.000	29.712	1.0	95	-0.04
20	Benzo(g,h,i) Perylene	30.000	29.377	2.1	92	-0.04

Average % D = 1.3

(#) = Out of Range SPCC's out = 0 CCC's out = 0
IJ18164.D 8100_H2.M Thu Oct 02 14:51:56 2003

6.7

Continuing Calibration Summary

Job Number: F19788
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GIJ887-CC869
Lab FileID: IJ18492.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\1002PAH\IJ18492.D\FID1B.CH Vial: 1
Signal #2 : C:\HPCHEM\1\DATA\1002PAH\IJ18492.D\FID2A.CH
Acq On : 2 Oct 2003 11:01 am Operator: SARAHM
Sample : cc869-30 Inst : FID 1
Misc : op8665,gij887,1000,,,1,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : C:\HPCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title : PAH's BY EPA 610 OR 8100
Last Update : Wed Sep 17 08:24:36 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Naphthalene	30.000	30.765	-2.6	98	0.00
2		2-Methyl Naphthalene	30.000	30.743	-2.5	97	0.00
3		1-Methyl Naphthalene	30.000	30.578	-1.9	97	0.00
4	S	2-Fluorobiphenyl	30.000	30.666	-2.2	95	0.00
5		Acenaphthylene	30.000	30.289	-1.0	96	0.00
6		Acenaphthene	30.000	31.033	-3.4	98	0.00
7		Fluorene	30.000	30.838	-2.8	97	0.00
8		Phenanthrene	30.000	31.154	-3.8	97	0.00
9		Anthracene	30.000	31.301	-4.3	100	0.00
10	S	O-Terphenyl	30.000	31.117	-3.7	98	0.00
11		Fluoranthene	30.000	31.194	-4.0	98	0.00
12		Pyrene	30.000	31.862	-6.2	101	0.00
13		Benzo(a)Anthracene	30.000	30.430	-1.4	94	0.00
14		Chrysene	30.000	30.542	-1.8	97	0.00
15		Benzo(b)Fluoranthene	30.000	30.616	-2.1	95	0.00
16		Benzo(k)Fluoranthene	30.000	29.743	0.9	96	0.00
17		Benzo(a) Pyrene	30.000	30.107	-0.4	95	0.00
18		Indeno(1,2,3-cd)pyrene	30.000	29.183	2.7	90	0.00
19		Dibenzo(a,h)anthracene	30.000	28.464	5.1	91	0.00
20		Benzo(g,h,i) Perylene	30.000	29.224	2.6	92	0.00

Signal #2

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Naphthalene	30.000	30.726	-2.4	97	0.00
2		2-Methyl Naphthalene	30.000	31.238	-4.1	97	0.00
3		1-Methyl Naphthalene	30.000	30.950	-3.2	97	0.00
4	S	2-Fluorobiphenyl	30.000	31.028	-3.4	97	0.00
5		Acenaphthylene	30.000	30.712	-2.4	97	0.00
6		Acenaphthene	30.000	31.497	-5.0	100	0.00
7		Fluorene	30.000	31.771	-5.9	99	0.00
8		Phenanthrene	30.000	32.321	-7.7	98	0.00
9		Anthracene	30.000	30.660	-2.2	100	0.00
10	S	O-Terphenyl	30.000	31.690	-5.6	100	0.00
11		Fluoranthene	30.000	31.815	-6.1	100	0.00
12		Pyrene	30.000	31.807	-6.0	101	0.00
13		Benzo(a)Anthracene	30.000	31.030	-3.4	97	0.00
14		Chrysene	30.000	30.987	-3.3	98	0.00
15		Benzo(b)Fluoranthene	30.000	30.880	-2.9	96	0.00

Continuing Calibration Summary

Job Number: F19788
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GIJ887-CC869
Lab FileID: IJ18492.D

16	Benzo(k)Fluoranthene	30.000	30.545	-1.8	97	0.00
17	Benzo(a) Pyrene	30.000	30.588	-2.0	96	0.00
18	Indeno(1,2,3-cd)pyrene	30.000	29.932	0.2	92	0.00
19	Dibenzo(a,h)anthracene	30.000	29.730	0.9	96	0.00
20	Benzo(g,h,i) Perylene	30.000	29.233	2.6	92	0.00

Average % D = 3.2

(#) = Out of Range SPCC's out = 0 CCC's out = 0
IJ18164.D 8100_H2.M Fri Oct 03 08:24:13 2003

Continuing Calibration Summary

Job Number: FI9788
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GIJ887-CC869
Lab FileID: IJ18500.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\1002PAH\IJ18500.D\FID1B.CH Vial: 9
Signal #2 : C:\HPCHEM\1\DATA\1002PAH\IJ18500.D\FID2A.CH
Acq On : 2 Oct 2003 2:50 pm Operator: SARAHM
Sample : cc869-20 Inst : FID 1
Misc : op8665,gij887,1000,,,1,2,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : C:\HPCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title : PAH's BY EPA 610 OR 8100
Last Update : Wed Sep 17 08:24:36 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Naphthalene	20.000	19.215	3.9	102	0.00
2		2-Methyl Naphthalene	20.000	18.969	5.2	100	0.00
3		1-Methyl Naphthalene	20.000	18.932	5.3	100	0.00
4	S	2-Fluorobiphenyl	20.000	18.687	6.6	99	0.00
5		Acenaphthylene	20.000	19.044	4.8	100	0.00
6		Acenaphthene	20.000	19.117	4.4	101	0.00
7		Fluorene	20.000	19.135	4.3	100	0.00
8		Phenanthrene	20.000	18.972	5.1	99	0.00
9		Anthracene	20.000	19.833	0.8	104	0.00
10	S	O-Terphenyl	20.000	19.445	2.8	102	0.00
11		Fluoranthene	20.000	19.405	3.0	102	0.00
12		Pyrene	20.000	19.632	1.8	104	0.00
13		Benzo(a)Anthracene	20.000	18.650	6.8	98	0.00
14		Chrysene	20.000	19.215	3.9	102	0.00
15		Benzo(b)Fluoranthene	20.000	18.388	8.1	96	0.00
16		Benzo(k)Fluoranthene	20.000	18.979	5.1	102	0.00
17		Benzo(a) Pyrene	20.000	18.648	6.8	99	0.00
18		Indeno(1,2,3-cd)pyrene	20.000	17.841	10.8	94	0.00
19		Dibenzo(a,h)anthracene	20.000	18.453	7.7	98	0.00
20		Benzo(g,h,i) Perylene	20.000	18.466	7.7	98	0.00

Signal #2

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Naphthalene	20.000	18.872	5.6	100	0.00
2		2-Methyl Naphthalene	20.000	18.789	6.1	100	0.00
3		1-Methyl Naphthalene	20.000	19.212	3.9	101	0.00
4	S	2-Fluorobiphenyl	20.000	19.407	3.0	103	0.00
5		Acenaphthylene	20.000	19.058	4.7	101	0.00
6		Acenaphthene	20.000	19.130	4.4	101	0.00
7		Fluorene	20.000	19.448	2.8	101	0.00
8		Phenanthrene	20.000	19.137	4.3	100	0.00
9		Anthracene	20.000	20.534	-2.7	111	0.00
10	S	O-Terphenyl	20.000	19.573	2.1	103	0.00
11		Fluoranthene	20.000	19.636	1.8	104	0.00
12		Pyrene	20.000	19.619	1.9	103	0.00
13		Benzo(a)Anthracene	20.000	19.096	4.5	101	0.00
14		Chrysene	20.000	18.981	5.1	100	0.00
15		Benzo(b)Fluoranthene	20.000	18.928	5.4	100	-0.01

Continuing Calibration Summary

Job Number: F19788
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GIJ887-CC869
Lab FileID: IJ18500.D

16	Benzo(k)Fluoranthene	20.000	19.070	4.6	101	-0.02
17	Benzo(a) Pyrene	20.000	19.047	4.8	101	-0.01
18	Indeno(1,2,3-cd)pyrene	20.000	18.219	8.9	96	-0.02
19	Dibenzo(a,h)anthracene	20.000	19.051	4.7	100	-0.02
20	Benzo(g,h,i) Perylene	20.000	18.323	8.4	97	-0.03

Average % D = 4.9

(#) = Out of Range SPCC's out = 0 CCC's out = 0
IJ18163.D 8100_H2.M Fri Oct 03 08:24:38 2003

Southeast
ACCUTEST.
Laboratories

12/08/05

Technical Report for

EEI

Camp Lejeune-Campbell St. Fuel Farm

844271

Accutest Job Number: F19845

Sampling Date: 09/30/03

Report to:

EEI

bmorris@eeimail.com

ATTN: Bill Morris

Total number of pages in report: 76

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Sections: 1 2 3 4 5 6 7

Table of Contents

-1-

Section 1: Sample Summary **3**
Section 2: Sample Results **4**
2.1: F19845-1: CSFF-EFF-001 4
2.2: F19845-2: RWC-1 8
2.3: F19845-3: RWC-2 9
2.4: F19845-4: RWC-3 10
2.5: F19845-5: RWC-3D 11
Section 3: Misc. Forms **12**
3.1: Chain of Custody 13
Section 4: GC Volatiles - QC Data Summaries **15**
4.1: Method Blank Summary 16
4.2: Blank Spike Summary 18
4.3: Matrix Spike/Matrix Spike Duplicate Summary 20
4.4: Surrogate Recovery Summaries 22
4.5: GC Surrogate Retention Time Summaries 23
4.6: Initial and Continuing Calibration Summaries 25
Section 5: GC Semi-volatiles - QC Data Summaries **30**
5.1: Method Blank Summary 31
5.2: Blank Spike Summary 33
5.3: Matrix Spike/Matrix Spike Duplicate Summary 34
5.4: Duplicate Summary 35
5.5: Surrogate Recovery Summaries 36
5.6: GC Surrogate Retention Time Summaries 37
5.7: Initial and Continuing Calibration Summaries 40
Section 6: Metals Analysis - QC Data Summaries **54**
6.1: Inst QC MA3507: As,Ba,Be,Cd,Cr,Fe,Pb,Mn,Se 55
6.2: Prep QC MP5920: As,Ba,Be,Cd,Cr,Fe,Pb,Mn,Se 69
Section 7: General Chemistry - QC Data Summaries **74**
7.1: Method Blank and Spike Results Summary 75
7.2: Duplicate Results Summary 76

Sample Summary

EEI

Job No: F19845

Camp Lejeune-Campbell St. Fuel Farm
Project No: 844271

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
F19845-1	09/30/03	10:15	MM	10/01/03	AQ	Ground Water	CSFF-EFF-001
F19845-2	09/30/03	09:09	MM	10/01/03	AQ	Ground Water	RWC-1
F19845-3	09/30/03	09:28	MM	10/01/03	AQ	Ground Water	RWC-2
F19845-4	09/30/03	09:50	MM	10/01/03	AQ	Ground Water	RWC-3
F19845-5	09/30/03	09:55	MM	10/01/03	AQ	Ground Water	RWC-3D

Report of Analysis

Client Sample ID:	CSFF-EFF-001		
Lab Sample ID:	F19845-1	**Date Sampled:**	09/30/03
Matrix:	AQ - Ground Water	**Date Received:**	10/01/03
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF030846.D	1	10/08/03	CV	n/a	n/a	GEF1124
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Rnn# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	84%		74-127%
98-08-8	aaa-Trifluorotoluene	91%		73-135%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CSFF-EFF-001		
Lab Sample ID:	F19845-1	**Date Sampled:**	09/30/03
Matrix:	AQ - Ground Water	**Date Received:**	10/01/03
Method:	EPA 610 EPA 610	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IJ18531.D	1	10/07/03	SD	10/06/03	OP8720	GIJ888
Run #2							

	Initial Volume	Final Volume
Run #1	990 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.1	2.0	ug/l	
208-96-8	Acenaphthylene	ND	5.1	2.0	ug/l	
120-12-7	Anthracene	ND	5.1	2.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.1	2.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.1	2.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.1	2.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.1	2.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.1	2.0	ug/l	
218-01-9	Chrysene	ND	5.1	2.0	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.1	2.0	ug/l	
206-44-0	Fluoranthene	ND	5.1	2.0	ug/l	
86-73-7	Fluorene	ND	5.1	2.0	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.1	2.0	ug/l	
91-20-3	Naphthalene	ND	5.1	2.0	ug/l	
90-12-0	1-Methylnaphthalene	ND	5.1	2.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.1	2.0	ug/l	
85-01-8	Phenanthrene	ND	5.1	2.0	ug/l	
129-00-0	Pyrene	ND	5.1	2.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	49%		41-139%
84-15-1	o-Terphenyl	78%		46-135%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indieates analyte found in associated method blank
N = Indicates presumptive evidcnce of a compound

Report of Analysis

Client Sample ID:	CSFF-EFF-001		
Lab Sample ID:	F19845-1	**Date Sampled:**	09/30/03
Matrix:	AQ - Ground Water	**Date Received:**	10/01/03
		Percent Solids:	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	< 10	10	ug/l	1	10/07/03	10/08/03	DM	SW846 6010B [1]	SW846 3010A [2]
Barium	< 200	200	ug/l	1	10/07/03	10/08/03	DM	SW846 6010B [1]	SW846 3010A [2]
Beryllium	< 5.0	5.0	ug/l	1	10/07/03	10/08/03	DM	SW846 6010B [1]	SW846 3010A [2]
Cadmium	< 5.0	5.0	ug/l	1	10/07/03	10/08/03	DM	SW846 6010B [1]	SW846 3010A [2]
Chromium	< 10	10	ug/l	1	10/07/03	10/08/03	DM	SW846 6010B [1]	SW846 3010A [2]
Iron	< 300	300	ug/l	1	10/07/03	10/08/03	DM	SW846 6010B [1]	SW846 3010A [2]
Lead	< 5.0	5.0	ug/l	1	10/07/03	10/08/03	DM	SW846 6010B [1]	SW846 3010A [2]
Manganese	< 15	15	ug/l	1	10/07/03	10/08/03	DM	SW846 6010B [1]	SW846 3010A [2]
Selenium	< 10	10	ug/l	1	10/07/03	10/08/03	DM	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA3507
(2) Prep QC Batch: MP5920

RL = Reporting Limit

Report of Analysis

Client Sample ID:	CSFF-EFF-001		
Lab Sample ID:	F19845-1	**Date Sampled:**	09/30/03
Matrix:	AQ - Ground Water	**Date Received:**	10/01/03
		Percent Solids:	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Hardness, Total as CaCO3	273	4.0	mg/l	1	10/21/03	DM	SW846 6010B/SM 2340B
Solids, Total Dissolved	330	10	mg/l	1	10/07/03	LIR	EPA 160.1
Solids, Total Suspended	< 4.0	4.0	mg/l	1	10/07/03	LIR	EPA 160.2

RL = Reporting Limit

Report of Analysis

Client Sample ID:	RWC-1		
Lab Sample ID:	F19845-2	**Date Sampled:**	09/30/03
Matrix:	AQ - Ground Water	**Date Received:**	10/01/03
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF030849.D	1	10/09/03	CV	n/a	n/a	GEF1124
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Diehlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	84%		74-127%
98-08-8	aaa-Trifluorotoluene	91%		73-135%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indieates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RWC-2		
Lab Sample ID:	F19845-3	**Date Sampled:**	09/30/03
Matrix:	AQ - Ground Water	**Date Received:**	10/01/03
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	EF030850.D	1	10/09/03	CV	n/a	n/a	GEF1124
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	70.4	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	10.1	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	27.8	1.0	0.50	ug/l	
108-88-3	Toluene	20.4	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	42.5	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	95%		74-127%
98-08-8	aaa-Trifluorotoluene	100%		73-135%

(a) All hits confirmed by dual column analysis.

ND = Not deteeted MDL - Method Deteetion Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RWC-3		
Lab Sample ID:	F19845-4	**Date Sampled:**	09/30/03
Matrix:	AQ - Ground Water	**Date Received:**	10/01/03
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF030851.D	1	10/09/03	CV	n/a	n/a	GEF1124
Run #2 [a]	EF030870.D	2	10/09/03	CV	n/a	n/a	GEF1125

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	169 [b]	2.0	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	21.0	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	38.9	1.0	0.50	ug/l	
108-88-3	Toluene	14.4	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	179	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	95%	95%	74-127%
98-08-8	aaa-Trifluorotoluene	104%	102%	73-135%

(a) All hits confirmed by dual column analysis.
(b) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RWC-3D		
Lab Sample ID:	F19845-5	**Date Sampled:**	09/30/03
Matrix:	AQ - Ground Water	**Date Received:**	10/01/03
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF030852.D	1	10/09/03	CV	n/a	n/a	GEF1124
Run #2 [a]	EF030871.D	5	10/09/03	CV	n/a	n/a	GEF1125

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	229 [b]	5.0	2.5	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	27.6	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	43.2	1.0	0.50	ug/l	
108-88-3	Toluene	17.7	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	213	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	96%	96%	74-127%
98-08-8	aaa-Trifluorotoluene	104%	100%	73-135%

(a) All hits confirmed by dual column analysis.
(b) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

COC Number: 844272-CSFF-093003

F19845

CHAIN-OF-CUSTODY RECORD

Engineering & Environment, Inc. - Piney Green Rd. Lot 203 - 910-539-5606								Receiving Lab: Accutest																		
Project Name: Campbell Street Fuel Farm				Project Location: CAMP LEJEUNE, NC (New River Air Station)				Analysis Desired																		
Project Number		Contact: Bill Morris		P.O. Number				VOC 602	Metals 6010	Total Hardness	TSS/TDS 160.1/160.2	SVOC 610														
Client Rep: US NAVY - LANTDIV				Project Manager: Moke Slade																						
Item No.	Sample Number	Date	Time	Comp	Grab	Sample Description	Number of Containers																			
1	CSFF-EFF 001	09/30/03	1015		X	System Effluent Sample	7	X	X	X	X	X														
2	RWC-1	09/30/03	0909		X	RWC-1	3	X	X	X	X	X														
3	RWB-1	09/30/03	0928		X	RWB-1	3	X																		
4	RWB-3	09/30/03	0950		X	RWB-3	3	X																		
5	RWB-3D	09/30/03	0955		X	RWB-3 DUP	3	X																		
6																										
7																										
8																										
9																										
10																										

Transfer Number	Item Number	Transfers Relinquished By	Transfers Accepted By	Date	Time	Remarks
1	1-6	[signature]	FedEx 8369 1400 3069	9/30/03	16:00	
2		FedEx	Muna Mohammed	10/1/03	0900.	
3						
4						1.8, 4.0, 2.8, 3.2.

ACCUTEST LABORATORIES SOUTHEAST SAMPLE RECEIPT CONFIRMATION

F19845

Accutest's Job Number: F19845 on 10.11.03

Client: Shaw **Project:** Campbell & Street fuel farm

Date Received: 10/11/03 **Time Received:** 0900

of Coolers Received: 4 **Cooler Temperatures:** 1.8, 4.0, 2.8, 5.2

Delivery Method: (FedEx) UPS Accutest Courier Greyhound Delivery Other

Air Bill Number:

Cooler Custody Seals Intact ?	(Yes)	No
Chain of Custody Provided ?	(Yes)	No
COC Match Bottle Label ID's ?	Yes	(No)
Sample Labels Present on all bottles ?	(Yes)	No
All Analyses Marked On COC ?	(Yes)	No
Are All Bottles Intact ?	(Yes)	No
Samples Preserved Correctly ?	(Yes)	No
Correct Number of Containers Used ?	(Yes)	No
Sufficient Sample Volume ?	(Yes)	No
Trip Blank Provided ?	Yes	(No)
Trip Blank on COC ?	Yes	(No)
Trip Blank Intact ?	Yes	No (N/A)
Trip Blank Matrix ?	Soil	Water (N/A)
Number of Encores ?	0	
Number of Boil Field Kits ?	0	

Summary of Comments: Sample #1 (CSFF-EFF 001) the labels states ID as CSFFEFF-3003, but time matches COC.
Sample #2 (RWC-1) only vials received

Signature: Munera Mohammed **Date:** 10/11/03

HMS.

ASBD/HW 05/11/03

4

GC Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: F19845
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GEF1124-MB	EF030845.D	1	10/08/03	CV	n/a	n/a	GEF1124

The QC reported here applies to the following samples: **Method:** EPA 601/602

F19845-1, F19845-2, F19845-3, F19845-4, F19845-5

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
352-33-0	1-Chloro-4-fluorobenzene	85%	74-127%
98-08-8	aaa-Trifluorotoluene	91%	73-135%

Method Blank Summary

Job Number: F19845
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GEF1125-MB	EF030869.D	1	10/09/03	CV	n/a	n/a	GEF1125

The QC reported here applies to the following samples: **Method:** EPA 601/602

F19845-4, F19845-5

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries		Limits
352-33-0	1-Chloro-4-fluorobenzene	83%	74-127%
98-08-8	aaa-Trifluorotoluene	91%	73-135%

Blank Spike Summary

Job Number: F19845
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GEF1124-BS	EF030844.D	1	10/08/03	CV	n/a	n/a	GEF1124

The QC reported bere applies to the following samples: **Method:** EPA 601/602

F19845-1, F19845-2, F19845-3, F19845-4, F19845-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	20	20.4	102	88-121
108-90-7	Chlorobenzene	20	18.8	94	87-120
95-50-1	1,2-Dichlorobenzene	20	18.0	90	81-119
541-73-1	1,3-Dichlorobenzene	20	19.1	96	82-120
106-46-7	1,4-Dichlorobenzene	20	18.7	94	81-120
100-41-4	Ethylbenzene	20	19.2	96	86-125
1634-04-4	Methyl Tert Butyl Ether	20	18.7	94	80-117
108-88-3	Toluene	20	19.8	99	89-123
1330-20-7	Xylenes (total)	60	58.1	97	89-124

CAS No.	Surrogate Recoveries	BSP	Limits
352-33-0	1-Chloro-4-fluorobenzene	94%	74-127%
98-08-8	aaa-Trifluorotoluene	95%	73-135%

Blank Spike Summary

Job Number: F19845
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GEF1125-BS	EF030868.D	1	10/09/03	CV	n/a	n/a	GEF1125

4.2

The QC reported here applies to the following samples: **Method:** EPA 601/602

F19845-4, F19845-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	20	21.1	106	88-121

CAS No.	Surrogate Recoveries	BSP	Limits
352-33-0	1-Chloro-4-fluorobenzene	98%	74-127%
98-08-8	aaa-Trifluorotoluene	98%	73-135%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F19845
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F19845-1MS	EF030847.D	1	10/08/03	CV	n/a	n/a	GEF1124
F19845-1MSD	EF030848.D	1	10/09/03	CV	n/a	n/a	GEF1124
F19845-1	EF030846.D	1	10/08/03	CV	n/a	n/a	GEF1124

The QC reported bere applies to the following samples: **Method:** EPA 601/602

F19845-1, F19845-2, F19845-3, F19845-4, F19845-5

CAS No.	Compound	F19845-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND		20	20.0	100	19.9	100	1	77-127/9
108-90-7	Chlorobenzene	ND		20	18.2	91	18.3	92	1	82-122/10
95-50-1	1,2-Dichlorobenzene	ND		20	17.4	87	17.8	89	2	69-133/13
541-73-1	1,3-Dichlorobenzene	ND		20	18.4	92	18.5	93	1	77-123/13
106-46-7	1,4-Dichlorobenzene	ND		20	18.1	91	18.1	91	0	73-127/13
100-41-4	Ethylbenzene	ND		20	18.7	94	18.7	94	0	68-136/11
1634-04-4	Methyl Tert Butyl Ether	ND		20	17.9	90	18.5	93	3	71-124/14
108-88-3	Toluene	ND		20	19.5	98	19.3	97	1	78-128/9
1330-20-7	Xylenes (total)	ND		60	57.0	95	57.2	95	0	71-136/11

CAS No.	Surrogate Recoveries	MS	MSD	F19845-1	Limits
352-33-0	1-Chloro-4-fluorobenzene	94%	94%	84%	74-127%
98-08-8	aaa-Trifluorotoluene	95%	96%	91%	73-135%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F19845
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F19939-1MS	EF030873.D	1	10/09/03	CV	n/a	n/a	GEF1125
F19939-1MSD	EF030874.D	1	10/09/03	CV	n/a	n/a	GEF1125
F19939-1	EF030872.D	1	10/09/03	CV	n/a	n/a	GEF1125

The QC reported here applies to the following samples: **Method:** EPA 601/602

F19845-4, F19845-5

CAS No.	Compound	F19939-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	1.0	U	20	20.3	102	20.3	102	0	77-127/9

CAS No.	Surrogate Recoveries	MS	MSD	F19939-1	Limits
352-33-0	1-Chloro-4-fluorobenzene	96%	95%	84%	74-127%
98-08-8	aaa-Trifluorotoluene	97%	96%	92%	73-135%

Volatile Surrogate Recovery Summary

Job Number: F19845
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Method: EPA 601/602 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S2 [a]
F19845-1	EF030846.D	84.0	91.0
F19845-2	EF030849.D	84.0	91.0
F19845-3	EF030850.D	95.0	100.0
F19845-4	EF030870.D	95.0	102.0
F19845-4	EF030851.D	95.0	104.0
F19845-5	EF030871.D	96.0	100.0
F19845-5	EF030852.D	96.0	104.0
F19845-1MS	EF030847.D	94.0	95.0
F19845-1MSD	EF030848.D	94.0	96.0
F19939-1MS	EF030873.D	96.0	97.0
F19939-1MSD	EF030874.D	95.0	96.0
GEF1124-BS	EF030844.D	94.0	95.0
GEF1124-MB	EF030845.D	85.0	91.0
GEF1125-BS	EF030868.D	98.0	98.0
GEF1125-MB	EF030869.D	83.0	91.0

Surrogate Compounds	Recovery Limits
S1 = 1-Chloro-4-fluorobenzene	74-127%
S2 = aaa-Trifluorotoluene	73-135%

(a) Recovery from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F19845
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GEF1123-CC1115	**Injection Date:**	10/08/03
Lab File ID:	EF030843.D	**Injection Time:**	22:16
Instrument ID:	GCEF	**Method:**	EPA 601/602

	S1 [a] RT	S2 [a] RT
Check Std	8.51	5.45

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
GEF1124-BS	EF030844.D	10/08/03	22:40	8.51	5.45
GEF1124-MB	EF030845.D	10/08/03	23:04	8.51	5.45
F19845-1	EF030846.D	10/08/03	23:28	8.52	5.45
F19845-1MS	EF030847.D	10/08/03	23:53	8.51	5.45
F19845-1MSD	EF030848.D	10/09/03	00:17	8.51	5.45
F19845-2	EF030849.D	10/09/03	00:42	8.51	5.45
F19845-3	EF030850.D	10/09/03	01:06	8.51	5.45
F19845-4	EF030851.D	10/09/03	01:30	8.51	5.45
F19845-5	EF030852.D	10/09/03	01:54	8.51	5.45
ZZZZZZ	EF030853.D	10/09/03	02:19	8.51	5.45

Snrrogate Compounds

S1 = 1-Chloro-4-fluorobenzene
S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F19845
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GEF1125-CC1115	**Injection Date:**	10/09/03
Lab File ID:	EF030867.D	**Injection Time:**	09:11
Instrument ID:	GCEF	**Method:**	EPA 601/602

	S1 [a] RT	S2 [a] RT
Check Std	8.51	5.45

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
GEF1125-BS	EF030868.D	10/09/03	09:48	8.51	5.45
GEF1126-BS	EF030868.D	10/09/03	09:48	8.51	5.45
GEF1125-MB	EF030869.D	10/09/03	10:12	8.51	5.45
GEF1126-MB	EF030869.D	10/09/03	10:12	8.51	5.45
F19845-4	EF030870.D	10/09/03	10:37	8.51	5.45
F19845-5	EF030871.D	10/09/03	11:04	8.51	5.45
F19939-1	EF030872.D	10/09/03	11:28	8.52	5.45
F19939-1MS	EF030873.D	10/09/03	11:54	8.51	5.45
F19939-1MSD	EF030874.D	10/09/03	12:19	8.51	5.45
ZZZZZZ	EF030875.D	10/09/03	12:43	8.51	5.45
ZZZZZZ	EF030876.D	10/09/03	13:39	8.51	5.45
ZZZZZZ	EF030877.D	10/09/03	14:03	8.51	5.45

Surrogate Compounds

S1 = 1-Chloro-4-fluorobenzene
S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #2

Initial Calibration Summary

Job Number: F19845
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GEF1115-ICC1115
Lab FileID: EF030588.D

Response Factor Report VOA1

Method : C:\HPCHEM\1\METHODS\DUAL1002.M (Chemstation Integrator)
Title : EPA 602 & 5030B/8021B
Last Update : Thu Sep 04 08:01:10 2003
Response via : Initial Calibration

Calibration Files
1 =EF030586.D 2 =EF030587.D 3 =EF030588.D
4 =EF030589.D 5 =EF030590.D 6 =EF030591.D

		Compound	1	2	3	4	5	6	Avg		%RSD
1)		Methyl tert Butyl E		7.314	6.491	6.487	6.505	6.372	6.634	E2	5.79
2)		Di-Isopropyl ether	0.845	1.155	1.058	1.044	1.037	1.026	1.027	E3	9.83
3)		Benzene	1.975	2.546	2.389	2.328	2.342	2.343	2.321	E3	8.07
4)	S	a,a,a-TFT(S)	6.790	6.891	6.979	7.090	7.440	7.269	7.076	E2	3.44
5)		Toluene	1.895	2.194	2.074	2.040	2.048	2.054	2.051	E3	4.65
6)	S	1-Chloro-4-Fluorobe	0.988	1.013	1.046	1.076	1.133	1.094	1.058	E3	5.07
7)		Chlorobenzene		2.370	2.073	2.016	2.031	2.031	2.104	E3	7.12
8)		Ethylbenzene		2.023	1.804	1.751	1.750	1.747	1.815	E3	6.53
9)		m,p-Xylene	1.785	2.072	1.927	1.890	1.881	1.884	1.907	E3	4.92
10)		o-Xylene	1.549	1.859	1.721	1.689	1.704	1.683	1.701	E3	5.81
11)		1,3-Dichlorobenzene	1.471	1.583	1.475	1.491	1.532	1.517	1.511	E3	2.79
12)		1,4-Dichlorobenzene	1.573	1.670	1.541	1.568	1.601	1.581	1.589	E3	2.78
13)		1,2-Dichlorobenzene	1.308	1.236	1.134	1.157	1.173	1.149	1.193	E3	5.60
Signal #2											
1)		Methyl tert Butyl E		1.837	1.638	1.652	1.614	1.555	1.659	E3	6.39
2)		Di-Isopropyl ether		2.857	2.630	2.598	2.554	2.498	2.627	E3	5.22
3)		Benzene	4.846	6.401	6.040	5.867	5.806	5.820	5.797	E3	8.91
4)	S	a,a,a-TFT(S)	1.654	1.685	1.721	1.774	1.815	1.745	1.732	E3	3.41
5)		Toluene	4.558	5.490	5.225	5.119	5.102	5.117	5.102	E3	5.96
6)	S	1-Chloro-4-Fluorobe	2.409	2.494	2.671	2.769	2.812	2.700	2.642	E3	5.99
7)		Chlorobenzene		6.373	5.359	5.159	5.237	5.120	5.450	E3	9.62
8)		Ethylbenzene	4.472	5.030	4.632	4.523	4.463	4.452	4.595	E3	4.85
9)		m,p-Xylene	4.607	5.368	4.976	4.895	4.889	4.850	4.931	E3	5.03
10)		o-Xylene	3.698	4.576	4.267	4.201	4.156	4.129	4.171	E3	6.78
11)		1,3-Dichlorobenzene	3.598	3.930	3.711	3.736	3.794	3.713	3.747	E3	2.94
12)		1,4-Dichlorobenzene	3.737	4.034	3.756	3.773	3.858	3.838	3.833	E3	2.85
13)		1,2-Dichlorobenzene	3.105	3.138	2.871	2.931	2.962	2.896	2.984	E3	3.74

(#) = Out of Range

DUAL1002.M Fri Oct 03 09:26:35 2003 EF

Continuing Calibration Summary

Job Number: F19845
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GEF1123-CC1115
Lab FileID: EF030843.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\100803\EF030843.D\FID1A.CH Vial: 27
Signal #2 : C:\HPCHEM\1\DATA\100803\EF030843.D\FID2B.CH
Acq On : 8 Oct 2003 10:16 pm Operator: ClaireV
Sample : cc1115-20 Inst : VOA1
Misc : gc2849,gef1123,,,,,1 MultiplIr: 1.00
IntFile Signal #1: AUTOINT1.E IntFile Signal #2: autoint2.e

Method : C:\HPCHEM\1\METHODS\DUAL1002.M (Chemstation Integrator)
Title : EPA 602 & 5030B/8021B
Last Update : Thu Oct 02 12:47:10 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	20.000	18.433	7.8	94	0.01
2		Di-Isopropyl ether	20.000	19.134	4.3	93	0.02
3		Benzene	20.000	18.852	5.7	92	0.02
4	S	a,a,a-TFT(S)	20.000	18.353	8.2	93	0.03
5		Toluene	20.000	18.703	6.5	92	0.03
6	S	1-Chloro-4-Fluorobenzene	20.000	18.065	9.7	91	0.03
7		Chlorobenzene	20.000	18.164	9.2	92	0.03
8		Ethylbenzene	20.000	18.278	8.6	92	0.03
9		m,p-Xylene	40.000	36.772	8.1	91	0.03
10		o-Xylene	20.000	18.766	6.2	93	0.03
11		1,3-Dichlorobenzene	20.000	18.438	7.8	94	0.03
12		1,4-Dichlorobenzene	20.000	18.387	8.1	95	0.03
13		1,2-Dichlorobenzene	20.000	18.055	9.7	95	0.03

Signal #2

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	20.000	18.831	5.8	95	0.01
2		Di-Isopropyl ether	20.000	19.107	4.5	95	0.02
3		Benzene	20.000	19.588	2.1	94	0.02
4	S	a,a,a-TFT(S)	20.000	18.992	5.0	96	0.02
5		Toluene	20.000	19.271	3.6	94	0.02
6	S	1-Chloro-4-Fluorobenzene	20.000	18.729	6.4	93	0.02
7		Chlorobenzene	20.000	18.749	6.3	95	0.02
8		Ethylbenzene	20.000	18.879	5.6	94	0.02
9		m,p-Xylene	40.000	38.069	4.8	94	0.03
10		o-Xylene	20.000	19.519	2.4	95	0.03
11		1,3-Dichlorobenzene	20.000	19.076	4.6	96	0.03
12		1,4-Dichlorobenzene	20.000	19.118	4.4	98	0.03
13		1,2-Dichlorobenzene	20.000	18.636	6.8	97	0.03

Average % D = 6.2

(#) = Out of Range SPCC's out = 0 CCC's out = 0
EF030588.D DUAL1002.M Thu Oct 09 09:00:35 2003 EF

Continuing Calibration Summary

Job Number: F19845
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GEF1124-CC1115
Lab FileID: EF030854.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\100803\EF030854.D\FID1A.CH Vial: 37
Signal #2 : C:\HPCHEM\1\DATA\100803\EF030854.D\FID2B.CH
Acq On : 9 Oct 2003 2:43 am Operator: ClaireV
Sample : cc1115-20 Inst : V0A1
Misc : gc2849,gef1124,,,,,1 Multiplr: 1.00
IntFile Signal #1: AUTOINT1.E IntFile Signal #2: autoint2.e

Method : C:\HPCHEM\1\METHODS\DUAL1002.M (Chemstation Integrator)
Title : EPA 602 & 5030B/8021B
Last Update : Thu Oct 02 12:47:10 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	20.000	18.824	5.9	96	0.02
2		Di-Isopropyl ether	20.000	19.678	1.6	96	0.02
3		Benzene	20.000	19.450	2.8	94	0.02
4	S	a,a,a-TFT(S)	20.000	18.945	5.3	96	0.02
5		Toluene	20.000	19.028	4.9	94	0.02
6	S	1-Chloro-4-Fluorobenzene	20.000	18.656	6.7	94	0.03
7		Chlorobenzene	20.000	18.524	7.4	94	0.03
8		Ethylbenzene	20.000	18.717	6.4	94	0.03
9		m,p-Xylene	40.000	37.400	6.5	92	0.03
10		o-Xylene	20.000	18.914	5.4	93	0.03
11		1,3-Dichlorobenzene	20.000	18.437	7.8	94	0.03
12		1,4-Dichlorobenzene	20.000	18.472	7.6	95	0.03
13		1,2-Dichlorobenzene	20.000	18.222	8.9	96	0.03

Signal #2

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	20.000	18.326	8.4	93	0.01
2		Di-Isopropyl ether	20.000	18.645	6.8	93	0.01
3		Benzene	20.000	19.291	3.5	93	0.02
4	S	a,a,a-TFT(S)	20.000	18.568	7.2	93	0.02
5		Toluene	20.000	18.950	5.3	93	0.02
6	S	1-Chloro-4-Fluorobenzene	20.000	18.573	7.1	92	0.03
7		Chlorobenzene	20.000	18.420	7.9	94	0.03
8		Ethylbenzene	20.000	18.833	5.8	93	0.02
9		m,p-Xylene	40.000	37.968	5.1	94	0.02
10		o-Xylene	20.000	19.245	3.8	94	0.03
11		1,3-Dichlorobenzene	20.000	18.550	7.2	94	0.02
12		1,4-Dichlorobenzene	20.000	18.631	6.8	95	0.03
13		1,2-Dichlorobenzene	20.000	18.346	8.3	95	0.03

Average % D = 6.2

(#) = Out of Range SPCC's out = 0 CCC's out = 0
EF030588.D DUAL1002.M Thu Oct 09 09:00:36 2003 EF

Continuing Calibration Summary

Job Number: F19845
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GEF1125-CC1115
Lab FileID: EF030867.D

4.6

Evaluate Continuing Calibration Report

```
Signal #1 : C:\HPCHEM\1\DATA\100903\EF030867.D\FID1A.CH  Vial: 1
Signal #2 : C:\HPCHEM\1\DATA\100903\EF030867.D\FID2B.CH
Acq On    :  9 Oct 2003   9:11 am                    Operator: ClaireV
Sample    : CC1115-40                                Inst    : VOA1
Misc      : gc2849,gef1125,,,,,1                     Multiplr: 1.00
IntFile Signal #1: AUTOINT1.E     IntFile Signal #2: autoint2.e

Method        : C:\HPCHEM\1\METHODS\DUAL1002.M (Chemstation Integrator)
Title         : EPA 602 & 5030B/8021B
Last Update   : Thu Oct 02 12:47:10 2003
Response via  : Multiple Level Calibration

Min. RRF      :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev  :  15%     Max. Rel. Area : 200%
```

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	40.000	35.481	11.3	91	0.02
2		Di-Isopropyl ether	40.000	37.947	5.1	93	0.02
3		Benzene	40.000	37.898	5.3	94	0.02
4	S	a,a,a-TFT(S)	20.000	17.821	10.9	89	0.03
5		Toluene	40.000	38.036	4.9	96	0.03
6	S	1-Chloro-4-Fluorobenzene	20.000	17.820	10.9	88	0.03
7		Chlorobenzene	40.000	36.445	8.9	95	0.04
8		Ethylbenzene	40.000	36.948	7.6	96	0.04
9		m,p-Xylene	80.000	75.302	5.9	95	0.04
10		o-Xylene	40.000	37.966	5.1	96	0.04
11		1,3-Dichlorobenzene	40.000	36.761	8.1	93	0.04
12		1,4-Dichlorobenzene	40.000	36.027	9.9	91	0.04
13		1,2-Dichlorobenzene	40.000	34.360	14.1	89	0.03

Signal #2

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	40.000	36.785	8.0	92	0.01
2		Di-Isopropyl ether	40.000	37.862	5.3	96	0.01
3		Benzene	40.000	39.236	1.9	97	0.02
4	S	a,a,a-TFT(S)	20.000	18.449	7.8	90	0.02
5		Toluene	40.000	39.307	1.7	98	0.02
6	S	1-Chloro-4-Fluorobenzene	20.000	18.556	7.2	89	0.03
7		Chlorobenzene	40.000	36.966	7.6	98	0.03
8		Ethylbenzene	40.000	38.259	4.4	97	0.03
9		m,p-Xylene	80.000	78.572	1.8	99	0.03
10		o-Xylene	40.000	39.370	1.6	98	0.03
11		1,3-Dichlorobenzene	40.000	38.019	5.0	95	0.03
12		1,4-Dichlorobenzene	40.000	37.315	6.7	95	0.03
13		1,2-Dichlorobenzene	40.000	36.273	9.3	92	0.03

Average % D = 6.8

(#) = Out of Range SPCC's out = 0 CCC's out = 0
EF030589.D DUAL1002.M Fri Oct 10 09:27:04 2003 EF

Continuing Calibration Summary

Job Number: F19845
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GEF1125-CC1115
Lab FileID: EF030878.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\100903\EF030878.D\FID1A.CH Vial: 11
Signal #2 : C:\HPCHEM\1\DATA\100903\EF030878.D\FID2B.CH
Acq On : 9 Oct 2003 2:27 pm Operator: ClaireV
Sample : cc1115-20 Inst : VOA1
Misc : gc2854,gef1125,,,,,1 Multiplr: 1.00
IntFile Signal #1: AUTOINT1.E IntFile Signal #2: autoint2.e

Method : C:\HPCHEM\1\METHODS\DUAL1002.M (Chemstation Integrator)
Title : EPA 602 & 5030B/8021B
Last Update : Thu Oct 02 12:47:10 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	Methyl tert Butyl Ether	20.000	17.794	11.0	91	0.02
2	Di-Isopropyl ether	20.000	18.710	6.4	91	0.02
3	Benzene	20.000	18.069	9.7	88	0.02
4 S	a,a,a-TFT(S)	20.000	18.262	8.7	93	0.02
5	Toluene	20.000	17.764	11.2	88	0.03
6 S	1-Chloro-4-Fluorobenzene	20.000	17.876	10.6	90	0.03
7	Chlorobenzene	20.000	17.263	13.7	88	0.03
8	Ethylbenzene	20.000	17.477	12.6	88	0.03
9	m,p-Xylene	40.000	35.214	12.0	87	0.03
10	o-Xylene	20.000	17.777	11.1	88	0.03
11	1,3-Dichlorobenzene	20.000	16.879	15.6#	86	0.03
12	1,4-Dichlorobenzene	20.000	16.932	15.3#	87	0.03
13	1,2-Dichlorobenzene	20.000	16.447	17.8#	86	0.03

Signal #2

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	Methyl tert Butyl Ether	20.000	18.803	6.0	95	0.01
2	Di-Isopropyl ether	20.000	19.032	4.8	95	0.02
3	Benzene	20.000	19.270	3.7	92	0.02
4 S	a,a,a-TFT(S)	20.000	19.270	3.7	97	0.02
5	Toluene	20.000	18.864	5.7	92	0.02
6 S	1-Chloro-4-Fluorobenzene	20.000	19.147	4.3	95	0.02
7	Chlorobenzene	20.000	18.098	9.5	92	0.02
8	Ethylbenzene	20.000	18.453	7.7	92	0.02
9	m,p-Xylene	40.000	36.891	7.8	91	0.02
10	o-Xylene	20.000	18.810	6.0	92	0.02
11	1,3-Dichlorobenzene	20.000	17.916	10.4	90	0.03
12	1,4-Dichlorobenzene	20.000	17.819	10.9	91	0.03
13	1,2-Dichlorobenzene	20.000	17.514	12.4	91	0.03

Average % D = 9.6

(#) = Out of Range SPCC's out = 0 CCC's out = 0
EF030588.D DUAL1002.M Fri Oct 10 09:27:44 2003 EF

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: F19845
Account: EEINCJX EEI
Projeet: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8720-MB	IJ18508.D	1	10/06/03	SD	10/06/03	OP8720	GIJ888

The QC reported here applies to the following samples: **Method:** EPA 610

F19845-1

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Accnaphthene	ND	5.0	2.0	ug/l	
208-96-8	Acenaphthylene	ND	5.0	2.0	ug/l	
120-12-7	Anthracene	ND	5.0	2.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.0	2.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.0	2.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.0	2.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.0	2.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.0	2.0	ug/l	
218-01-9	Chrysene	ND	5.0	2.0	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.0	2.0	ug/l	
206-44-0	Fluoranthene	ND	5.0	2.0	ug/l	
86-73-7	Fluorene	ND	5.0	2.0	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.0	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.0	ug/l	
90-12-0	1-Methylnaphthalene	ND	5.0	2.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.0	2.0	ug/l	
85-01-8	Phenanthrene	ND	5.0	2.0	ug/l	
129-00-0	Pyrene	ND	5.0	2.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
321-60-8	2-Fluorobiphenyl	44%	41-139%
84-15-1	o-Terphenyl	74%	46-135%

Method Blank Summary

Job Number: F19845
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8720-MB	IJ18536.D	1	10/07/03	SD	10/06/03	OP8720	GIJ889

The QC reported here applies to the following samples: **Method:** EPA 610

F19845-1

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.0	2.0	ug/l	
208-96-8	Acenaphthylene	ND	5.0	2.0	ug/l	
120-12-7	Anthracene	ND	5.0	2.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.0	2.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.0	2.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.0	2.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.0	2.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.0	2.0	ug/l	
218-01-9	Chrysene	ND	5.0	2.0	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.0	2.0	ug/l	
206-44-0	Fluoranthene	ND	5.0	2.0	ug/l	
86-73-7	Fluorene	ND	5.0	2.0	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.0	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.0	ug/l	
90-12-0	1-Methylnaphthalene	ND	5.0	2.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.0	2.0	ug/l	
85-01-8	Phenanthrene	ND	5.0	2.0	ug/l	
129-00-0	Pyrene	ND	5.0	2.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
321-60-8	2-Fluorobiphenyl	43%	41-139%
84-15-1	o-Terphenyl	75%	46-135%

Blank Spike Summary

Job Number: F19845
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8720-BS	IJ18507.D	1	10/06/03	SD	10/06/03	OP8720	GIJ888

5.2

The QC reported here applies to the following samples: **Method:** EPA 610

F19845-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
83-32-9	Acenaphthene	25	21.5	86	59-114
208-96-8	Acenaphthylene	25	19.0	76	58-109
120-12-7	Anthracene	25	21.7	87	63-110
56-55-3	Benzo(a)anthracene	25	20.8	83	74-111
50-32-8	Benzo(a)pyrene	25	20.3	81	71-110
205-99-2	Benzo(b)fluoranthene	25	21.0	84	75-112
191-24-2	Benzo(g,h,i)perylene	25	21.2	85	66-114
207-08-9	Benzo(k)fluoranthene	25	20.5	82	73-111
218-01-9	Chrysene	25	21.1	84	73-112
53-70-3	Dibenzo(a,h)anthracene	25	20.6	82	67-111
206-44-0	Fluoranthene	25	21.7	87	74-113
86-73-7	Fluorene	25	20.7	83	67-113
193-39-5	Indeno(1,2,3-cd)pyrene	25	20.2	81	68-115
91-20-3	Naphthalene	25	19.9	80	52-113
90-12-0	1-Methylnaphthalene	25	21.5	86	55-117
91-57-6	2-Methylnaphthalene	25	19.4	78	50-115
85-01-8	Phenanthrene	25	21.2	85	70-111
129-00-0	Pyrene	25	21.7	87	73-115

CAS No.	Surrogate Recoveries	BSP	Limits
321-60-8	2-Fluorobiphenyl	78%	41-139%
84-15-1	o-Terphenyl	83%	46-135%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F19845
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8720-MS	IJ18528.D	1	10/07/03	SD	10/06/03	OP8720	GIJ888
OP8720-MSD	IJ18529.D	1	10/07/03	SD	10/06/03	OP8720	GIJ888
F19844-3	IJ18527.D	1	10/07/03	SD	10/06/03	OP8720	GIJ888

The QC reported here applies to the following samples: **Method:** EPA 610

F19845-1

CAS No.	Compound	F19844-3 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	ND		51	47.2	93	41.3	81	13	36-143/21
208-96-8	Acenaphthylene	ND		51	41.5	81	36.3	71	13	59-108/22
120-12-7	Anthracene	ND		51	47.5	93	42.9	84	10	61-113/22
56-55-3	Benzo(a)anthracene	ND		51	45.0	88	41.2	81	9	69-111/17
50-32-8	Benzo(a)pyrene	ND		51	44.2	87	41.1	81	7	71-109/22
205-99-2	Benzo(b)fluoranthene	ND		51	45.6	89	41.4	81	10	63-116/19
191-24-2	Benzo(g,h,i)perylene	ND		51	46.7	92	43.3	85	8	54-123/19
207-08-9	Benzo(k)fluoranthene	ND		51	44.7	88	42.1	83	6	66-114/16
218-01-9	Chrysene	ND		51	45.5	89	42.1	83	8	65-116/15
53-70-3	Dibenzo(a,h)anthracene	ND		51	45.8	90	42.4	83	8	52-130/24
206-44-0	Fluoranthene	ND		51	47.0	92	42.8	84	9	73-113/16
86-73-7	Fluorene	ND		51	45.3	89	40.1	79	12	63-114/20
193-39-5	Indeno(1,2,3-cd)pyrene	ND		51	44.8	88	41.2	81	8	43-133/24
91-20-3	Naphthalene	ND		51	42.1	83	37.7	74	11	40-130/27
90-12-0	1-Methylnaphthalene	ND		51	46.7	92	40.9	80	13	50-128/25
91-57-6	2-Methylnaphthalene	ND		51	41.8	82	36.7	72	13	32-148/26
85-01-8	Phenanthrene	ND		51	46.4	91	41.4	81	11	44-136/19
129-00-0	Pyrene	ND		51	47.0	92	42.7	84	10	71-116/16

CAS No.	Surrogate Recoveries	MS	MSD	F19844-3	Limits
321-60-8	2-Fluorobiphenyl	84%	73%	77%	41-139%
84-15-1	o-Terphenyl	88%	79%	80%	46-135%

Duplicate Summary

Job Number: F19845
Account: EEINCJX EEI
Projeet: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8720-DUP	IJ18515.D	1	10/06/03	SD	10/06/03	OP8720	GIJ888
F19843-6	IJ18514.D	1	10/06/03	SD	10/06/03	OP8720	GIJ888

The QC reported here applies to the following samples: **Method:** EPA 610

F19845-1

CAS No.	Compound	F19843-6 ug/l	Q	DUP ug/l	Q	RPD	Limits
83-32-9	Acenaphthene	ND		ND		nc	
208-96-8	Acenaphthylene	ND		ND		nc	
120-12-7	Anthracene	ND		ND		nc	
56-55-3	Benzo(a)anthracene	ND		ND		nc	
50-32-8	Benzo(a)pyrene	ND		ND		nc	
205-99-2	Benzo(b)fluoranthene	ND		ND		nc	
191-24-2	Benzo(g,h,i)perylene	ND		ND		nc	
207-08-9	Benzo(k)fluoranthene	ND		ND		nc	
218-01-9	Chrysene	ND		ND		nc	
53-70-3	Dibenzo(a,h)anthracene	ND		ND		nc	
206-44-0	Fluoranthene	ND		ND		nc	
86-73-7	Fluorene	ND		ND		nc	
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ND		nc	
91-20-3	Naphthalene	ND		ND		nc	
90-12-0	1-Methylnaphthalene	ND		ND		nc	
91-57-6	2-Methylnaphthalene	ND		ND		nc	
85-01-8	Phenanthrene	ND		ND		nc	
129-00-0	Pyrene	ND		ND		nc	

CAS No.	Surrogate Recoveries	DUP	F19843-6	Limits
321-60-8	2-Fluorobiphenyl	60%	55%	41-139%
84-15-1	o-Terphenyl	80%	78%	46-135%

Semivolatile Surrogate Recovery Summary

Job Number: F19845
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Method: EPA 610	**Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S2 [a]
F19845-1	IJ18531.D	49.0	78.0
OP8720-BS	IJ18507.D	78.0	83.0
OP8720-DUP	IJ18515.D	60.0	80.0
OP8720-MB	IJ18508.D	44.0	74.0
OP8720-MB	IJ18536.D	43.0	75.0
OP8720-MS	IJ18528.D	84.0	88.0
OP8720-MSD	IJ18529.D	73.0	79.0

Surrogate Compounds	Recovery Limits
S1 = 2-Fluorobiphenyl	41-139%
S2 = o-Terphenyl	46-135%

(a) Recovery from GC signal #1

GC Surrogate Retention Time Summary

Job Number: F19845
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GIJ888-CC869	**Injection Date:**	10/06/03
Lab File ID:	IJ18506.D	**Injection Time:**	14:05
Instrument ID:	GCIJ	**Method:**	EPA 610

	S1 [a] RT	S2 [a] RT
Check Std	5.82	10.36

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
OP8720-BS	IJ18507.D	10/06/03	14:38	5.82	10.36
OP8720-MB	IJ18508.D	10/06/03	15:07	5.82	10.37
ZZZZZZ	IJ18509.D	10/06/03	15:36	5.82	10.37
ZZZZZZ	IJ18510.D	10/06/03	16:05	5.82	10.36
ZZZZZZ	IJ18511.D	10/06/03	16:34	5.82	10.36
ZZZZZZ	IJ18512.D	10/06/03	17:02	5.82	10.37
ZZZZZZ	IJ18513.D	10/06/03	17:31	5.82	10.37
F19843-6	IJ18514.D	10/06/03	18:00	5.82	10.37
OP8720-DUP	IJ18515.D	10/06/03	18:29	5.82	10.37
ZZZZZZ	IJ18516.D	10/06/03	18:58	5.83	10.37

Surrogate Compounds

S1 = 2-Fluorobiphenyl
S2 = o-Terphenyl

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: F19845
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GIJ888-CC869	**Injection Date:**	10/06/03
Lab File ID:	IJ18526.D	**Injection Time:**	23:44
Instrument ID:	GCIJ	**Method:**	EPA 610

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	5.82	6.50	10.37	11.61

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
F19844-3	IJ18527.D	10/07/03	00:12	5.82		10.37	
OP8720-MS	IJ18528.D	10/07/03	00:41	5.82		10.37	
OP8720-MSD	IJ18529.D	10/07/03	01:09	5.82		10.37	
ZZZZZZ	IJ18530.D	10/07/03	01:38	5.82		10.37	
F19845-1	IJ18531.D	10/07/03	02:06	5.82		10.38	
ZZZZZZ	IJ18533.D	10/07/03	03:03	5.82		10.37	
GIJ888-ECC869	IJ18534.D	10/07/03	03:32	5.82	6.50	10.37	11.61

Surrogate Compounds

S1 = 2-Fluorobiphenyl
S2 = o-Terphenyl

(a) Rctention time from GC signal #1
(b) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F19845
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GIJ889-CC869	**Injection Date:**	10/07/03
Lab File ID:	IJ18535.D	**Injection Time:**	11:09
Instrument ID:	GCIJ	**Method:**	EPA 610

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	5.82	6.51	10.37	11.62

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
OP8720-MB	IJ18536.D	10/07/03	11:37	5.82		10.37	
ZZZZZZ	IJ18537.D	10/07/03	12:06	5.82		10.36	
GIJ889-ECC869	IJ18538.D	10/07/03	12:35	5.82	6.50	10.36	11.62

Surrogate Compounds

S1 = 2-Fluorobiphenyl
S2 = o-Terphenyl

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

Initial Calibration Summary

Job Number: F19845
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GIJ869-ICC869
Lab FileID: IJI8163.D

Response Factor Report FID 1

Method : C:\HPCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title : PAH's BY EPA 610 OR 8100
Last Update : Thu Jul 31 12:50:14 2003
Response via : Initial Calibration

Calibration Files
5 =IJ18161.D 10 =IJ18162.D 20 =IJ18163.D
30 =IJ18164.D 40 =IJ18165.D 50 =IJ18166.D

		Compound	5	10	20	30	40	50	Avg		%RSD
1)		Naphthalene	1.766	1.641	1.534	1.709	1.540	1.605	1.633	E4	5.67
2)		2-Methyl Naphthalen	1.668	1.587	1.495	1.674	1.504	1.578	1.584	E4	4.84
3)		1-Methyl Naphthalen	1.573	1.492	1.409	1.575	1.419	1.487	1.493	E4	4.81
4)	S	2-Fluorobiphenyl	1.422	1.317	1.297	1.469	1.330	1.398	1.372	E4	4.96
5)		Acenaphthylene	1.668	1.621	1.525	1.696	1.532	1.603	1.607	E4	4.31
6)		Acenaphthene	1.707	1.642	1.548	1.721	1.559	1.630	1.635	E4	4.42
7)		Fluorene	1.636	1.625	1.526	1.692	1.530	1.601	1.602	E4	4.02
8)		Phenanthrene	1.500	1.556	1.479	1.656	1.486	1.557	1.539	E4	4.32
9)		Anthracene	1.752	1.706	1.552	1.701	1.526	1.565	1.634	E4	5.92
10)	S	O-Terphenyl	1.756	1.715	1.594	1.768	1.577	1.649	1.677	E4	4.89
11)		Fluoranthene	1.661	1.646	1.528	1.703	1.525	1.598	1.610	E4	4.53
12)		Pyrene	1.736	1.641	1.529	1.712	1.529	1.601	1.625	E4	5.44
13)		Benzo(a)Anthracene	1.580	1.576	1.500	1.698	1.520	1.589	1.577	E4	4.39
14)		Chrysene	1.822	1.714	1.568	1.746	1.553	1.616	1.670	E4	6.43
15)		Benzo(b)Fluoranthen	1.592	1.586	1.533	1.731	1.557	1.629	1.605	E4	4.36
16)		Benzo(k)Fluoranthen	1.956	1.785	1.611	1.785	1.584	1.642	1.727	E4	8.19
17)		Benzo(a) Pyrene	1.717	1.631	1.528	1.706	1.526	1.590	1.616	E4	5.17
18)		Indeno(1,2,3-cd)pyr	1.513	1.514	1.440	1.634	1.469	1.543	1.519	E4	4.43
19)		Dibenzo(a,h)anthrac	1.834	1.734	1.588	1.749	1.563	1.624	1.682	E4	6.33
20)		Benzo(g,h,i) Peryle	1.774	1.699	1.550	1.736	1.528	1.594	1.647	E4	6.25

Signal #2 Calibration Files
5 =IJ18161.D 10 =IJ18162.D 20 =IJ18163.D
30 =IJ18164.D 40 =IJ18165.D 50 =IJ18166.D

		Compound	5	10	20	30	40	50	Avg		%RSD
1)		Naphthalene	2.323	2.172	2.040	2.282	2.046	2.137	2.167	E4	5.44
2)		2-Methyl Naphthalen	2.083	2.012	1.918	2.187	1.973	2.067	2.040	E4	4.62
3)		1-Methyl Naphthalen	1.997	1.913	1.834	2.055	1.858	1.943	1.933	E4	4.32
4)	S	2-Fluorobiphenyl	1.853	1.802	1.701	1.936	1.753	1.840	1.814	E4	4.52
5)		Acenaphthylene	2.185	2.140	2.013	2.242	2.034	2.128	2.124	E4	4.12
6)		Acenaphthene	2.226	2.180	2.038	2.272	2.055	2.150	2.153	E4	4.31
7)		Fluorene	2.058	2.058	1.987	2.216	2.007	2.104	2.072	E4	3.96
8)		Phenanthrene	1.769	1.895	1.852	2.125	1.903	2.012	1.926	E4	6.52
9)		Anthracene	2.387	2.301	1.996	2.196	1.973	2.055	2.152	E4	7.91
10)	S	O-Terphenyl	2.300	2.262	2.109	2.344	2.091	2.191	2.216	E4	4.65
11)		Fluoranthene	2.124	2.126	1.983	2.227	1.993	2.105	2.093	E4	4.39
12)		Pyrene	2.269	2.238	2.081	2.300	2.051	2.150	2.181	E4	4.72
13)		Benzo(a)Anthracene	2.193	2.145	2.021	2.274	2.032	2.121	2.131	E4	4.53
14)		Chrysene	2.261	2.189	2.046	2.278	2.028	2.115	2.153	E4	4.96
15)		Benzo(b)Fluoranthen	2.162	2.098	2.012	2.271	2.055	2.153	2.125	E4	4.31
16)		Benzo(k)Fluoranthen	2.337	2.221	2.063	2.298	2.049	2.131	2.183	E4	5.56
17)		Benzo(a) Pyrene	2.228	2.120	2.001	2.255	2.016	2.098	2.120	E4	4.96
18)		Indeno(1,2,3-cd)pyr	2.018	2.015	1.944	2.230	2.015	2.130	2.059	E4	5.00
19)		Dibenzo(a,h)anthrac	2.350	2.214	2.028	2.220	1.978	2.045	2.139	E4	6.72
20)		Benzo(g,h,i) Peryle	2.190	2.119	1.986	2.225	1.996	2.085	2.100	E4	4.67

Initial Calibration Summary

Job Number: F19845
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GIJ869-ICC869
Lab FileID: IJ18163.D

Average % RSD = 5.1

(#) = Out of Range

8100_H2.M Mon Aug 04 09:38:20 2003

5.7

Continuing Calibration Summary

Job Number: F19845
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GIJ888-CC869
Lab FileID: IJ18506.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\1006PAH\IJ18506.D\FID1B.CH Vial: 1
Signal #2 : C:\HPCHEM\1\DATA\1006PAH\IJ18506.D\FID2A.CH
Acq On : 6 Oct 2003 2:05 pm Operator: SARAHM
Sample : cc869-20 Inst : FID 1
Misc : op8720,gij888,1000,,,1,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : C:\HPCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title : PAH's BY EPA 610 OR 8100
Last Update : Mon Oct 06 14:35:04 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Naphthalene	20.000	18.381	8.1	98	0.00
2		2-Methyl Naphthalene	20.000	18.405	8.0	97	0.00
3		1-Methyl Naphthalene	20.000	18.236	8.8	97	0.00
4	S	2-Fluorobiphenyl	20.000	17.904	10.5	95	0.00
5		Acenaphthylene	20.000	18.248	8.8	96	0.00
6		Acenaphthene	20.000	18.327	8.4	97	0.00
7		Fluorene	20.000	18.450	7.8	97	0.00
8		Phenanthrene	20.000	18.488	7.6	96	0.00
9		Anthracene	20.000	19.054	4.7	100	0.00
10	S	O-Terphenyl	20.000	18.709	6.5	98	0.00
11		Fluoranthene	20.000	18.783	6.1	99	0.00
12		Pyrene	20.000	19.023	4.9	101	0.00
13		Benzo(a)Anthracene	20.000	18.190	9.0	96	0.00
14		Chrysene	20.000	18.619	6.9	99	0.00
15		Benzo(b)Fluoranthene	20.000	17.877	10.6	94	0.00
16		Benzo(k)Fluoranthene	20.000	18.198	9.0	98	0.00
17		Benzo(a) Pyrene	20.000	18.207	9.0	96	0.00
18		Indeno(1,2,3-cd)pyrene	20.000	18.415	7.9	97	0.00
19		Dibenzo(a,h)anthracene	20.000	18.676	6.6	99	0.00
20		Benzo(g,h,i) Perylene	20.000	18.865	5.7	100	0.00

Signal #2

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Naphthalene	20.000	18.341	8.3	97	0.00
2		2-Methyl Naphthalene	20.000	18.144	9.3	96	0.00
3		1-Methyl Naphthalene	20.000	18.254	8.7	96	0.00
4	S	2-Fluorobiphenyl	20.000	18.713	6.4	100	0.00
5		Acenaphthylene	20.000	18.446	7.8	97	0.00
6		Acenaphthene	20.000	18.554	7.2	98	0.00
7		Fluorene	20.000	18.962	5.2	99	0.00
8		Phenanthrene	20.000	18.932	5.3	98	-0.01
9		Anthracene	20.000	19.874	0.6	107	-0.02
10	S	O-Terphenyl	20.000	19.048	4.8	100	-0.02
11		Fluoranthene	20.000	18.978	5.1	100	-0.02
12		Pyrene	20.000	19.335	3.3	101	-0.03
13		Benzo(a)Anthracene	20.000	18.765	6.2	99	-0.04
14		Chrysene	20.000	18.935	5.3	100	0.00
15		Benzo(b)Fluoranthene	20.000	18.421	7.9	97	0.00

Continuing Calibration Summary

Job Number: F19845
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GIJ888-CC869
Lab FileID: IJ18506.D

16	Benzo(k)Fluoranthene	20.000	18.501	7.5	98	0.00
17	Benzo(a) Pyrene	20.000	18.573	7.1	98	0.00
18	Indeno(1,2,3-cd)pyrene	20.000	18.722	6.4	99	0.00
19	Dibenzo(a,h)anthracene	20.000	18.936	5.3	100	0.00
20	Benzo(g,h,i) Perylene	20.000	18.921	5.4	100	0.00

Average % D = 6.9

(#) = Out of Range SPCC's out = 0 CCC's out = 0
IJ18163.D 8100_H2.M Tue Oct 07 08:31:21 2003

5.7

Continuing Calibration Summary

Job Number: F19845
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GIJ888-CC869
Lab FileID: IJ18517.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\1006PAH\IJ18517.D\FID1B.CH Vial: 12
Signal #2 : C:\HPCHEM\1\DATA\1006PAH\IJ18517.D\FID2A.CH
Acq On : 6 Oct 2003 7:26 pm Operator: SARAHM
Sample : cc869-30 Inst : FID 1
Misc : op8720,gij888,1000,,,1,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : C:\HPCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title : PAH's BY EPA 610 OR 8100
Last Update : Mon Oct 06 14:35:04 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Naphthalene	30.000	27.669	7.8	88	0.00
2		2-Methyl Naphthalene	30.000	27.385	8.7	86	0.00
3		1-Methyl Naphthalene	30.000	27.406	8.6	87	0.00
4	S	2-Fluorobiphenyl	30.000	27.351	8.8	85	0.00
5		Acenaphthylene	30.000	27.759	7.5	88	0.00
6		Acenaphthene	30.000	27.772	7.4	88	0.00
7		Fluorene	30.000	28.018	6.6	88	0.00
8		Phenanthrene	30.000	28.276	5.7	88	0.00
9		Anthracene	30.000	28.516	4.9	91	0.00
10	S	O-Terphenyl	30.000	28.153	6.2	89	0.00
11		Fluoranthene	30.000	28.320	5.6	89	0.00
12		Pyrene	30.000	28.867	3.8	91	0.00
13		Benzo(a)Anthracene	30.000	27.529	8.2	85	0.00
14		Chrysene	30.000	27.585	8.0	88	0.00
15		Benzo(b)Fluoranthene	30.000	27.458	8.5	85	0.01
16		Benzo(k)Fluoranthene	30.000	26.938	10.2	87	0.00
17		Benzo(a) Pyrene	30.000	27.205	9.3	86	0.01
18		Indeno(1,2,3-cd)pyrene	30.000	27.756	7.5	86	0.00
19		Dibenzo(a,h)anthracene	30.000	27.299	9.0	87	0.00
20		Benzo(g,h,i) Perylene	30.000	27.906	7.0	88	0.00

Signal #2

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Naphthalene	30.000	27.291	9.0	86	0.00
2		2-Methyl Naphthalene	30.000	27.431	8.6	85	0.00
3		1-Methyl Naphthalene	30.000	27.217	9.3	85	0.00
4	S	2-Fluorobiphenyl	30.000	27.342	8.9	85	0.00
5		Acenaphthylene	30.000	27.847	7.2	88	0.00
6		Acenaphthene	30.000	27.916	6.9	88	0.00
7		Fluorene	30.000	28.563	4.8	89	0.00
8		Phenanthrene	30.000	28.656	4.5	87	-0.01
9		Anthracene	30.000	27.911	7.0	91	-0.01
10	S	O-Terphenyl	30.000	28.433	5.2	90	-0.01
11		Fluoranthene	30.000	28.506	5.0	89	-0.02
12		Pyrene	30.000	28.647	4.5	91	-0.02
13		Benzo(a)Anthracene	30.000	27.835	7.2	87	-0.03
14		Chrysene	30.000	27.535	8.2	87	0.00
15		Benzo(b)Fluoranthene	30.000	27.454	8.5	86	0.00

Continuing Calibration Summary

Job Number: F19845
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GIJ888-CC869
Lab FileID: IJ185I7.D

16	Benzo(k)Fluoranthene	30.000	27.423	8.6	87	0.00
17	Benzo(a) Pyrene	30.000	27.657	7.8	87	0.00
18	Indeno(1,2,3-cd)pyrene	30.000	28.157	6.1	87	0.00
19	Dibenzo(a,h)anthracene	30.000	28.037	6.5	90	0.00
20	Benzo(g,h,i) Perylene	30.000	28.090	6.4	88	0.00

Average % D = 7.2

(#) = Out of Range SPCC's out = 0 CCC's out = 0
IJ18164.D 8100_H2.M Tue Oct 07 08:31:54 2003

5.7

Continuing Calibration Summary

Job Number: F19845 **Sample:** GIJ888-CC869
Account: EEINCJX EEI **Lab FileID:** IJ18526.D
Project: Camp Lejeune-Campbell St. Fuel Farm

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\1006PAH\IJ18526.D\FID1B.CH Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\1006PAH\IJ18526.D\FID2A.CH
Acq On : 6 Oct 2003 11:44 pm Operator: SARAHM
Sample : cc869-20 Inst : FID 1
Misc : op8720,gij888,1000,,,1,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : C:\HPCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title : PAH's BY EPA 610 OR 8100
Last Update : Mon Oct 06 14:35:04 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Naphthalene	20.000	18.670	6.6	99	0.00
2		2-Methyl Naphthalene	20.000	18.474	7.6	98	0.00
3		1-Methyl Naphthalene	20.000	18.389	8.1	97	0.00
4	S	2-Fluorobiphenyl	20.000	18.041	9.8	95	0.00
5		Acenaphthylene	20.000	18.695	6.5	98	0.00
6		Acenaphthene	20.000	18.706	6.5	99	0.00
7		Fluorene	20.000	18.794	6.0	99	0.00
8		Phenanthrene	20.000	18.700	6.5	97	0.00
9		Anthracene	20.000	19.490	2.6	103	0.00
10	S	O-Terphenyl	20.000	19.077	4.6	100	0.00
11		Fluoranthene	20.000	19.012	4.9	100	0.00
12		Pyrene	20.000	19.213	3.9	102	0.01
13		Benzo(a)Anthracene	20.000	18.034	9.8	95	0.00
14		Chrysene	20.000	18.621	6.9	99	0.00
15		Benzo(b)Fluoranthene	20.000	17.626	11.9	92	0.00
16		Benzo(k)Fluoranthene	20.000	18.566	7.2	100	0.00
17		Benzo(a) Pyrene	20.000	18.107	9.5	96	0.00
18		Indeno(1,2,3-cd)pyrene	20.000	18.087	9.6	95	0.00
19		Dibenzo(a,h)anthracene	20.000	18.273	8.6	97	0.00
20		Benzo(g,h,i) Perylene	20.000	19.020	4.9	101	0.00

Signal #2

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Naphthalene	20.000	18.511	7.4	98	0.00
2		2-Methyl Naphthalene	20.000	18.233	8.8	97	0.00
3		1-Methyl Naphthalene	20.000	18.480	7.6	97	0.00
4	S	2-Fluorobiphenyl	20.000	18.926	5.4	101	0.00
5		Acenaphthylene	20.000	18.845	5.8	99	0.00
6		Acenaphthene	20.000	18.858	5.7	100	0.00
7		Fluorene	20.000	19.264	3.7	100	0.00
8		Phenanthrene	20.000	18.959	5.2	99	-0.01
9		Anthracene	20.000	20.386	-1.9	110	-0.01
10	S	O-Terphenyl	20.000	19.344	3.3	102	-0.02
11		Fluoranthene	20.000	19.411	2.9	102	-0.02
12		Pyrene	20.000	19.498	2.5	102	-0.02
13		Benzo(a)Anthracene	20.000	18.690	6.5	99	-0.03
14		Chrysene	20.000	18.839	5.8	99	0.01
15		Benzo(b)Fluoranthene	20.000	18.259	8.7	96	0.01

Continuing Calibration Summary

Job Number: F19845
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GIJ888-CC869
Lab FileID: IJ18526.D

16	Benzo(k)Fluoranthene	20.000	18.453	7.7	98	0.01
17	Benzo(a) Pyrene	20.000	18.535	7.3	98	0.00
18	Indeno(1,2,3-cd)pyrene	20.000	18.421	7.9	98	0.00
19	Dibenzo(a,h)anthracene	20.000	19.145	4.3	101	0.00
20	Benzo(g,h,i) Perylene	20.000	18.724	6.4	99	0.00

Average % D = 6.4

(#) = Out of Range SPCC's out = 0 CCC's out = 0
IJ18163.D 8100_H2.M Tue Oct 07 08:31:23 2003

5.7

Continuing Calibration Summary

Job Number: F19845
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GIJ888-ECC869
Lab FileID: IJ18534.D

Evaluate Continuing Calibration Report

```
Signal #1 : C:\HPCHEM\1\DATA\1006PAH\IJ18534.D\FID1B.CH  Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\1006PAH\IJ18534.D\FID2A.CH
Acq On    :  7 Oct 2003   3:32 am                    Operator: SARAHM
Sample    : ecc869-20                                Inst    : FID 1
Misc      : op8720,gij888,990,,,1,1,water            Multiplr: 1.00
IntFile Signal #1: events.e     IntFile Signal #2: events2.e

Method       : C:\HPCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title        : PAH's BY EPA 610 OR 8100
Last Update  : Mon Oct 06 14:35:04 2003
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  15%     Max. Rel. Area : 200%
```

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Naphthalene	20.000	18.820	5.9	100	0.00
2		2-Methyl Naphthalene	20.000	18.633	6.8	99	0.00
3		1-Methyl Naphthalene	20.000	18.534	7.3	98	0.00
4	S	2-Fluorobiphenyl	20.000	18.210	8.9	96	0.00
5		Acenaphthylene	20.000	18.783	6.1	99	0.00
6		Acenaphthene	20.000	18.803	6.0	99	0.00
7		Fluorene	20.000	18.912	5.4	99	0.00
8		Phenanthrene	20.000	18.777	6.1	98	0.00
9		Anthracene	20.000	19.534	2.3	103	0.00
10	S	O-Terphenyl	20.000	19.147	4.3	101	0.00
11		Fluoranthene	20.000	19.125	4.4	101	0.01
12		Pyrene	20.000	19.347	3.3	103	0.01
13		Benzo(a)Anthracene	20.000	18.409	8.0	97	0.00
14		Chrysene	20.000	18.997	5.0	101	0.00
15		Benzo(b)Fluoranthene	20.000	18.305	8.5	96	0.00
16		Benzo(k)Fluoranthene	20.000	18.752	6.2	101	0.00
17		Benzo(a) Pyrene	20.000	18.465	7.7	98	0.01
18		Indeno(1,2,3-cd)pyrene	20.000	18.569	7.2	98	0.00
19		Dibenzo(a,h)anthracene	20.000	18.755	6.2	99	0.00
20		Benzo(g,h,i) Perylene	20.000	19.407	3.0	103	0.00

Signal #2

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Naphthalene	20.000	18.732	6.3	99	0.00
2		2-Methyl Naphthalene	20.000	18.378	8.1	98	0.00
3		1-Methyl Naphthalene	20.000	18.616	6.9	98	0.00
4	S	2-Fluorobiphenyl	20.000	19.048	4.8	102	0.00
5		Acenaphthylene	20.000	18.963	5.2	100	0.00
6		Acenaphthene	20.000	18.988	5.1	100	0.00
7		Fluorene	20.000	19.387	3.1	101	0.00
8		Phenanthrene	20.000	19.156	4.2	100	-0.01
9		Anthracene	20.000	20.382	-1.9	110	-0.01
10	S	O-Terphenyl	20.000	19.434	2.8	102	-0.02
11		Fluoranthene	20.000	19.530	2.3	103	-0.02
12		Pyrene	20.000	19.473	2.6	102	-0.02
13		Benzo(a)Anthracene	20.000	19.037	4.8	100	-0.03
14		Chrysene	20.000	19.237	3.8	101	0.00
15		Benzo(b)Fluoranthene	20.000	18.719	6.4	99	0.01

Continuing Calibration Summary

Job Number: F19845
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GIJ888-ECC869
Lab FileID: IJ18534.D

16	Benzo(k)Fluoranthene	20.000	18.813	5.9	100	0.01
17	Benzo(a) Pyrene	20.000	19.039	4.8	101	0.01
18	Indeno(1,2,3-cd)pyrene	20.000	18.935	5.3	100	0.00
19	Dibenzo(a,h)anthracene	20.000	19.609	2.0	103	0.00
20	Benzo(g,h,i) Perylene	20.000	19.193	4.0	101	0.00

Average % D = 5.2

(#) = Out of Range SPCC's out = 0 CCC's out = 0
IJ18163.D 8100_H2.M Tue Oct 07 08:31:25 2003

5.7

Continuing Calibration Summary

Job Number: F19845
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GIJ889-CC869
Lab FileID: IJ18535.D

Evaluate Continuing Calibration Report

```
Signal #1 : C:\HPCHEM\1\DATA\1007PAH\IJ18535.D\FID1B.CH  Vial: 1
Signal #2 : C:\HPCHEM\1\DATA\1007PAH\IJ18535.D\FID2A.CH
Acq On    :  7 Oct 2003  11:09 am                    Operator: SARAHM
Sample    : cc869-20                                 Inst    : FID 1
Misc      : op8720,gij889,990,,,1,1,water            Multiplr: 1.00
IntFile Signal #1: events.e     IntFile Signal #2: events2.e

Method       : C:\HPCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title        : PAH's BY EPA 610 OR 8100
Last Update  : Mon Oct 06 14:35:04 2003
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  15%     Max. Rel. Area : 200%
```

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Naphthalene	20.000	18.764	6.2	100	0.00
2		2-Methyl Naphthalene	20.000	18.618	6.9	99	0.00
3		1-Methyl Naphthalene	20.000	18.539	7.3	98	0.00
4	S	2-Fluorobiphenyl	20.000	18.069	9.7	96	0.00
5		Acenaphthylene	20.000	18.682	6.6	98	0.00
6		Acenaphthene	20.000	18.779	6.1	99	0.00
7		Fluorene	20.000	18.837	5.8	99	0.00
8		Phenanthrene	20.000	18.759	6.2	98	0.00
9		Anthracene	20.000	19.608	2.0	103	0.00
10	S	O-Terphenyl	20.000	19.159	4.2	101	0.00
11		Fluoranthene	20.000	19.188	4.1	101	0.00
12		Pyrene	20.000	19.421	2.9	103	0.00
13		Benzo(a)Anthracene	20.000	18.460	7.7	97	0.00
14		Chrysene	20.000	19.063	4.7	101	0.00
15		Benzo(b)Fluoranthene	20.000	18.274	8.6	96	0.00
16		Benzo(k)Fluoranthene	20.000	18.808	6.0	101	0.00
17		Benzo(a) Pyrene	20.000	18.510	7.4	98	0.00
18		Indeno(1,2,3-cd)pyrene	20.000	18.571	7.1	98	0.00
19		Dibenzo(a,h)anthracene	20.000	18.826	5.9	100	0.00
20		Benzo(g,h,i) Perylene	20.000	19.719	1.4	105	0.00

Signal #2

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Naphthalene	20.000	18.669	6.7	99	0.00
2		2-Methyl Naphthalene	20.000	18.371	8.1	98	0.00
3		1-Methyl Naphthalene	20.000	18.506	7.5	98	0.00
4	S	2-Fluorobiphenyl	20.000	19.014	4.9	101	0.00
5		Acenaphthylene	20.000	18.858	5.7	99	0.00
6		Acenaphthene	20.000	18.968	5.2	100	0.00
7		Fluorene	20.000	19.320	3.4	101	0.00
8		Phenanthrene	20.000	19.172	4.1	100	0.00
9		Anthracene	20.000	20.314	-1.6	109	0.00
10	S	O-Terphenyl	20.000	19.469	2.7	102	0.00
11		Fluoranthene	20.000	19.622	1.9	104	0.00
12		Pyrene	20.000	19.590	2.1	103	0.00
13		Benzo(a)Anthracene	20.000	19.097	4.5	101	-0.02
14		Chrysene	20.000	19.336	3.3	102	0.02
15		Benzo(b)Fluoranthene	20.000	18.764	6.2	99	0.03

Continuing Calibration Summary

Job Number: F19845
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GIJ889-CC869
Lab FileID: IJ18535.D

16	Benzo(k)Fluoranthene	20.000	18.768	6.2	99	0.03
17	Benzo(a) Pyrene	20.000	19.006	5.0	101	0.03
18	Indeno(1,2,3-cd)pyrene	20.000	18.960	5.2	100	0.03
19	Dibenzo(a,h)anthracene	20.000	19.599	2.0	103	0.03
20	Benzo(g,h,i) Perylene	20.000	19.247	3.8	102	0.03

Average % D = 5.2

(#) = Out of Range SPCC's out = 0 CCC's out = 0
IJ18163.D 8100_H2.M Tue Oct 07 13:11:42 2003

5.7

Continuing Calibration Summary

Job Number: F19845
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GIJ889-ECC869
Lab FileID: IJ18538.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\1007PAH\IJ18538.D\FID1B.CH Vial: 4
Signal #2 : C:\HPCHEM\1\DATA\1007PAH\IJ18538.D\FID2A.CH
Acq On : 7 Oct 2003 12:35 pm Operator: SARAHM
Sample : ecc869-30 Inst : FID 1
Misc : op8720,gij889,980,,,1,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : C:\HPCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title : PAH's BY EPA 610 OR 8100
Last Update : Mon Oct 06 14:35:04 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Naphthalene	30.000	28.059	6.5	89	0.00
2		2-Methyl Naphthalene	30.000	28.047	6.5	88	0.00
3		1-Methyl Naphthalene	30.000	27.914	7.0	88	0.00
4	S	2-Fluorobiphenyl	30.000	27.748	7.5	86	0.00
5		Acenaphthylene	30.000	28.149	6.2	89	0.00
6		Acenaphthene	30.000	28.130	6.2	89	0.00
7		Fluorene	30.000	28.336	5.5	89	0.00
8		Phenanthrene	30.000	28.569	4.8	89	0.00
9		Anthracene	30.000	28.742	4.2	92	0.00
10	S	O-Terphenyl	30.000	28.445	5.2	90	0.00
11		Fluoranthene	30.000	28.499	5.0	90	0.00
12		Pyrene	30.000	29.038	3.2	92	0.00
13		Benzo(a)Anthracene	30.000	27.535	8.2	85	0.00
14		Chrysene	30.000	27.569	8.1	88	0.00
15		Benzo(b)Fluoranthene	30.000	27.681	7.7	86	0.00
16		Benzo(k)Fluoranthene	30.000	26.929	10.2	87	0.00
17		Benzo(a) Pyrene	30.000	27.340	8.9	86	0.00
18		Indeno(1,2,3-cd)pyrene	30.000	28.007	6.6	87	0.00
19		Dibenzo(a,h)anthracene	30.000	27.654	7.8	89	0.00
20		Benzo(g,h,i) Perylene	30.000	28.204	6.0	89	0.00

Signal #2

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Naphthalene	30.000	28.028	6.6	89	0.00
2		2-Methyl Naphthalene	30.000	28.121	6.3	87	0.00
3		1-Methyl Naphthalene	30.000	27.883	7.1	87	0.00
4	S	2-Fluorobiphenyl	30.000	27.989	6.7	87	0.00
5		Acenaphthylene	30.000	28.450	5.2	90	0.00
6		Acenaphthene	30.000	28.457	5.1	90	0.00
7		Fluorene	30.000	29.146	2.8	91	0.00
8		Phenanthrene	30.000	29.389	2.0	89	0.00
9		Anthracene	30.000	28.320	5.6	92	0.00
10	S	O-Terphenyl	30.000	28.915	3.6	91	0.00
11		Fluoranthene	30.000	28.982	3.4	91	0.00
12		Pyrene	30.000	29.241	2.5	92	0.00
13		Benzo(a)Anthracene	30.000	28.047	6.5	88	0.00
14		Chrysene	30.000	27.764	7.5	87	0.04
15		Benzo(b)Fluoranthene	30.000	27.962	6.8	87	0.04

Continuing Calibration Summary

Job Number: F19845
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GIJ889-ECC869
Lab FileID: IJ18538.D

16	Benzo(k)Fluoranthene	30.000	27.381	8.7	87	0.04
17	Benzo(a) Pyrene	30.000	28.035	6.5	88	0.04
18	Indeno(1,2,3-cd)pyrene	30.000	28.661	4.5	88	0.04
19	Dibenzo(a,h)anthracene	30.000	27.880	7.1	90	0.03
20	Benzo(g,h,i) Perylene	30.000	28.618	4.6	90	0.04

Average % D = 6.0

(#) = Out of Range SPCC's out = 0 CCC's out = 0
IJ18164.D 8100_H2.M Tue Oct 07 13:11:15 2003

5.7

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Instrument Runlogs
- Initial and Continuing Calibration Blanks
- Initial and Continuing Calibration Checks
- High and Low Check Standards
- Interfering Element Check Standards
- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: F19845
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR100803.ASC Date Analyzed: 10/08/03 Methods: SW846 6010B
Analyst: DM Run ID: MA3507
Parameters: As,Ba,Be,Cd,Cr,Fe,Pb,Mn,Se

Time	Sample Description	Dilution Factor	PS Recov	Comments
10:27	MA3507-ICV1	1		
10:30	MA3507-ICB1	1		
10:33	MA3507-CRI1	1		
10:39	MA3507-ICSA1	1		
10:41	MA3507-ICSAB1	1		
10:47	MA3507-CCV1	1		
10:51	MA3507-CCB1	1		
10:55	MP5919-MB1	1		
10:59	MP5919-B1	1		
11:03	F19852-2	1		(sample used for QC only; not part of login F19845)
11:06	MP5919-D1	1		
11:10	MP5919-SD1	5		
11:14	MP5919-S1	1		
11:17	MP5919-S2	1		
11:22	ZZZZZZ	1		
11:25	ZZZZZZ	1		
11:29	ZZZZZZ	1		
11:33	MA3507-CCV2	1		
11:37	MA3507-CCB2	1		
11:41	ZZZZZZ	1		
11:44	ZZZZZZ	1		
11:48	ZZZZZZ	1		
11:51	ZZZZZZ	1		
11:55	ZZZZZZ	1		
11:58	ZZZZZZ	1		
12:02	ZZZZZZ	1		
12:05	ZZZZZZ	1		
12:09	MP5921-MB1	1		
12:12	MP5921-B1	1		
12:17	MA3507-CCV3	1		
12:21	MA3507-CCB3	1		
12:25	F19678-4	1		(sample used for QC only; not part of login F19845)
12:28	MP5921-D1	1		

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: F19845
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR100803.ASC Date Analyzed: 10/08/03 Methods: SW846 6010B
Analyst: DM Run ID: MA3507
Parameters: As,Ba,Be,Cd,Cr,Fe,Pb,Mn,Se

Time	Sample Description	Dilution Factor	PS Recov	Comments
12:32	MP5921-SD1	5		
12:35	MP5921-S1	1		
12:39	MP5921-S2	1		
12:43	ZZZZZZ	1		
12:47	ZZZZZZ	1		
12:50	ZZZZZZ	1		
12:54	ZZZZZZ	1		
12:57	ZZZZZZ	1		
13:01	MA3507-CCV4	1		
13:05	MA3507-CCB4	1		
13:09	ZZZZZZ	1		
13:22	MA3507-CCV5	1		
13:27	MA3507-CCB5	1		
13:54	MA3507-CRI2	1		
13:57	MA3507-CCV6	1		
14:02	MA3507-CCB6	1		
14:08	MP5920-MB1	1		
14:12	MP5920-B1	1		
14:16	F19912-1	1		(sample used for QC only; not part of login F19845)
14:20	MP5920-D1	1		
14:23	MP5920-SD1	5		
14:27	MP5920-S1	1		
14:30	MP5920-S2	1		
14:35	ZZZZZZ	1		
14:38	ZZZZZZ	1		
14:42	ZZZZZZ	1		
14:45	MA3507-CCV7	1		
14:50	MA3507-CCB7	1		
14:53	ZZZZZZ	1		
14:57	ZZZZZZ	1		
15:00	ZZZZZZ	1		
15:04	ZZZZZZ	1		
15:07	ZZZZZZ	1		

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: F19845
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR100803.ASC Date Analyzed: 10/08/03 Methods: SW846 6010B
Analyst: DM Run ID: MA3507
Parameters: As,Ba,Be,Cd,Cr,Fe,Pb,Mn,Se

Time	Sample Description	Dilution Factor	PS Recov	Comments
15:11	ZZZZZZ	1		
15:15	ZZZZZZ	1		
15:18	F19845-1	1		
---------->	Last reportable sample/prep for job F19845			
15:22	ZZZZZZ	1		
15:25	ZZZZZZ	1		
15:33	MA3507-CCV8	1		
15:37	MA3507-CCB8	1		
---------->	Last reportable CCB for job F19845			
15:41	MA3507-CRI3	1		
15:44	MA3507-CCV9	1		
15:49	MA3507-CCB9	1		

Refer to raw data for calibration curve and standards.

INTERNAL STANDARD SUMMARY

Login Number: F19845
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR100803.ASC Date Analyzed: 10/08/03 Methods: SW846 6010B
Analyst: DM Run ID: MA3507
Parameters: As,Ba,Be,Cd,Cr,Fe,Pb,Mn,Se

Time	Sample Description	Istd#1
10:27	MA3507-ICV1	6852
10:30	MA3507-ICB1	7093 R
10:33	MA3507-CRI1	7048
10:39	MA3507-ICSA1	6256
10:41	MA3507-ICSAB1	6197
10:47	MA3507-CCV1	6749
10:51	MA3507-CCB1	6956
10:55	MP5919-MB1	6902
10:59	MP5919-B1	6697
11:03	F19852-2	7070
11:06	MP5919-D1	6973
11:10	MP5919-SD1	7051
11:14	MP5919-S1	7017
11:17	MP5919-S2	7101
11:22	ZZZZZZ	6473
11:25	ZZZZZZ	6933
11:29	ZZZZZZ	7024
11:33	MA3507-CCV2	6811
11:37	MA3507-CCB2	7065
11:41	ZZZZZZ	7069
11:44	ZZZZZZ	7175
11:48	ZZZZZZ	7179
11:51	ZZZZZZ	6804
11:55	ZZZZZZ	7151
11:58	ZZZZZZ	7135
12:02	ZZZZZZ	7250
12:05	ZZZZZZ	7065
12:09	MP5921-MB1	6938
12:12	MP5921-B1	6783
12:17	MA3507-CCV3	6886
12:21	MA3507-CCB3	7036
12:25	F19678-4	6938
12:28	MP5921-D1	7090

INTERNAL STANDARD SUMMARY

Login Number: F19845
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR100803.ASC Date Analyzed: 10/08/03 Methods: SW846 6010B
Analyst: JM Run ID: MA3507
Parameters: As,Ba,Be,Cd,Cr,Fe,Pb,Mn,Se

Time	Sample Description	Istd#1
12:32	MP5921-SD1	7034
12:35	MP5921-S1	6679
12:39	MP5921-S2	6782
12:43	ZZZZZZ	6901
12:47	ZZZZZZ	6692
12:50	ZZZZZZ	6653
12:54	ZZZZZZ	6855
12:57	ZZZZZZ	6966
13:01	MA3507-CCV4	6712
13:05	MA3507-CCB4	6971
13:09	ZZZZZZ	6725
13:22	MA3507-CCV5	6924
13:27	MA3507-CCB5	6940
13:54	MA3507-CRI2	7063
13:57	MA3507-CCV6	6798
14:02	MA3507-CCB6	7011
14:08	MP5920-MB1	6951
14:12	MP5920-B1	6846
14:16	F19912-1	6956
14:20	MP5920-D1	6762
14:23	MP5920-SD1	7064
14:27	MP5920-S1	6766
14:30	MP5920-S2	6823
14:35	ZZZZZZ	6949
14:38	ZZZZZZ	6998
14:42	ZZZZZZ	7016
14:45	MA3507-CCV7	6760
14:50	MA3507-CCB7	6995
14:53	ZZZZZZ	7069
14:57	ZZZZZZ	6610
15:00	ZZZZZZ	6878
15:04	ZZZZZZ	6808
15:07	ZZZZZZ	6886

6.1.1

INTERNAL STANDARD SUMMARY

Login Number: F19845
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: ER100803.ASC Date Analyzed: 10/08/03 Methods: SW846 6010B
Analyst: DM Run ID: MA3507
Parameters: As,Ba,Be,Cd,Cr,Fe,Pb,Mn,Se

Time	Sample Description	Istd#1
15:11	ZZZZZZ	6967
15:15	ZZZZZZ	7102
15:18	F19845-1	7012
15:22	ZZZZZZ	6869
15:25	ZZZZZZ	7028
15:33	MA3507-CCV8	6877
15:37	MA3507-CCB8	6976
15:41	MA3507-CRI3	7019
15:44	MA3507-CCV9	6835
15:49	MA3507-CCB9	7012

R = Reference for ISTD limits. ! = Outside limits.

LEGEND:

Istd#	Parameter	Limits
Istd#1	Yttrium	60-125 %

9.1.6

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: F19845
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR100803.ASC Date Analyzed: 10/08/03 Methods: SW846 6010B
QC Limits: result < RL Run ID: MA3507 Units: ug/l

Time:			10:30		10:51		11:37		12:21	
Sample ID:			ICB1		CCB1		CCB2		CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	6.6	anr							
Antimony	5.0	1.5	anr							
Arsenic	10	2.8	0.58	<10	-0.91	<10	0.51	<10	2.9	<10
Barium	200	.49	0.56	<200	0.66	<200	0.95	<200	1.5	<200
Beryllium	5.0	.26	0.69	<5.0	0.85	<5.0	1.1	<5.0	1.0	<5.0
Cadmium	5.0	.26	0.43	<5.0	0.42	<5.0	0.80	<5.0	1.0	<5.0
Calcium	1000	3.8	anr							
Chromium	10	.43	0.37	<10	2.1	<10	1.7	<10	1.5	<10
Cobalt	50	.5	anr							
Copper	25	.44	anr							
Iron	300	7.1	12.2	<300	70.8	<300	63.6	<300	68.6	<300
Lead	5.0	1.2	0.94	<5.0	3.2	<5.0	1.2	<5.0	3.9	<5.0
Magnesium	5000	9.9	anr							
Manganese	15	.16	0.33	<15	0.57	<15	0.80	<15	0.99	<15
Molybdenum	50	.75	anr							
Nickel	40	1.1	anr							
Potassium	5000	14	anr							
Selenium	10	2	-1.1	<10	2.1	<10	3.4	<10	0.68	<10
Silver	10	.55	anr							
Sodium	5000	150	anr							
Thallium	10	1.5	anr							
Tin	50	2.2	anr							
Vanadium	50	.47	anr							
Zinc	20	.59	anr							

(*) Outside of QC limits
(anr) Analyte not requested

6.1.2

BLANK RESULTS SUMMARY
Part 2 - Initial and Continuing Calibration Blanks

Login Number: F19845
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR100803.ASC
QC Limits: result < RL

Date Analyzed: 10/08/03
Run ID: MA3507

Methods: SW846 6010B
Units: ug/l

Time:			13:05		13:27		14:02		14:50	
Sample ID:			CCB4		CCB5		CCB6		CCB7	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	6.6	anr							
Antimony	5.0	1.5	anr							
Arsenic	10	2.8	-1.5	<10	0.0	<10	1.1	<10	0.46	<10
Barium	200	.49	1.3	<200	0.83	<200	0.88	<200	1.1	<200
Beryllium	5.0	.26	1.2	<5.0	0.75	<5.0	0.86	<5.0	1.0	<5.0
Cadmium	5.0	.26	1.1	<5.0	0.71	<5.0	0.56	<5.0	0.73	<5.0
Calcium	1000	3.8	anr							
Chromium	10	.43	1.4	<10	0.55	<10	0.59	<10	0.75	<10
Cobalt	50	.5	anr							
Copper	25	.44	anr							
Iron	300	7.1	61.1	<300	59.1	<300	54.5	<300	50.5	<300
Lead	5.0	1.2	3.4	<5.0	0.34	<5.0	1.2	<5.0	2.1	<5.0
Magnesium	5000	9.9	anr							
Manganese	15	.16	1.2	<15	0.55	<15	0.52	<15	0.79	<15
Molybdenum	50	.75	anr							
Nickel	40	1.1	anr							
Potassium	5000	24	anr							
Selenium	10	2	6.3	<10	2.1	<10	2.9	<10	2.0	<10
Silver	10	.55	anr							
Sodium	5000	150	anr							
Thallium	10	1.5	anr							
Tin	50	2.2	anr							
Vanadium	50	.47	anr							
Zinc	20	.59	anr							

(*) Outside of QC limits
(anr) Analyte not requested

6.1.2

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: F19845
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR100803.ASC Date Analyzed: 10/08/03 Methods: SW846 6010B
QC Limits: result < RL Run ID: MA3507 Units: ug/l

Time: / Sample ID: / Metal	RL	IDL	15:37 CCB8 raw	final
Aluminum	200	6.6	anr	
Antimony	5.0	1.5	anr	
Arsenic	10	2.8	0.30	<10
Barium	200	.49	1.7	<200
Beryllium	5.0	.26	1.6	<5.0
Cadmium	5.0	.26	1.5	<5.0
Calcium	1000	3.8	anr	
Chromium	10	.43	1.5	<10
Cobalt	50	.5	anr	
Copper	25	.44	anr	
Iron	300	7.1	79.1	<300
Lead	5.0	1.2	2.2	<5.0
Magnesium	5000	9.9	anr	
Manganese	15	.16	1.5	<15
Molybdenum	50	.75	anr	
Nickel	40	1.1	anr	
Potassium	5000	14	anr	
Selenium	10	2	5.1	<10
Silver	10	.55	anr	
Sodium	5000	150	anr	
Thallium	10	1.5	anr	
Tin	50	2.2	anr	
Vanadium	50	.47	anr	
Zinc	20	.59	anr	

(*) Outside of QC limits
(anr) Analyte not requested

6.1.2

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: F19845
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR100803.ASC Date Analyzed: 10/08/03 Methods: SW846 6010B
QC Limits: 90 to 110 % Recovery Run ID: MA3507 Units: ug/l

Time:		10:27			10:47			11:33	
Sample ID:	ICV	ICV1		CCV	CCV1		CCV	CCV2	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	2000	1940	97.0	2000	1970	98.5	2000	1950	97.5
Barium	2000	2040	102.0	2000	2080	104.0	2000	2060	103.0
Beryllium	2000	1950	97.5	2000	2000	100.0	2000	1990	99.5
Cadmium	2000	1950	97.5	2000	2010	100.5	2000	1990	99.5
Calcium	anr								
Chromium	2000	1870	93.5	2000	1920	96.0	2000	1910	95.5
Cobalt	anr								
Copper	anr								
Iron	40000	40900	102.3	40000	42000	105.0	40000	41400	103.5
Lead	2000	1900	95.0	2000	1960	98.0	2000	1940	97.0
Magnesium	anr								
Manganese	2000	1940	97.0	2000	1980	99.0	2000	1970	98.5
Molybdenum	anr								
Nickel	anr								
Potassium	anr								
Selenium	2000	1920	96.0	2000	1960	98.0	2000	1940	97.0
Silver	anr								
Sodium	anr								
Thallium	anr								
Tin	anr								
Vanadium	anr								
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

ACCUTEST.
F19845

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: F19845
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: ER100803.ASC Date Analyzed: 10/08/03 Methods: SW846 6010B
QC Limits: 90 to 110 % Recovery Run ID: MA3507 Units: ug/l

Time:		12:17			13:01			13:22	
Sample ID:	CCV	CCV3		CCV	CCV4		CCV	CCV5	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	2000	1920	96.0	2000	1980	99.0	2000	1930	96.5
Barium	2000	2030	101.5	2000	2100	105.0	2000	2020	101.0
Beryllium	2000	1950	97.5	2000	2020	101.0	2000	1960	98.0
Cadmium	2000	1950	97.5	2000	2030	101.5	2000	1970	98.5
Calcium	anr								
Chromium	2000	1870	93.5	2000	1940	97.0	2000	1880	94.0
Cobalt	anr								
Copper	anr								
Iron	40000	40700	101.8	40000	42100	105.3	40000	40900	102.3
Lead	2000	1910	95.5	2000	1970	98.5	2000	1910	95.5
Magnesium	anr								
Manganese	2000	1930	96.5	2000	2000	100.0	2000	1940	97.0
Molybdenum	anr								
Nickel	anr								
Potassium	anr								
Selenium	2000	1920	96.0	2000	1970	98.5	2000	1930	96.5
Silver	anr								
Sodium	anr								
Thallium	anr								
Tin	anr								
Vanadium	anr								
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

ACCUTEST.
F19845

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: F19845
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR1C0803.ASC Date Analyzed: 10/08/03 Methods: SW846 6010B
QC Limits: 90 to 110 % Recovery Run ID: MA3507 Units: ug/l

Time:		13:57			14:45			15:33	
Sample ID:	CCV	CCV6		CCV	CCV7		CCV	CCV8	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	2000	1960	98.0	2000	1960	98.0	2000	1910	95.5
Barium	2000	2060	103.0	2000	2050	102.5	2000	2000	100.0
Beryllium	2000	1990	99.5	2000	2000	100.0	2000	1950	97.5
Cadmium	2000	1990	99.5	2000	2000	100.0	2000	1950	97.5
Calcium	anr								
Chromium	2000	1910	95.5	2000	1910	95.5	2000	1870	93.5
Cobalt	anr								
Copper	anr								
Iron	40000	41500	103.8	40000	41500	103.8	40000	40600	101.5
Lead	2000	1940	97.0	2000	1940	97.0	2000	1900	95.0
Magnesium	anr								
Manganese	2000	1970	98.5	2000	1970	98.5	2000	1920	96.0
Molybdenum	anr								
Nickel	anr								
Potassium	anr								
Selenium	2000	1940	97.0	2000	1930	96.5	2000	1900	95.0
Silver	anr								
Sodium	anr								
Thallium	anr								
Tin	anr								
Vanadium	anr								
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

6.1.3

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: F19845
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR100803.ASC Date Analyzed: 10/08/03 Methods: SW846 6010B
QC Limits: 70 to 130 % Recovery Run ID: MA3507 Units: ug/l

Time:			10:33		13:54	
Sample ID:	CRI	CRIA	CRI1		CRI2	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	400		anr			
Antimony	10		anr			
Arsenic	20		17.1	85.5	17.5	87.5
Barium	400		398	99.5	394	98.5
Beryllium	10		10.2	102.0	10.0	100.0
Cadmium	10		9.8	98.0	9.7	97.0
Calcium	2000		anr			
Chromium	20		19.1	95.5	20.6	103.0
Cobalt	100		anr			
Copper	50		anr			
Iron	600		660	110.0	689	114.8
Lead	10		11.5	115.0	9.7	97.0
Magnesium	10000		anr			
Manganese	30		30.9	103.0	30.9	103.0
Molybdenum	100		anr			
Nickel	80		anr			
Potassium	10000		anr			
Selenium	10		13.2	130.0	10.3	103.0
Silver	20		anr			
Sodium	10000		anr			
Thallium	20		anr			
Tin	100		anr			
Vanadium	100		anr			
Zinc	40		anr			

(*) Outside of QC limits
(anr) Analyte not requested

6.1.4

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: F19845
Account: EEINCJX - FEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR100803.ASC Date Analyzed: 10/08/03 Methods: SW846 6010B
QC Limits: 80 to 120 % Recovery Run ID: MA3507 Units: ug/l

Time:			10:39		10:41	
Sample ID:	ICSA	ICSAB	ICSA1		ICSAB1	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	500000	500000	546000	109.2	509000	101.8
Antimony		1000	-4.2		974	97.4
Arsenic		1000	-0.82		954	95.4
Barium		500	2.0		532	106.4
Beryllium		500	-0.040		513	102.6
Cadmium		1000	0.49		989	98.9
Calcium	500000	500000	502000	100.4	478000	95.6
Chromium		500	2.3		472	94.4
Cobalt		500	0.55		475	95.0
Copper		500	-5.0		500	100.0
Iron	200000	200000	208000	104.0	192000	96.0
Lead		1000	-1.6		969	96.9
Magnesium	500000	500000	547000	109.4	519000	103.8
Manganese		500	-0.35		483	96.6
Molybdenum		1000	0.40		930	93.0
Nickel		1000	3.1		958	95.8
Potassium			18.4		-360	
Selenium		1000	-8.0		962	96.2
Silver		1000	-1.6		1100	110.0
Sodium			196		317	
Thallium		1000	2.9		919	91.9
Tin		1000	-7.2		927	92.7
Vanadium		500	15.2		516	103.2
Zinc		1000	-3.1		937	93.7

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: F19845
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

QC Batch ID: MP5920
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date: 10/07/03

Metal	RL	IDL	MB raw	final
Aluminum	200	6.6	anr	
Antimony	5.0	1.3	anr	
Arsenic	10	2.8	-4.1	<10
Barium	200	.49	-0.47	<200
Beryllium	5.0	.26	-0.090	<5.0
Cadmium	5.0	.26	-0.39	<5.0
Calcium	1000	3.8	anr	
Chromium	10	.43	-0.44	<10
Cobalt	50	.5	anr	
Copper	25	.44	anr	
Iron	300	7.1	0.41	<300
Lead	5.0	1.2	1.2	<5.0
Magnesium	5000	9.9	anr	
Manganese	15	.16	-0.34	<15
Molybdenum	50	.75	anr	
Nickel	40	1.1	anr	
Potassium	5000	14	anr	
Selenium	10	2	-1.8	<10
Silver	10	.55	anr	
Sodium	5000	150	anr	
Thallium	10	1.5	anr	
Tin	50	2.2		
Vanadium	50	.47	anr	
Zinc	20	.59	anr	

Associated samples MP5920: F19845-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

6.2.1

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: F19845
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

QC Batch ID: MP5920
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date: 10/07/03 10/07/03

Metal	F19912-1 Original	DUP	RPD	QC Limits	F19912-1 Original	MS	Spikelot MPFLICP	% Rec	QC Limits
Aluminum	anr								
Antimony	anr								
Arsenic	0.0	0.0	NC	0-12	0.0	3910	4000	97.8	83-116
Barium	5.6	5.2	7.4	0-13	5.6	4150	4000	103.6	82-116
Beryllium	0.0	0.0	NC	0-12	0.0	106	100	106.0	86-119
Cadmium	0.0	0.0	NC	0-13	0.0	103	100	103.0	80-125
Calcium	anr								
Chromium	0.0	0.0	NC	0-12	0.0	402	400	100.5	82-120
Cobalt	anr								
Copper	anr								
Iron	45.8	16.1	96.0 (a)	0-14	45.8	30400	27000	112.4	76-125
Lead	1.7	0.0	200.0(a)	0-10	1.7	1040	1000	103.8	84-118
Magnesium	anr								
Manganese	1.7	1.6	6.1	0-13	1.7	1030	1000	102.8	75-125
Molybdenum	anr								
Nickel	anr								
Potassium	anr								
Selenium	0.0	0.0	NC	0-13	0.0	4020	4000	100.5	84-121
Silver	anr								
Sodium	anr								
Thallium	anr								
Tin									
Vanadium	anr								
Zinc	anr								

Associated samples MP5920: F19845-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) RPD acceptable due to low duplicate and sample concentrations.

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: F19845
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

QC Batch ID: MP5920
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date: 10/07/03

Metal	F19912-1 Original	MSD	Spikelot MPFLICP	% Rec	MSD RPD	QC Limit
Aluminum	anr					
Antimony	anr					
Arsenic	0.0	3970	4000	99.3	1.5	
Barium	5.6	4190	4000	104.6	1.0	
Beryllium	0.0	108	100	108.0	1.9	
Cadmium	0.0	105	100	105.0	1.9	
Calcium	anr					
Chromium	0.0	409	400	102.3	1.7	
Cobalt	anr					
Copper	anr					
Iron	45.8	31100	27000	115.0	2.3	
Lead	1.7	1060	1000	105.8	1.9	
Magnesium	anr					
Manganese	1.7	1040	1000	103.8	1.0	
Molybdenum	anr					
Nickel	anr					
Potassium	anr					
Selenium	0.0	4090	4000	102.3	1.7	
Silver	anr					
Sodium	anr					
Thallium	anr					
Tin						
Vanadium	anr					
Zinc	anr					

Associated samples MP5920: F19845-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

6.2.2

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: F19845
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

QC Batch ID: MP5920
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date: 10/07/03

Metal	BSP Result	Spikelot MPFLICP	% Rec	QC Limits
Aluminum	anr			
Antimony	anr			
Arsenic	3800	4000	95.0	80-120
Barium	4050	4000	101.3	80-120
Beryllium	104	100	104.0	80-120
Cadmium	101	100	101.0	80-120
Calcium	anr			
Chromium	392	400	98.0	80-120
Cobalt	anr			
Copper	anr			
Iron	29900	27000	110.7	80-120
Lead	1020	1000	102.0	80-120
Magnesium	anr			
Manganese	1000	1000	100.0	80-120
Molybdenum	anr			
Nickel	anr			
Potassium	anr			
Selenium	3930	4000	98.3	80-120
Silver	anr			
Sodium	anr			
Thallium	anr			
Tin				
Vanadium	anr			
Zinc	anr			

Associated samples MP5920: F19845-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: F19845
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

QC Batch ID: MP5920
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date: 10/07/03

Metal	F19912-1 Original	SDL 1:5	RPD	QC Limits
Aluminum	anr			
Antimony	anr			
Arsenic	0.00	0.00	NC	0-10
Barium	5.63	4.17	25.9 (a)	0-10
Beryllium	0.00	0.00	NC	0-10
Cadmium	0.00	0.00	NC	0-10
Calcium	anr			
Chromium	0.00	0.00	NC	0-10
Cobalt	anr			
Copper	anr			
Iron	45.8	43.8	4.5	0-10
Lead	1.70	8.11	377.1(a)	0-10
Magnesium	anr			
Manganese	1.74	0.00	100.0(a)	0-10
Molybdenum	anr			
Nickel	anr			
Potassium	anr			
Selenium	0.00	0.00	NC	0-10
Silver	anr			
Sodium	anr			
Thallium	anr			
Tin				
Vanadium	anr			
Zinc	anr			

Associated samples MP5920: F19845-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

6.2.4

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: F19845
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Solids, Total Dissolved	GN12821	10	<10	mg/l				
Solids, Total Suspended	GN12822	4.0	<4.0	mg/l				

Associated Samples:
Batch GN12821: F19845-1
Batch GN12822: F19845-1

7.1

7

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: F19845
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Solids, Total Dissolved	GN12821	F19845-1	mg/l	330	325	0.9	0-29%
Solids, Total Suspended	GN12822	F19845-1	mg/l	<4.0	<4.0	0.0	0-33%

Associated Samples:
Batch GN12821: F19845-1
Batch GN12822: F19845-1

7.2
7

October 2003 Laboratory Reports

Southeast
ACCUTEST.
Laboratories

12/08/05

Technical Report for

EEI

Camp Lejeune-Campbell St. Fuel Farm

824603

Accutest Job Number: F20395

Sampling Date: 10/31/03

Report to:

EEI

bmorris@eeimail.com

ATTN: Bill Morris

Total number of pages in report: 80

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Sections: 1 2 3 4 5 6

Table of Contents

Section 1: Sample Summary **3**
Section 2: Sample Results **4**
2.1: F20395-1: CSFF-EFF-002 4
2.2: F20395-2: RWC-1 8
2.3: F20395-3: RWB-1 9
2.4: F20395-4: RWB-3 10
2.5: F20395-5: RWB-3D 11
Section 3: GC Volatiles - QC Data Summaries 12
3.1: Method Blank Summary 13
3.2: Blank Spike Summary 15
3.3: Matrix Spike/Matrix Spike Duplicate Summary 17
3.4: Surrogate Recovery Summaries 19
3.5: GC Surrogate Retention Time Summaries 20
3.6: Initial and Continuing Calibration Summaries 24
Section 4: GC Semi-volatiles - QC Data Summaries **31**
4.1: Method Blank Summary 32
4.2: Blank Spike Summary 34
4.3: Matrix Spike/Matrix Spike Duplicate Summary 35
4.4: Surrogate Recovery Summaries 36
4.5: GC Surrogate Retention Time Summaries 37
4.6: Initial and Continuing Calibration Summaries 40
Section 5: Metals Analysis - QC Data Summaries 52
5.1: Inst QC MA3554: As,Ba,Be,Cd,Cr,Fe,Pb,Mn,Se 53
5.2: Prep QC MP6005: As,Ba,Be,Cd,Cr,Fe,Pb,Mn,Se 71
5.3: IDL and Linear Range Summaries 76
Section 6: General Chemistry - QC Data Summaries 78
6.1: Method Blank and Spike Results Summary 79
6.2: Duplicate Results Summary 80

Accutest LabLink@43779 18:24 08-Dec-2005

Sample Summary

EEI

Job No: F20395

Camp Lejeune-Campbell St. Fuel Farm
Project No: 824603

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
F20395-1	10/31/03	14:40	MM	11/01/03	AQ	Water	CSFF-EFF-002
F20395-2	10/31/03	13:55	MM	11/01/03	AQ	Water	RWC-1
F20395-3	10/31/03	14:00	MM	11/01/03	AQ	Water	RWB-1
F20395-4	10/31/03	14:15	MM	11/01/03	AQ	Water	RWB-3
F20395-5	10/31/03	14:20	MM	11/01/03	AQ	Water	RWB-3D

2.1

Report of Analysis

Client Sample ID:	CSFF-EFF-002		
Lab Sample ID:	F20395-1	**Date Sampled:**	10/31/03
Matrix:	AQ - Water	**Date Received:**	11/01/03
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD043001.D	1	11/11/03	RM	n/a	n/a	GCD1765
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Diehlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	91%		70-123%
98-08-8	aaa-Trifluorotoluene	92%		73-122%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CSFF-EFF-002		
Lab Sample ID:	F20395-1	**Date Sampled:**	10/31/03
Matrix:	AQ - Water	**Date Received:**	11/01/03
Method:	EPA 610 EPA 610	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IJ18765.D	1	11/04/03	SD	11/03/03	OP8972	GIJ905
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.0	2.0	ug/l	
208-96-8	Acenaphthylene	ND	5.0	2.0	ug/l	
120-12-7	Anthracene	ND	5.0	2.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.0	2.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.0	2.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.0	2.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.0	2.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.0	2.0	ug/l	
218-01-9	Chrysene	ND	5.0	2.0	ug/l	
53-70-3	Dibenzo(a,h)anthraeene	ND	5.0	2.0	ug/l	
206-44-0	Fluoranthene	ND	5.0	2.0	ug/l	
86-73-7	Fluorene	ND	5.0	2.0	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.0	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.0	ug/l	
90-12-0	1-Methylnaphthalene	ND	5.0	2.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.0	2.0	ug/l	
85-01-8	Phenanthrene	ND	5.0	2.0	ug/l	
129-00-0	Pyrene	ND	5.0	2.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	98%		42-123%
84-15-1	o-Terphenyl	103%		51-123%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in assoeiated method blank
N = Indicates presumptive evidence of a compound

2.1

Report of Analysis

Client Sample ID:	CSFF-EFF-002		
Lab Sample ID:	F20395-1	**Date Sampled:**	10/31/03
Matrix:	AQ - Water	**Date Received:**	11/01/03
		Percent Solids:	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	< 10	10	ug/l	1	11/03/03	11/04/03	DM	SW846 6010B [1]	SW846 3010A [2]
Barium	< 200	200	ug/l	1	11/03/03	11/04/03	DM	SW846 6010B [1]	SW846 3010A [2]
Beryllium	< 5.0	5.0	ug/l	1	11/03/03	11/04/03	DM	SW846 6010B [1]	SW846 3010A [2]
Cadmium	< 5.0	5.0	ug/l	1	11/03/03	11/04/03	DM	SW846 6010B [1]	SW846 3010A [2]
Chromium	< 10	10	ug/l	1	11/03/03	11/04/03	DM	SW846 6010B [1]	SW846 3010A [2]
Iron	< 300	300	ug/l	1	11/03/03	11/04/03	DM	SW846 6010B [1]	SW846 3010A [2]
Lead	< 5.0	5.0	ug/l	1	11/03/03	11/04/03	DM	SW846 6010B [1]	SW846 3010A [2]
Manganese	< 15	15	ug/l	1	11/03/03	11/04/03	DM	SW846 6010B [1]	SW846 3010A [2]
Selenium	< 10	10	ug/l	1	11/03/03	11/04/03	DM	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA3554
(2) Prep QC Batch: MP6005

RL = Reporting Limit

Report of Analysis

Client Sample ID:	CSFF-EFF-002		
Lab Sample ID:	F20395-1	**Date Sampled:**	10/31/03
Matrix:	AQ - Water	**Date Received:**	11/01/03
		Percent Solids:	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Hardness, Total as CaCO3	290	4.0	mg/l	1	11/17/03	DM	SW846 6010B/SM 2340B
Solids, Total Dissolved	356	10	mg/l	1	11/18/03	LE	EPA 160.1
Solids, Total Suspended	< 4.0	4.0	mg/l	1	11/07/03	LIR	EPA 160.2

RL = Reporting Limit

Report of Analysis

Client Sample ID:	RWC-1		
Lab Sample ID:	F20395-2	**Date Sampled:**	10/31/03
Matrix:	AQ - Water	**Date Received:**	11/01/03
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD043002.D	1	11/11/03	RM	n/a	n/a	GCD1765
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	91%		70-123%
98-08-8	aaa-Trifluorotoluene	95%		73-122%

ND = Not deteeted MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a eompound

Report of Analysis

Client Sample ID:	RWB-1		
Lab Sample ID:	F20395-3	**Date Sampled:**	10/31/03
Matrix:	AQ - Water	**Date Received:**	11/01/03
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	CD043003.D	1	11/11/03	RM	n/a	n/a	GCD1765
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	0.91	1.0	0.50	ug/l	J
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	11.1	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	95%		70-123%
98-08-8	aaa-Trifluorotoluene	93%		73-122%

(a) All hits confirmed by dual column analysis.

ND = Not deteeted MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RWB-3		
Lab Sample ID:	F20395-4	**Date Sampled:**	10/31/03
Matrix:	AQ - Water	**Date Received:**	11/01/03
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	CD043021.D	5	11/11/03	BM	n/a	n/a	GCD1766
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	292	5.0	2.5	ug/l	
108-90-7	Chlorobenzene	ND	5.0	2.5	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.0	2.5	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	2.5	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	2.5	ug/l	
100-41-4	Ethylbenzene	51.5	5.0	2.5	ug/l	
1634-04-4	Methyl Tert Butyl Ether	52.3	5.0	2.5	ug/l	
108-88-3	Toluene	124	5.0	2.5	ug/l	
1330-20-7	Xylenes (total)	275	15	5.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	101%		70-123%
98-08-8	aaa-Trifluorotoluene	101%		73-122%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indieates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RWB-3D		
Lab Sample ID:	F20395-5	**Date Sampled:**	10/31/03
Matrix:	AQ - Water	**Date Received:**	11/01/03
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	CD043022.D	5	11/11/03	BM	n/a	n/a	GCD1766
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	293	5.0	2.5	ug/l	
108-90-7	Chlorobenzene	ND	5.0	2.5	ug/l	
95-50-1	1,2-Diehlorobenzene	ND	5.0	2.5	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	2.5	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	2.5	ug/l	
100-41-4	Ethylbenzene	55.1	5.0	2.5	ug/l	
1634-04-4	Methyl Tert Butyl Ether	50.9	5.0	2.5	ug/l	
108-88-3	Toluene	127	5.0	2.5	ug/l	
1330-20-7	Xylenes (total)	287	15	5.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	99%		70-123%
98-08-8	aaa-Trifluorotoluene	99%		73-122%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

GC Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: F20395
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Bateh
GCD1765-MB	CD042991.D	1	11/10/03	RM	n/a	n/a	GCD1765

The QC reported here applies to the following samples: **Method:** EPA 601/602

F20395-1, F20395-2, F20395-3

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
352-33-0	1-Chloro-4-fluorobenzene	91%	70-123%
98-08-8	aaa-Trifluorotoluene	91%	73-122%

Method Blank Summary

Job Number: F20395
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GCD1766-MB	CD043018.D	1	11/11/03	BM	n/a	n/a	GCD1766

The QC reported here applies to the following samples: **Method:** EPA 601/602

F20395-4, F20395-5

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
352-33-0	1-Chloro-4-fluorobenzene	90%	70-123%
98-08-8	aaa-Trifluorotoluene	91%	73-122%

Blank Spike Summary

Job Number: F20395
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GCD1765-BS	CD042990.D	1	11/10/03	RM	n/a	n/a	GCD1765

The QC reported here applies to the following samples: **Method:** EPA 601/602

F20395-1, F20395-2, F20395-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	20	17.8	89	86-121
108-90-7	Chlorobenzene	20	16.8	84	81-119
95-50-1	1,2-Diehlorobenzene	20	16.6	83	75-120
541-73-1	1,3-Dichlorobenzenc	20	16.9	85	77-121
106-46-7	1,4-Dichlorobenzene	20	16.4	82	75-122
100-41-4	Ethylbenzene	20	16.9	85	81-126
1634-04-4	Methyl Tcrt Butyl Ethcr	20	16.1	81	76-117
108-88-3	Toluene	20	17.2	86	82-123
1330-20-7	Xylenes (total)	60	50.9	85	82-125

CAS No.	Surrogate Recoveries	BSP	Limits
352-33-0	1-Chloro-4-fluorobenzene	97%	70-123%
98-08-8	aaa-Trifluorotoluene	96%	73-122%

Blank Spike Summary

Job Number: F20395
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GCD1766-BS	CD043017.D	1	11/11/03	BM	n/a	n/a	GCD1766

The QC reported here applies to the following samples: **Method:** EPA 601/602

F20395-4, F20395-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	20	19.0	95	86-121
108-90-7	Chlorobenzene	20	18.2	91	81-119
95-50-1	1,2-Dichlorobenzene	20	17.9	90	75-120
541-73-1	1,3-Dichlorobenzene	20	18.7	94	77-121
106-46-7	1,4-Dichlorobenzene	20	18.1	91	75-122
100-41-4	Ethylbenzene	20	18.6	93	81-126
1634-04-4	Methyl Tert Butyl Ether	20	17.8	89	76-117
108-88-3	Toluene	20	18.6	93	82-123
1330-20-7	Xylenes (total)	60	56.4	94	82-125

CAS No.	Surrogate Recoveries	BSP	Limits
352-33-0	1-Chloro-4-fluorobenzene	97%	70-123%
98-08-8	aaa-Trifluorotoluene	95%	73-122%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F20395
Account: EEINCJX EE1
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F20362-6MS	CD042992.D	1	11/11/03	RM	n/a	n/a	GCD1765
F20362-6MSD	CD042993.D	1	11/11/03	RM	n/a	n/a	GCD1765
F20362-6 [a]	CD042994.D	1	11/11/03	RM	n/a	n/a	GCD1765

The QC reported here applies to the following samples: **Method:** EPA 601/602

F20395-1, F20395-2, F20395-3

CAS No.	Compound	F20362-6 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND		20	19.2	96	18.9	95	2	77-125/6
108-90-7	Chlorobenzene	ND		20	18.2	91	18.0	90	1	78-120/8
95-50-1	1,2-Dichlorobenzene	ND		20	18.1	91	18.0	90	1	69-125/7
541-73-1	1,3-Dichlorobenzene	ND		20	18.3	92	18.3	92	0	71-126/7
106-46-7	1,4-Dichlorobenzene	ND		20	18.2	91	17.7	89	3	67-129/7
100-41-4	Ethylbenzene	1.3		20	19.6	92	19.5	91	1	74-127/6
1634-04-4	Methyl Tert Butyl Ether	ND		20	18.2	91	18.1	91	1	66-127/9
108-88-3	Toluene	ND		20	18.6	93	18.4	92	1	77-124/5
1330-20-7	Xylenes (total)	ND		60	55.6	93	55.2	92	1	76-125/5

CAS No.	Surrogate Recoveries	MS	MSD	F20362-6	Limits
352-33-0	1-Chloro-4-fluorobenzene	98%	99%	93%	70-123%
98-08-8	aaa-Trifluorotoluene	95%	97%	92%	73-122%

(a) All hits confirmed by dual column analysis.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F20395
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F20520-1MS	CD043028.D	1	11/11/03	BM	n/a	n/a	GCD1766
F20520-1MSD	CD043029.D	1	11/11/03	BM	n/a	n/a	GCD1766
F20520-1	CD043023.D	1	11/11/03	BM	n/a	n/a	GCD1766

The QC reported here applies to the followiug samples: **Method:** EPA 601/602

F20395-4, F20395-5

CAS No.	Compound	F20520-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND		20	18.8	94	18.5	93	2	77-125/6
108-90-7	Chlorobenzene	ND		20	18.2	91	17.6	88	3	78-120/8
95-50-1	1,2-Dichlorobenzene	ND		20	17.8	89	17.5	88	2	69-125/7
541-73-1	1,3-Dichlorobenzene	ND		20	18.2	91	17.7	89	3	71-126/7
106-46-7	1,4-Dichlorobenzene	ND		20	17.8	89	17.2	86	3	67-129/7
100-41-4	Ethylbenzene	ND		20	18.4	92	17.8	89	3	74-127/6
1634-04-4	Methyl Tert Butyl Ether	ND		20	18.4	92	17.8	89	3	66-127/9
108-88-3	Toluene	ND		20	18.5	93	18.0	90	3	77-124/5
1330-20-7	Xylenes (total)	ND		60	55.3	92	53.8	90	3	76-125/5

CAS No.	Surrogate Recoveries	MS	MSD	F20520-1	Limits
352-33-0	1-Chloro-4-fluorobenzene	99%	99%	91%	70-123%
98-08-8	aaa-Trifluorotoluene	95%	96%	92%	73-122%

Volatile Surrogate Recovery Summary

Job Number: F20395
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Method: EPA 601/602 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S2 [a]
F20395-1	CD043001.D	91.0	92.0
F20395-2	CD043002.D	91.0	95.0
F20395-3	CD043003.D	95.0	93.0
F20395-4	CD043021.D	101.0	101.0
F20395-5	CD043022.D	99.0	99.0
F20362-6MS	CD042992.D	98.0	95.0
F20362-6MSD	CD042993.D	99.0	97.0
F20520-1MS	CD043028.D	99.0	95.0
F20520-1MSD	CD043029.D	99.0	96.0
GCD1765-BS	CD042990.D	97.0	96.0
GCD1765-MB	CD042991.D	91.0	91.0
GCD1766-BS	CD043017.D	97.0	95.0
GCD1766-MB	CD043018.D	90.0	91.0

Surrogate Compounds	Recovery Limits
S1 = 1-Chloro-4-fluorobenzene	70-123%
S2 = aaa-Trifluorotoluene	73-122%

(a) Recovery from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F20395
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GCD1764-CC1732	**Injection Date:**	11/10/03
Lab File ID:	CD042984.D	**Injection Time:**	20:48
Instrument ID:	GCCD	**Method:**	EPA 601/602

	S1 [a] RT	S2 [a] RT
Check Std	8.82	5.43

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
ZZZZZZ	CD042985.D	11/10/03	21:12	8.82	5.43
ZZZZZZ	CD042986.D	11/10/03	21:37	8.81	5.42
ZZZZZZ	CD042987.D	11/10/03	22:01	8.81	5.43
ZZZZZZ	CD042988.D	11/10/03	22:26	8.82	5.43
ZZZZZZ	CD042989.D	11/10/03	22:50	8.81	5.43
GCD1765-BS	CD042990.D	11/10/03	23:15	8.81	5.43
GCD1765-MB	CD042991.D	11/10/03	23:39	8.81	5.43
F20362-6MS	CD042992.D	11/11/03	00:03	8.82	5.43
F20362-6MSD	CD042993.D	11/11/03	00:28	8.82	5.43
F20362-6	CD042994.D	11/11/03	00:52	8.81	5.42

Surrogate Compounds

S1 = 1-Chloro-4-fluorobenzene
S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F20395
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GCD1765-CC1732	**Injection Date:**	11/11/03
Lab File ID:	CD042995.D	**Injection Time:**	01:16
Instrument ID:	GCCD	**Method:**	EPA 601/602

	S1 [a] RT	S2 [a] RT
Cheek Std	8.82	5.43

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
ZZZZZZ	CD042996.D	11/11/03	01:41	8.81	5.42
ZZZZZZ	CD042997.D	11/11/03	02:06	8.82	5.43
ZZZZZZ	CD042999.D	11/11/03	02:57	8.82	5.43
ZZZZZZ	CD043000.D	11/11/03	03:21	8.81	5.43
F20395-1	CD043001.D	11/11/03	03:46	8.82	5.43
F20395-2	CD043002.D	11/11/03	04:10	8.81	5.43
F20395-3	CD043003.D	11/11/03	04:35	8.82	5.44

Surrogate Compounds

S1 = 1-Chloro-4-fluorobenzene
S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F20395
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GCD1766-CC1732	**Injection Date:**	11/11/03
Lab File ID:	CD043016.D	**Injection Time:**	10:24
Instrument ID:	GCCD	**Method:**	EPA 601/602

	S1 [a] RT	S2 [a] RT
Check Std	8.83	5.44

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
GCD1766-BS	CD043017.D	11/11/03	11:01	8.83	5.43
GCD1766-MB	CD043018.D	11/11/03	11:37	8.83	5.43
ZZZZZZ	CD043019.D	11/11/03	12:13	8.82	5.42
ZZZZZZ	CD043020.D	11/11/03	12:38	8.81	5.42
F20395-4	CD043021.D	11/11/03	13:02	8.83	5.44
F20395-5	CD043022.D	11/11/03	13:27	8.82	5.43
F20520-1	CD043023.D	11/11/03	13:51	8.81	5.43
ZZZZZZ	CD043024.D	11/11/03	14:15	8.82	5.43
ZZZZZZ	CD043025.D	11/11/03	14:40	8.82	5.43
ZZZZZZ	CD043026.D	11/11/03	15:04	8.83	5.44

Surrogate Compounds

S1 = 1-Chloro-4-fluorobenzene
S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F20395
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GCD1766-CC1732	**Injection Date:**	11/11/03
Lab File ID:	CD043027.D	**Injection Time:**	15:33
Instrument ID:	GCCD	**Method:**	EPA 601/602

	S1 [a] RT	S2 [a] RT
Check Std	8.82	5.43

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
F20520-1MS	CD043028.D	11/11/03	15:57	8.82	5.43
F20520-1MSD	CD043029.D	11/11/03	16:21	8.81	5.43
ZZZZZZ	CD043030.D	11/11/03	16:45	8.81	5.42
ZZZZZZ	CD043031.D	11/11/03	17:09	8.81	5.43
ZZZZZZ	CD043032.D	11/11/03	17:33	8.81	5.43
GCD1767-BS	CD043033.D	11/11/03	17:57	8.81	5.42
GCD1767-MB	CD043034.D	11/11/03	18:21	8.81	5.43
ZZZZZZ	CD043035.D	11/11/03	18:48	8.80	5.41
ZZZZZZ	CD043036.D	11/11/03	19:12	8.80	5.42

Surrogate Compounds

S1 = 1-Chloro-4-fluorobenzene
S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #2

Initial Calibration Summary

Job Number: F20395
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GCD1732-ICC1732
Lab FileID: CD042255.D

Response Factor Report VOA2

Method : C:\HPCHEM\2\METHODS\GCCD1021.M (Chemstation Integrator)
Title : EPA 602/8021B
Last Update : Tue Oct 21 07:45:27 2003
Response via : Initial Calibration

Calibration Files
1 =CD042253.D 2 =CD042254.D 3 =CD042255.D
4 =CD042256.D 5 =CD042257.D 6 =CD042258.D

		Compound	1	2	3	4	5	6	Avg		%RSD
1)		Methyl tert Butyl E	1.103	1.368	1.394	1.421	1.433	1.359	1.346	E3	9.10
2)		Di-Isopropyl ether	1.860	2.192	2.238	2.316	2.338	2.262	2.201	E3	7.97
3)		BENZENE		6.066	6.290	6.508	6.475	6.396	6.347	E3	2.81
4)	S	a,a,a-TFT(S)	1.632	1.688	1.846	1.919	1.917	1.882	1.814	E3	6.81
5)		TOLUENE	5.161	6.123	6.395	6.538	6.492	6.452	6.194	E3	8.50
6)	S	1-Chloro-4-Fluorobe	2.871	2.956	3.308	3.419	3.405	3.332	3.215	E3	7.43
7)		CHLOROBENZENE	6.594	6.642	6.939	7.012	6.971	6.902	6.843	E3	2.61
8)		ETHYLBENZENE	6.579	5.912	5.944	5.915	5.848	5.765	5.994	E3	4.90
9)		m,p-XYLENE	5.185	6.080	6.368	6.397	6.329	6.179	6.090	E3	7.55
10)		o-XYLENE	4.634	5.691	5.885	5.894	5.844	5.738	5.614	E3	8.67
11)		1,3-DICHLOROBENZENE	4.857	5.324	5.778	5.837	5.866	5.205	5.478	E3	7.54
12)		1,4-DICHLOROBENZENE	5.105	5.657	6.069	6.217	6.337	5.979	5.894	E3	7.65
13)		1,2-DICHLOROBENZENE	4.043	4.355	4.675	4.737	4.843	4.586	4.540	E3	6.47

Signal #2 Calibration Files
1 =CD042253.D 2 =CD042254.D 3 =CD042255.D
4 =CD042256.D 5 =CD042257.D 6 =CD042258.D

		Compound	1	2	3	4	5	6	Avg		%RSD
1)		Methyl tert Butyl E	1.036	1.107	1.120	1.076	1.079	1.077	1.083	E3	2.69
2)		Di-Isopropyl ether	1.425	1.707	1.642	1.617	1.614	1.597	1.600	E3	5.89
3)		BENZENE	3.711	4.663	4.590	4.553	4.565	4.570	4.442	E3	8.11
4)	S	a,a,a-TFT(S)	1.201	1.220	1.236	1.262	1.273	1.282	1.246	E3	2.58
5)		TOLUENE	4.208	4.826	4.754	4.722	4.708	4.738	4.659	E3	4.83
6)	S	1-Chloro-4-Fluorobe	2.217	2.256	2.325	2.378	2.370	2.400	2.324	E3	3.16
7)		CHLOROBENZENE	4.858	5.244	5.159	5.184	5.203	5.216	5.144	E3	2.78
8)		ETHYLBENZENE	3.873	4.451	4.421	4.424	4.408	4.389	4.328	E3	5.17
9)		m,p-XYLENE	4.158	4.715	4.685	4.690	4.657	4.694	4.600	E3	4.73
10)		o-XYLENE	3.824	4.387	4.387	4.379	4.349	4.359	4.281	E3	5.24
11)		1,3-DICHLOROBENZENE	3.989	4.251	4.434	4.478	4.628	4.528	4.385	E3	5.25
12)		1,4-DICHLOROBENZENE	4.343	4.535	4.727	4.800	4.796	4.880	4.680	E3	4.32
13)		1,2-DICHLOROBENZENE	3.358	3.451	3.618	3.672	3.758	3.744	3.600	E3	4.51

Average % RSD = 5.7

(#) = Out of Range

GCCD1021.M Wed Oct 22 09:44:22 2003 QRXY

Continuing Calibration Summary

Job Number: F20395
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GCD1764-CC1732
Lab FileID: CD042984.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\111003\CD042984.D\FID1A.CH Vial: 20
Signal #2 : C:\HPCHEM\2\DATA\111003\CD042984.D\FID2B.CH
Acq On : 10 Nov 2003 8:48 pm Operator: RondaM
Sample : CC1732-20 Inst : VOA2
Misc : gc2937,gcd1764,,,,,1 Multiplr: 1.00
IntFile Signal #1: PID.E IntFile Signal #2: FID.E

Method : C:\HPCHEM\2\METHODS\GCCD1021.M (Chemstation Integrator)
Title : EPA 602/8021B
Last Update : Thu Nov 06 12:29:40 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	20.000	20.599	-3.0	99	-0.01
2		Di-Isopropyl ether	20.000	20.010	-0.1	98	-0.01
3		BENZENE	20.000	18.741	6.3	95	0.00
4	S	a,a,a-TFT(S)	20.000	20.576	-2.9	101	0.00
5		TOLUENE	20.000	19.211	3.9	93	0.00
6	S	1-Chloro-4-Fluorobenzene	20.000	20.928	-4.6	102	-0.01
7		CHLOROBENZENE	20.000	18.852	5.7	93	-0.01
8		ETHYL8ENZENE	20.000	18.853	5.7	95	-0.01
9		m,p-XYLENE	40.000	39.257	1.9	94	-0.01
10		o-XYLENE	20.000	19.741	1.3	94	-0.01
11		1,3-DICHLOROBENZENE	20.000	19.917	0.4	94	0.02
12		1,4-DICHLOROBENZENE	20.000	19.265	3.7	94	0.02
13		1,2-DICHLOROBENZENE	20.000	19.611	1.9	95	-0.02

Signal #2

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	20.000	18.718	6.4	90	-0.02
2		Di-Isopropyl ether	20.000	18.631	6.8	91	-0.02
3		BENZENE	20.000	18.481	7.6	89	-0.02
4	S	a,a,a-TFT(S)	20.000	19.045	4.8	96	-0.02
5		TOLUENE	20.000	18.292	8.5	90	-0.02
6	S	1-Chloro-4-Fluorobenzene	20.000	19.579	2.1	98	-0.02
7		CHLOROBENZENE	20.000	18.308	8.5	91	-0.02
8		ETHYLBENZENE	20.000	18.823	5.9	92	-0.02
9		m,p-XYLENE	40.000	37.279	6.8	92	-0.02
10		o-XYLENE	20.000	18.920	5.4	92	-0.02
11		1,3-DICHLOROBENZENE	20.000	18.649	6.8	92	0.02
12		1,4-DICHLOROBENZENE	20.000	18.256	8.7	90	0.02
13		1,2-DICHLOROBENZENE	20.000	18.703	6.5	93	0.02

Average % D = 4.9

(#) = Out of Range SPCC's out = 0 CCC's out = 0
CD042255.D GCCD1021.M Tue Nov 11 08:50:23 2003 QRXY

Continuing Calibration Summary

Job Number: F20395
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GCD1765-CC1732
Lab FileID: CD042995.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\111003\CD042995.D\FID1A.CH Vial: 30
Signal #2 : C:\HPCHEM\2\DATA\111003\CD042995.D\FID2B.CH
Acq On : 11 Nov 2003 1:16 am Operator: RondaM
Sample : CC1732-20 Inst : VOA2
Misc : gc2937,gcd1765,,,,,1 Multiplr: 1.00
IntFile Signal #1: PID.E IntFile Signal #2: FID.E

Method : C:\HPCHEM\2\METHODS\GCCD1021.M (Chemstation Integrator)
Title : EPA 602/8021B
Last Update : Thu Nov 06 12:29:40 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	20.000	19.931	0.3	96	0.00
2		Di-Isopropyl ether	20.000	19.412	2.9	95	0.00
3		BENZENE	20.000	18.868	5.7	95	0.00
4	S	a,a,a-TFT(S)	20.000	19.957	0.2	98	0.00
5		TOLUENE	20.000	19.684	1.6	95	0.00
6	S	1-Chloro-4-Fluorobenzene	20.000	20.596	-3.0	100	0.00
7		CHLOROBENZENE	20.000	19.178	4.1	95	0.00
8		ETHYLBENZENE	20.000	18.905	5.5	95	0.00
9		m,p-XYLENE	40.000	39.625	0.9	95	0.00
10		o-XYLENE	20.000	19.997	0.0	95	0.00
11		1,3-DICHLOROBENZENE	20.000	19.905	0.5	94	0.03
12		1,4-DICHLOROBENZENE	20.000	19.401	3.0	94	0.03
13		1,2-DICHLOROBENZENE	20.000	19.570	2.1	95	0.00

Signal #2

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	20.000	19.343	3.3	93	-0.02
2		Di-Isopropyl ether	20.000	19.037	4.8	93	-0.02
3		BENZENE	20.000	19.202	4.0	93	-0.02
4	S	a,a,a-TFT(S)	20.000	19.120	4.4	96	-0.02
5		TOLUENE	20.000	18.869	5.7	92	-0.02
6	S	1-Chloro-4-Fluorobenzene	20.000	19.519	2.4	98	-0.02
7		CHLOROBENZENE	20.000	18.785	6.1	94	-0.02
8		ETHYLBENZENE	20.000	19.204	4.0	94	-0.02
9		m,p-XYLENE	40.000	38.032	4.9	93	-0.02
10		o-XYLENE	20.000	19.491	2.5	95	-0.02
11		1,3-DICHLOROBENZENE	20.000	18.814	5.9	93	0.02
12		1,4-DICHLOROBENZENE	20.000	18.420	7.9	91	0.02
13		1,2-DICHLOROBENZENE	20.000	18.827	5.9	94	0.02

Average % D = 3.5

(#) = Out of Range SPCC's out = 0 CCC's out = 0
CD042255.D GCCD1021.M Tue Nov 11 08:50:24 2003 QRXY

Continuing Calibration Summary

Job Number: F20395
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GCD1765-CC1732
Lab FileID: CD043006.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\111003\CD043006.D\FID1A.CH Vial: 41
Signal #2 : C:\HPCHEM\2\DATA\111003\CD043006.D\FID2B.CH
Acq On : 11 Nov 2003 5:52 am Operator: RondaM
Sample : CC1732-20 Inst : VOA2
Misc : gc2946,gcd1765,,,,,1 Multiplr: 1.00
IntFile Signal #1: PID.E IntFile Signal #2: FID.E

Method : C:\HPCHEM\2\METHODS\GCCD1021.M (Chemstation Integrator)
Title : EPA 602/8021B
Last Update : Thu Nov 06 12:29:40 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	20.000	20.845	-4.2	101	0.00
2		Di-Isopropyl ether	20.000	19.840	0.8	98	0.00
3		BENZENE	20.000	18.780	6.1	95	0.00
4	S	a,a,a-TFT(S)	20.000	20.434	-2.2	100	0.00
5		TOLUENE	20.000	19.276	3.6	93	0.00
6	S	1-Chloro-4-Fluorobenzene	20.000	20.786	-3.9	101	-0.01
7		CHLOROBENZENE	20.000	18.690	6.5	92	-0.01
8		ETHYLBENZENE	20.000	18.313	8.4	92	-0.01
9		m,p-XYLENE	40.000	38.919	2.7	93	-0.01
10		o-XYLENE	20.000	19.454	2.7	93	-0.01
11		1,3-DICHLOROBENZENE	20.000	19.497	2.5	92	0.02
12		1,4-DICHLOROBENZENE	20.000	19.014	4.9	92	0.02
13		1,2-DICHLOROBENZENE	20.000	19.253	3.7	93	-0.01

Signal #2

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	20.000	18.736	6.3	91	-0.02
2		Di-Isopropyl ether	20.000	18.589	7.1	91	-0.02
3		BENZENE	20.000	18.760	6.2	91	-0.02
4	S	a,a,a-TFT(S)	20.000	19.284	3.6	97	-0.02
5		TOLUENE	20.000	18.553	7.2	91	-0.02
6	S	1-Chloro-4-Fluorobenzene	20.000	19.559	2.2	98	-0.02
7		CHLOROBENZENE	20.000	18.206	9.0	91	-0.02
8		ETHYLBENZENE	20.000	18.642	6.8	91	-0.02
9		m,p-XYLENE	40.000	37.000	7.5	91	-0.02
10		o-XYLENE	20.000	18.935	5.3	92	-0.02
11		1,3-DICHLOROBENZENE	20.000	18.480	7.6	91	0.02
12		1,4-DICHLOROBENZENE	20.000	17.909	10.5	89	0.02
13		1,2-DICHLOROBENZENE	20.000	18.257	8.7	91	0.02

Average % D = 5.4

(#) = Out of Range SPCC's out = 0 CCC's out = 0
CD042255.D GCCD1021.M Tue Nov 11 08:50:26 2003 QRXY

Continuing Calibration Summary

Job Number: F20395
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GCD1766-CC1732
Lab FileID: CD043016.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\111103\CD043016.D\FID1A.CH Vial: 1
Signal #2 : C:\HPCHEM\2\DATA\111103\CD043016.D\FID2B.CH
Acq On : 11 Nov 2003 10:24 am Operator: BarbaraM
Sample : CC1732-40 Inst : VOA2
Misc : gc2929,gcd1766,,,,,1 MultiplIr: 1.00
IntFile Signal #1: PID.E IntFile Signal #2: FID.E

Method : C:\HPCHEM\2\METHODS\GCCD1021.M (Chemstation Integrator)
Title : EPA 602/8021B
Last Update : Thu Nov 06 12:29:40 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	Methyl tert Butyl Ether	40.000	38.610	3.5	91	0.00
2	Di-Isopropyl ether	40.000	39.151	2.1	93	0.00
3	BENZENE	40.000	38.660	3.4	94	0.00
4 S	a,a,a-TFT(S)	20.000	20.723	-3.6	98	0.00
5	TOLUENE	40.000	40.427	-1.1	96	0.00
6 S	1-Chloro-4-Fluorobenzene	20.000	21.398	-7.0	101	0.00
7	CHLOROBENZENE	40.000	39.120	2.2	95	0.00
8	ETHYLBENZENE	40.000	37.999	5.0	96	0.00
9	m,p-XYLENE	80.000	81.337	-1.7	97	0.00
10	o-XYLENE	40.000	40.380	-1.0	96	0.00
11	1,3-DICHLOROBENZENE	40.000	42.005	-5.0	99	0.02
12	1,4-DICHLOROBENZENE	40.000	40.569	-1.4	96	0.02
13	1,2-DICHLOROBENZENE	40.000	40.272	-0.7	96	-0.01

Signal #2

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	Methyl tert Butyl Ether	40.000	36.480	8.8	92	-0.02
2	Di-Isopropyl ether	40.000	36.594	8.5	91	-0.02
3	BENZENE	40.000	37.756	5.6	92	-0.02
4 S	a,a,a-TFT(S)	20.000	19.780	1.1	98	0.00
5	TOLUENE	40.000	37.868	5.3	93	-0.01
6 S	1-Chloro-4-Fluorobenzene	20.000	19.784	1.1	97	0.00
7	CHLOROBENZENE	40.000	37.447	6.4	93	0.00
8	ETHYLBENZENE	40.000	38.383	4.0	94	0.00
9	m,p-XYLENE	80.000	77.472	3.2	95	0.00
10	o-XYLENE	40.000	38.742	3.1	95	-0.01
11	1,3-DICHLOROBENZENE	40.000	38.907	2.7	95	0.02
12	1,4-DICHLOROBENZENE	40.000	38.498	3.8	94	0.02
13	1,2-DICHLOROBENZENE	40.000	38.798	3.0	95	0.01

Average % D = 3.6

(#) = Out of Range SPCC's out = 0 CCC's out = 0
CD042256.D GCCD1021.M Wed Nov 12 09:01:46 2003 QRXY

Continuing Calibration Summary

Job Number: F20395
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GCD1766-CC1732
Lab FileID: CD043027.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\111103\CD043027.D\FID1A.CH Vial: 12
Signal #2 : C:\HPCHEM\2\DATA\111103\CD043027.D\FID2B.CH
Acq On : 11 Nov 2003 3:33 pm Operator: BarbaraM
Sample : CC1732-20 Inst : VOA2
Misc : gc2950,gcd1766,,,,,1 Multiplr: 1.00
IntFile Signal #1: PID.E IntFile Signal #2: FID.E

Method : C:\HPCHEM\2\METHODS\GCCD1021.M (Chemstation Integrator)
Title : EPA 602/8021B
Last Update : Thu Nov 06 12:29:40 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	20.000	18.924	5.4	91	-0.01
2		Di-Isopropyl ether	20.000	18.506	7.5	91	-0.01
3		BENZENE	20.000	18.193	9.0	92	-0.01
4	S	a,a,a-TFT(S)	20.000	19.673	1.6	97	0.00
5		TOLUENE	20.000	20.243	-1.2	98	0.00
6	S	1-Chloro-4-Fluorobenzene	20.000	20.379	-1.9	99	0.00
7		CHLOROBENZENE	20.000	18.970	5.2	94	0.00
8		ETHYLBENZENE	20.000	19.108	4.5	96	0.00
9		m,p-XYLENE	40.000	40.700	-1.8	97	0.00
10		o-XYLENE	20.000	20.238	-1.2	97	0.00
11		1,3-DICHLOROBENZENE	20.000	19.648	1.8	93	0.02
12		1,4-DICHLOROBENZENE	20.000	19.272	3.6	94	0.02
13		1,2-DICHLOROBENZENE	20.000	19.397	3.0	94	-0.02

Signal #2

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	20.000	18.579	7.1	90	-0.02
2		Di-Isopropyl ether	20.000	18.284	8.6	89	-0.02
3		BENZENE	20.000	18.585	7.1	90	-0.02
4	S	a,a,a-TFT(S)	20.000	18.855	5.7	95	-0.02
5		TOLUENE	20.000	19.386	3.1	95	-0.02
6	S	1-Chloro-4-Fluorobenzene	20.000	19.388	3.1	97	-0.02
7		CHLOROBENZENE	20.000	18.378	8.1	92	-0.02
8		ETHYLBENZENE	20.000	19.315	3.4	95	-0.02
9		m,p-XYLENE	40.000	38.805	3.0	95	-0.02
10		o-XYLENE	20.000	19.511	2.4	95	-0.02
11		1,3-DICHLOROBENZENE	20.000	18.580	7.1	92	0.01
12		1,4-DICHLOROBENZENE	20.000	18.181	9.1	90	0.01
13		1,2-DICHLOROBENZENE	20.000	18.778	6.1	93	0.01

Average % D = 4.7

(#) = Out of Range SPCC's out = 0 CCC's out = 0
CD042255.D GCCD1021.M Wed Nov 12 09:01:14 2003 QRXY

Continuing Calibration Summary

Job Number: F20395
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GCD1767-CC1732
Lab FileID: CD043038.D

Evaluate Continuing Calibration Report

```
Signal #1 : C:\HPCHEM\2\DATA\111103\CD043038.D\FID1A.CH  Vial: 22
Signal #2 : C:\HPCHEM\2\DATA\111103\CD043038.D\FID2B.CH
Acq On    : 11 Nov 2003   8:00 pm                    Operator: BarbaraM
Sample    : CC1732-20                                Inst    : VOA2
Misc      : gc2951,gcd1767,,,,,1                     Multiplr: 1.00
IntFile Signal #1: PID.E        IntFile Signal #2: FID.E

Method        : C:\HPCHEM\2\METHODS\GCCD1021.M (Chemstation Integrator)
Title         : EPA 602/8021B
Last Update   : Thu Nov 06 12:29:40 2003
Response via  : Multiple Level Calibration

Min. RRF      :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev  :  15%     Max. Rel. Area : 200%
```

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	20.000	18.897	5.5	91	-0.02
2		Di-Isopropyl ether	20.000	18.447	7.8	91	-0.02
3		BENZENE	20.000	18.107	9.5	91	-0.02
4	S	a,a,a-TFT(S)	20.000	19.895	0.5	98	-0.02
5		TOLUENE	20.000	19.001	5.0	92	-0.03
6	S	1-Chloro-4-Fluorobenzene	20.000	20.469	-2.3	99	-0.04
7		CHLOROBENZENE	20.000	18.752	6.2	92	-0.04
8		ETHYLBENZENE	20.000	18.641	6.8	94	-0.03
9		m,p-XYLENE	40.000	39.043	2.4	93	-0.03
10		o-XYLENE	20.000	19.693	1.5	94	-0.03
11		1,3-DICHLOROBENZENE	20.000	19.295	3.5	91	0.00
12		1,4-DICHLOROBENZENE	20.000	18.763	6.2	91	0.00
13		1,2-DICHLOROBENZENE	20.000	18.763	6.2	91	-0.04

Signal #2

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	20.000	18.345	8.3	89	0.00
2		Di-Isopropyl ether	20.000	18.194	9.0	89	-0.02
3		BENZENE	20.000	18.460	7.7	89	-0.03
4	S	a,a,a-TFT(S)	20.000	18.734	6.3	94	-0.03
5		TOLUENE	20.000	18.197	9.0	89	-0.03
6	S	1-Chloro-4-Fluorobenzene	20.000	19.224	3.9	96	-0.04
7		CHLOROBENZENE	20.000	18.231	8.8	91	-0.04
8		ETHYLBENZENE	20.000	18.854	5.7	92	-0.04
9		m,p-XYLENE	40.000	37.179	7.1	91	-0.04
10		o-XYLENE	20.000	18.863	5.7	92	-0.04
11		1,3-DICHLOROBENZENE	20.000	18.009	10.0	89	0.00
12		1,4-DICHLOROBENZENE	20.000	17.986	10.1	89	0.00
13		1,2-DICHLOROBENZENE	20.000	18.170	9.1	90	0.00

Average % D = 6.3

(#) = Out of Range SPCC's out = 0 CCC's out = 0
CD042255.D GCCD1021.M Wed Nov 12 09:01:15 2003 QRXY

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: F20395
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8972-MB	IJ18750.D	1	11/04/03	SD	11/03/03	OP8972	GIJ905

The QC reported here applies to the following samples: **Method:** EPA 610

F20395-1

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.0	2.0	ug/l	
208-96-8	Acenaphthylene	ND	5.0	2.0	ug/l	
120-12-7	Anthracene	ND	5.0	2.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.0	2.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.0	2.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.0	2.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.0	2.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.0	2.0	ug/l	
218-01-9	Chrysene	ND	5.0	2.0	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.0	2.0	ug/l	
206-44-0	Fluoranthene	ND	5.0	2.0	ug/l	
86-73-7	Fluorene	ND	5.0	2.0	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.0	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.0	ug/l	
90-12-0	1-Methylnaphthalene	ND	5.0	2.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.0	2.0	ug/l	
85-01-8	Phenanthrene	ND	5.0	2.0	ug/l	
129-00-0	Pyrene	ND	5.0	2.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
321-60-8	2-Fluorobiphenyl	94%	42-123%
84-15-1	o-Terphenyl	99%	51-123%

Method Blank Summary

Job Number: F20395
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8972-MB	IJ18768.D	1	11/05/03	SD	11/03/03	OP8972	GIJ906

The QC reported bere applies to the following samples: **Method:** EPA 610

F20395-1

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.0	2.0	ug/l	
208-96-8	Acenaphthylene	ND	5.0	2.0	ug/l	
120-12-7	Anthracene	ND	5.0	2.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.0	2.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.0	2.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.0	2.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.0	2.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.0	2.0	ug/l	
218-01-9	Chrysene	ND	5.0	2.0	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.0	2.0	ug/l	
206-44-0	Fluoranthene	ND	5.0	2.0	ug/l	
86-73-7	Fluorene	ND	5.0	2.0	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.0	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.0	ug/l	
90-12-0	1-Methylnaphthalene	ND	5.0	2.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.0	2.0	ug/l	
85-01-8	Phenanthrene	ND	5.0	2.0	ug/l	
129-00-0	Pyrene	ND	5.0	2.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
321-60-8	2-Fluorobiphenyl	92%	42-123%
84-15-1	o-Terphenyl	99%	51-123%

Blank Spike Summary

Job Number: F20395
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8972-BS	IJ18749.D	1	11/04/03	SD	11/03/03	OP8972	GIJ905

The QC reported here applies to the followiug samples: **Method:** EPA 610

F20395-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
83-32-9	Aeenaphthene	25	27.5	110	71-113
208-96-8	Acenaphthylene	25	24.6	98	63-102
120-12-7	Anthracene	25	26.9	108	71-110
56-55-3	Benzo(a)anthracene	25	25.8	103	70-114
50-32-8	Benzo(a)pyrene	25	26.5	106	67-114
205-99-2	Benzo(b)fluoranthene	25	25.4	102	69-115
191-24-2	Benzo(g,h,i)perylene	25	25.9	104	61-117
207-08-9	Benzo(k)fluoranthene	25	26.9	108	69-111
218-01-9	Chrysene	25	27.4	110	70-114
53-70-3	Dibenzo(a,h)anthracene	25	26.4	106	64-114
206-44-0	Fluoranthene	25	26.8	107	71-114
86-73-7	Fluorene	25	26.7	107	69-111
193-39-5	Indeno(1,2,3-cd)pyrene	25	24.6	98	63-112
91-20-3	Naphthalene	25	25.9	104	66-105
90-12-0	1-Methylnaphthalene	25	26.7	107	71-112
91-57-6	2-Methylnaphthalene	25	26.2	105	65-106
85-01-8	Phenanthrene	25	26.4	106	69-112
129-00-0	Pyrene	25	26.8	107	70-114

CAS No.	Surrogate Recoveries	BSP	Limits
321-60-8	2-Fluorobiphenyl	101%	42-123%
84-15-1	o-Terphenyl	102%	51-123%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F20395
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8972-MS	IJ18754.D	1	11/04/03	SD	11/03/03	OP8972	GIJ905
OP8972-MSD	IJ18755.D	1	11/04/03	SD	11/03/03	OP8972	GIJ905
F20286-3 [a]	IJ18753.D	1	11/04/03	SD	11/03/03	OP8972	GIJ905

The QC reported here applies to the following samples: **Method:** EPA 610

F20395-1

CAS No.	Compound	F20286-3 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
83-32-9	Aeenaphthene	ND		50	59.0	118	57.7	115	2	59-123/20
208-96-8	Aeenaphthylene	ND		50	50.6	101	49.7	99	2	51-114/20
120-12-7	Anthraeene	ND		50	55.3	111	53.7	107	3	64-114/17
56-55-3	Benzo(a)anthracene	ND		50	54.2	108	52.8	106	3	66-115/17
50-32-8	Benzo(a)pyrene	ND		50	54.8	110	54.5	109	1	62-118/17
205-99-2	Benzo(b)fluoranthene	ND		50	53.8	108	52.3	105	3	66-117/17
191-24-2	Benzo(g,h,i)perylene	ND		50	53.7	107	53.7	107	0	59-120/17
207-08-9	Benzo(k)fluoranthene	ND		50	54.8	110	54.4	109	1	64-116/16
218-01-9	Chrysene	ND		50	56.5	113	55.2	110	2	66-117/16
53-70-3	Dibenzo(a,h)anthracene	ND		50	54.8	110	55.4	111	1	57-124/18
206-44-0	Fluoranthene	ND		50	56.3	113	54.0	108	4	67-116/17
86-73-7	Fluorene	ND		50	57.2	114	55.7	111	3	58-122/19
193-39-5	Indeno(1,2,3-cd)pyrene	ND		50	51.5	103	52.1	104	1	59-116/18
91-20-3	Naphthalene	5.5		50	59.6	108	58.0	105	3	47-114/20
90-12-0	1-Methylnaphthalene	4.3	J	50	59.5	110	58.4	108	2	55-128/21
91-57-6	2-Methylnaphthalene	6.5		50	61.6	110	60.3	108	2	51-117/21
85-01-8	Phenanthrene	ND		50	55.2	110	53.3	107	4	63-116/18
129-00-0	Pyrene	ND		50	56.0	112	53.7	107	4	67-116/17

CAS No.	Surrogate Recoveries	MS	MSD	F20286-3	Limits
321-60-8	2-Fluorobiphenyl	100%	99%	81%	42-123%
84-15-1	o-Terphenyl	103%	100%	98%	51-123%

(a) All hits confirmed by dual column analysis.

Semivolatile Surrogate Recovery Summary

Job Number: F20395
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Method: EPA 610 **Matrix:** AQ

Samples and QC sbown here apply to thc above method

Lab Sample ID	Lab File ID	S1 [a]	S2 [a]
F20395-1	IJ18765.D	98.0	103.0
OP8972-BS	IJ18749.D	101.0	102.0
OP8972-MB	IJ18750.D	94.0	99.0
OP8972-MB	IJ18768.D	92.0	99.0
OP8972-MS	IJ18754.D	100.0	103.0
OP8972-MSD	IJ18755.D	99.0	100.0

Surrogate Compounds	Recovery Limits
S1 = 2-Fluorobiphenyl	42-123%
S2 = o-Terphenyl	51-123%

(a) Reeovery from GC signal #1

GC Surrogate Retention Time Summary

Job Number: F20395
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GIJ905-CC904	**Injection Date:**	11/04/03
Lab File ID:	IJ18748.D	**Injection Time:**	09:17
Instrument ID:	GCIJ	**Method:**	EPA 610

	S1 [a] RT	S2 [a] RT
Check Std	5.74	10.26

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
OP8972-BS	IJ18749.D	11/04/03	09:59	5.74	10.26
OP8972-MB	IJ18750.D	11/04/03	10:27	5.74	10.26
F20286-3	IJ18753.D	11/04/03	11:53	5.74	10.26
OP8972-MS	IJ18754.D	11/04/03	12:28	5.74	10.26
OP8972-MSD	IJ18755.D	11/04/03	12:57	5.74	10.26
ZZZZZZ	IJ18756.D	11/04/03	13:26	5.74	10.26
ZZZZZZ	IJ18757.D	11/04/03	13:54	5.74	10.26

Surrogate Compounds

S1 = 2-Fluorobiphenyl
S2 = o-Terphenyl

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: F20395
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GIJ905-CC904	**Injection Date:**	11/04/03
Lab File ID:	IJ18759.D	**Injection Time:**	14:52
Instrument ID:	GCIJ	**Method:**	EPA 610

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	5.74	6.48	10.26	11.60

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
ZZZZZZ	IJ18760.D	11/04/03	15:22	5.74		10.26	
ZZZZZZ	IJ18762.D	11/04/03	16:20	5.74		10.26	
F20395-1	IJ18765.D	11/04/03	17:46	5.74		10.27	
GIJ905-ECC904	IJ18766.D	11/04/03	18:15	5.74	6.48	10.26	11.59

Surrogate Compouuds

S1 = 2-Fluorobiphenyl
S2 = o-Terphenyl

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F20395
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GIJ906-CC904	**Injection Date:**	11/05/03
Lab File ID:	IJ18767.D	**Injection Time:**	13:42
Instrument ID:	GCIJ	**Metbod:**	EPA 610

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	5.73	6.48	10.25	11.59

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
OP8972-MB	IJ18768.D	11/05/03	14:19	5.73		10.26	
ZZZZZZ	IJ18769.D	11/05/03	14:47	5.74		10.26	
ZZZZZZ	IJ18770.D	11/05/03	15:16	5.74		10.26	
GIJ906-ECC904	IJ18771.D	11/05/03	15:45	5.74	6.49	10.26	11.60

Surrogate Compounds

S1 = 2-Fluorobiphenyl
S2 = o-Terphenyl

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

Initial Calibration Summary

Job Number: F20395
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GIJ904-ICC904
Lab FileID: IJ18733.D

Response Factor Report FID 1

Method : C:\HPCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title : PAH's BY EPA 610 OR 8100
Last Update : Thu Oct 30 14:18:02 2003
Response via : Initial Calibration

Calibration Files
5 =IJ18731.D 10 =IJ18732.D 20 =IJ18733.D
30 =IJ18734.D 40 =IJ18735.D 50 =IJ18736.D

		Compound	5	10	20	30	40	50	Avg		%RSD
1)		Naphthalene	1.440	1.392	1.370	1.345	1.344	1.381	1.379	E4	2.58
2)		2-Methyl Naphthalen	1.400	1.356	1.335	1.310	1.309	1.342	1.342	E4	2.54
3)		1-Methyl Naphthalen	1.406	1.364	1.342	1.317	1.316	1.349	1.349	E4	2.47
4)	S	2-Fluorobiphenyl	1.284	1.249	1.231	1.210	1.208	1.239	1.237	E4	2.29
5)		Acenaphthylene	1.422	1.381	1.360	1.333	1.333	1.367	1.366	E4	2.45
6)		Acenaphthene	1.435	1.394	1.374	1.347	1.348	1.383	1.380	E4	2.37
7)		Fluorene	1.389	1.355	1.339	1.314	1.317	1.351	1.344	E4	2.06
8)		Phenanthrene	1.390	1.362	1.346	1.321	1.321	1.357	1.349	E4	1.95
9)		Anthracene	1.397	1.360	1.339	1.312	1.311	1.346	1.344	E4	2.40
10)	S	O-Terphenyl	1.512	1.462	1.433	1.404	1.403	1.440	1.442	E4	2.82
11)		Fluoranthene	1.426	1.388	1.365	1.338	1.338	1.373	1.371	E4	2.43
12)		Pyrene	1.411	1.390	1.367	1.341	1.340	1.377	1.371	E4	2.03
13)		Benzo(a)Anthracene	1.426	1.394	1.376	1.351	1.355	1.395	1.383	E4	2.02
14)		Chrysene	1.434	1.389	1.365	1.336	1.336	1.372	1.372	E4	2.70
15)		Benzo(b)Fluoranthen	1.452	1.412	1.392	1.383	1.388	1.442	1.412	E4	2.09
16)		Benzo(k)Fluoranthen	1.476	1.435	1.404	1.361	1.364	1.386	1.405	E4	3.16
17)		Benzo(a) Pyrene	1.385	1.355	1.330	1.305	1.309	1.346	1.338	E4	2.26
18)		Indeno(1,2,3-cd)pyr	1.418	1.385	1.369	1.345	1.354	1.392	1.377	E4	1.93
19)		Dibenzo(a,h)anthrac	1.420	1.386	1.376	1.350	1.357	1.393	1.380	E4	1.84
20)		Benzo(g,h,i) Peryle	1.458	1.419	1.397	1.369	1.376	1.415	1.406	E4	2.31

Signal #2 Calibration Files
5 =IJ18731.D 10 =IJ18732.D 20 =IJ18733.D
30 =IJ18734.D 40 =IJ18735.D 50 =IJ18736.D

		Compound	5	10	20	30	40	50	Avg		%RSD
1)		Naphthalene	2.075	2.007	1.982	1.945	1.951	2.001	1.993	E4	2.37
2)		2-Methyl Naphthalen	1.975	1.919	1.900	1.865	1.871	1.921	1.909	E4	2.10
3)		1-Methyl Naphthalen	1.990	1.932	1.912	1.878	1.884	1.933	1.921	E4	2.14
4)	S	2-Fluorobiphenyl	1.822	1.767	1.751	1.720	1.726	1.773	1.760	E4	2.10
5)		Acenaphthylene	2.000	1.944	1.926	1.896	1.899	1.951	1.936	E4	2.00
6)		Acenaphthene	2.022	1.965	1.946	1.915	1.922	1.976	1.958	E4	2.02
7)		Fluorene	1.954	1.910	1.899	1.868	1.873	1.926	1.905	E4	1.71
8)		Phenanthrene	1.916	1.883	1.896	1.865	1.881	1.925	1.894	E4	1.20
9)		Anthracene	2.015	1.948	1.898	1.866	1.858	1.922	1.918	E4	3.04
10)	S	O-Terphenyl	2.137	2.069	2.040	2.004	2.007	2.063	2.053	E4	2.40
11)		Fluoranthene	2.016	1.959	1.936	1.903	1.907	1.961	1.947	E4	2.14
12)		Pyrene	2.036	1.975	1.951	1.918	1.924	1.980	1.964	E4	2.21
13)		Benzo(a)Anthracene	2.046	1.992	1.966	1.934	1.942	1.997	1.980	E4	2.10
14)		Chrysene	2.011	1.961	1.931	1.893	1.901	1.958	1.942	E4	2.25
15)		Benzo(b)Fluoranthen	2.102	2.068	1.989	1.949	1.971	2.025	2.017	E4	2.93
16)		Benzo(k)Fluoranthen	2.085	2.010	1.984	1.964	1.957	2.015	2.003	E4	2.33
17)		Benzo(a) Pyrene	1.967	1.923	1.893	1.862	1.870	1.924	1.907	E4	2.07
18)		Indeno(1,2,3-cd)pyr	2.127	1.964	1.977	1.965	1.982	2.058	2.012	E4	3.31
19)		Dibenzo(a,h)anthrac	2.046	1.985	1.945	1.898	1.904	1.935	1.952	E4	2.84
20)		Benzo(g,h,i) Peryle	2.087	2.017	1.985	1.952	1.965	2.019	2.004	E4	2.44

Initial Calibration Summary

Job Number: F20395
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GIJ904-ICC904
Lab FileID: IJ18733.D

Average % RSD = 2.3

(#) = Out of Range

8100_H2.M Fri Oct 31 08:21:31 2003

Continuing Calibration Summary

Job Number: F20395
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GIJ905-CC904
Lab FileID: IJ18748.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\1104PAH\IJ18748.D\FID1B.CH Vial: 1
Acq On : 4 Nov 2003 9:17 am Operator: sarahm
Sample : cc904-30 Inst : FID 1
Misc : op8972,gij905,1000,,,1,1,water Multiplr: 1.00
IntFile : events.e

Data File : C:\HPCHEM\1\DATA\1104PAH\IJ18748.D\FID2A.CH Vial: 1
Acq On : 4 Nov 2003 9:17 am Operator: sarahm
Sample : cc904-20 Inst : FID 1
Misc : op8972,gij905,1000,,,1,1,water Multiplr: 1.00
IntFile : events2.e

Method : C:\HPCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title : PAH's BY EPA 610 OR 8100
Last Update : Thu Oct 30 14:18:02 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Naphthalene	30.000	29.842	0.5	102	0.00
2		2-Methyl Naphthalene	30.000	29.868	0.4	102	0.00
3		1-Methyl Naphthalene	30.000	29.956	0.1	102	0.00
4	S	2-Fluorobiphenyl	30.000	29.768	0.8	101	0.00
5		Acenaphthylene	30.000	29.775	0.8	102	0.00
6		Acenaphthene	30.000	30.166	-0.6	103	0.00
7		Fluorene	30.000	30.094	-0.3	103	0.00
8		Phenanthrene	30.000	29.849	0.5	102	0.00
9		Anthracene	30.000	30.065	-0.2	103	0.00
10	S	O-Terphenyl	30.000	30.100	-0.3	103	0.00
11		Fluoranthene	30.000	30.001	-0.0	102	0.00
12		Pyrene	30.000	29.952	0.2	102	0.00
13		Benzo(a)Anthracene	30.000	29.395	2.0	100	0.00
14		Chrysene	30.000	30.534	-1.8	105	0.00
15		Benzo(b)Fluoranthene	30.000	28.841	3.9	98	0.00
16		Benzo(k)Fluoranthene	30.000	31.012	-3.4	107	0.00
17		Benzo(a) Pyrene	30.000	29.885	0.4	102	0.00
18		Indeno(1,2,3-cd)pyrene	30.000	29.210	2.6	100	0.00
19		Dibenzo(a,h)anthracene	30.000	30.585	-2.0	104	0.00
20		Benzo(g,h,i) Perylene	30.000	30.048	-0.2	103	0.00

Signal #2

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Naphthalene	30.000	30.134	-0.4	103	0.00
2		2-Methyl Naphthalene	30.000	30.177	-0.6	103	0.00
3		1-Methyl Naphthalene	30.000	30.182	-0.6	103	0.00
4	S	2-Fluorobiphenyl	30.000	30.159	-0.5	103	0.00
5		Acenaphthylene	30.000	30.007	-0.0	102	0.00
6		Acenaphthene	30.000	30.349	-1.2	103	0.00
7		Fluorene	30.000	30.257	-0.9	103	0.00
8		Phenanthrene	30.000	30.194	-0.6	102	0.00
9		Anthracene	30.000	30.245	-0.8	104	0.00
10	S	O-Terphenyl	30.000	30.233	-0.8	103	0.00

Continuing Calibration Summary

Job Number: F20395
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GIJ905-CC904
Lab FileID: IJ18748.D

11	Fluoranthene	30.000	30.262	-0.9	103	0.00
12	Pyrene	30.000	30.245	-0.8	103	0.00
13	Benzo(a)Anthracene	30.000	30.262	-0.9	103	0.00
14	Chrysene	30.000	30.246	-0.8	103	0.00
15	Benzo(b)Fluoranthene	30.000	30.257	-0.9	104	0.00
16	Benzo(k)Fluoranthene	30.000	30.070	-0.2	102	0.00
17	Benzo(a) Pyrene	30.000	30.222	-0.7	103	0.00
18	Indeno(1,2,3-cd)pyrene	30.000	30.041	-0.1	103	-0.01
19	Dibenzo(a,h)anthracene	30.000	30.193	-0.6	104	-0.01
20	Benzo(g,h,i) Perylene	30.000	30.094	-0.3	103	-0.01

Average % D = 0.8

(#) = Out of Range SPCC's out = 0 CCC's out = 0
IJ18734.D 8100_H2.M Wed Nov 05 08:18:39 2003

4.6

Continuing Calibration Summary

Job Number: F20395
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GIJ905-CC904
Lab FileID: IJ18759.D

Evaluate Continuing Calibration Report

```
Signal #1 : C:\HPCHEM\1\DATA\1104PAH\IJ18759.D\FID1B.CH  Via1: 12
Signal #2 : C:\HPCHEM\1\DATA\1104PAH\IJ18759.D\FID2A.CH
Acq On    :  4 Nov 2003   2:52 pm                    Operator: sarahm
Sample    : cc904-20                                 Inst    : FID 1
Misc      : op8972,gij905,1000,,,1,1,water           Multiplr: 1.00
IntFile Signal #1: events.e     IntFile Signal #2: events2.e

Method       : C:\HPCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title        : PAH's BY EPA 610 OR 8100
Last Update  : Thu Oct 30 14:18:02 2003
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  15%     Max. Rel. Area : 200%
```

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Naphthalene	20.000	20.630	-3.1	104	0.00
2		2-Methyl Naphthalene	20.000	20.765	-3.8	104	0.00
3		1-Methyl Naphthalene	20.000	20.835	-4.2	105	0.00
4	S	2-Fluorobiphenyl	20.000	20.619	-3.1	104	0.00
5		Acenaphthylene	20.000	20.805	-4.0	104	0.00
6		Acenaphthene	20.000	20.734	-3.7	104	0.00
7		Fluorene	20.000	20.853	-4.3	105	0.00
8		Phenanthrene	20.000	20.647	-3.2	103	0.00
9		Anthracene	20.000	21.290	-6.4	107	0.00
10	S	O-Terphenyl	20.000	20.881	-4.4	105	0.00
11		Fluoranthene	20.000	20.857	-4.3	105	0.00
12		Pyrene	20.000	20.775	-3.9	104	0.00
13		Benzo(a)Anthracene	20.000	20.527	-2.6	103	0.00
14		Chrysene	20.000	21.272	-6.4	107	0.00
15		Benzo(b)Fluoranthene	20.000	20.032	-0.2	102	0.00
16		Benzo(k)Fluoranthene	20.000	21.901	-9.5	110	0.00
17		Benzo(a) Pyrene	20.000	20.986	-4.9	106	0.00
18		Indeno(1,2,3-cd)pyrene	20.000	20.670	-3.4	104	0.00
19		Dibenzo(a,h)anthracene	20.000	21.655	-8.3	109	0.00
20		Benzo(g,h,i) Perylene	20.000	21.228	-6.1	107	0.00

Signal #2

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Naphthalene	20.000	20.505	-2.5	103	0.00
2		2-Methyl Naphthalene	20.000	20.469	-2.3	103	0.00
3		1-Methyl Naphthalene	20.000	20.463	-2.3	103	0.00
4	S	2-Fluorobiphenyl	20.000	20.445	-2.2	103	0.00
5		Acenaphthylene	20.000	20.458	-2.3	103	0.00
6		Acenaphthene	20.000	20.414	-2.1	103	0.00
7		Fluorene	20.000	20.491	-2.5	103	0.00
8		Phenanthrene	20.000	20.241	-1.2	101	0.00
9		Anthracene	20.000	20.863	-4.3	105	0.00
10	S	O-Terphenyl	20.000	20.537	-2.7	103	0.00
11		Fluoranthene	20.000	20.554	-2.8	103	0.00
12		Pyrene	20.000	20.548	-2.7	103	0.00
13		Benzo(a)Anthracene	20.000	20.595	-3.0	104	0.00
14		Chrysene	20.000	20.625	-3.1	104	0.00
15		Benzo(b)Fluoranthene	20.000	20.372	-1.9	103	0.00

Continuing Calibration Summary

Job Number: F20395
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GIJ905-CC904
Lab FileID: IJ18759.D

16	Benzo(k)Fluoranthene	20.000	20.795	-4.0	105	0.00
17	Benzo(a) Pyrene	20.000	20.712	-3.6	104	0.00
18	Indeno(1,2,3-cd)pyrene	20.000	20.805	-4.0	106	-0.01
19	Dibenzo(a,h)anthracene	20.000	21.170	-5.9	106	-0.01
20	Benzo(g,h,i) Perylene	20.000	20.537	-2.7	104	-0.02

Average % D = 3.7

(#) = Out of Range SPCC's out = 0 CCC's out = 0
IJ18733.D 8100_H2.M Wed Nov 05 08:09:13 2003

4.6

Continuing Calibration Summary

Job Number: F20395
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GIJ905-ECC904
Lab FileID: IJ18766.D

4.6.4

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\1104PAH\IJ18766.D\FID1B.CH Vial: 19
Signal #2 : C:\HPCHEM\1\DATA\1104PAH\IJ18766.D\FID2A.CH
Acq On : 4 Nov 2003 6:15 pm Operator: sarahm
Sample : ecc904-20 Inst : FID 1
Misc : op8972,gij905,1000,,,1,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : C:\HPCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title : PAH's BY EPA 610 OR 8100
Last Update : Thu Oct 30 14:18:02 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Naphthalene	20.000	20.784	-3.9	105	0.00
2		2-Methyl Naphthalene	20.000	20.734	-3.7	104	0.00
3		1-Methyl Naphthalene	20.000	20.802	-4.0	105	0.00
4	S	2-Fluorobiphenyl	20.000	20.546	-2.7	103	0.00
5		Acenaphthylene	20.000	20.629	-3.1	104	0.00
6		Acenaphthene	20.000	20.616	-3.1	104	0.00
7		Fluorene	20.000	20.933	-4.7	105	0.00
8		Phenanthrene	20.000	20.584	-2.9	103	0.00
9		Anthracene	20.000	21.474	-7.4	108	0.00
10	S	O-Terphenyl	20.000	20.937	-4.7	105	0.00
11		Fluoranthene	20.000	20.982	-4.9	105	0.00
12		Pyrene	20.000	20.810	-4.0	104	0.00
13		Benzo(a)Anthracene	20.000	20.579	-2.9	103	0.00
14		Chrysene	20.000	21.471	-7.4	108	0.00
15		Benzo(b)Fluoranthene	20.000	20.123	-0.6	102	0.00
16		Benzo(k)Fluoranthene	20.000	21.984	-9.9	110	0.00
17		Benzo(a) Pyrene	20.000	21.060	-5.3	106	0.00
18		Indeno(1,2,3-cd)pyrene	20.000	20.438	-2.2	103	0.00
19		Dibenzo(a,h)anthracene	20.000	21.609	-8.0	108	0.00
20		Benzo(g,h,i) Perylene	20.000	20.912	-4.6	105	0.00

Signal #2

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Naphthalene	20.000	20.557	-2.8	103	0.00
2		2-Methyl Naphthalene	20.000	20.480	-2.4	103	0.00
3		1-Methyl Naphthalene	20.000	20.420	-2.1	103	0.00
4	S	2-Fluorobiphenyl	20.000	20.448	-2.2	103	0.00
5		Acenaphthylene	20.000	20.504	-2.5	103	0.00
6		Acenaphthene	20.000	20.481	-2.4	103	0.00
7		Fluorene	20.000	20.656	-3.3	104	0.00
8		Phenanthrene	20.000	20.162	-0.8	101	-0.01
9		Anthracene	20.000	21.218	-6.1	107	-0.01
10	S	O-Terphenyl	20.000	20.688	-3.4	104	-0.01
11		Fluoranthene	20.000	20.689	-3.4	104	-0.01
12		Pyrene	20.000	20.711	-3.6	104	-0.01
13		Benzo(a)Anthracene	20.000	20.750	-3.8	104	-0.02
14		Chrysene	20.000	20.880	-4.4	105	-0.02
15		Benzo(b)Fluoranthene	20.000	20.469	-2.3	104	-0.02

Continuing Calibration Summary

Job Number: F20395
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GIJ905-ECC904
Lab FileID: IJ18766.D

16	Benzo(k)Fluoranthene	20.000	20.858	-4.3	105	-0.02
17	Benzo(a) Pyrene	20.000	20.743	-3.7	104	-0.02
18	Indeno(1,2,3-cd)pyrene	20.000	20.440	-2.2	104	-0.02
19	Dibenzo(a,h)anthracene	20.000	20.736	-3.7	104	-0.02
20	Benzo(g,h,i) Perylene	20.000	20.449	-2.2	103	-0.03

Average % D = 3.8

(#) = Out of Range SPCC's out = 0 CCC's out = 0
IJ18733.D 8100_H2.M Wed Nov 05 08:09:15 2003

4.6 4

Continuing Calibration Summary

Job Number: F20395
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GIJ906-CC904
Lab FileID: IJ18767.D

Evaluate Continuing Calibration Report

```
Signal #1 : C:\HPCHEM\1\DATA\1105PAH\IJ18767.D\FID1B.CH  Vial: 1
Signal #2 : C:\HPCHEM\1\DATA\1105PAH\IJ18767.D\FID2A.CH
Acq On    :  5 Nov 2003   1:42 pm                    Operator: sarahm
Sample    : cc904-20                                 Inst    : FID 1
Misc      : op8972,gij906,1000,,,1,1,water           Multiplr: 1.00
IntFile Signal #1: events.e     IntFile Signal #2: events2.e

Method       : C:\HPCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title        : PAH's BY EPA 610 OR 8100
Last Update  : Thu Oct 30 14:18:02 2003
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  15%     Max. Rel. Area : 200%
```

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Naphthalene	20.000	20.638	-3.2	104	0.00
2		2-Methyl Naphthalene	20.000	20.777	-3.9	104	0.00
3		1-Methyl Naphthalene	20.000	20.845	-4.2	105	0.00
4	S	2-Fluorobiphenyl	20.000	20.578	-2.9	103	0.00
5		Acenaphthylene	20.000	20.710	-3.6	104	0.00
6		Acenaphthene	20.000	20.707	-3.5	104	0.00
7		Fluorene	20.000	20.969	-4.8	105	0.00
8		Phenanthrene	20.000	20.652	-3.3	104	0.00
9		Anthracene	20.000	21.520	-7.6	108	-0.01
10	S	O-Terphenyl	20.000	21.073	-5.4	106	0.00
11		Fluoranthene	20.000	21.088	-5.4	106	0.00
12		Pyrene	20.000	20.903	-4.5	105	0.00
13		Benzo(a)Anthracene	20.000	20.712	-3.6	104	0.00
14		Chrysene	20.000	21.618	-8.1	109	0.00
15		Benzo(b)Fluoranthene	20.000	20.346	-1.7	103	0.00
16		Benzo(k)Fluoranthene	20.000	22.173	-10.9	111	-0.01
17		Benzo(a) Pyrene	20.000	21.270	-6.3	107	0.00
18		Indeno(1,2,3-cd)pyrene	20.000	20.738	-3.7	104	0.00
19		Dibenzo(a,h)anthracene	20.000	22.020	-10.1	110	0.00
20		Benzo(g,h,i) Perylene	20.000	21.186	-5.9	107	0.00

Signal #2

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Naphthalene	20.000	21.020	-5.1	106	0.00
2		2-Methyl Naphthalene	20.000	20.909	-4.5	105	0.00
3		1-Methyl Naphthalene	20.000	20.861	-4.3	105	0.00
4	S	2-Fluorobiphenyl	20.000	20.855	-4.3	105	0.00
5		Acenaphthylene	20.000	20.807	-4.0	105	0.00
6		Acenaphthene	20.000	20.861	-4.3	105	0.00
7		Fluorene	20.000	20.967	-4.8	105	0.00
8		Phenanthrene	20.000	20.849	-4.2	104	0.00
9		Anthracene	20.000	21.353	-6.8	108	0.00
10	S	O-Terphenyl	20.000	21.111	-5.6	106	0.00
11		Fluoranthene	20.000	21.136	-5.7	106	-0.01
12		Pyrene	20.000	21.126	-5.6	106	0.00
13		Benzo(a)Anthracene	20.000	21.304	-6.5	107	0.00
14		Chrysene	20.000	21.317	-6.6	107	0.00
15		Benzo(b)Fluoranthene	20.000	21.251	-6.3	108	0.00

Continuing Calibration Summary

Job Number: F20395
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GIJ906-CC904
Lab FileID: IJ18767.D

16	Benzo(k)Fluoranthene	20.000	21.187	-5.9	107	0.00
17	Benzo(a) Pyrene	20.000	21.235	-6.2	107	0.00
18	Indeno(1,2,3-cd)pyrene	20.000	20.921	-4.6	106	0.00
19	Dibenzo(a,h)anthracene	20.000	21.261	-6.3	107	0.00
20	Benzo(g,h,i) Perylene	20.000	21.072	-5.4	106	0.00

Average % D = 5.2

(#) = Out of Range SPCC's out = 0 CCC's out = 0
IJ18733.D 8100_H2.M Thu Nov 06 08:56:39 2003

4.6

Continuing Calibration Summary

Job Number: F20395
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GIJ906-ECC904
Lab FileID: IJ18771.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\1105PAH\IJ18771.D\FID1B.CH Vial: 5
Signal #2 : C:\HPCHEM\1\DATA\1105PAH\IJ18771.D\FID2A.CH
Acq On : 5 Nov 2003 3:45 pm Operator: sarahm
Sample : ecc904-30 Inst : FID 1
Misc : op8972,gij906,990,,,1,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : C:\HPCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title : PAH's BY EPA 610 OR 8100
Last Update : Thu Oct 30 14:18:02 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Naphthalene	30.000	30.216	-0.7	103	0.00
2		2-Methyl Naphthalene	30.000	30.405	-1.4	104	0.00
3		1-Methyl Naphthalene	30.000	30.498	-1.7	104	0.00
4	S	2-Fluorobiphenyl	30.000	30.192	-0.6	103	0.00
5		Acenaphthylene	30.000	30.428	-1.4	104	0.00
6		Acenaphthene	30.000	30.445	-1.5	104	0.00
7		Fluorene	30.000	30.738	-2.5	105	0.00
8		Phenanthrene	30.000	30.307	-1.0	103	0.00
9		Anthracene	30.000	31.111	-3.7	106	0.00
10	S	O-Terphenyl	30.000	30.772	-2.6	105	0.00
11		Fluoranthene	30.000	30.808	-2.7	105	0.00
12		Pyrene	30.000	30.582	-1.9	104	0.00
13		Benzo(a)Anthracene	30.000	30.442	-1.5	104	0.00
14		Chrysene	30.000	31.482	-4.9	108	0.00
15		Benzo(b)Fluoranthene	30.000	29.739	0.9	101	0.00
16		Benzo(k)Fluoranthene	30.000	32.325	-7.8	111	0.00
17		Benzo(a) Pyrene	30.000	31.025	-3.4	106	0.00
18		Indeno(1,2,3-cd)pyrene	30.000	30.142	-0.5	103	0.00
19		Dibenzo(a,h)anthracene	30.000	31.747	-5.8	108	0.00
20		Benzo(g,h,i) Perylene	30.000	30.332	-1.1	104	0.00

Signal #2

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Naphthalene	30.000	30.334	-1.1	104	0.00
2		2-Methyl Naphthalene	30.000	30.298	-1.0	103	0.00
3		1-Methyl Naphthalene	30.000	30.165	-0.5	103	0.00
4	S	2-Fluorobiphenyl	30.000	30.201	-0.7	103	0.00
5		Acenaphthylene	30.000	30.314	-1.0	103	0.00
6		Acenaphthene	30.000	30.320	-1.1	103	0.00
7		Fluorene	30.000	30.521	-1.7	104	0.00
8		Phenanthrene	30.000	30.186	-0.6	102	0.00
9		Anthracene	30.000	30.985	-3.3	106	0.00
10	S	O-Terphenyl	30.000	30.568	-1.9	104	0.00
11		Fluoranthene	30.000	30.622	-2.1	104	0.00
12		Pyrene	30.000	30.621	-2.1	105	0.00
13		Benzo(a)Anthracene	30.000	30.692	-2.3	105	0.00
14		Chrysene	30.000	30.688	-2.3	105	0.00
15		Benzo(b)Fluoranthene	30.000	30.563	-1.9	105	0.00

Continuing Calibration Summary

Job Number: F20395
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GIJ906-ECC904
Lab FileID: IJ18771.D

16	Benzo(k)Fluoranthene	30.000	30.668	-2.2	104	0.00
17	Benzo(a) Pyrene	30.000	30.674	-2.2	105	0.00
18	Indeno(1,2,3-cd)pyrene	30.000	30.310	-1.0	103	0.00
19	Dibenzo(a,h)anthracene	30.000	30.540	-1.8	105	0.00
20	Benzo(g,h,i) Perylene	30.000	30.062	-0.2	103	0.00

Average % D = 2.0

(#) = Out of Range SPCC's out = 0 CCC's out = 0
IJ18734.D 8100_H2.M Thu Nov 06 08:56:15 2003

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Instrument Runlogs
- Initial and Continuing Calibration Blanks
- Initial and Continuing Calibration Checks
- High and Low Check Standards
- Interfering Element Check Standards
- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries
- IDL and Linear Range Summaries

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: F20395
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR110403.ASC Date Analyzed: 11/04/03 Methods: SW846 6010B
Analyst: DM Run ID: MA3554
Parameters: As,Ba,Be,Cd,Cr,Fe,Pb,Mn,Se

Time	Sample Description	Dilution Factor	PS Recov	Comments
10:16	MA3554-ICV1	1		
10:20	MA3554-ICB1	1		
10:23	MA3554-CRI1	1		
10:33	MA3554-ICSA1	1		
10:34	MA3554-ICSAB1	1		
10:38	MA3554-CCV1	1		
10:42	MA3554-CCB1	1		
10:46	MP5999-MB1	1		
10:49	MP5999-B1	1		
10:54	F20319-1	1		(sample used for QC only; not part of login F20395)
10:57	MP5999-D1	1		
11:01	MP5999-SD1	5		
11:04	MP5999-S1	1		
11:08	MP5999-S2	1		
11:12	ZZZZZZ	1		
11:16	ZZZZZZ	1		
11:20	ZZZZZZ	1		
11:23	MA3554-CCV2	1		
11:28	MA3554-CCB2	1		
11:31	ZZZZZZ	1		
11:35	ZZZZZZ	1		
11:39	ZZZZZZ	1		
11:42	ZZZZZZ	1		
11:46	ZZZZZZ	1		
11:49	ZZZZZZ	1		
11:53	ZZZZZZ	1		
11:56	ZZZZZZ	1		
12:00	ZZZZZZ	1		
12:03	MP5998-MB1	1		
12:07	MA3554-CCV3	1		
12:11	MA3554-CCB3	1		
12:15	MP5998-B1	1		
12:19	F20321-1	1		(sample used for QC only; not part of login F20395)

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: F20395
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR110403.ASC Date Analyzed: 11/04/03 Methods: SW846 6010B
Analyst: DM Run ID: MA3554
Parameters: As,Ba,Be,Cd,Cr,Fe,Pb,Mn,Se

Time	Sample Description	Dilution Factor	PS Recov	Comments
12:23	MP5998-D1	1		
12:26	MP5998-SD1	5		
12:30	MP5998-S1	1		
12:33	MP5998-S2	1		
12:38	ZZZZZZ	1		
12:41	ZZZZZZ	1		
12:45	ZZZZZZ	1		
12:48	ZZZZZZ	1		
12:52	MA3554-CCV4	1		
12:56	MA3554-CCB4	1		
13:00	ZZZZZZ	1		
13:03	ZZZZZZ	1		
13:07	ZZZZZZ	1		
13:10	ZZZZZZ	1		
13:14	ZZZZZZ	1		
13:18	ZZZZZZ	1		
13:21	ZZZZZZ	1		
13:25	ZZZZZZ	1		
13:28	ZZZZZZ	1		
13:32	ZZZZZZ	1		
13:35	MA3554-CCV5	1		
13:40	MA3554-CCB5	1		
13:43	ZZZZZZ	1		
13:47	ZZZZZZ	1		
13:50	ZZZZZZ	1		
13:54	ZZZZZZ	1		
13:57	MP6005-MB1	1		
14:01	MP6005-B1	1		
14:05	F20362-6	1		(sample used for QC only; not part of login F20395)
14:09	MP6005-D1	1		
14:12	MP6005-SD1	5		
14:16	MP6005-S1	1		
14:20	MA3554-CCV6	1		

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: F20395
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR110403.ASC Date Analyzed: 11/04/03 Methods: SW846 6010B
Analyst: DM Run ID: MA3554
Parameters: As,Ba,Be,Cd,Cr,Fe,Pb,Mn,Se

Time	Sample Description	Dilution Factor	PS Recov	Comments
14:25	MA3554-CCB6	1		
14:28	MP6005-S2	1		
14:33	ZZZZZZ	1		
14:36	ZZZZZZ	1		
14:40	ZZZZZZ	1		
14:43	ZZZZZZ	1		
14:47	ZZZZZZ	1		
14:50	ZZZZZZ	1		
14:54	ZZZZZZ	1		
14:57	ZZZZZZ	1		
15:01	ZZZZZZ	1		
15:04	MA3554-CCV7	1		
15:09	MA3554-CCB7	1		
15:12	ZZZZZZ	1		
15:16	ZZZZZZ	1		
15:20	ZZZZZZ	1		
15:23	ZZZZZZ	1		
15:27	ZZZZZZ	1		
15:30	F20395-1	1		
---------->	Last reportable sample/prep for job F20395			
15:34	ZZZZZZ	1		
15:37	ZZZZZZ	1		
15:41	ZZZZZZ	1		
15:45	MA3554-CRI2	1		
15:49	MA3554-CCV8	1		
15:53	MA3554-CCB8	1		
---------->	Last reportable CCB for job F20395			
16:00	MP6011-MB1	1		
16:04	MP6011-B1	1		
16:08	F20406-2	1		(sample used for QC only; not part of login F20395)
16:12	MP6011-D1	1		
16:15	MP6011-SD1	5		
16:19	MP6011-S1	1		
16:22	MP6011-S2	1		
16:27	ZZZZZZ	1		

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: F20395
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR110403.ASC Date Analyzed: 11/04/03 Methods: SW846 6010B
Analyst: DM Run ID: MA3554
Parameters: As,Ba,Be,Cd,Cr,Fe,Pb,Mn,Se

Time	Sample Description	Dilution Factor	PS Recov	Comments
16:30	ZZZZZZ	1		
16:34	ZZZZZZ	1		
16:37	MA3554-CCV9	1		
16:42	MA3554-CCB9	1		
16:45	ZZZZZZ	1		
16:49	ZZZZZZ	1		
16:52	ZZZZZZ	1		
16:56	ZZZZZZ	1		
16:59	ZZZZZZ	1		
17:03	ZZZZZZ	1		
17:07	ZZZZZZ	1		
17:10	ZZZZZZ	1		
17:14	ZZZZZZ	1		
17:17	ZZZZZZ	1		
17:21	MA3554-CCV10	1		
17:25	MA3554-CCB10	1		
17:29	ZZZZZZ	1		
17:32	ZZZZZZ	1		
17:36	ZZZZZZ	1		
17:39	ZZZZZZ	1		
17:43	ZZZZZZ	1		
17:46	ZZZZZZ	1		
17:50	MP6012-MB1	1		
17:53	MP6012-B1	1		
17:58	F20345-1	1		(sample used for QC only; not part of login F20395)
18:01	ZZZZZZ	1		
18:05	MA3554-CCV11	1		
18:09	MA3554-CCB11	1		
18:13	MP6012-SD1	5		
18:16	MP6012-S1	1		
18:20	MP6012-S2	1		
18:24	ZZZZZZ	1		
18:28	ZZZZZZ	1		

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: F20395
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR110403.ASC Date Analyzed: 11/04/03 Methods: SW846 6010B
Analyst: DM Run ID: MA3554
Parameters: As,Ba,Be,Cd,Cr,Fe,Pb,Mn,Se

Time	Sample Description	Dilution Factor	PS Recov	Comments
18:31	ZZZZZZ	1		
18:35	ZZZZZZ	1		
18:38	ZZZZZZ	1		
18:42	ZZZZZZ	1		
18:46	ZZZZZZ	1		
18:49	MA3554-CCV12	1		
18:53	MA3554-CCB12	1		
18:57	ZZZZZZ	1		
19:01	ZZZZZZ	1		
19:04	ZZZZZZ	1		
19:08	ZZZZZZ	1		
19:11	ZZZZZZ	1		
19:15	ZZZZZZ	1		
19:18	ZZZZZZ	1		
19:22	ZZZZZZ	1		
19:26	MA3554-CRI3	1		
19:30	MA3554-CCV13	1		
19:34	MA3554-CCB13	1		

Refer to raw data for calibration curve and standards.

INTERNAL STANDARD SUMMARY

Login Number: F20395
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR110403.ASC Date Analyzed: 11/04/03 Methods: SW846 6010B
Analyst: DM Run ID: MA3554
Parameters: As,Ba,Be,Cd,Cr,Fe,Pb,Mn,Se

Time	Sample Description	Istd#1
10:16	MA3554-ICV1	7087
10:20	MA3554-ICB1	7275 R
10:23	MA3554-CRI1	7217
10:33	MA3554-ICSA1	6377
10:34	MA3554-ICSAB1	6489
10:38	MA3554-CCV1	7029
10:42	MA3554-CCB1	7142
10:46	MP5999-MB1	6993
10:49	MP5999-B1	6816
10:54	F20319-1	7260
10:57	MP5999-D1	7275
11:01	MP5999-SD1	7176
11:04	MP5999-S1	7144
11:08	MP5999-S2	7114
11:12	ZZZZZZ	7326
11:16	ZZZZZZ	7295
11:20	ZZZZZZ	7309
11:23	MA3554-CCV2	7111
11:28	MA3554-CCB2	7256
11:31	ZZZZZZ	7285
11:35	ZZZZZZ	7566
11:39	ZZZZZZ	7806
11:42	ZZZZZZ	7130
11:46	ZZZZZZ	7232
11:49	ZZZZZZ	7304
11:53	ZZZZZZ	7609
11:56	ZZZZZZ	7139
12:00	ZZZZZZ	7696
12:03	MP5998-MB1	7119
12:07	MA3554-CCV3	7246
12:11	MA3554-CCB3	7201
12:15	MP5998-B1	7018
12:19	F20321-1	6928

5.1.1

INTERNAL STANDARD SUMMARY

Login Number: F20395
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR110403.ASC Date Analyzed: 11/04/03 Methods: SW846 6010B
Analyst: DM Run ID: MA3554
Parameters: As,Ba,Be,Cd,Cr,Fe,Pb,Mn,Se

Time	Sample Description	Istd#1
12:23	MP5998-D1	6831
12:26	MP5998-SD1	7241
12:30	MP5998-S1	6795
12:33	MP5998-S2	6870
12:38	ZZZZZZ	6765
12:41	ZZZZZZ	6936
12:45	ZZZZZZ	7227
12:48	ZZZZZZ	7210
12:52	MA3554-CCV4	7142
12:56	MA3554-CCB4	7238
13:00	ZZZZZZ	7154
13:03	ZZZZZZ	7317
13:07	ZZZZZZ	7233
13:10	ZZZZZZ	7235
13:14	ZZZZZZ	7209
13:18	ZZZZZZ	6988
13:21	ZZZZZZ	7149
13:25	ZZZZZZ	6956
13:28	ZZZZZZ	7126
13:32	ZZZZZZ	7114
13:35	MA3554-CCV5	7153
13:40	MA3554-CCB5	7335
13:43	ZZZZZZ	6951
13:47	ZZZZZZ	7199
13:50	ZZZZZZ	7189
13:54	ZZZZZZ	7035
13:57	MP6005-MB1	7083
14:01	MP6005-B1	7027
14:05	F20362-6	7163
14:09	MP6005-D1	7241
14:12	MP6005-SD1	7250
14:16	MP6005-S1	7032
14:20	MA3554-CCV6	7191

5.1.1 G

INTERNAL STANDARD SUMMARY

Login Number: F20395
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR110403.ASC Date Analyzed: 11/04/03 Methods: SW846 6010B
Analyst: DM Run ID: MA3554
Parameters: As,Ba,Be,Cd,Cr,Fe,Pb,Mn,Se

Time	Sample Description	Istd#1
14:25	MA3554-CCB6	7307
14:28	MP6005-S2	7033
14:33	ZZZZZZ	7230
14:36	ZZZZZZ	7223
14:40	ZZZZZZ	7156
14:43	ZZZZZZ	7174
14:47	ZZZZZZ	7215
14:50	ZZZZZZ	7081
14:54	ZZZZZZ	7089
14:57	ZZZZZZ	6975
15:01	ZZZZZZ	6987
15:04	MA3554-CCV7	7087
15:09	MA3554-CCB7	7323
15:12	ZZZZZZ	7195
15:16	ZZZZZZ	7190
15:20	ZZZZZZ	7166
15:23	ZZZZZZ	7105
15:27	ZZZZZZ	7167
15:30	F20395-1	6978
15:34	ZZZZZZ	7178
15:37	ZZZZZZ	6962
15:41	ZZZZZZ	7064
15:45	MA3554-CRI2	7320
15:49	MA3554-CCV8	7129
15:53	MA3554-CCB8	7299
16:00	MP6011-MB1	7208
16:04	MP6011-B1	7103
16:08	F20406-2	6974
16:12	MP6011-D1	7042
16:15	MP6011-SD1	7253
16:19	MP6011-S1	6936
16:22	MP6011-S2	6874
16:27	ZZZZZZ	6823

INTERNAL STANDARD SUMMARY

Login Number: F20395
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR110403.ASC Date Analyzed: 11/04/03 Methods: SW846 6010B
Analyst: DM Run ID: MA3554
Parameters: As,Ba,Be,Cd,Cr,Fe,Pb,Mn,Se

Time	Sample Description	Istd#1
16:30	ZZZZZZ	6938
16:34	ZZZZZZ	7021
16:37	MA3554-CCV9	7209
16:42	MA3554-CCB9	7367
16:45	ZZZZZZ	7147
16:49	ZZZZZZ	6810
16:52	ZZZZZZ	7283
16:56	ZZZZZZ	7236
16:59	ZZZZZZ	7385
17:03	ZZZZZZ	7266
17:07	ZZZZZZ	7212
17:10	ZZZZZZ	7353
17:14	ZZZZZZ	7467
17:17	ZZZZZZ	7241
17:21	MA3554-CCV10	7164
17:25	MA3554-CCB10	7403
17:29	ZZZZZZ	7292
17:32	ZZZZZZ	7108
17:36	ZZZZZZ	7266
17:39	ZZZZZZ	7064
17:43	ZZZZZZ	6949
17:46	ZZZZZZ	7077
17:50	MP6012-MB1	7103
17:53	MP6012-B1	6921
17:58	F20345-1	7590
18:01	ZZZZZZ	18111 !
18:05	MA3554-CCV11	7260
18:09	MA3554-CCB11	7424
18:13	MP6012-SD1	7448
18:16	MP6012-S1	7389
18:20	MP6012-S2	7313
18:24	ZZZZZZ	7568
18:28	ZZZZZZ	7567

5.1.1

INTERNAL STANDARD SUMMARY

Login Number: F20395
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR110403.ASC Date Analyzed: 11/04/03 Methods: SW846 6010B
Analyst: DM Run ID: MA3554
Parameters: As,Ba,Be,Cd,Cr,Fe,Pb,Mn,Se

Time	Sample Description	Istd#1
18:31	ZZZZZZ	7184
18:35	ZZZZZZ	7403
18:38	ZZZZZZ	7464
18:42	ZZZZZZ	7329
18:46	ZZZZZZ	8122
18:49	MA3554-CCV12	7318
18:53	MA3554-CCB12	7384
18:57	ZZZZZZ	7927
19:01	ZZZZZZ	7502
19:04	ZZZZZZ	7156
19:08	ZZZZZZ	7249
19:11	ZZZZZZ	7196
19:15	ZZZZZZ	6985
19:18	ZZZZZZ	7301
19:22	ZZZZZZ	7204
19:26	MA3554-CRI3	7268
19:30	MA3554-CCV13	7260
19:34	MA3554-CCB13	7304

R = Reference for ISTD limits. ! = Outside limits.

LEGEND:

Istd#	Parameter	Limits
Istd#1	Yttrium	60-125 %

5.1.1

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: F20395
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR110403.ASC Date Analyzed: 11/04/03 Methods: SW846 6010B
QC Limits: result < RL Run ID: MA3554 Units: ug/l

Time: / Sample ID: / Metal	RL	IDL	10:20 ICB1 raw	final	10:42 CCB1 raw	final	11:28 CCB2 raw	final	12:11 CCB3 raw	final
Aluminum	200	6.6	anr							
Antimony	5.0	1.5	anr							
Arsenic	10	2.8	-2.1	<10	1.2	<10	-0.93	<10	-1.4	<10
Barium	200	.5	0.030	<200	0.20	<200	0.29	<200	0.55	<200
Beryllium	5.0	.3	-0.12	<5.0	0.050	<5.0	0.26	<5.0	0.50	<5.0
Cadmium	5.0	.3	-0.30	<5.0	-0.11	<5.0	0.040	<5.0	0.18	<5.0
Calcium	1000	3.8	anr							
Chromium	10	.4	-0.11	<10	0.17	<10	0.25	<10	0.75	<10
Cobalt	50	.5	anr							
Copper	25	.44	anr							
Iron	300	7.1	0.020	<300	18.7	<300	37.5	<300	60.7	<300
Lead	5.0	1.2	1.8	<5.0	2.8	<5.0	1.8	<5.0	3.0	<5.0
Magnesium	5000	9.9	anr							
Manganese	15	.16	-0.12	<15	0.12	<15	0.26	<15	0.44	<15
Molybdenum	50	.75	anr							
Nickel	40	1.1	anr							
Potassium	5000	14	aur							
Selenium	10	2	-0.61	<10	1.2	<10	3.5	<10	2.8	<10
Silver	10	.6	anr							
Sodium	5000	150	anr							
Thallium	10	1.5	anr							
Tin	50	1.5	anr							
Vanadium	50	.47	anr							
Zinc	20	.59	anr							

(*) Outside of QC limits
(aur) Analyte not requested

5.1.2

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: F20395
Account: EBINOJX - EBI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR110403.ASC
QC Limits: result < RL

Date Analyzed: 11/04/03
Run ID: MA3554

Methods: SW846 6010B
Units: ug/L

Time: / Sample ID: / Metal	RL	IDL	12:56 CCB4 raw	final	13:40 CCB5 raw	final	14:25 CCB6 raw	final	15:09 CCB7 raw	final
Aluminum	200	6.6	anr							
Antimony	5.0	1.5	anr							
Arsenic	10	2.8	-1.1	<10	-2.7	<10	-3.1	<10	0.51	<10
Barium	200	.5	0.62	<200	0.11	<200	0.32	<200	0.49	<200
Beryllium	5.0	.3	0.70	<5.0	0.46	<5.0	0.63	<5.0	0.90	<5.0
Cadmium	5.0	.3	0.23	<5.0	-0.22	<5.0	-0.050	<5.0	0.030	<5.0
Calcium	1000	3.8	anr							
Chromium	10	.4	0.39	<10	-0.060	<10	0.28	<10	0.16	<10
Cobalt	50	.5	anr							
Copper	25	.44	anr							
Iron	300	7.1	34.5	<300	25.0	<300	32.0	<300	39.2	<300
Lead	5.0	1.2	2.2	<5.0	0.88	<5.0	0.52	<5.0	2.3	<5.0
Magnesium	5000	9.9	anr							
Manganese	15	.16	0.58	<15	0.030	<15	0.15	<15	0.38	<15
Molybdenum	50	.75	anr							
Nickel	40	1.1	anr							
Potassium	5000	14	anr							
Selenium	10	2	3.4	<10	0.87	<10	3.8	<10	1.7	<10
Silver	10	.6	anr							
Sodium	5000	150	anr							
Thallium	10	1.5	anr							
Tin	50	1.5	anr							
Vanadium	50	.47	anr							
Zinc	20	.59	anr							

(*) Outside of QC limits
(anr) Analyte not requested

5.1.2 5

ACCUTEST.
F20395

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: F20395
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR110403.ASC Date Analyzed: 11/04/03 Methods: SW846 6010B
QC Limits: result < RL Run ID: MA3554 Units: ug/l

Time:			15:53	
Sample ID:			CCB8	
Metal	RL	IDL	raw	final
Aluminum	200	6.6	anr	
Antimony	5.0	1.5	anr	
Arsenic	10	2.8	-0.47	<10
Barium	200	.5	0.60	<200
Beryllium	5.0	.3	1.0	<5.0
Cadmium	5.0	.3	0.11	<5.0
Calcium	1000	3.8	anr	
Chromium	10	.4	0.42	<10
Cobalt	50	.5	anr	
Copper	25	.44	anr	
Iron	300	7.1	35.2	<300
Lead	5.0	1.2	2.1	<5.0
Magnesium	5000	9.9	anr	
Manganese	15	.16	0.45	<15
Molybdenum	50	.75	anr	
Nickel	40	1.1	anr	
Potassium	5000	14	anr	
Selenium	10	2	2.7	<10
Silver	10	.6	anr	
Sodium	5000	150	anr	
Thallium	10	1.5	anr	
Tin	50	1.5	anr	
Vanadium	50	.47	anr	
Zinc	20	.59	anr	

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: F20395
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR110403.ASC Date Analyzed: 11/04/03 Methods: SW846 6010B
QC Limits: 90 to 110 % Recovery Run ID: MA3554 Units: ug/l

Time:		10:16			10:38			11:23	
Sample ID:	ICV	ICV1		CCV	CCV1		CCV	CCV2	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	2000	2000	100.0	2000	2000	100.0	2000	2000	100.0
Barium	2000	2050	102.5	2000	2050	102.5	2000	2060	103.0
Beryllium	2000	2030	101.5	2000	2030	101.5	2000	2050	102.5
Cadmium	2000	2020	101.0	2000	2030	101.5	2000	2040	102.0
Calcium	anr								
Chromium	2000	1930	96.5	2000	1940	97.0	2000	1940	97.0
Cobalt	anr								
Copper	anr								
Iron	40000	40900	102.3	40000	41000	102.5	40000	41100	102.8
Lead	2000	1970	98.5	2000	1980	99.0	2000	1990	99.5
Magnesium	anr								
Manganese	2000	2000	100.0	2000	2000	100.0	2000	2010	100.5
Molybdenum	anr								
Nickel	anr								
Potassium	anr								
Selenium	2000	1990	99.5	2000	2000	100.0	2000	2010	100.5
Silver	anr								
Sodium	anr								
Thallium	anr								
Tin	anr								
Vanadium	anr								
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

5.1.3

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: F20395
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR110403.ASC Date Analyzed: 11/04/03 Methods: SW846 6010B
QC Limits: 90 to 110 % Recovery Run ID: MA3554 Units: ug/l

Time:		12:07			12:52			13:35	
Sample ID:	CCV	CCV3		CCV	CCV4		CCV	CCV5	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	2000	1960	98.0	2000	2030	101.5	2000	2050	102.5
Barium	2000	2010	100.5	2000	2070	103.5	2000	2080	104.0
Beryllium	2000	1980	99.0	2000	2040	102.0	2000	2060	103.0
Cadmium	2000	1980	99.0	2000	2030	101.5	2000	2050	102.5
Calcium	anr								
Chromium	2000	1890	94.5	2000	1950	97.5	2000	1960	98.0
Cobalt	anr								
Copper	anr								
Iron	40000	39800	99.5	40000	41200	103.0	40000	41500	103.8
Lead	2000	1930	96.5	2000	1980	99.0	2000	1990	99.5
Magnesium	anr								
Manganese	2000	1950	97.5	2000	2020	101.0	2000	2030	101.5
Molybdenum	anr								
Nickel	anr								
Potassium	anr								
Selenium	2000	1970	98.5	2000	2040	102.0	2000	2060	103.0
Silver	anr								
Sodium	anr								
Thallium	anr								
Tin	anr								
Vanadium	anr								
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

5.1.3

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: F20395
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: 1R110403.ASC Date Analyzed: 11/04/03 Methods: SW846 6010B
QC Limits: 90 to 110 % Recovery Run ID: MA3554 Units: ug/l

Time:		14:20			15:04			15:49	
Sample ID:	CCV	CCV6		CCV	CCV7		CCV	CCV8	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	2000	1980	99.0	2000	2050	102.5	2000	2050	102.5
Barium	2000	2040	102.0	2000	2080	104.0	2000	2090	104.5
Beryllium	2000	1980	99.0	2000	2050	102.5	2000	2050	102.5
Cadmium	2000	1960	98.0	2000	2030	101.5	2000	2030	101.5
Calcium	anr								
Chromium	2000	1890	94.5	2000	1960	98.0	2000	1960	98.0
Cobalt	anr								
Copper	anr								
Iron	40000	39900	99.8	40000	41300	103.3	40000	41300	103.3
Lead	2000	1910	95.5	2000	1970	98.5	2000	1970	98.5
Magnesium	anr								
Manganese	2000	1970	98.5	2000	2030	101.5	2000	2030	101.5
Molybdenum	anr								
Nickel	anr								
Potassium	anr								
Selenium	2000	1990	99.5	2000	2050	102.5	2000	2050	102.5
Silver	anr								
Sodium	anr								
Thallium	anr								
Tin	anr								
Vanadium	anr								
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: F20395
Account: EBINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR110403.ASC Date Analyzed: 11/04/03 Methods: SW846 6010B
QC Limits: 70 to 130 % Recovery Run ID: MA3554 Units: ug/l

Time:			10:23		15:45	
Sample ID:	CRI	CRIA	CRI1		CRI2	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	400		anr			
Antimony	10		anr			
Arsenic	20		17.7	88.5	18.4	92.0
Barium	400		401	100.3	411	102.8
Beryllium	10		10.2	102.0	11.0	110.0
Cadmium	10		10.0	100.0	9.7	97.0
Calcium	2000		anr			
Chromium	20		19.9	99.5	20.2	101.0
Cobalt	100		anr			
Copper	50		anr			
Iron	600		640	106.7	650	108.3
Lead	10		12.0	120.0	11.5	115.0
Magnesium	10000		anr			
Manganese	30		30.9	103.0	31.6	105.3
Molybdenum	100		anr			
Nickel	80		anr			
Potassium	10000		anr			
Selenium	10		9.9	99.0	11.5	115.0
Silver	20		anr			
Sodium	10000		anr			
Thallium	20		anr			
Tin	100		anr			
Vanadium	100		anr			
Zinc	40		anr			

(*) Outside of QC limits
(anr) Analyte not requested

5.1.4

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: F20395
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR110403.ASC Date Analyzed: 11/04/03 Methods: SW846 6010B
QC Limits: 80 to 120 % Recovery Run ID: MA3554 Units: ug/l

Time:			10:33		10:34	
Sample ID:	ICSA	ICSAB	ICSA1		ICSAB1	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	500000	500000	520000	104.0	497000	99.4
Antimony		1000	0.020		937	93.7
Arsenic		1000	-0.67		939	93.9
Barium		500	2.1		518	103.6
Beryllium		500	-0.81		501	100.2
Cadmium		1000	-0.55		962	96.2
Calcium	500000	500000	456000	91.2	464000	92.8
Chromium		500	6.0		464	92.8
Cobalt		500	0.56		467	93.4
Copper		500	-1.9		501	100.2
Iron	200000	200000	198000	99.0	206000	103.0
Lead		1000	-1.6		939	93.9
Magnesium	500000	500000	510000	102.0	522000	104.4
Manganese		500	0.060		474	94.8
Molybdenum		1000	-10		938	93.8
Nickel		1000	4.1		941	94.1
Potassium			7.1		-320	
Selenium		1000	7.9		941	94.1
Silver		1000	-0.53		1060	106.0
Sodium			12.9		392	
Thallium		1000	0.55		882	88.2
Tin		1000	-9.9		919	91.9
Vanadium		500	3.5		497	99.4
Zinc		1000	-2.6		901	90.1

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: F20395
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

QC Batch ID: MP6005
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date: 11/03/03

Metal	RL	IDL	MB raw	final
Aluminum	200	6.6		
Antimony	5.0	1.5		
Arsenic	10	2.8	-4.8	<10
Barium	200	.5	-0.14	<200
Beryllium	5.0	.3	-0.030	<5.0
Cadmium	5.0	.3	-0.64	<5.0
Calcium	1000	3.8		
Chromium	10	.4	-0.64	<10
Cobalt	50	.5		
Copper	25	.44		
Iron	300	7.1	-15	<300
Lead	5.0	1.2	1.6	<5.0
Magnesium	5000	9.9	anr	
Manganese	15	.16	-0.13	<15
Molybdenum	50	.75		
Nickel	40	1.1		
Potassium	5000	14		
Selenium	10	2	-1.1	<10
Silver	10	.6	anr	
Sodium	5000	150	anr	
Thallium	10	1.5		
Tin	50	1.5		
Vanadium	50	.47	anr	
Zinc	20	.59		

Associated samples MP6005: F20395-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

5.2.1

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: F20395
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

QC Batch ID: MP6005
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date: 11/03/03 11/03/03

Metal	F20362-6 Original	DUP	RPD	QC Limits	F20362-6 Original	MS	Spikelot MPFLICP	% Rec	QC Limits
Aluminum									
Antimony									
Arsenic	0.0	0.0	NC	0-12	0.0	4050	4000	101.3	83-116
Barium	30.0	30.0	0.0	0-13	30.0	4250	4000	105.5	82-116
Beryllium	0.0	0.0	NC	0-12	0.0	110	100	110.0	86-119
Cadmium	0.0	0.0	NC	0-13	0.0	104	100	104.0	80-115
Calcium									
Chromium	0.0	0.0	NC	0-12	0.0	410	400	102.5	82-120
Cobalt									
Copper									
Iron	937	601	43.7*(a)	0-14	937	29000	27000	103.9	76-125
Lead	3.6	3.1	14.9 (b)	0-10	3.6	1040	1000	103.6	84-118
Magnesium	anr								
Manganese	4.9	5.0	2.0	0-13	4.9	1060	1000	105.5	75-125
Molybdenum									
Nickel									
Potassium									
Selenium	0.0	0.0	NC	0-13	0.0	4100	4000	102.5	84-121
Silver	anr								
Sodium	anr								
Thallium									
Tin									
Vanadium	anr								
Zinc									

Associated samples MP6005: F20395-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) High RPD due to possible sample nonhomogeneity.
(b) RPD acceptable due to low duplicate and sample concentrations.

5.2.2 5

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: F20395
Account: SEINCJX - SEI
Project: Camp Lejeune-Campbell St. Fuel Farm

QC Batch ID: MP6005
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date: 11/03/03

Metal	F20362-6 Original	MSD	Spikelot MPFLICP	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony						
Arsenic	0.0	3960	4000	99.0	2.2	
Barium	30.0	4150	4000	103.0	2.4	
Beryllium	0.0	108	100	108.0	1.8	
Cadmium	0.0	102	100	102.0	1.9	
Calcium						
Chromium	0.0	405	400	101.3	1.2	
Cobalt						
Copper						
Iron	937	29200	27000	104.7	0.7	
Lead	3.6	1020	1000	101.6	1.9	
Magnesium	anr					
Manganese	4.9	1040	1000	103.5	1.9	
Molybdenum						
Nickel						
Potassium						
Selenium	0.0	3980	4000	99.5	3.0	
Silver	anr					
Sodium	anr					
Thallium						
Tin						
Vanadium	anr					
Zinc						

Associated samples MP6005: F20395-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

5.2.2

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: F20395
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

QC Batch ID: MP6005
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date: 11/03/03

Metal	BSP Result	Spikelot MPFLICP	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic	3940	4000	98.5	80-120
Barium	4170	4000	104.3	80-120
Beryllium	108	100	108.0	80-120
Cadmium	102	100	102.0	80-120
Calcium				
Chromium	407	400	101.8	80-120
Cobalt				
Copper				
Iron	28200	27000	104.4	80-120
Lead	1030	1000	103.0	80-120
Magnesium	anr			
Manganese	1040	1000	104.0	80-120
Molybdenum				
Nickel				
Potassium				
Selenium	3960	4000	99.0	80-120
Silver	anr			
Sodium	anr			
Thallium				
Tin				
Vanadium	anr			
Zinc				

Associated samples MP6005: F20395-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

5.2.3

SERIAL DILUTION RESULTS SUMMARY

Login Number: F20395
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

QC Batch ID: MP6005
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date: 11/03/03

Metal	F20362-6 Original	SDL 1:5	RPD	QC Limits
Aluminum				
Antimony				
Arsenic	0.00	0.00	NC	0-10
Barium	30.0	29.6	1.3	0-10
Beryllium	0.00	0.00	NC	0-10
Cadmium	0.00	0.00	NC	0-10
Calcium				
Chromium	0.00	0.00	NC	0-10
Cobalt				
Copper				
Iron	937	900	4.0	0-10
Lead	3.55	13.8	289.6(a)	0-10
Magnesium	anr			
Manganese	4.85	3.83	21.0 (a)	0-10
Molybdenum				
Nickel				
Potessium				
Selenium	0.00	0.00	NC	0-10
Silver	anr			
Sodium	anr			
Thallium				
Tin				
Vanadium	anr			
Zinc				

Associated samples MP6005: F20395-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

5.2.4

Instrument Detection Limits

Job Number: F20395
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Instrument ID: TJATRACE1 **Effective Date:** 04/15/02

Analyte	IDL ug/l
Aluminum	6.6
Antimony	1.5
Arsenic	2.8
Barium	.5
Beryllium	.3
Cadmium	.3
Calcium	3.8
Chromium	.4
Cobalt	.5
Copper	.44
Iron	7.1
Lead	1.2
Magnesium	9.9
Manganese	.16
Molybdenum	.75
Nickel	1.1
Potassium	13.8
Selenium	2
Silver	.6
Sodium	145
Thallium	1.5
Tin	1.5
Vanadium	.47
Zinc	.59

The above applies to the following instrument runs:
MA3554

Instrument Linear Ranges

Job Number: F20395
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Instrument ID: TJATRACE1 **Effective Date:** 10/03/03

Analyte	Linear Range ug/l
Aluminum	1000000
Antimony	100000
Arsenic	50000
Barium	100000
Beryllium	50000
Cadmium	50000
Calcium	500000
Chromium	100000
Cobalt	100000
Copper	100000
Iron	1000000
Lead	100000
Magnesium	1000000
Manganese	50000
Molybdenum	100000
Nickel	100000
Potassium	1000000
Selenium	100000
Silver	1000
Sodium	250000
Thallium	100000
Tin	100000
Vanadium	100000
Zinc	100000

The above applies to the following instrument runs:
MA3554

5.3

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: F20395
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Solids, Total Dissolved	GN13057	10	<10	mg/l				
Solids, Total Suspended	GN13077	4.0	<4.0	mg/l				

Associated Samples:
Batch GN13057: F20395-1
Batch GN13077: F20395-1

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: F20395
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Solids, Total Dissolved	GN13057	F20395-1	mg/l	356	353	0.8	0-29%
Solids, Total Suspended	GN13077	F20320-2	mg/l	<4.0	<4.0	0.0	0-33%

Associated Samples:
Batch GN13057: F20395-1
Batch GN13077: F20395-1

6.2.9

December 2003 Laboratory Reports

Southeast
ACCUTEST.
Laboratories

12/08/05

Technical Report for

EEI

CSFF MCAS New River

CTO 3

Accutest Job Number: F21252

Sampling Dates: 12/16/03 - 12/18/03

Report to:

EEI

bmorris@eeimail.com

ATTN: Bill Morris

Total number of pages in report: 112

ACCREDITED IN ACCORDANCE WITH nelac

Test results coutained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Sections: 1 2 3 4 5 6

Table of Contents

-1-

Section 1: Sample Summary **3**
Section 2: Case Narrative/Conformance Summary 5
Section 3: Sample Results 6
3.1: F21252-1: USTCSFF-MW03 6
3.2: F21252-2: USTCSFF-MW12 8
3.3: F21252-3: USTCSFF-MW14 10
3.4: F21252-4: USTCSFF-DW02 12
3.5: F21252-5: USTCSFF-DW02D 15
3.6: F21252-6: USTCSFF-MW11 18
3.7: F21252-7: USTCSFF-MW16 20
3.8: F21252-8: USTCSFF-DW06 22
3.9: F21252-9: USTCSFF-MW21 25
3.10: F21252-10: USTCSFF-MW24 27
3.11: F21252-11: USTCSFF-13DW01 29
3.12: F21252-12: USTCSFF-122MW09 32
3.13: F21252-13: USTCSFF-122MW04 35
3.14: F21252-14: USTCSFF-13MW01 37
3.15: F21252-15: TRIP BLANK 39
Section 4: Misc. Forms **40**
4.1: Chain of Custody 41
Section 5: GC Volatiles - QC Data Summaries 44
5.1: Method Blank Summary 45
5.2: Blank Spike Summary 50
5.3: Matrix Spike/Matrix Spike Duplicate Summary 56
5.4: Surrogate Recovery Summaries 61
5.5: GC Surrogate Retention Time Summaries 63
5.6: Initial and Continuing Calibration Summaries 77
Section 6: GC Semi-volatiles - QC Data Summaries 95
6.1: Method Blank Summary 96
6.2: Blank Spike Summary 97
6.3: Matrix Spike/Matrix Spike Duplicate Summary 98
6.4: Surrogate Recovery Summaries 99
6.5: GC Surrogate Retention Time Summaries 100
6.6: Initial and Continuing Calibration Summaries 103

Sample Summary

EEI

Job No: F21252

CSFF MCAS New River
Project No: CTO 3

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
F21252-1	12/16/03	11:40	BMTE	12/19/03	AQ	Ground Water	USTCSFF-MW03
F21252-2	12/16/03	14:25	BMTE	12/19/03	AQ	Ground Water	USTCSFF-MW12
F21252-3	12/16/03	15:00	BMTE	12/19/03	AQ	Ground Water	USTCSFF-MW14
F21252-4	12/16/03	15:35	BMTE	12/19/03	AQ	Ground Water	USTCSFF-DW02
F21252-5	12/16/03	00:00	BMTE	12/19/03	AQ	Ground Water	USTCSFF-DW02D
F21252-6	12/17/03	10:25	BMTE	12/19/03	AQ	Ground Water	USTCSFF-MW11
F21252-7	12/16/03	12:34	BMTE	12/19/03	AQ	Ground Water	USTCSFF-MW16
F21252-8	12/17/03	12:05	BMTE	12/19/03	AQ	Ground Water	USTCSFF-DW06
F21252-9	12/17/03	12:57	BMTE	12/19/03	AQ	Ground Water	USTCSFF-MW21
F21252-10	12/17/03	14:02	BMTE	12/19/03	AQ	Ground Water	USTCSFF-MW24
F21252-11	12/17/03	15:50	BMTE	12/19/03	AQ	Ground Water	USTCSFF-13DW01
F21252-12	12/17/03	16:35	BMTE	12/19/03	AQ	Ground Water	USTCSFF-122MW09
F21252-13	12/18/03	14:10	BMTE	12/19/03	AQ	Ground Water	USTCSFF-122MW04

Sample Summary
(continued)

EEI

Job No: F21252

CSFF MCAS New River
Project No: CTO 3

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
F21252-14	12/18/03	15:00	BMTE	12/19/03	AQ	Ground Water	USTCSFF-13MW01
F21252-15	12/18/03	00:00	BMTE	12/19/03	AQ	Trip Blank Water	TRIP BLANK

Accutest Laboratories Southeast, Inc.
Analytical Narrative

Client: EEI
Site: CSFF MCAS New River
Job No.: F21252
Report Date: January 13, 2004

15 samples were collected on December 16, 17 and 18, 2003 and received on December 19, 2003. Samples were intact and properly cooled. A listing of the Laboratory Sample ID, Client Sample ID, and dates of collection are presented in the Results Summary section of this report.
We received 610 sample bottles for sample USTCSFF-DW02D but 610 was not checked off on the chain of custody. We logged in the sample for 610 analysis. An e-mail was sent to Bill Morris on 12.22.03 to notify him.
All method specified holding times, calibrations and quality control performance criteria were met, with the following notes.

VOCs, EPA 601/602:

- The MS/MSDs associated with analytical batches GCD1826 and GCD1828 each had one RPD above acceptance limits. The associated Blank Spike was within acceptance limits. Data not adversely affected.

PAHs, EPA 610:

- Sample USTCSFF-122MW09 (F21252-12) has an elevated reporting limit for one compound due to matrix interference. Data has been footnoted accordingly.

Accutest Laboratories Southeast, Inc. certifies that this report meets the project requirements for analytical data produced for the samples as received at the Accutest Laboratories Southeast location as stated in the Analytical Task Order and the COC. In addition, Accutest Laboratories Southeast, Inc. certifies that data as reported meet the Data Quality Objectives for precision, accuracy and completeness as specified in the Accutest Laboratories Southeast, Inc. Quality Manual for other that conditions detailed above. It is recommended by Accutest Laboratories Southeast, Inc. that this report is to be used in its entirety. Accutest Laboratories Southeast, Inc. is not responsible for any assumptions of data quality if partial data packages are used to interpret data. The Accutest Laboratories Southeast, Inc. Laboratory Director as verified by the signature on the front page has authorized release of this report.

Narrative prepared by:

Date: January 13, 2004

Sue O. Bell, Project Manager (signature on file)

Report of Analysis

Client Sample ID:	USTCSFF-MW03		
Lab Sample ID:	F21252-1	**Date Sampled:**	12/16/03
Matrix:	AQ - Ground Water	**Date Received:**	12/19/03
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD044196.D	1	12/24/03	BM	n/a	n/a	GCD1821
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Rnn# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	92%		70-123%
98-08-8	aaa-Trifluorotoluene	96%		73-122%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW03		
Lab Sample ID:	F21252-1	**Date Sampled:**	12/16/03
Matrix:	AQ - Ground Water	**Date Received:**	12/19/03
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK01592.D	1	12/29/03	SKW	12/29/03	OP9468	GKK51
Run #2							

	Initial Volume	Final Volume
Run #1	37.1 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0094	ug/l	

CAS No.	Surrogate Reeoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	105%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW12		
Lab Sample ID:	F21252-2	**Date Sampled:**	12/16/03
Matrix:	AQ - Ground Water	**Date Received:**	12/19/03
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	CD044235.D	1	12/29/03	BM	n/a	n/a	GCD1824
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	1.3	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	0.77	1.0	0.50	ug/l	J
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	1.6	3.0	1.0	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	99%		70-123%
98-08-8	aaa-Trifluorotoluene	100%		73-122%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exeeeds calibration range
J = Indieates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW12		
Lab Sample ID:	F21252-2	**Date Sampled:**	12/16/03
Matrix:	AQ - Ground Water	**Date Received:**	12/19/03
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK01593.D	1	12/29/03	SKW	12/29/03	OP9468	GKK51
Run #2							

	Initial Volume	Final Volume
Run #1	38.4 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.018	0.0091	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	109%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW14		
Lab Sample ID:	F21252-3	**Date Sampled:**	12/16/03
Matrix:	AQ - Ground Water	**Date Received:**	12/19/03
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD044197.D	1	12/24/03	BM	n/a	n/a	GCD1821
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	92%		70-123%
98-08-8	aaa-Trifluorotoluene	95%		73-122%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW14		
Lab Sample ID:	F21252-3	**Date Sampled:**	12/16/03
Matrix:	AQ - Ground Water	**Date Received:**	12/19/03
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK01594.D	1	12/29/03	SKW	12/29/03	OP9468	GKK51
Run #2							

	Initial Volume	Final Volume
Run #1	38.2 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.018	0.0092	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	102%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-DW02		
Lab Sample ID:	F21252-4	**Date Sampled:**	12/16/03
Matrix:	AQ - Ground Water	**Date Received:**	12/19/03
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD044199.D	1	12/24/03	BM	n/a	n/a	GCD1821
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	92%		70-123%
98-08-8	aaa-Trifluorotoluene	95%		73-122%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-DW02		
Lab Sample ID:	F21252-4	**Date Sampled:**	12/16/03
Matrix:	AQ - Ground Water	**Date Received:**	12/19/03
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK01595.D	1	12/29/03	SKW	12/29/03	OP9468	GKK51
Run #2							

	Initial Volnme	Final Volume
Run #1	37.5 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0093	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	101%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-DW02		
Lab Sample ID:	F21252-4	**Date Sampled:**	12/16/03
Matrix:	AQ - Ground Water	**Date Received:**	12/19/03
Method:	EPA 610 EPA 610	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	IJ19089.D	1	12/24/03	SD	12/23/03	OP9429	GIJ922
Run #2							

	Initial Volume	Final Volume
Run #1	960 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	35.4	5.2	2.1	ug/l	
208-96-8	Acenaphthylene	ND	5.2	2.1	ug/l	
120-12-7	Anthracene	ND	5.2	2.1	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.2	2.1	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.2	2.1	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.2	2.1	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.2	2.1	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.2	2.1	ug/l	
218-01-9	Chrysene	ND	5.2	2.1	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.2	2.1	ug/l	
206-44-0	Fluoranthene	ND	5.2	2.1	ug/l	
86-73-7	Fluorene	27.9	5.2	2.1	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.2	2.1	ug/l	
91-20-3	Naphthalene	36.0	5.2	2.1	ug/l	
90-12-0	1-Methylnaphthalene	4.6	5.2	2.1	ug/l	J
91-57-6	2-Methylnaphthalene	2.3	5.2	2.1	ug/l	J
85-01-8	Phenanthrene	ND	5.2	2.1	ug/l	
129-00-0	Pyrene	ND	5.2	2.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Rnn# 2	Limits
321-60-8	2-Fluorobiphenyl	96%		42-123%
84-15-1	o-Terphenyl	100%		51-123%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-DW02D		
Lab Sample ID:	F21252-5	**Date Sampled:**	12/16/03
Matrix:	AQ - Ground Water	**Date Received:**	12/19/03
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD044236.D	1	12/29/03	BM	n/a	n/a	GCD1824
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	96%		70-123%
98-08-8	aaa-Trifluorotoluene	96%		73-122%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidenee of a compound

Report of Analysis

Client Sample ID:	USTCSFF-DW02D		
Lab Sample ID:	F21252-5	**Date Sampled:**	12/16/03
Matrix:	AQ - Ground Water	**Date Received:**	12/19/03
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK01596.D	1	12/29/03	SKW	12/29/03	OP9468	GKK51
Run #2							

	Initial Volume	Final Volume
Run #1	37.1 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0094	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	104%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indieates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-DW02D		
Lab Sample ID:	F21252-5	**Date Sampled:**	12/16/03
Matrix:	AQ - Ground Water	**Date Received:**	12/19/03
Method:	EPA 610 EPA 610	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	IJ19090.D	1	12/24/03	SD	12/23/03	OP9429	GIJ922
Run #2							

	Initial Volume	Final Volume
Run #1	980 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	35.1	5.1	2.0	ug/l	
208-96-8	Acenaphthylene	ND	5.1	2.0	ug/l	
120-12-7	Anthracene	ND	5.1	2.0	ug/l	
56-55-3	Benzo(a)anthraeene	ND	5.1	2.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.1	2.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.1	2.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.1	2.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.1	2.0	ug/l	
218-01-9	Chrysene	ND	5.1	2.0	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.1	2.0	ug/l	
206-44-0	Fluoranthene	ND	5.1	2.0	ug/l	
86-73-7	Fluorene	27.8	5.1	2.0	ug/l	
193-39-5	Indeno(1,2,3-ed)pyrene	ND	5.1	2.0	ug/l	
91-20-3	Naphthalene	36.9	5.1	2.0	ug/l	
90-12-0	1-Methylnaphthalene	4.6	5.1	2.0	ug/l	J
91-57-6	2-Methylnaphthalene	ND	5.1	2.0	ug/l	
85-01-8	Phenanthrene	ND	5.1	2.0	ug/l	
129-00-0	Pyrene	ND	5.1	2.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	95%		42-123%
84-15-1	o-Terphenyl	101%		51-123%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW11		
Lab Sample ID:	F21252-6	**Date Sampled:**	12/17/03
Matrix:	AQ - Ground Water	**Date Received:**	12/19/03
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD044270.D	1	12/30/03	BM	n/a	n/a	GCD1826
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	91%		70-123%
98-08-8	aaa-Trifluorotoluene	92%		73-122%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW11		
Lab Sample ID:	F21252-6	**Date Sampled:**	12/17/03
Matrix:	AQ - Ground Water	**Date Received:**	12/19/03
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK01597.D	1	12/29/03	SKW	12/29/03	OP9468	GKK51
Run #2							

	Initial Volume	Final Volume
Run #1	37.7 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0093	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	101%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW16		
Lab Sample ID:	F21252-7	**Date Sampled:**	12/16/03
Matrix:	AQ - Ground Water	**Date Received:**	12/19/03
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	CD044237.D	1	12/29/03	BM	n/a	n/a	GCD1824
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	41.7	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	7.4	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.88	1.0	0.50	ug/l	J
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	32.4	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	103%		70-123%
98-08-8	aaa-Trifluorotoluene	108%		73-122%

(a) All hits eonfirmed by dual column analysis.

ND = Not deteeted MDL - Method Detection Limit
RL = Reporting Limit
E = Indieates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW16		
Lab Sample ID:	F21252-7	**Date Sampled:**	12/16/03
Matrix:	AQ - Ground Water	**Date Received:**	12/19/03
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK01598.D	1	12/29/03	SKW	12/29/03	OP9468	GKK51
Run #2							

	Initial Volume	Final Volume
Run #1	37.9 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.018	0.0092	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	112%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-DW06		
Lab Sample ID:	F21252-8	**Date Sampled:**	12/17/03
Matrix:	AQ - Ground Water	**Date Received:**	12/19/03
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD044271.D	1	12/30/03	BM	n/a	n/a	GCD1826
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Ruu# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	90%		70-123%
98-08-8	aaa-Trifluorotoluene	93%		73-122%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exeeeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-DW06		
Lab Sample ID:	F21252-8	**Date Sampled:**	12/17/03
Matrix:	AQ - Ground Water	**Date Received:**	12/19/03
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK01600.D	1	12/29/03	SKW	12/29/03	OP9468	GKK51
Run #2							

	Initial Volume	Final Volume
Run #1	37.6 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0093	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	100%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidenee of a compound

Report of Analysis

Client Sample ID:	USTCSFF-DW06		
Lab Sample ID:	F21252-8	**Date Sampled:**	12/17/03
Matrix:	AQ - Ground Water	**Date Received:**	12/19/03
Method:	EPA 610 EPA 610	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IJ19091.D	1	12/24/03	SD	12/23/03	OP9429	GIJ922
Run #2							

	Initial Volume	Final Volume
Run #1	930 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.4	2.2	ug/l	
208-96-8	Acenaphthylene	ND	5.4	2.2	ug/l	
120-12-7	Anthracene	ND	5.4	2.2	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.4	2.2	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.4	2.2	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.4	2.2	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.4	2.2	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.4	2.2	ug/l	
218-01-9	Chrysene	ND	5.4	2.2	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.4	2.2	ug/l	
206-44-0	Fluoranthene	ND	5.4	2.2	ug/l	
86-73-7	Fluorene	ND	5.4	2.2	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.4	2.2	ug/l	
91-20-3	Naphthalene	ND	5.4	2.2	ug/l	
90-12-0	1-Methylnaphthalene	ND	5.4	2.2	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.4	2.2	ug/l	
85-01-8	Phenanthrene	ND	5.4	2.2	ug/l	
129-00-0	Pyrene	ND	5.4	2.2	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	88%		42-123%
84-15-1	o-Terphenyl	95%		51-123%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW21		
Lab Sample ID:	F21252-9	**Date Sampled:**	12/17/03
Matrix:	AQ - Ground Water	**Date Received:**	12/19/03
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	CD044310.D	5	12/30/03	BM	n/a	n/a	GCD1828
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	273	5.0	2.5	ug/l	
108-90-7	Chlorobenzene	ND	5.0	2.5	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.0	2.5	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	2.5	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	2.5	ug/l	
100-41-4	Ethylbenzene	246	5.0	2.5	ug/l	
1634-04-4	Methyl Tert Butyl Ether	180	5.0	2.5	ug/l	
108-88-3	Toluene	95.2	5.0	2.5	ug/l	
1330-20-7	Xylenes (total)	1060	15	5.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	107%		70-123%
98-08-8	aaa-Trifluorotoluene	107%		73-122%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW21		
Lab Sample ID:	F21252-9	**Date Sampled:**	12/17/03
Matrix:	AQ - Ground Water	**Date Received:**	12/19/03
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK01601.D	1	12/29/03	SKW	12/29/03	OP9468	GKK51
Run #2							

	Initial Volume	Final Volume
Run #1	38.7 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.018	0.0090	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	98%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW24		
Lab Sample ID:	F21252-10	**Date Sampled:**	12/17/03
Matrix:	AQ - Ground Water	**Date Received:**	12/19/03
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	CD044272.D	1	12/30/03	BM	n/a	n/a	GCD1826
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	40.1	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	19.1	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	16.5	1.0	0.50	ug/l	
108-88-3	Toluene	58.0	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	62.9	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	99%		70-123%
98-08-8	aaa-Trifluorotoluene	99%		73-122%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW24		
Lab Sample ID:	F21252-10	**Date Sampled:**	12/17/03
Matrix:	AQ - Ground Water	**Date Received:**	12/19/03
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK01602.D	1	12/29/03	SKW	12/29/03	OP9468	GKK51
Run #2							

	Initial Volume	Final Volume
Run #1	37.5 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0093	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	101%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-13DW01		
Lab Sample ID:	F21252-11	**Date Sampled:**	12/17/03
Matrix:	AQ - Ground Water	**Date Received:**	12/19/03
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	CD044305.D	1	12/30/03	BM	n/a	n/a	GCD1828
Run #2	CD044275.D	50	12/30/03	BM	n/a	n/a	GCD1826

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	9.1	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	7.9	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	2.0	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	13.9	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	97%	92%	70-123%
98-08-8	aaa-Trifluorotoluene	97%	93%	73-122%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indieates value exeeeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-13DW01		
Lab Sample ID:	F21252-11	**Date Sampled:**	12/17/03
Matrix:	AQ - Ground Water	**Date Received:**	12/19/03
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK01603.D	1	12/29/03	SKW	12/29/03	OP9468	GKK51
Run #2							

	Initial Volume	Final Volume
Run #1	38.3 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.018	0.0091	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	92%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-13DW01		
Lab Sample ID:	F21252-11	**Date Sampled:**	12/17/03
Matrix:	AQ - Ground Water	**Date Received:**	12/19/03
Method:	EPA 610 EPA 610	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IJ19092.D	1	12/24/03	SD	12/23/03	OP9429	GIJ922
Run #2 [a]	IJ19098.D	5	12/24/03	SD	12/23/03	OP9429	GIJ922
Run #3 [a]	IJ19097.D	80	12/24/03	SD	12/23/03	OP9429	GIJ922

	Initial Volume	Final Volume
Run #1	980 ml	1.0 ml
Run #2	980 ml	1.0 ml
Run #3	980 ml	1.0 ml

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	69.2 [b]	26	10	ug/l	
208-96-8	Acenaphthylene	ND [b]	26	10	ug/l	
120-12-7	Anthracene	ND	5.1	2.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.1	2.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.1	2.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.1	2.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.1	2.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.1	2.0	ug/l	
218-01-9	Chrysene	ND	5.1	2.0	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.1	2.0	ug/l	
206-44-0	Fluoranthene	ND	5.1	2.0	ug/l	
86-73-7	Fluorene	27.5 [b]	26	10	ug/l	
193-39-5	Indeno(1,2,3-ed)pyrene	ND	5.1	2.0	ug/l	
91-20-3	Naphthalene	1510 [c]	410	160	ug/l	
90-12-0	1-Methylnaphthalene	70.2 [b]	26	10	ug/l	
91-57-6	2-Methylnaphthalene	118 [b]	26	10	ug/l	
85-01-8	Phenanthrene	ND	5.1	2.0	ug/l	
129-00-0	Pyrene	ND	5.1	2.0	ug/l	

CAS No.	Surrogate Reeoveries	Run# 1	Run# 2	Run# 3	Limits
321-60-8	2-Fluorobiphenyl	105%	98%	0% [d]	42-123%
84-15-1	o-Terphenyl	102%	98%	0% [d]	51-123%

(a) All hits confirmed by dual column analysis.
(b) Result is from Run# 2
(c) Result is from Run# 3
(d) Outside control limits due to dilution.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indieates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-122MW09		
Lab Sample ID:	F21252-12	**Date Sampled:**	12/17/03
Matrix:	AQ - Ground Water	**Date Received:**	12/19/03
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	CD044306.D	1	12/30/03	BM	n/a	n/a	GCD1828
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	0.79	1.0	0.50	ug/l	J
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Diehlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Diehlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	95%		70-123%
98-08-8	aaa-Trifluorotoluene	95%		73-122%

(a) All hits eonfirmed by dual eolumn analysis.

ND = Not deteeted MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-122MW09		
Lab Sample ID:	F21252-12	**Date Sampled:**	12/17/03
Matrix:	AQ - Ground Water	**Date Received:**	12/19/03
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK01604.D	1	12/29/03	SKW	12/29/03	OP9468	GKK51
Run #2							

	Initial Volume	Final Volume
Run #1	37.1 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0094	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	105%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indieates an estimated value
B = Indicates analyte found in associated method blank
N = Indieates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-122MW09		
Lab Sample ID:	F21252-12	**Date Sampled:**	12/17/03
Matrix:	AQ - Ground Water	**Date Received:**	12/19/03
Method:	EPA 610 EPA 610	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IJ19093.D	1	12/24/03	SD	12/23/03	OP9429	GIJ922
Run #2	IJ19099.D	4	12/24/03	SD	12/23/03	OP9429	GIJ922

	Initial Volume	Final Volume
Run #1	880 ml	1.0 ml
Run #2	880 ml	1.0 ml

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.7	2.3	ug/l	
208-96-8	Acenaphthylene	ND	5.7	2.3	ug/l	
120-12-7	Anthracene	ND	5.7	2.3	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.7	2.3	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.7	2.3	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.7	2.3	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.7	2.3	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.7	2.3	ug/l	
218-01-9	Chrysene	ND	5.7	2.3	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.7	2.3	ug/l	
206-44-0	Fluoranthene	ND	5.7	2.3	ug/l	
86-73-7	Fluorene	ND	5.7	2.3	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.7	2.3	ug/l	
91-20-3	Naphthalene	84.1 [a]	23	9.1	ug/l	
90-12-0	1-Methylnaphthalene	65.0 [a]	23	9.1	ug/l	
91-57-6	2-Methylnaphthalene [b]	ND [a]	46	46	ug/l	
85-01-8	Phenanthrene	ND	5.7	2.3	ug/l	
129-00-0	Pyrene	ND	5.7	2.3	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	99%	94%	42-123%
84-15-1	o-Terphenyl	107%	93%	51-123%

(a) Result is from Run# 2
(b) Elevated reporting limits due to matrix interference.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indieates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-122MW04		
Lab Sample ID:	F21252-13	**Date Sampled:**	12/18/03
Matrix:	AQ - Ground Water	**Date Received:**	12/19/03
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD044273.D	1	12/30/03	BM	n/a	n/a	GCD1826
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	91%		70-123%
98-08-8	aaa-Trifluorotoluene	93%		73-122%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-122MW04		
Lab Sample ID:	F21252-13	**Date Sampled:**	12/18/03
Matrix:	AQ - Ground Water	**Date Received:**	12/19/03
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK01605.D	1	12/29/03	SKW	12/29/03	OP9468	GKK51
Run #2							

	Initial Volume	Final Volume
Run #1	36.9 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0095	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	101%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indieates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a eompound

Report of Analysis

Client Sample ID:	USTCSFF-13MW01		
Lab Sample ID:	F21252-14	**Date Sampled:**	12/18/03
Matrix:	AQ - Ground Water	**Date Received:**	12/19/03
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	CD044307.D	1	12/30/03	BM	n/a	n/a	GCD1828
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	14.6	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	1.2	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	5.0	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	97%		70-123%
98-08-8	aaa-Trifluorotoluene	96%		73-122%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-13MW01		
Lab Sample ID:	F21252-14	**Date Sampled:**	12/18/03
Matrix:	AQ - Ground Water	**Date Received:**	12/19/03
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK01606.D	1	12/29/03	SKW	12/29/03	OP9468	GKK51
Run #2							

	Initial Volume	Final Volume
Run #1	38.6 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.018	0.0091	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	89%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exeeeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	F21252-15	**Date Sampled:**	12/18/03
Matrix:	AQ - Trip Blank Water	**Date Received:**	12/19/03
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD044281.D	1	12/30/03	BM	n/a	n/a	GCD1826
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	91%		70-123%
98-08-8	aaa-Trifluorotoluene	93%		73-122%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indieates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

ACCUTEST Laboratories

CHAIN OF CUSTODY

4405 VINELAND ROAD • SUITE C-15
ORLANDO, FL 32811
TEL: 407-425-6700 • FAX: 407-425-0707

ACCUTEST JOB #: F21252
ACCUTEST QUOTE #:

CLIENT INFORMATION

NAME: ENGINEERING & ENVIRONMENT
ADDRESS: 824 Gumbranch RD Suite 5
CITY: JACKSONVILLE STATE: NC ZIP: 28540
SEND REPORT TO:
PHONE #: (910) 989 3214

FACILITY INFORMATION

CSFF
PROJECT NAME: MCAS
LOCATION: New River Cherry Point (WCM)
PROJECT NO.: CTO 3
FAX #: (910) 989-3341

ANALYTICAL INFORMATION

EPA 602/504.1
610

MATRIX CODES

DW - DRINKING WATER
GW - GROUND WATER
WW - WASTE WATER
SO - SOIL
SL - SLUDGE
OI - OIL
LIQ - OTHER LIQUID
SOL - OTHER SOLID

ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION DATE	TIME	SAMPLED BY:	MATRIX	# OF BOTTLES	PRESERVATION HCl	H2SO4	HNO3	HOSEA	NONE	EPA 602/504.1	610	LAB USE ONLY
1	USTCSFF-MW03	12/16/03	[illegible]	BM	GW	3	X					X		
2	" MW12	12/16/03	1425	BM		3	X					X		
3	" MW14	12/16/03	1500	BM		3	X					X		
4	" DW02	12/16/03	1535	BM		5	X				X	X	X	
5	" DW03D	12/16/03	-	BM		5	X				X	X		
6	" MW11	12/17/03	1025	TE		3	X					X		
7	" MW16	12/16/03	1034	BM		3	X					X		
8	" DW06	12/17/03	1205	TE		5	X				X	X	X	
9	" MW21	12/17/03	1257	TE		3	X					X		
10	" MW24	12/17/03	1402	TE	V	3	X					X		
11	USTCSFF-13DW01	12/17/03	1550	TE	GW	5	X				X	X	X	

DATA TURNAROUND INFORMATION

- [X] STANDARD
- [ ] 48 HOUR RUSH
- [ ] 24 HOUR EMERGENCY
- [ ] OTHER

APPROVED BY:

EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED

DATA DELIVERABLE INFORMATION

- [ ] STANDARD
- [ ] COMMERCIAL "B"
- [ ] DISK DELIVERABLE
- [ ] STATE FORMS
- [X] OTHER (SPECIFY) NEESA C

COMMENTS/REMARKS

3 vials total for EPA 602 + 610 (504.1)

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESION, INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
1.	12/16/03 1630	1. FED EX 8434 9077 9062	2. Ferdinand Espinoza	12/19/03 1000	2. Jane Watkins
RELINQUISHED BY:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
3.		3.	4.		4.
RELINQUISHED BY:	DATE TIME:	RECEIVED BY:	SEAL #	PRESERVE WHERE APPLICABLE ☐	ON ICE ☐	TEMPERATURE 2.6 °C
5.		5.				

F21252: Chain of Custody
Page 1 of 3

CHAIN OF CUSTODY

ACCUTEST Laboratories
4405 VINELAND ROAD • SUITE C-15
ORLANDO, FL 32811
TEL: 407-425-6700 • FAX: 407-425-0707

ACCUTEST JOB #:
ACCUTEST QUOTE #: F21252

CLIENT INFORMATION

ENGINEERING + ENVIRONMENT INC
NAME: 824 Grumbranch Rd Suite S
ADDRESS: Jacksonville NC 28540
CITY, STATE, ZIP
SEND REPORT TO:
PHONE #: (910) 989-3214

FACILITY INFORMATION

CSFF
PROJECT NAME: MCAS
LOCATION: New River Cherry Point (NCM)
PROJECT NO.: C703
FAX #: (910) 989-3341

ANALYTICAL INFORMATION

EPA 602 / 504.1
610
Soil (WCM)

MATRIX CODES

DW - DRINKING WATER
GW - GROUND WATER
WW - WASTE WATER
SO - SOIL
SL - SLUDGE
OI - OIL
LIQ - OTHER LIQUID
SOL - OTHER SOLID

ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION DATE	COLLECTION TIME	SAMPLED BY:	MATRIX	# OF BOTTLES	PRESERVATION HCl	HNO3	H2SO4	NONE	EPA 602 / 504.1	610	Soil (WCM)	LAB USE ONLY
12	USTCSFF-122MW09	12/17/03	1655	TE	GW	5	X			X	X	X		
13	USTCSFF-122MW04	12/17/03	1410	BM	GW	3	X				X			
14	USTCSFF-13MW01	12/18/03	1540	BM	GW	3	X				X			
15	TRIP BLANK	12/18/03	1530	—	W	2					X			

DATA TURNAROUND INFORMATION

X STANDARD
☐ 48 HOUR RUSH
☐ 24 HOUR EMERGENCY
☐ OTHER
APPROVED BY:
EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED

DATA DELIVERABLE INFORMATION

☐ STANDARD
☐ COMMERCIAL "B"
☐ DISK DELIVERABLE
☐ STATE FORMS
X OTHER (SPECIFY) NEESA-C

COMMENTS/REMARKS

3 vials total for EPA 602 + EDB (504.1)

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
1.	12/18/03 1630	1. # 8434 9077 9062 FED EX	2. Roland Express	12/19/03 1000	2. Dave Watkins
RELINQUISHED BY:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
3.		3.	4.		4.
RELINQUISHED BY:	DATE TIME:	RECEIVED BY:	SEAL #	PRESERVE WHERE APPLICABLE ☐	ON ICE ☐	TEMPERATURE 2.6 °C
5.		5.				

F21252: Chain of Custody
Page 2 of 3

ACCUTEST LABORATORIES SOUTHEAST SAMPLE RECEIPT CONFIRMATION

Accutest's Job Number: F21252

Client: Engineering & ENV Project: CSFF

Date Received: 12/19/03 Time Received: 10:00

of Coolers Received: 1 Cooler Temperatures: 2.6

Delivery Method: (FedEx) UPS Accutest Courier Greyhound Delivery Other

Air Bill Number: 8434 9077 9062

Cooler Custody Seals Intact ?	(Yes)	No	
Chain of Custody Provided ?	(Yes)	No	
COC Match Bottle Label ID's ?	(Yes)	No	
Sample Labels Present on all bottles ?	(Yes)	No	
All Analyses Marked On COC ?	Yes	(No)	
Are All Bottles Intact ?	(Yes)	No	
Samples Preserved Correctly ?	(Yes)	No	
Correct Number of Containers Used ?	Yes	(No)	
Sufficient Sample Volume ?	(Yes)	No	
Trip Blank Provided ?	(Yes)	No	
Trip Blank on COC ?	(Yes)	No	
Trip Blank Intact ?	(Yes)	No	N/A
Trip Blank Matrix ?	Soil	(Water)	N/A
Number of Encores ?	Ø		
Number of Soil Field Kits ?	Ø		

Summary of Comments: sample DW02D we received 6 lO bottle - analysis not check off on COC - Each sample request 602 and 504 we received 3 vials HCL pres. will need to use 2 for 602, 1 for 504

Signature: Dave Watkins Date: 12/19/03

ASBD/HW 05/11/03

F21252: Chain of Custody
Page 3 of 3

4.1
4

GC Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: F21252
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GCD1821-MB	CD044178.D	1	12/24/03	BM	n/a	n/a	GCD1821

The QC reported here applies to the following samples: **Method:** EPA 601/602

F21252-1, F21252-3, F21252-4

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
352-33-0	1-Chloro-4-fluorobenzene	93%	70-123%
98-08-8	aaa-Trifluorotoluene	95%	73-122%

Method Blank Summary

Job Number: F21252
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GCD1824-MB	CD044232.D	1	12/29/03	BM	n/a	n/a	GCD1824

The QC reported here applies to the following samples: **Method:** EPA 601/602

F21252-2, F21252-5, F21252-7

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
352-33-0	1-Chloro-4-fluorobenzene	93%	70-123%
98-08-8	aaa-Trifluorotoluene	95%	73-122%

Method Blank Summary

Job Number: F21252
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GCD1826-MB	CD044258.D	1	12/29/03	BM	n/a	n/a	GCD1826

5.1

The QC reported here applies to the following samples: **Method:** EPA 601/602

F21252-6, F21252-8, F21252-10, F21252-11, F21252-13, F21252-15

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
352-33-0	1-Chloro-4-fluorobenzene	92%	70-123%
98-08-8	aaa-Trifluorotoluene	94%	73-122%

Method Blank Summary

Job Number: F21252
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GCD1828-MB	CD044293.D	1	12/30/03	BM	n/a	n/a	GCD1828

The QC reported here applies to the following samples: **Method:** EPA 601/602

F21252-9, F21252-11, F21252-12, F21252-14

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
352-33-0	1-Chloro-4-fluorobenzene	98%	70-123%
98-08-8	aaa-Trifluorotoluene	96%	73-122%

Method Blank Summary

Job Number: F21252
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP9468-MB	KK01591.D	1	12/29/03	SKW	12/29/03	OP9468	GKK51

5.1.4

The QC reported here applies to the following samples: **Method:** EPA 504.1

F21252-1, F21252-2, F21252-3, F21252-4, F21252-5, F21252-6, F21252-7, F21252-8, F21252-9, F21252-10, F21252-11, F21252-12, F21252-13, F21252-14

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.020	0.010	ug/l	

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	102%	60-139%

Blank Spike Summary

Job Number: F21252
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GCD1821-BS	CD044177.D	1	12/24/03	BM	n/a	n/a	GCD1821

The QC reported here applies to the following samples: **Method:** EPA 601/602

F21252-1, F21252-3, F21252-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	20	18.8	94	86-121
108-90-7	Chlorobenzene	20	18.8	94	81-119
95-50-1	1,2-Dichlorobenzene	20	18.4	92	75-120
541-73-1	1,3-Dichlorobenzene	20	18.7	94	77-121
106-46-7	1,4-Dichlorobenzene	20	18.2	91	75-122
100-41-4	Ethylbenzene	20	18.7	94	81-126
1634-04-4	Methyl Tert Butyl Ether	20	18.6	93	76-117
108-88-3	Toluene	20	19.1	96	82-123
1330-20-7	Xylenes (total)	60	55.1	92	82-125

CAS No.	Surrogate Recoveries	BSP	Limits
352-33-0	1-Chloro-4-fluorobenzene	97%	70-123%
98-08-8	aaa-Trifluorotoluene	98%	73-122%

Blank Spike Summary

Job Number: F21252
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GCD1824-BS	CD044231.D	1	12/29/03	BM	n/a	n/a	GCD1824

The QC reported here applies to the following samples: **Method:** EPA 601/602

F21252-2, F21252-5, F21252-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	20	18.6	93	86-121
108-90-7	Chlorobenzene	20	18.6	93	81-119
95-50-1	1,2-Dichlorobenzene	20	18.2	91	75-120
541-73-1	1,3-Dichlorobenzene	20	18.7	94	77-121
106-46-7	1,4-Dichlorobenzene	20	18.2	91	75-122
100-41-4	Ethylbenzene	20	18.3	92	81-126
1634-04-4	Methyl Tert Butyl Ether	20	17.5	88	76-117
108-88-3	Toluene	20	19.0	95	82-123
1330-20-7	Xylenes (total)	60	54.3	91	82-125

CAS No.	Surrogate Recoveries	BSP	Limits
352-33-0	1-Chloro-4-fluorobenzene	98%	70-123%
98-08-8	aaa-Trifluorotoluene	99%	73-122%

Blank Spike Summary

Job Number: F21252
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GCD1826-BS	CD044257.D	1	12/29/03	BM	n/a	n/a	GCD1826

The QC reported here applies to the following samples: **Method:** EPA 601/602

F21252-6, F21252-8, F21252-10, F21252-11, F21252-13, F21252-15

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	20	18.6	93	86-121
108-90-7	Chlorobenzene	20	18.3	92	81-119
95-50-1	1,2-Dichlorobenzene	20	17.6	88	75-120
541-73-1	1,3-Dichlorobenzene	20	17.8	89	77-121
106-46-7	1,4-Dichlorobenzene	20	17.5	88	75-122
100-41-4	Ethylbenzene	20	18.0	90	81-126
1634-04-4	Methyl Tert Butyl Ether	20	19.4	97	76-117
108-88-3	Toluene	20	18.7	94	82-123
1330-20-7	Xylenes (total)	60	53.2	89	82-125

CAS No.	Surrogate Recoveries	BSP	Limits
352-33-0	1-Chloro-4-fluorobenzene	95%	70-123%
98-08-8	aaa-Trifluorotoluene	98%	73-122%

Blank Spike Summary

Job Number: F21252
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GCD1828-BS	CD044292.D	1	12/30/03	BM	n/a	n/a	GCD1828

5.2

The QC reported here applies to the following samples: **Method:** EPA 601/602

F21252-9, F21252-11, F21252-12, F21252-14

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	20	19.3	97	86-121
108-90-7	Chlorobenzene	20	18.9	95	81-119
95-50-1	1,2-Diehlorobenzene	20	19.4	97	75-120
541-73-1	1,3-Diehlorobenzene	20	19.7	99	77-121
106-46-7	1,4-Diehlorobenzene	20	19.2	96	75-122
100-41-4	Ethylbenzene	20	18.6	93	81-126
1634-04-4	Methyl Tert Butyl Ether	20	19.0	95	76-117
108-88-3	Toluene	20	19.1	96	82-123
1330-20-7	Xylenes (total)	60	57.2	95	82-125

CAS No.	Surrogate Recoveries	BSP	Limits
352-33-0	1-Chloro-4-fluorobenzene	100%	70-123%
98-08-8	aaa-Trifluorotoluene	99%	73-122%

Blank Spike Summary

Job Number: F21252
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP9468-BS	KK01589.D	1	12/29/03	SKW	12/29/03	OP9468	GKK51

The QC reported here applies to the following samples: **Method:** EPA 504.1

F21252-1, F21252-2, F21252-3, F21252-4, F21252-5, F21252-6, F21252-7, F21252-8, F21252-9, F21252-10, F21252-11, F21252-12, F21252-13, F21252-14

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
106-93-4	1,2-Dibromoethane	0.25	0.25	100	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	101%	60-139%

Blank Spike Summary

Job Number: F21252
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP9468-BS2	KK01590.D	1	12/29/03	SKW	12/29/03	OP9468	GKK51

The QC reported here applies to the following samples: **Method:** EPA 504.1

F21252-1, F21252-2, F21252-3, F21252-4, F21252-5, F21252-6, F21252-7, F21252-8, F21252-9, F21252-10, F21252-11, F21252-12, F21252-13, F21252-14

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
106-93-4	1,2-Dibromoethane	0.25	0.27	108	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	114%	60-139%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F21252
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F21181-4MS	CD044188.D	1	12/24/03	BM	n/a	n/a	GCD1821
F21181-4MSD	CD044189.D	1	12/24/03	BM	n/a	n/a	GCD1821
F21181-4	CD044192.D	1	12/24/03	BM	n/a	n/a	GCD1821

The QC reported here applies to the following samples: **Method:** EPA 601/602

F21252-1, F21252-3, F21252-4

CAS No.	Compound	F21181-4 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND		20	18.1	91	18.1	91	0	77-125/6
108-90-7	Chlorobenzene	ND		20	17.7	89	17.7	89	0	78-120/8
95-50-1	1,2-Dichlorobenzene	ND		20	17.1	86	16.9	85	1	69-125/7
541-73-1	1,3-Dichlorobenzene	ND		20	17.4	87	17.4	87	0	71-126/7
106-46-7	1,4-Dichlorobenzene	ND		20	17.3	87	17.2	86	1	67-129/7
100-41-4	Ethylbenzene	ND		20	17.8	89	17.7	89	1	74-127/6
1634-04-4	Methyl Tert Butyl Ether	ND		20	19.9	100	18.8	94	6	66-127/9
108-88-3	Toluene	ND		20	18.4	92	18.3	92	1	77-124/5
1330-20-7	Xylenes (total)	ND		60	52.1	87	52.1	87	0	76-125/5

CAS No.	Surrogate Recoveries	MS	MSD	F21181-4	Limits
352-33-0	1-Chloro-4-fluorobenzene	96%	98%	91%	70-123%
98-08-8	aaa-Trifluorotoluene	99%	100%	97%	73-122%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F21252
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F21255-8MS	CD044245.D	1	12/29/03	BM	n/a	n/a	GCD1824
F21255-8MSD	CD044246.D	1	12/29/03	BM	n/a	n/a	GCD1824
F21255-8	CD044244.D	1	12/29/03	BM	n/a	n/a	GCD1824

The QC reported here applies to the following samples: **Method:** EPA 601/602

F21252-2, F21252-5, F21252-7

CAS No.	Compound	F21255-8 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Ree/RPD
71-43-2	Benzene	ND		20	18.1	91	18.2	91	1	77-125/6
108-90-7	Chlorobenzene	ND		20	17.7	89	17.6	88	1	78-120/8
95-50-1	1,2-Dichlorobenzene	ND		20	17.4	87	17.5	88	1	69-125/7
541-73-1	1,3-Dichlorobenzene	ND		20	17.4	87	17.6	88	1	71-126/7
106-46-7	1,4-Dichlorobenzene	ND		20	17.3	87	17.2	86	1	67-129/7
100-41-4	Ethylbenzene	0.60	J	20	18.2	88	18.3	89	1	74-127/6
1634-04-4	Methyl Tert Butyl Ether	11.0		20	31.2	101	30.2	96	3	66-127/9
108-88-3	Toluene	ND		20	18.7	94	18.4	92	2	77-124/5
1330-20-7	Xylenes (total)	ND		60	51.9	87	52.9	88	2	76-125/5

CAS No.	Surrogate Recoveries	MS	MSD	F21255-8	Limits
352-33-0	1-Chloro-4-fluorobenzene	97%	98%	94%	70-123%
98-08-8	aaa-Trifluorotoluene	100%	98%	97%	73-122%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F21252
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F21252-11MS	CD044276.D	50	12/30/03	BM	n/a	n/a	GCD1826
F21252-11MSD	CD044277.D	50	12/30/03	BM	n/a	n/a	GCD1826
F21252-11	CD044275.D	50	12/30/03	BM	n/a	n/a	GCD1826

The QC reported here applies to the following samples: **Method:** EPA 601/602

F21252-6, F21252-8, F21252-10, F21252-11, F21252-13, F21252-15

CAS No.	Compound	F21252-11 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND		1000	905	91	910	91	1	77-125/6
108-90-7	Chlorobenzene	ND		1000	874	87	864	86	1	78-120/8
95-50-1	1,2-Dichlorobenzene	ND		1000	842	84	843	84	0	69-125/7
541-73-1	1,3-Dichlorobenzene	ND		1000	862	86	848	85	2	71-126/7
106-46-7	1,4-Dichlorobenzene	ND		1000	839	84	827	83	1	67-129/7
100-41-4	Ethylbenzene	ND		1000	879	88	870	87	1	74-127/6
1634-04-4	Methyl Tert Butyl Ether	ND		1000	886	89	752	75	16*	66-127/9
108-88-3	Toluene	ND		1000	898	90	904	90	1	77-124/5
1330-20-7	Xylenes (total)	ND		3000	2600	87	2560	85	2	76-125/5

CAS No.	Surrogate Recoveries	MS	MSD	F21252-11	Limits
352-33-0	1-Chloro-4-fluorobenzene	95%	95%	92%	70-123%
98-08-8	aaa-Trifluorotoluene	97%	95%	93%	73-122%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F21252
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F21333-2MS	CD044316.D	1	12/31/03	BM	n/a	n/a	GCD1828
F21333-2MSD	CD044317.D	1	12/31/03	BM	n/a	n/a	GCD1828
F21333-2	CD044315.D	1	12/31/03	BM	n/a	n/a	GCD1828

The QC reported bere applies to the following samples: **Method:** EPA 601/602

F21252-9, F21252-11, F21252-12, F21252-14

CAS No.	Compound	F21333-2 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND		20	18.9	95	18.8	94	1	77-125/6
108-90-7	Chlorobenzene	ND		20	17.7	89	17.6	88	1	78-120/8
95-50-1	1,2-Dichlorobenzene	ND		20	17.1	86	17.5	88	2	69-125/7
541-73-1	1,3-Dichlorobenzene	ND		20	17.3	87	17.5	88	1	71-126/7
106-46-7	1,4-Dichlorobenzene	ND		20	16.9	85	17.2	86	2	67-129/7
100-41-4	Ethylbenzene	ND		20	17.7	89	17.6	88	1	74-127/6
1634-04-4	Methyl Tert Butyl Ether	ND		20	18.4	92	21.8	109	17*	66-127/9
108-88-3	Toluene	ND		20	18.2	91	18.3	92	1	77-124/5
1330-20-7	Xylenes (total)	ND		60	53.6	89	53.3	89	1	76-125/5

CAS No.	Surrogate Recoveries	MS	MSD	F21333-2	Limits
352-33-0	1-Chloro-4-fluorobenzene	98%	98%	94%	70-123%
98-08-8	aaa-Trifluorotoluene	98%	99%	95%	73-122%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F21252
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP9468-MS	KK01610.D	1	12/29/03	SKW	12/29/03	OP9468	GKK51
OP9468-MSD	KK01611.D	1	12/29/03	SKW	12/29/03	OP9468	GKK51
F21202-8	KK01608.D	1	12/29/03	SKW	12/29/03	OP9468	GKK51

The QC reported here applies to the following samples: **Method:** EPA 504.1

F21252-1, F21252-2, F21252-3, F21252-4, F21252-5, F21252-6, F21252-7, F21252-8, F21252-9, F21252-10, F21252-11, F21252-12, F21252-13, F21252-14

CAS No.	Compound	F21202-8 ug/l	Q	Spike ug/l	MS ng/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
106-93-4	1,2-Dibromoethane	ND		0.239	0.24	100	0.22	93	9	65-135/25

CAS No.	Surrogate Recoveries	MS	MSD	F21202-8	Limits
460-00-4	4-Bromofluorobenzene	106%	98%	107%	60-139%

Volatile Surrogate Recovery Summary

Job Number: F21252
Account: EEINCJX EEI
Project: CSFF MCAS New River

Method: EPA 601/602 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S2 [a]
F21252-1	CD044196.D	92.0	96.0
F21252-2	CD044235.D	99.0	100.0
F21252-3	CD044197.D	92.0	95.0
F21252-4	CD044199.D	92.0	95.0
F21252-5	CD044236.D	96.0	96.0
F21252-6	CD044270.D	91.0	92.0
F21252-7	CD044237.D	103.0	108.0
F21252-8	CD044271.D	90.0	93.0
F21252-9	CD044310.D	107.0	107.0
F21252-10	CD044272.D	99.0	99.0
F21252-11	CD044305.D	97.0	97.0
F21252-11	CD044275.D	92.0	93.0
F21252-12	CD044306.D	95.0	95.0
F21252-13	CD044273.D	91.0	93.0
F21252-14	CD044307.D	97.0	96.0
F21252-15	CD044281.D	91.0	93.0
F21181-4MS	CD044188.D	96.0	99.0
F21181-4MSD	CD044189.D	98.0	100.0
F21252-11MS	CD044276.D	95.0	97.0
F21252-11MSD	CD044277.D	95.0	95.0
F21255-8MS	CD044245.D	97.0	100.0
F21255-8MSD	CD044246.D	98.0	98.0
F21333-2MS	CD044316.D	98.0	98.0
F21333-2MSD	CD044317.D	98.0	99.0
GCD1821-BS	CD044177.D	97.0	98.0
GCD1821-MB	CD044178.D	93.0	95.0
GCD1824-BS	CD044231.D	98.0	99.0
GCD1824-MB	CD044232.D	93.0	95.0
GCD1826-BS	CD044257.D	95.0	98.0
GCD1826-MB	CD044258.D	92.0	94.0
GCD1828-BS	CD044292.D	100.0	99.0
GCD1828-MB	CD044293.D	98.0	96.0

Surrogate Compounds	Recovery Limits
S1 = 1-Chloro-4-fluorobenzene	70-123%
S2 = aaa-Trifluorotoluene	73-122%

(a) Recovery from GC signal #2

5.4

Volatile Surrogate Recovery Summary

Job Number: F21252
Account: EEINCJX EEI
Project: CSFF MCAS New River

Method: EPA 504.1	**Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]
F21252-1	KK01592.D	105.0
F21252-2	KK01593.D	109.0
F21252-3	KK01594.D	102.0
F21252-4	KK01595.D	101.0
F21252-5	KK01596.D	104.0
F21252-6	KK01597.D	101.0
F21252-7	KK01598.D	112.0
F21252-8	KK01600.D	100.0
F21252-9	KK01601.D	98.0
F21252-10	KK01602.D	101.0
F21252-11	KK01603.D	92.0
F21252-12	KK01604.D	105.0
F21252-13	KK01605.D	101.0
F21252-14	KK01606.D	89.0
OP9468-BS	KK01589.D	101.0
OP9468-BS2	KK01590.D	114.0
OP9468-MB	KK01591.D	102.0
OP9468-MS	KK01610.D	106.0
OP9468-MSD	KK01611.D	98.0

Surrogate Compounds	Recovery Limits
S1 = 4-Bromofluorobenzene	60-139%

(a) Reeovery from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F21252
Account: EEINCJX EEI
Project: CSFF MCAS New River

Check Std:	GCD1821-CC1806	**Injection Date:**	12/24/03
Lab File ID:	CD044176.D	**Injection Time:**	09:17
Instrument ID:	GCCD	**Method:**	EPA 601/602

	S1 [a] RT	S2 [a] RT
Check Std	8.78	5.37

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
GCD1821-BS	CD044177.D	12/24/03	10:00	8.77	5.37
GCD1821-MB	CD044178.D	12/24/03	10:35	8.78	5.37
ZZZZZZ	CD044179.D	12/24/03	11:12	8.78	5.38
ZZZZZZ	CD044180.D	12/24/03	11:36	8.76	5.36
ZZZZZZ	CD044181.D	12/24/03	12:00	8.76	5.37
ZZZZZZ	CD044182.D	12/24/03	12:25	8.77	5.37
ZZZZZZ	CD044183.D	12/24/03	12:50	8.77	5.37
ZZZZZZ	CD044185.D	12/24/03	13:38	8.77	5.37
ZZZZZZ	CD044186.D	12/24/03	14:03	8.77	5.37

Surrogate Compounds

S1 = 1-Chloro-4-fluorobenzene
S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F21252
Account: EEINCJX EEI
Project: CSFF MCAS New River

Check Std:	GCD1821-CC1806	**Injection Date:**	12/24/03
Lab File ID:	CD044187.D	**Injection Time:**	14:28
Instrument ID:	GCCD	**Method:**	EPA 601/602

	S1 [a] RT	S2 [a] RT
Check Std	8.78	5.37

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
F21181-4MS	CD044188.D	12/24/03	14:52	8.77	5.37
F21181-4MSD	CD044189.D	12/24/03	15:17	8.78	5.38
ZZZZZZ	CD044190.D	12/24/03	15:41	8.78	5.37
ZZZZZZ	CD044191.D	12/24/03	16:06	8.78	5.37
F21181-4	CD044192.D	12/24/03	16:30	8.77	5.37
ZZZZZZ	CD044193.D	12/24/03	16:54	8.76	5.37
ZZZZZZ	CD044194.D	12/24/03	17:19	8.77	5.37
ZZZZZZ	CD044195.D	12/24/03	17:43	8.77	5.37
F21252-1	CD044196.D	12/24/03	18:08	8.77	5.37
F21252-3	CD044197.D	12/24/03	18:32	8.77	5.37

Surrogate Compounds

S1 = 1-Chloro-4-fluorobenzene
S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F21252
Account: EEINCJX EEI
Project: CSFF MCAS New River

Check Std:	GCD1821-CC1806	**Injection Date:**	12/24/03
Lab File ID:	CD044198.D	**Injection Time:**	18:57
Instrument ID:	GCCD	**Method:**	EPA 601/602

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	9.06	8.78	5.97	5.37

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
F21252-4	CD044199.D	12/24/03	19:21		8.78		5.38
GCD1823-BS	CD044203.D	12/24/03	21:00		8.78		5.38
GCD1822-BS	CD044203.D	12/24/03	21:00		8.78		5.38
GCD1823-MB	CD044204.D	12/24/03	21:24		8.78		5.37
GCD1822-MB	CD044204.D	12/24/03	21:24		8.78		5.37
ZZZZZZ	CD044205.D	12/24/03	21:49		8.78		5.38
ZZZZZZ	CD044206.D	12/24/03	22:13	9.06		5.97	
ZZZZZZ	CD044207.D	12/24/03	22:38		8.77		5.38
ZZZZZZ	CD044208.D	12/24/03	23:02		8.77		5.38

Surrogate Compounds

S1 = 1-Chloro-4-fluorobenzene
S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F21252
Account: EEINCJX EEI
Project: CSFF MCAS New River

Check Std:	GCD1824-CC1806	**Injection Date:**	12/29/03
Lab File ID:	CD044230.D	**Injection Time:**	09:45
Instrument ID:	GCCD	**Method:**	EPA 601/602

	S1 [a] RT	S2 [a] RT
Check Std	8.77	5.37

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
GCD1824-BS	CD044231.D	12/29/03	11:04	8.77	5.36
GCD1824-MB	CD044232.D	12/29/03	11:45	8.78	5.36
ZZZZZZ	CD044233.D	12/29/03	12:21	8.78	5.37
ZZZZZZ	CD044234.D	12/29/03	12:45	8.77	5.37
F21252-2	CD044235.D	12/29/03	13:10	8.77	5.38
F21252-5	CD044236.D	12/29/03	13:34	8.77	5.37
F21252-7	CD044237.D	12/29/03	13:59	8.77	5.38
ZZZZZZ	CD044238.D	12/29/03	14:23	8.77	5.37
ZZZZZZ	CD044239.D	12/29/03	14:49	8.77	5.37
ZZZZZZ	CD044240.D	12/29/03	15:14	8.77	5.37

Surrogate Compounds

S1 = 1-Chloro-4-fluorobenzene
S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F21252
Account: EEINCJX EEI
Project: CSFF MCAS New River

Check Std:	GCD1824-CC1806	**Injection Date:**	12/29/03
Lab File ID:	CD044241.D	**Injection Time:**	15:39
Instrument ID:	GCCD	**Method:**	EPA 601/602

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	9.05	8.77	5.98	5.38

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
ZZZZZZ	CD044242.D	12/29/03	16:04		8.78		5.38
ZZZZZZ	CD044243.D	12/29/03	16:29		8.78		5.39
F21255-8	CD044244.D	12/29/03	16:53		8.79		5.38
F21255-8MS	CD044245.D	12/29/03	17:17		8.78		5.38
F21255-8MSD	CD044246.D	12/29/03	17:42		8.78		5.38
ZZZZZZ	CD044247.D	12/29/03	18:07		8.78		5.38
ZZZZZZ	CD044248.D	12/29/03	18:32		8.78		5.38
ZZZZZZ	CD044249.D	12/29/03	18:56	9.05		5.98	
ZZZZZZ	CD044251.D	12/29/03	19:45		8.79		5.39

Surrogate Compounds

S1 = 1-Chloro-4-fluorobenzene
S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

5.5

GC Surrogate Retention Time Summary

Job Number: F21252
Account: EEINCJX EEI
Project: CSFF MCAS New River

Check Std:	GCD1824-CC1806	**Iujection Date:**	12/29/03
Lab File ID:	CD044252.D	**Injection Time:**	20:10
Instrument ID:	GCCD	**Method:**	EPA 601/602

	S1 [a] RT	S2 [a] RT
Check Std	8.75	5.36

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
ZZZZZZ	CD044256.D	12/29/03	21:50	8.75	5.35
GCD1825-BS	CD044257.D	12/29/03	22:15	8.75	5.35
GCD1826-BS	CD044257.D	12/29/03	22:15	8.75	5.35
GCD1825-MB	CD044258.D	12/29/03	22:39	8.75	5.35
GCD1826-MB	CD044258.D	12/29/03	22:39	8.75	5.35
F21258-1	CD044259.D	12/29/03	23:04	8.75	5.36
F21258-1MS	CD044260.D	12/29/03	23:28	8.74	5.34
F21258-1MSD	CD044261.D	12/29/03	23:53	8.75	5.35
ZZZZZZ	CD044262.D	12/30/03	00:18	8.74	5.35

Surrogate Compounds

S1 = 1-Chloro-4-fluorobenzene
S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F21252
Account: EEINCJX EEI
Project: CSFF MCAS New River

Check Std:	GCD1826-CC1806	**Injection Date:**	12/30/03
Lab File ID:	CD044274.D	**Injection Time:**	05:17
Instrument ID:	GCCD	**Method:**	EPA 601/602

	S1 [a] RT	S2 [a] RT
Check Std	8.75	5.35

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
F21252-11	CD044275.D	12/30/03	05:41	8.76	5.35
F21252-11MS	CD044276.D	12/30/03	06:06	8.75	5.35
F21252-11MSD	CD044277.D	12/30/03	06:30	8.75	5.35
F21252-15	CD044281.D	12/30/03	08:11	8.75	5.35

Surrogate Compounds

S1 = 1-Chloro-4-fluorobenzene
S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F21252
Account: EEINCJX EEI
Project: CSFF MCAS New River

Check Std:	GCD1828-CC1827	**Injection Date:**	12/30/03
Lab File ID:	CD044313.D	**Injection Time:**	23:46
Instrument ID:	GCCD	**Method:**	EPA 601/602

	S1 [a] RT	S2 [a] RT
Check Std	8.76	5.35

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
ZZZZZZ	CD044314.D	12/31/03	00:11	8.75	5.36
F21333-2	CD044315.D	12/31/03	00:36	8.75	5.35
F21333-2MS	CD044316.D	12/31/03	01:00	8.75	5.35
F21333-2MSD	CD044317.D	12/31/03	01:25	8.75	5.35
GCD1829-BS	CD044320.D	12/31/03	02:39	8.75	5.35
GCD1829-MB	CD044321.D	12/31/03	03:04	8.76	5.36
ZZZZZZ	CD044322.D	12/31/03	03:28	8.75	5.35

Surrogate Compounds

S1 = 1-Chloro-4-fluorobenzene
S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F21252
Account: EEINCJX EEI
Project: CSFF MCAS New River

Check Std:	GKK51-ICC51	**Injection Date:**	12/29/03
Lab File ID:	KK01583.D	**Injection Time:**	10:57
Instrument ID:	GCKK	**Method:**	EPA 504.1

	S1 [a] RT
Check Std	6.70

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT
OP9468-BS	KK01589.D	12/29/03	13:04	6.70
OP9468-BS2	KK01590.D	12/29/03	13:24	6.70
OP9468-MB	KK01591.D	12/29/03	13:44	6.70
F21252-1	KK01592.D	12/29/03	14:05	6.70
F21252-2	KK01593.D	12/29/03	14:25	6.70
F21252-3	KK01594.D	12/29/03	14:45	6.70
F21252-4	KK01595.D	12/29/03	15:04	6.70
F21252-5	KK01596.D	12/29/03	15:24	6.70
F21252-6	KK01597.D	12/29/03	15:44	6.70
F21252-7	KK01598.D	12/29/03	16:04	6.70

Surrogate Compounds

S1 = 4-Bromofluorobenzene

(a) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F21252
Account: EEINCJX EEI
Project: CSFF MCAS New River

Check Std:	GKK51-CC51	**Injection Date:**	12/29/03
Lab File ID:	KK01599.D	**Injection Time:**	16:24
Instrument ID:	GCKK	**Method:**	EPA 504.1

	S1 [a] RT
Check Std	6.70

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT
F21252-8	KK01600.D	12/29/03	16:44	6.70
F21252-9	KK01601.D	12/29/03	17:04	6.70
F21252-10	KK01602.D	12/29/03	17:24	6.70
F21252-11	KK01603.D	12/29/03	17:44	6.70
F21252-12	KK01604.D	12/29/03	18:03	6.70
F21252-13	KK01605.D	12/29/03	18:23	6.70
F21252-14	KK01606.D	12/29/03	18:43	6.70
ZZZZZZ	KK01607.D	12/29/03	19:03	6.70
F21202-8	KK01608.D	12/29/03	19:23	6.70

Surrogate Compounds

S1 = 4-Bromofluorobenzene

(a) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F21252
Account: EEINCJX EE1
Project: CSFF MCAS New River

Check Std:	GKK51-CC51	**Injection Date:**	12/29/03
Lab File ID:	KK01609.D	**Injection Time:**	19:43
Instrument ID:	GCKK	**Method:**	EPA 504.1

	S1 [a] RT
Check Std	6.70

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT
OP9468-MS	KK01610.D	12/29/03	20:03	6.70
OP9468-MSD	KK01611.D	12/29/03	20:22	6.70
OP9467-BS	KK01612.D	12/29/03	20:42	6.70
OP9467-BS2	KK01613.D	12/29/03	21:02	6.70
OP9467-MB	KK01614.D	12/29/03	21:22	6.70
F21330-1	KK01615.D	12/29/03	21:42	6.70
OP9467-MS	KK01616.D	12/29/03	22:02	6.70
OP9467-MSD	KK01617.D	12/29/03	22:21	6.70
ZZZZZZ	KK01618.D	12/29/03	22:41	6.70
ZZZZZZ	KK01619.D	12/29/03	23:01	6.70

Surrogate Compounds

S1 = 4-Bromofluorobenzene

(a) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F21252
Account: EEINCJX EEI
Project: CSFF MCAS New River

Check Std:	GCD1825-CC1806	**Injection Date:**	12/30/03
Lab File ID:	CD044263.D	**Injection Time:**	00:43
Instrument ID:	GCCD	**Method:**	EPA 601/602

	S1 [a] RT	S2 [a] RT
Cheek Std	8.74	5.35

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
ZZZZZZ	CD044264.D	12/30/03	01:08	8.75	5.35
ZZZZZZ	CD044265.D	12/30/03	01:34	8.75	5.35
F21252-6	CD044270.D	12/30/03	03:38	8.75	5.35
F21252-8	CD044271.D	12/30/03	04:03	8.74	5.35
F21252-10	CD044272.D	12/30/03	04:28	8.75	5.35
F21252-13	CD044273.D	12/30/03	04:53	8.75	5.35

Surrogate Compounds

S1 = 1-Chloro-4-fluorobenzene
S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F21252
Account: EEINCJX EEI
Project: CSFF MCAS New River

Check Std:	GCD1827-ICC1827	**Injection Date:**	12/30/03
Lab File ID:	CD044288.D	**Injection Time:**	12:12
Instrument ID:	GCCD	**Method:**	EPA 601/602

	S1 [a] RT	S2 [a] RT
Check Std	8.74	5.35

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
GCD1827-BS	CD044292.D	12/30/03	13:50	8.76	5.35
GCD1828-BS	CD044292.D	12/30/03	13:50	8.76	5.35
GCD1827-MB	CD044293.D	12/30/03	14:25	8.76	5.35
GCD1828-MB	CD044293.D	12/30/03	14:25	8.76	5.35
ZZZZZZ	CD044294.D	12/30/03	15:13	8.75	5.35
ZZZZZZ	CD044295.D	12/30/03	16:23	8.75	5.35
ZZZZZZ	CD044296.D	12/30/03	16:47	8.74	5.35
ZZZZZZ	CD044297.D	12/30/03	17:12	8.74	5.34
ZZZZZZ	CD044298.D	12/30/03	17:36	8.74	5.35
F21308-1	CD044299.D	12/30/03	18:01	8.75	5.35
F21308-1MS	CD044300.D	12/30/03	18:25	8.75	5.36
F21308-1MSD	CD044301.D	12/30/03	18:50	8.75	5.35

Surrogate Compounds

S1 = 1-Chloro-4-fluorobenzene
S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F21252
Account: EEINCJX EEI
Project: CSFF MCAS New River

Check Std:	GCD1827-CC1827	**Injection Date:**	12/30/03
Lab File ID:	CD044302.D	**Injection Time:**	19:14
Instrument ID:	GCCD	**Method:**	EPA 601/602

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Cheek Std	9.05	8.75	5.96	5.35

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
ZZZZZZ	CD044303.D	12/30/03	19:39		8.75		5.35
ZZZZZZ	CD044304.D	12/30/03	20:03		8.75		5.35
F21252-11	CD044305.D	12/30/03	20:28		8.76		5.35
F21252-12	CD044306.D	12/30/03	20:52		8.75		5.35
F21252-14	CD044307.D	12/30/03	21:17		8.75		5.35
ZZZZZZ	CD044308.D	12/30/03	21:42		8.75		5.35
ZZZZZZ	CD044309.D	12/30/03	22:07		8.75		5.35
F21252-9	CD044310.D	12/30/03	22:32		8.76		5.36
ZZZZZZ	CD044311.D	12/30/03	22:58	9.05		5.97	
ZZZZZZ	CD044312.D	12/30/03	23:22		8.75		5.35

Surrogate Compounds

S1 = 1-Chloro-4-fluorobenzene
S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

Initial Calibration Summary

Job Number: F21252
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GCD1806-ICC1806
Lab FileID: CD043805.D

Response Factor Report VOA2

Method : C:\HPCHEM\2\METHODS\GCCD1215.M (Chemstation Integrator)
Title : EPA 602/8021B
Last Update : Mon Dec 15 08:11:11 2003
Response via : Initial Calibration

Calibration Files
1 =CD043803.D 2 =CD043804.D 3 =CD043805.D
4 =CD043806.D 5 =CD043807.D 6 =CD043808.D

		Compound	1	2	3	4	5	6	Avg		%RSD
1)		Methyl tert Butyl E	1.355	1.406	1.273	1.439	1.405	1.394	1.379	E3	4.23
2)		Di-Isopropyl ether	2.009	2.278	2.306	2.327	2.308	2.286	2.252	E3	5.35
3)		BENZENE	6.626	6.015	5.958	5.989	5.960	5.965	6.085	E3	4.36
4)	S	a,a,a-TFT(S)	1.575	1.629	1.714	1.728	1.748	1.704	1.683	E3	3.95
5)		TOLUENE		6.064	6.017	6.021	6.005	5.994	6.020	E3	0.44
6)	S	1-Chloro-4-Fluorobe	2.943	2.997	3.156	3.217	3.247	3.168	3.121	E3	3.94
7)		CHLOROBENZENE	7.400	6.851	6.533	6.488	6.538	6.595	6.734	E3	5.21
8)		ETHYLBENZENE		5.989	5.557	5.490	5.482	5.518	5.607	E3	3.84
9)		m,p-XYLENE	6.968	6.196	6.009	5.930	5.972	5.939	6.169	E3	6.54
10)		o-XYLENE	6.247	5.702	5.575	5.484	5.491	5.533	5.672	E3	5.16
11)		1,3-DICHLOROBENZENE	6.344	5.629	5.713	5.617	5.673	5.320	5.716	E3	5.91
12)		1,4-DICHLOROBENZENE	6.932	5.982	5.969	5.934	6.012	5.947	6.129	E3	6.43
13)		1,2-DICHLOROBENZENE	5.530	4.625	4.682	4.571	4.604	4.515	4.755	E3	8.08

Signal #2 Calibration Files
1 =CD043803.D 2 =CD043804.D 3 =CD043805.D
4 =CD043806.D 5 =CD043807.D 6 =CD043808.D

		Compound	1	2	3	4	5	6	Avg		%RSD
1)		Methyl tert Butyl E	0.993	0.973	0.773	0.986	0.975	1.020	0.954	E3	9.42
2)		Di-Isopropyl ether	1.372	1.591	1.616	1.552	1.535	1.533	1.533	E3	5.57
3)		BENZENE	4.826	4.357	4.289	4.230	4.202	4.239	4.357	E3	5.42
4)	S	a,a,a-TFT(S)	1.118	1.137	1.126	1.131	1.157	1.187	1.143	E3	2.22
5)		TOLUENE		4.545	4.386	4.362	4.392	4.387	4.414	E3	1.68
6)	S	1-Chloro-4-Fluorobe	2.159	2.175	2.216	2.185	2.243	2.250	2.205	E3	1.69
7)		CHLOROBENZENE	5.157	5.103	4.937	4.818	4.875	4.824	4.952	E3	2.93
8)		ETHYLBENZENE	4.484	4.236	4.178	4.087	4.128	4.151	4.211	E3	3.39
9)		m,p-XYLENE	5.387	4.563	4.488	4.394	4.391	4.446	4.611	E3	8.35
10)		o-XYLENE	4.890	4.208	4.140	4.095	4.063	4.092	4.248	E3	7.50
11)		1,3-DICHLOROBENZENE	5.146	4.508	4.373	4.305	4.382	4.389	4.517	E3	6.97
12)		1,4-DICHLOROBENZENE	5.623	4.596	4.595	4.568	4.679	4.694	4.792	E3	8.55
13)		1,2-DICHLOROBENZENE	4.351	3.569	3.567	3.523	3.623	3.604	3.706	E3	8.58

Average % RSD = 5.2

(#) = Out of Range

GCCD1215.M Tue Dec 16 08:30:28 2003 QRXY

Continuing Calibration Summary

Job Number: F21252 **Sample:** GCD1821-CC1806
Account: EEINCJX EEI **Lab FileID:** CD044176.D
Project: CSFF MCAS New River

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\122403\CD044176.D\FID1A.CH Vial: 2
Signal #2 : C:\HPCHEM\2\DATA\122403\CD044176.D\FID2B.CH
Acq On : 24 Dec 2003 9:17 am Operator: BarbaraM
Sample : CC1806-40 Inst : VOA2
Misc : gc3065,gcd1821,,,,,1 Multiplr: 1.00
IntFile Signal #1: PID.E IntFile Signal #2: FID.E

Method : C:\HPCHEM\2\METHODS\GCCD1215.M (Chemstation Integrator)
Title : EPA 602/8021B
Last Update : Mon Dec 15 12:40:54 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	40.000	37.269	6.8	89	0.00
2		Di-Isopropyl ether	40.000	39.332	1.7	95	0.00
3		BENZENE	40.000	39.164	2.1	99	0.00
4	S	a,a,a-TFT(S)	20.000	20.159	-0.8	98	0.00
5		TOLUENE	40.000	40.180	-0.4	100	0.00
6	S	1-Chloro-4-Fluorobenzene	20.000	20.248	-1.2	98	0.02
7		CHLOROBENZENE	40.000	39.277	1.8	102	0.02
8		ETHYLBENZENE	40.000	39.804	0.5	102	0.02
9		m,p-XYLENE	80.000	78.442	1.9	102	0.02
10		o-XYLENE	40.000	39.573	1.1	102	0.02
11		1,3-DICHLOROBENZENE	40.000	40.299	-0.7	103	0.00
12		1,4-DICHLOROBENZENE	40.000	39.936	0.2	103	0.00
13		1,2-DICHLOROBENZENE	40.000	39.510	1.2	103	0.01

Signal #2

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	40.000	36.293	9.3	88	0.02
2		Di-Isopropyl ether	40.000	41.319	-3.3	102	0.02
3		BENZENE	40.000	38.371	4.1	99	0.02
4	S	a,a,a-TFT(S)	20.000	19.986	0.1	101	0.02
5		TOLUENE	40.000	39.816	0.5	101	0.02
6	S	1-Chloro-4-Fluorobenzene	20.000	19.637	1.8	99	0.03
7		CHLOROBENZENE	40.000	38.806	3.0	100	0.03
8		ETHYLBENZENE	40.000	39.151	2.1	101	0.03
9		m,p-XYLENE	80.000	76.459	4.4	100	0.03
10		o-XYLENE	40.000	38.689	3.3	100	0.02
11		1,3-DICHLOROBENZENE	40.000	38.927	2.7	102	0.02
12		1,4-DICHLOROBENZENE	40.000	38.797	3.0	102	0.02
13		1,2-DICHLOROBENZENE	40.000	39.018	2.5	103	0.02

Average % D = 2.3

(#) = Out of Range SPCC's out = 0 CCC's out = 0
CD043806.D GCCD1215.M Mon Dec 29 08:52:59 2003 QRXY

Continuing Calibration Summary

Job Number: F21252
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GCD1821-CC1806
Lab FileID: CD044187.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\122403\CD044187.D\FID1A.CH Vial: 13
Signal #2 : C:\HPCHEM\2\DATA\122403\CD044187.D\FID2B.CH
Acq On : 24 Dec 2003 2:28 pm Operator: BarbaraM
Sample : CC1806-20 Inst : VOA2
Misc : gc3065,gcd1821,,,,,1 Multiplr: 1.00
IntFile Signal #1: PID.E IntFile Signal #2: FID.E

Method : C:\HPCHEM\2\METHODS\GCCD1215.M (Chemstation Integrator)
Title : EPA 602/8021B
Last Update : Mon Dec 15 12:40:54 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	20.000	20.080	-0.4	109	0.00
2		Di-Isopropyl ether	20.000	20.062	-0.3	98	0.00
3		BENZENE	20.000	19.425	2.9	99	0.00
4	S	a,a,a-TFT(S)	20.000	20.391	-2.0	100	0.00
5		TOLUENE	20.000	19.984	0.1	100	0.00
6	S	1-Chloro-4-Fluorobenzene	20.000	20.027	-0.1	99	0.01
7		CHLOROBENZENE	20.000	19.508	2.5	101	0.01
8		ETHYLBENZENE	20.000	19.953	0.2	101	0.00
9		m,p-XYLENE	40.000	38.789	3.0	100	0.00
10		o-XYLENE	20.000	19.637	1.8	100	0.00
11		1,3-DICHLOROBENZENE	20.000	19.929	0.4	100	0.00
12		1,4-DICHLOROBENZENE	20.000	19.476	2.6	100	0.00
13		1,2-DICHLOROBENZENE	20.000	19.677	1.6	100	0.00

Signal #2

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	20.000	20.764	-3.8	128	0.02
2		Di-Isopropyl ether	20.000	20.341	-1.7	97	0.02
3		BENZENE	20.000	19.292	3.5	98	0.02
4	S	a,a,a-TFT(S)	20.000	19.693	1.5	100	0.03
5		TOLUENE	20.000	19.777	1.1	100	0.02
6	S	1-Chloro-4-Fluorobenzene	20.000	19.444	2.8	97	0.03
7		CHLOROBENZENE	20.000	19.351	3.2	97	0.03
8		ETHYLBENZENE	20.000	19.506	2.5	98	0.02
9		m,p-XYLENE	40.000	37.809	5.5	97	0.02
10		o-XYLENE	20.000	19.247	3.8	99	0.02
11		1,3-DICHLOROBENZENE	20.000	19.143	4.3	99	0.02
12		1,4-DICHLOROBENZENE	20.000	18.876	5.6	98	0.02
13		1,2-DICHLOROBENZENE	20.000	19.162	4.2	100	0.02

Average % D = 2.4

(#) = Out of Range SPCC's out = 0 CCC's out = 0
CD043805.D GCCD1215.M Mon Dec 29 08:52:25 2003 QRXY

Continuing Calibration Summary

Job Number: F21252
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GCD1821-CC1806
Lab FileID: CD044198.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\122403\CD044198.D\FID1A.CH Vial: 23
Signal #2 : C:\HPCHEM\2\DATA\122403\CD044198.D\FID2B.CH
Acq On : 24 Dec 2003 6:57 pm Operator: BarbaraM
Sample : CC1806-20 Inst : VOA2
Misc : gc3072,gcd1821,,,,,1 MultiplIr: 1.00
IntFile Signal #1: PID.E IntFile Signal #2: FID.E

Method : C:\HPCHEM\2\METHODS\GCCD1215.M (Chemstation Integrator)
Title : EPA 602/8021B
Last Update : Mon Dec 15 12:40:54 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	20.000	20.268	-1.3	110	0.00
2		Di-Isopropyl ether	20.000	20.958	-4.8	102	0.00
3		BENZENE	20.000	19.698	1.5	101	0.00
4	S	a,a,a-TFT(S)	20.000	20.601	-3.0	101	0.00
5		TOLUENE	20.000	20.062	-0.3	100	0.00
6	S	1-Chloro-4-Fluorobenzene	20.000	19.812	0.9	98	0.01
7		CHLOROBENZENE	20.000	19.278	3.6	99	0.01
8		ETHYLBENZENE	20.000	19.777	1.1	100	0.01
9		m,p-XYLENE	40.000	38.561	3.6	99	0.00
10		o-XYLENE	20.000	19.373	3.1	99	0.00
11		1,3-DICHLOROBENZENE	20.000	19.820	0.9	99	0.00
12		1,4-DICHLOROBENZENE	20.000	19.494	2.5	100	0.00
13		1,2-DICHLOROBENZENE	20.000	19.817	0.9	101	0.00

Signal #2

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	20.000	18.550	7.2	114	0.02
2		Di-Isopropyl ether	20.000	20.160	-0.8	96	0.02
3		BENZENE	20.000	19.386	3.1	98	0.02
4	S	a,a,a-TFT(S)	20.000	19.636	1.8	100	0.03
5		TOLUENE	20.000	19.794	1.0	100	0.03
6	S	1-Chloro-4-Fluorobenzene	20.000	19.062	4.7	95	0.03
7		CHLOROBENZENE	20.000	19.623	1.9	98	0.03
8		ETHYLBENZENE	20.000	19.383	3.1	98	0.02
9		m,p-XYLENE	40.000	37.357	6.6	96	0.02
10		o-XYLENE	20.000	19.063	4.7	98	0.02
11		1,3-DICHLOROBENZENE	20.000	19.143	4.3	99	0.02
12		1,4-DICHLOROBENZENE	20.000	18.671	6.6	97	0.02
13		1,2-DICHLOROBENZENE	20.000	19.352	3.2	101	0.02

Average % D = 3.0

(#) = Out of Range SPCC's out = 0 CCC's out = 0
CD043805.D GCCD1215.M Mon Dec 29 08:52:26 2003 QRXY

Continuing Calibration Summary

Job Number: F21252
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GCD1822-CC1806
Lab FileID: CD044209.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\122403\CD044209.D\FID1A.CH Vial: 34
Signal #2 : C:\HPCHEM\2\DATA\122403\CD044209.D\FID2B.CH
Acq On : 24 Dec 2003 11:27 pm Operator: BarbaraM
Sample : CC1806-20 Inst : VOA2
Misc : gc3066,gcd1822,,,,,1 Multiplr: 1.00
IntFile Signal #1: PID.E IntFile Signal #2: FID.E

Method : C:\HPCHEM\2\METHODS\GCCD1215.M (Chemstation Integrator)
Title : EPA 602/8021B
Last Update : Mon Dec 15 12:40:54 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	20.000	19.244	3.8	104	0.00
2		Di-Isopropyl ether	20.000	19.449	2.8	95	0.00
3		BENZENE	20.000	18.655	6.7	95	0.00
4	S	a,a,a-TFT(S)	20.000	19.571	2.1	96	0.00
5		TOLUENE	20.000	19.366	3.2	97	0.00
6	S	1-Chloro-4-Fluorobenzene	20.000	19.533	2.3	97	0.00
7		CHLOROBENZENE	20.000	19.033	4.8	98	0.00
8		ETHYLBENZENE	20.000	19.520	2.4	98	0.00
9		m,p-XYLENE	40.000	38.104	4.7	98	0.00
10		o-XYLENE	20.000	19.250	3.8	98	0.00
11		1,3-DICHLOROBENZENE	20.000	19.429	2.9	97	0.00
12		1,4-DICHLOROBENZENE	20.000	19.000	5.0	98	0.00
13		1,2-DICHLOROBENZENE	20.000	19.150	4.3	97	0.00

Signal #2

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	20.000	18.273	8.6	113	0.02
2		Di-Isopropyl ether	20.000	20.235	-1.2	96	0.02
3		BENZENE	20.000	19.119	4.4	97	0.02
4	S	a,a,a-TFT(S)	20.000	19.795	1.0	100	0.03
5		TOLUENE	20.000	19.536	2.3	98	0.02
6	S	1-Chloro-4-Fluorobenzene	20.000	19.375	3.1	96	0.02
7		CHLOROBENZENE	20.000	19.200	4.0	96	0.02
8		ETHYLBENZENE	20.000	19.104	4.5	96	0.02
9		m,p-XYLENE	40.000	36.760	8.1	94	0.02
10		o-XYLENE	20.000	18.744	6.3	96	0.01
11		1,3-DICHLOROBENZENE	20.000	18.623	6.9	96	0.02
12		1,4-DICHLOROBENZENE	20.000	18.250	8.8	95	0.02
13		1,2-DICHLOROBENZENE	20.000	19.027	4.9	99	0.02

Average % D = 4.3

(#) = Out of Range SPCC's out = 0 CCC's out = 0
CD043805.D GCCD1215.M Mon Dec 29 08:52:27 2003 QRXY

Continuing Calibration Summary

Job Number: F21252 **Sample:** GCD1824-CC1806
Account: EEINCJX EEI **Lab FileID:** CD044230.D
Project: CSFF MCAS New River

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\122903\CD044230.D\FID1A.CH Vial: 2
Signal #2 : C:\HPCHEM\2\DATA\122903\CD044230.D\FID2B.CH
Acq On : 29 Dec 2003 9:45 am Operator: BarbaraM
Sample : CC1806-40 Inst : VOA2
Misc : gc3065,gcd1824,,,,,1 MultiplR: 1.00
IntFile Signal #1: PID.E IntFile Signal #2: FID.E

Method : C:\HPCHEM\2\METHODS\GCCD1215.M (Chemstation Integrator)
Title : EPA 602/8021B
Last Update : Mon Dec 15 12:40:54 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	40.000	41.499	-3.7	99	0.00
2		Di-Isopropyl ether	40.000	41.477	-3.7	100	0.00
3		BENZENE	40.000	39.191	2.0	100	0.00
4	S	a,a,a-TFT(S)	20.000	20.936	-4.7	102	0.00
5		TOLUENE	40.000	40.267	-0.7	101	0.00
6	S	1-Chloro-4-Fluorobenzene	20.000	20.891	-4.5	101	0.01
7		CHLOROBENZENE	40.000	39.013	2.5	101	0.01
8		ETHYLBENZENE	40.000	39.646	0.9	101	0.01
9		m,p-XYLENE	80.000	78.183	2.3	102	0.00
10		o-XYLENE	40.000	39.212	2.0	101	0.00
11		1,3-DICHLOROBENZENE	40.000	39.989	0.0	102	0.00
12		1,4-DICHLOROBENZENE	40.000	39.507	1.2	102	0.00
13		1,2-DICHLOROBENZENE	40.000	39.406	1.5	102	0.00

Signal #2

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	40.000	40.569	-1.4	98	0.02
2		Di-Isopropyl ether	40.000	40.178	-0.4	99	0.02
3		BENZENE	40.000	37.972	5.1	98	0.02
4	S	a,a,a-TFT(S)	20.000	20.014	-0.1	101	0.02
5		TOLUENE	40.000	39.169	2.1	99	0.02
6	S	1-Chloro-4-Fluorobenzene	20.000	20.182	-0.9	102	0.03
7		CHLOROBENZENE	40.000	38.688	3.3	99	0.02
8		ETHYLBENZENE	40.000	38.904	2.7	100	0.02
9		m,p-XYLENE	80.000	76.162	4.8	100	0.02
10		o-XYLENE	40.000	38.311	4.2	99	0.01
11		1,3-DICHLOROBENZENE	40.000	38.433	3.9	101	0.00
12		1,4-DICHLOROBENZENE	40.000	37.806	5.5	99	0.00
13		1,2-DICHLOROBENZENE	40.000	38.538	3.7	101	0.00

Average % D = 2.6

(#) = Out of Range SPCC's out = 0 CCC's out = 0
CD043806.D GCCD1215.M Tue Dec 30 08:19:27 2003 QRXY

Continuing Calibration Summary

Job Number: F21252
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GCD1824-CC1806
Lab FileID: CD044241.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\122903\CD044241.D\FID1A.CH Vial: 13
Signal #2 : C:\HPCHEM\2\DATA\122903\CD044241.D\FID2B.CH
Acq On : 29 Dec 2003 3:39 pm Operator: BarbaraM
Sample : CC1806-20 Inst : VOA2
Misc : gc3073,gcd1824,,,,,1 Multiplr: 1.00
IntFile Signal #1: PID.E IntFile Signal #2: FID.E

Method : C:\HPCHEM\2\METHODS\GCCD1215.M (Chemstation Integrator)
Title : EPA 602/8021B
Last Update : Mon Dec 15 12:40:54 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	20.000	18.844	5.8	102	0.01
2		Di-Isopropyl ether	20.000	20.310	-1.5	99	0.01
3		BENZENE	20.000	19.345	3.3	99	0.01
4	S	a,a,a-TFT(S)	20.000	20.374	-1.9	100	0.01
5		TOLUENE	20.000	19.814	0.9	99	0.00
6	S	1-Chloro-4-Fluorobenzene	20.000	20.178	-0.9	100	0.00
7		CHLOROBENZENE	20.000	19.296	3.5	99	0.00
8		ETHYLBENZENE	20.000	19.604	2.0	99	0.00
9		m,p-XYLENE	40.000	38.355	4.1	98	0.00
10		o-XYLENE	20.000	19.689	1.6	100	0.00
11		1,3-DICHLOROBENZENE	20.000	19.740	1.3	99	0.00
12		1,4-DICHLOROBENZENE	20.000	19.397	3.0	100	0.00
13		1,2-DICHLOROBENZENE	20.000	19.589	2.1	99	0.02

Signal #2

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	20.000	16.252	18.7#	100	0.02
2		Di-Isopropyl ether	20.000	20.768	-3.8	99	0.02
3		BENZENE	20.000	18.990	5.1	96	0.03
4	S	a,a,a-TFT(S)	20.000	19.595	2.0	99	0.04
5		TOLUENE	20.000	19.344	3.3	97	0.02
6	S	1-Chloro-4-Fluorobenzene	20.000	19.527	2.4	97	0.03
7		CHLOROBENZENE	20.000	19.231	3.8	96	0.02
8		ETHYLBENZENE	20.000	19.336	3.3	97	0.02
9		m,p-XYLENE	40.000	37.154	7.1	95	0.02
10		o-XYLENE	20.000	19.025	4.9	98	0.02
11		1,3-DICHLOROBENZENE	20.000	18.855	5.7	97	0.02
12		1,4-DICHLOROBENZENE	20.000	18.779	6.1	98	0.02
13		1,2-DICHLOROBENZENE	20.000	19.148	4.3	99	0.03

Average % D = 3.9

(#) = Out of Range SPCC's out = 0 CCC's out = 0
CD043805.D GCCD1215.M Tue Dec 30 08:18:54 2003 QRXY

5.6

Continuing Calibration Summary

Job Number: F21252
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GCD1824-CC1806
Lab FileID: CD044252.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\122903\CD044252.D\FID1A.CH Vial: 23
Signal #2 : C:\HPCHEM\2\DATA\122903\CD044252.D\FID2B.CH
Acq On : 29 Dec 2003 8:10 pm Operator: BarbaraM
Sample : CC1806-20 Inst : VOA2
Misc : gc3073,gcd1824,,,,,1 Multiplr: 1.00
IntFile Signal #1: PID.E IntFile Signal #2: FID.E

Method : C:\HPCHEM\2\METHODS\GCCD1215.M (Chemstation Integrator)
Title : EPA 602/8021B
Last Update : Mon Dec 15 12:40:54 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	20.000	20.255	-1.3	110	0.00
2		Di-Isopropyl ether	20.000	20.271	-1.4	99	0.00
3		BENZENE	20.000	19.266	3.7	98	0.00
4	S	a,a,a-TFT(S)	20.000	20.240	-1.2	99	0.00
5		TOLUENE	20.000	19.675	1.6	98	0.00
6	S	1-Chloro-4-Fluorobenzene	20.000	19.757	1.2	98	0.00
7		CHLOROBENZENE	20.000	19.080	4.6	98	0.00
8		ETHYLBENZENE	20.000	19.638	1.8	99	0.00
9		m,p-XYLENE	40.000	37.921	5.2	97	0.00
10		o-XYLENE	20.000	19.231	3.8	98	-0.01
11		1,3-DICHLOROBENZENE	20.000	19.224	3.9	96	-0.02
12		1,4-DICHLOROBENZENE	20.000	18.886	5.6	97	-0.02
13		1,2-DICHLOROBENZENE	20.000	19.026	4.9	97	-0.02

Signal #2

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	20.000	20.441	-2.2	126	0.00
2		Di-Isopropyl ether	20.000	19.978	0.1	95	0.00
3		BENZENE	20.000	18.954	5.2	96	0.00
4	S	a,a,a-TFT(S)	20.000	19.528	2.4	99	0.00
5		TOLUENE	20.000	19.252	3.7	97	0.00
6	S	1-Chloro-4-Fluorobenzene	20.000	19.152	4.2	95	0.00
7		CHLOROBENZENE	20.000	19.161	4.2	96	0.00
8		ETHYLBENZENE	20.000	19.123	4.4	96	0.00
9		m,p-XYLENE	40.000	36.788	8.0	95	0.00
10		o-XYLENE	20.000	18.983	5.1	97	0.00
11		1,3-DICHLOROBENZENE	20.000	18.445	7.8	95	-0.02
12		1,4-DICHLOROBENZENE	20.000	18.145	9.3	95	-0.02
13		1,2-DICHLOROBENZENE	20.000	18.546	7.3	96	-0.02

Average % D = 4.0

(#) = Out of Range SPCC's out = 0 CCC's out = 0
CD043805.D GCCD1215.M Tue Dec 30 08:18:55 2003 QRXY

Continuing Calibration Summary

Job Number: F21252
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GCD1825-CC1806
Lab FileID: CD044263.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\122903\CD044263.D\FID1A.CH Vial: 33
Signal #2 : C:\HPCHEM\2\DATA\122903\CD044263.D\FID2B.CH
Acq On : 30 Dec 2003 12:43 am Operator: BarbaraM
Sample : CC1B06-20 Inst : VOA2
Misc : gc3066,gcd1825,,,,,1 MultiplIr: 1.00
IntFile Signal #1: PID.E IntFile Signal #2: FID.E

Method : C:\HPCHEM\2\METHODS\GCCD1215.M (Chemstation Integrator)
Title : EPA 602/8021B
Last Update : Mon Dec 15 12:40:54 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	20.000	19.990	0.1	108	0.00
2		Di-Isopropyl ether	20.000	19.661	1.7	96	0.00
3		BENZENE	20.000	18.984	5.1	97	0.00
4	S	a,a,a-TFT(S)	20.000	19.516	2.4	96	0.00
5		TOLUENE	20.000	19.570	2.1	98	0.00
6	S	1-Chloro-4-Fluorobenzene	20.000	19.482	2.6	96	0.00
7		CHLOROBENZENE	20.000	18.945	5.3	98	0.00
8		ETHYLBENZENE	20.000	19.543	2.3	99	-0.01
9		m,p-XYLENE	40.000	37.876	5.3	97	-0.01
10		o-XYLENE	20.000	19.291	3.5	98	-0.02
11		1,3-DICHLOROBENZENE	20.000	19.104	4.5	96	-0.02
12		1,4-DICHLOROBENZENE	20.000	18.563	7.2	95	-0.02
13		1,2-DICHLOROBENZENE	20.000	18.856	5.7	96	-0.02

Signal #2

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	20.000	19.535	2.3	120	0.00
2		Di-Isopropyl ether	20.000	19.852	0.7	94	0.00
3		BENZENE	20.000	18.921	5.4	96	0.00
4	S	a,a,a-TFT(S)	20.000	19.077	4.6	97	0.00
5		TOLUENE	20.000	19.308	3.5	97	0.00
6	S	1-Chloro-4-Fluorobenzene	20.000	19.113	4.4	95	0.00
7		CHLOROBENZENE	20.000	18.972	5.1	95	0.00
8		ETHYLBENZENE	20.000	19.000	5.0	96	0.00
9		m,p-XYLENE	40.000	36.668	8.3	94	-0.01
10		o-XYLENE	20.000	18.952	5.2	97	-0.02
11		1,3-DICHLOROBENZENE	20.000	18.493	7.5	96	-0.02
12		1,4-DICHLOROBENZENE	20.000	18.012	9.9	94	-0.02
13		1,2-DICHLOROBENZENE	20.000	18.522	7.4	96	-0.02

Average % D = 4.5

(#) = Out of Range SPCC's out = 0 CCC's out = 0
CD043805.D GCCD1215.M Tue Dec 30 08:18:56 2003 QRXY

Continuing Calibration Summary

Job Number: F21252
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GCD1826-CC1806
Lab FileID: CD044274.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\122903\CD044274.D\FID1A.CH Vial: 44
Signal #2 : C:\HPCHEM\2\DATA\122903\CD044274.D\FID2B.CH
Acq On : 30 Dec 2003 5:17 am Operator: BarbaraM
Sample : CC1806-20 Inst : VOA2
Misc : gc3076,gcd1826,,,,,1 Multiplr: 1.00
IntFile Signal #1: PID.E IntFile Signal #2: FID.E

Method : C:\HPCHEM\2\METHODS\GCCD1215.M (Chemstation Integrator)
Title : EPA 602/8021B
Last Update : Mon Dec 15 12:40:54 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	20.000	19.322	3.4	105	0.00
2		Di-Isopropyl ether	20.000	20.010	-0.1	98	0.00
3		BENZENE	20.000	18.925	5.4	97	0.00
4	S	a,a,a-TFT(S)	20.000	20.018	-0.1	98	0.00
5		TOLUENE	20.000	19.237	3.8	96	0.00
6	S	1-Chloro-4-Fluorobenzene	20.000	19.563	2.2	97	0.00
7		CHLOROBENZENE	20.000	18.649	6.8	96	0.00
8		ETHYLBENZENE	20.000	19.012	4.9	96	0.00
9		m,p-XYLENE	40.000	36.977	7.6	95	0.00
10		o-XYLENE	20.000	18.687	6.6	95	0.00
11		1,3-DICHLOROBENZENE	20.000	18.854	5.7	94	0.00
12		1,4-DICHLOROBENZENE	20.000	18.320	8.4	94	0.00
13		1,2-DICHLOROBENZENE	20.000	18.703	6.5	95	0.00

Signal #2

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	20.000	16.749	16.3#	103	0.00
2		Di-Isopropyl ether	20.000	19.766	1.2	94	0.00
3		BENZENE	20.000	18.573	7.1	94	0.00
4	S	a,a,a-TFT(S)	20.000	19.236	3.8	98	0.00
5		TOLUENE	20.000	18.976	5.1	95	0.00
6	S	1-Chloro-4-Fluorobenzene	20.000	18.965	5.2	94	0.00
7		CHLOROBENZENE	20.000	18.439	7.8	92	0.00
8		ETHYLBENZENE	20.000	18.507	7.5	93	0.00
9		m,p-XYLENE	40.000	35.885	10.3	92	0.00
10		o-XYLENE	20.000	18.468	7.7	95	0.00
11		1,3-DICHLOROBENZENE	20.000	18.186	9.1	94	0.00
12		1,4-DICHLOROBENZENE	20.000	17.684	11.6	92	0.00
13		1,2-DICHLOROBENZENE	20.000	18.228	8.9	95	0.00

Average % D = 6.3

(#) = Out of Range SPCC's out = 0 CCC's out = 0
CD043805.D GCCD1215.M Tue Dec 30 08:18:57 2003 QRXY

Initial Calibration Summary

Job Number: F21252
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GCD1827-ICC1827
Lab FileID: CD044288.D

Response Factor Report VOA2

Method : C:\HPCHEM\2\METHODS\GCCD1230.M (Chemstation Integrator)
Title : EPA 602/8021B
Last Update : Tue Dec 30 13:49:32 2003
Response via : Initial Calibration

Calibration Files
1 =CD044286.D 2 =CD044287.D 3 =CD044288.D
4 =CD044289.D 5 =CD044290.D 6 =CD044291.D

		Compound	1	2	3	4	5	6	Avg		%RSD
1)		Methyl tert Butyl E	1.055	1.180	1.209	1.265	1.223	1.340	1.212	E3	7.82
2)		Di-Isopropyl ether	2.203	2.226	2.302	2.312	2.266	2.267	2.263	E3	1.87
3)		BENZENE	5.230	5.789	5.844	5.873	5.759	5.820	5.719	E3	4.25
4)	S	a,a,a-TFT(S)	1.549	1.612	1.697	1.714	1.700	1.690	1.660	E3	3.93
5)		TOLUENE	5.446	5.941	5.903	5.930	5.797	5.855	5.812	E3	3.22
6)	S	1-Chloro-4-Fluorobe	2.904	3.000	3.089	3.139	3.144	3.131	3.068	E3	3.16
7)		CHLOROBENZENE	7.479	6.775	6.402	6.394	6.284	6.349	6.614	E3	6.92
8)		ETHYLBENZENE		5.924	5.456	5.379	5.259	5.325	5.469	E3	4.84
9)		m,p-XYLENE	5.687	6.002	5.829	5.880	5.729	5.727	5.809	E3	2.04
10)		o-XYLENE	5.238	5.594	5.409	5.432	5.270	5.328	5.378	E3	2.42
11)		1,3-DICHLOROBENZENE	5.504	5.547	5.547	5.584	5.529	5.220	5.489	E3	2.44
12)		1,4-DICHLOROBENZENE	5.951	5.881	5.798	5.905	5.785	5.817	5.856	E3	1.14
13)		1,2-DICHLOROBENZENE	4.742	4.609	4.464	4.570	4.511	4.506	4.567	E3	2.19

Signal #2 Calibration Files
1 =CD044286.D 2 =CD044287.D 3 =CD044288.D
4 =CD044289.D 5 =CD044290.D 6 =CD044291.D

		Compound	1	2	3	4	5	6	Avg		%RSD
1)		Methyl tert Butyl E	7.095	7.694	7.445	7.693	7.619	9.150	7.783	E2	9.09
2)		Di-Isopropyl ether	1.532	1.539	1.501	1.520	1.490	1.498	1.513	E3	1.32
3)		BENZENE	3.938	4.213	4.084	4.108	4.019	4.083	4.074	E3	2.26
4)	S	a,a,a-TFT(S)	1.062	1.083	1.098	1.125	1.134	1.170	1.112	E3	3.49
5)		TOLUENE	4.188	4.339	4.246	4.245	4.191	4.250	4.243	E3	1.29
6)	S	1-Chloro-4-Fluorobe	2.116	2.062	2.091	2.113	2.162	2.191	2.122	E3	2.22
7)		CHLOROBENZENE	5.116	4.841	4.689	4.735	4.643	4.720	4.791	E3	3.60
8)		ETHYLBENZENE	3.908	4.091	3.974	4.012	3.944	4.006	3.989	E3	1.59
9)		m,p-XYLENE	4.187	4.340	4.214	4.267	4.203	4.247	4.243	E3	1.31
10)		o-XYLENE	3.961	4.006	4.019	3.983	3.904	3.958	3.972	E3	1.03
11)		1,3-DICHLOROBENZENE	4.331	4.169	4.219	4.310	4.199	4.309	4.256	E3	1.61
12)		1,4-DICHLOROBENZENE	4.757	4.437	4.393	4.494	4.477	4.585	4.524	E3	2.90
13)		1,2-DICHLOROBENZENE	3.711	3.404	3.434	3.512	3.482	3.552	3.516	E3	3.11

Average % RSD = 3.1

(#) = Out of Range

GCCD1230.M Wed Dec 31 09:50:21 2003 QRXY

Continuing Calibration Summary

Job Number: F21252
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GCD1827-CC1827
Lab FileID: CD044302.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\123003\CD044302.D\FID1A.CH Vial: 18
Signal #2 : C:\HPCHEM\2\DATA\123003\CD044302.D\FID2B.CH
Acq On : 30 Dec 2003 7:14 pm Operator: BarbaraM
Sample : CC1827-20 Inst : VOA2
Misc : gc3077,gcd1827,,,,,1 Multiplr: 1.00
IntFile Signal #1: PID.E IntFile Signal #2: FID.E

Method : C:\HPCHEM\2\METHODS\GCCD1230.M (Chemstation Integrator)
Title : EPA 602/8021B
Last Update : Tue Dec 30 13:49:15 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	20.000	22.584	-12.9	113	0.00
2		Di-Isopropyl ether	20.000	20.322	-1.6	100	0.00
3		BENZENE	20.000	20.539	-2.7	101	0.00
4	S	a,a,a-TFT(S)	20.000	20.356	-1.8	100	0.00
5		TOLUENE	20.000	20.447	-2.2	101	0.00
6	S	1-Chloro-4-Fluorobenzene	20.000	20.068	-0.3	100	0.01
7		CHLOROBENZENE	20.000	19.415	2.9	100	0.01
8		ETHYLBENZENE	20.000	20.014	-0.1	100	0.01
9		m,p-XYLENE	40.000	40.265	-0.7	100	0.01
10		o-XYLENE	20.000	20.351	-1.8	101	0.02
11		1,3-DICHLOROBENZENE	20.000	20.212	-1.1	100	0.02
12		1,4-DICHLOROBENZENE	20.000	19.660	1.7	99	0.02
13		1,2-DICHLOROBENZENE	20.000	19.845	0.8	102	0.03

Signal #2

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	20.000	22.325	-11.6	117	0.00
2		Di-Isopropyl ether	20.000	20.181	-0.9	102	0.00
3		BENZENE	20.000	20.197	-1.0	101	0.00
4	S	a,a,a-TFT(S)	20.000	19.649	1.8	99	0.00
5		TOLUENE	20.000	20.188	-0.9	101	0.00
6	S	1-Chloro-4-Fluorobenzene	20.000	19.718	1.4	100	0.00
7		CHLOROBENZENE	20.000	19.538	2.3	100	0.00
8		ETHYLBENZENE	20.000	20.102	-0.5	101	0.01
9		m,p-XYLENE	40.000	40.039	-0.1	101	0.00
10		o-XYLENE	20.000	20.213	-1.1	100	0.01
11		1,3-DICHLOROBENZENE	20.000	19.870	0.6	100	0.02
12		1,4-DICHLOROBENZENE	20.000	19.453	2.7	100	0.02
13		1,2-DICHLOROBENZENE	20.000	19.645	1.8	101	0.02

Average % D = 2.2

(#) = Out of Range SPCC's out = 0 CCC's out = 0
CD044288.D GCCD1230.M Wed Dec 31 08:43:50 2003 QRXY

Continuing Calibration Summary

Job Number: F21252
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GCD1828-CC1827
Lab FileID: CD044313.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\123003\CD044313.D\FID1A.CH Vial: 29
Signal #2 : C:\HPCHEM\2\DATA\123003\CD044313.D\FID2B.CH
Acq On : 30 Dec 2003 11:46 pm Operator: BarbaraM
Sample : CC1B27-20 Inst : VOA2
Misc : gc3073,gcd1828,,,,,1 MultiplIr: 1.00
IntFile Signal #1: PID.E IntFile Signal #2: FID.E

Method : C:\HPCHEM\2\METHODS\GCCD1230.M (Chemstation Integrator)
Title : EPA 602/8021B
Last Update : Tue Dec 30 13:49:15 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	20.000	21.928	-9.6	110	0.00
2		Di-Isopropyl ether	20.000	18.849	5.8	93	0.00
3		BENZENE	20.000	19.523	2.4	96	0.00
4	S	a,a,a-TFT(S)	20.000	19.492	2.5	95	0.00
5		TOLUENE	20.000	19.629	1.9	97	0.01
6	S	1-Chloro-4-Fluorobenzene	20.000	19.430	2.9	96	0.02
7		CHLOROBENZENE	20.000	19.017	4.9	98	0.02
8		ETHYLBENZENE	20.000	19.607	2.0	9B	0.02
9		m,p-XYLENE	40.000	39.665	0.8	99	0.02
10		o-XYLENE	20.000	20.0B7	-0.4	100	0.02
11		1,3-DICHLOROBENZENE	20.000	19.761	1.2	98	0.02
12		1,4-DICHLOROBENZENE	20.000	19.397	3.0	9B	0.02
13		1,2-DICHLOROBENZENE	20.000	19.595	2.0	100	0.02

Signal #2

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	20.000	24.091	-20.5#	126	0.00
2		Di-Isopropyl ether	20.000	20.021	-0.1	101	0.00
3		BENZENE	20.000	20.077	-0.4	100	0.00
4	S	a,a,a-TFT(S)	20.000	19.643	1.8	99	0.00
5		TOLUENE	20.000	19.957	0.2	100	0.00
6	S	1-Chloro-4-Fluorobenzene	20.000	19.799	1.0	100	0.01
7		CHLOROBENZENE	20.000	19.393	3.0	99	0.01
8		ETHYLBENZENE	20.000	20.113	-0.6	101	0.01
9		m,p-XYLENE	40.000	39.711	0.7	100	0.01
10		o-XYLENE	20.000	20.081	-0.4	99	0.01
11		1,3-DICHLOROBENZENE	20.000	19.667	1.7	99	0.02
12		1,4-DICHLOROBENZENE	20.000	19.029	4.9	98	0.02
13		1,2-DICHLOROBENZENE	20.000	19.446	2.8	100	0.02

Average % D = 3.0

(#) = Out of Range SPCC's out = 0 CCC's out = 0
CD044288.D GCCD1230.M Wed Dec 31 08:43:51 2003 QRXY

Continuing Calibration Summary

Job Number: F21252
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GCD1829-CC1827
Lab FileID: CD044324.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\123003\CD044324.D\FID1A.CH Vial: 39
Signal #2 : C:\HPCHEM\2\DATA\123003\CD044324.D\FID2B.CH
Acq On : 31 Dec 2003 4:18 am Operator: BarbaraM
Sample : CC1827-20 Inst : VOA2
Misc : gc3077,gcd1829,,,,,1 Multiplr: 1.00
IntFile Signal #1: PID.E IntFile Signal #2: FID.E

Method : C:\HPCHEM\2\METHODS\GCCD1230.M (Chemstation Integrator)
Title : EPA 602/8021B
Last Update : Tue Dec 30 13:49:15 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	20.000	23.256	-16.3#	117	0.00
2		Di-Isopropyl ether	20.000	19.971	0.1	98	0.01
3		BENZENE	20.000	20.217	-1.1	99	0.01
4	S	a,a,a-TFT(S)	20.000	20.249	-1.2	99	0.01
5		TOLUENE	20.000	20.041	-0.2	99	0.01
6	S	1-Chloro-4-Fluorobenzene	20.000	19.763	1.2	98	0.01
7		CHLOROBENZENE	20.000	18.999	5.0	98	0.02
8		ETHYLBENZENE	20.000	19.662	1.7	99	0.02
9		m,p-XYLENE	40.000	39.238	1.9	98	0.02
10		o-XYLENE	20.000	19.964	0.2	99	0.02
11		1,3-DICHLOROBENZENE	20.000	19.748	1.3	98	0.02
12		1,4-DICHLOROBENZENE	20.000	19.118	4.4	97	0.02
13		1,2-DICHLOROBENZENE	20.000	19.880	0.6	102	0.02

Signal #2

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	20.000	25.140	-25.7#	131	0.00
2		Di-Isopropyl ether	20.000	19.840	0.8	100	0.00
3		BENZENE	20.000	19.842	0.8	99	0.00
4	S	a,a,a-TFT(S)	20.000	19.609	2.0	99	0.00
5		TOLUENE	20.000	19.796	1.0	99	0.00
6	S	1-Chloro-4-Fluorobenzene	20.000	20.375	-1.9	103	0.00
7		CHLOROBENZENE	20.000	19.205	4.0	98	0.00
8		ETHYLBENZENE	20.000	19.671	1.6	99	0.01
9		m,p-XYLENE	40.000	39.666	0.8	100	0.01
10		o-XYLENE	20.000	20.020	-0.1	99	0.01
11		1,3-DICHLOROBENZENE	20.000	19.280	3.6	97	0.02
12		1,4-DICHLOROBENZENE	20.000	19.262	3.7	99	0.02
13		1,2-DICHLOROBENZENE	20.000	19.968	0.2	102	0.02

Average % D = 3.1

(#) = Out of Range SPCC's out = 0 CCC's out = 0
CD044288.D GCCD1230.M Wed Dec 31 08:43:53 2003 QRXY

Initial Calibration Summary

Job Number: F21252
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GKK51-ICC51
Lab FileID: KK01583.D

Response Factor Report GC-KK-LL

Method : C:\MSDCHEM\1\METHODS\504_1.M (Chemstation Integrator)
Title : EDB/DBCP by EPA 504.1 or SW846 8011
Last Update : Mon Dec 29 12:14:46 2003
Response via : Initial Calibration

Calibration Files
.125 =KK01582.D .250 =KK01583.D .500 =KK01584.D
0.75 =KK01585.D 1.0 =KK01586.D

	Compound	.125	.250	.500	0.75	1.0	Avg		%RSD
1)	1,2-Dibromoethane	4.918	5.266	4.676	4.301	4.450	4.722	E4	8.12
2) S	4-Bromofluorobenzene	3.218	3.296	2.989	2.740	2.705	2.990	E3	8.99
3)	1,2-Dibromo-3-chlorop	0.873	0.916	0.976	0.955	1.010	0.946	E5	5.60
Signal #2									
1)	1,2-Dibromoethane	3.919	4.088	3.713	3.303	3.431	3.691	E4	8.86
2) S	4-Bromofluorobenzene	4.245	4.180	3.942	3.604	3.663	3.927	E3	7.42
3)	1,2-Dibromo-3-chlorop	7.383	7.612	7.871	7.704	8.150	7.744	E4	3.71

(#) = Out of Range

504_1.M Tue Dec 30 07:41:43 2003

5.6

Continuing Calibration Summary

Job Number: F21252 **Sample:** GKK51-CC51
Account: EEINCJX EEI **Lab FileID:** KK01599.D
Project: CSFF MCAS New River

Evaluate Continuing Calibration Report

```
Signal #1 : C:\MSDCHEM\1\DATA\1229EDB\KK01599.D\ECD1A.CH Vial: 20
Signal #2 : C:\MSDCHEM\1\DATA\1229EDB\KK01599.D\ECD2B.CH
Acq On    : 12-29-03 04:24:18 PM                    Operator: stephw
Sample    : cc51-0.25                               Inst    : GC-KK-LL
Misc      : op9468,gkk51,35,,,2,1,water             Multiplr: 1.00
IntFile Signal #1: EVENTS.E     IntFile Signal #2: EVENTS2.E

Method       : C:\MSDCHEM\1\METHODS\504_1.M (Chemstation Integrator)
Title        : EDB/DBCP by EPA 504.1 or SW846 8011
Last Update  : Mon Dec 29 12:14:46 2003
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
1	1,2-Dibromoethane	0.250	0.254	-1.6	91	0.00
2 S	4-Bromofluorobenzene	2.000	2.166	-8.3	98	0.00
3	1,2-Dibromo-3-chloropropane	0.250	0.247	1.2	102	0.00
Signal #2						
1	1,2-Dibromoethane	0.250	0.257	-2.8	93	0.00
2 S	4-Bromofluorobenzene	2.000	2.113	-5.6	99	0.00
3	1,2-Dibromo-3-chloropropa	0.250	0.252	-0.8	103	0.00

Evaluate Continuing Calibration Report - Not Founds

```
Signal #1 : C:\MSDCHEM\1\DATA\1229EDB\KK01599.D\ECD1A.CH Vial: 20
Signal #2 : C:\MSDCHEM\1\DATA\1229EDB\KK01599.D\ECD2B.CH
Acq On    : 12-29-03 04:24:18 PM                    Operator: stephw
Sample    : cc51-0.25                               Inst    : GC-KK-LL
Misc      : op9468,gkk51,35,,,2,1,water             Multiplr: 1.00
IntFile Signal #1: EVENTS.E     IntFile Signal #2: EVENTS2.E

Method       : C:\MSDCHEM\1\METHODS\504_1.M (Chemstation Integrator)
Title        : EDB/DBCP by EPA 504.1 or SW846 8011
Last Update  : Mon Dec 29 12:14:46 2003
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
Signal #2						

```
(#) = Out of Range              SPCC's out = 0  CCC's out = 0
 KK01583.D  504_1.M          Tue Dec 30 07:41:00 2003
```

Continuing Calibration Summary

Job Number: F21252
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GKK51-CC51
Lab FileID: KK01609.D

Evaluate Continuing Calibration Report

Signal #1 : C:\MSDCHEM\1\DATA\1229EDB\KK01609.D\ECD1A.CH Vial: 30
Signal #2 : C:\MSDCHEM\1\DATA\1229EDB\KK01609.D\ECD2B.CH
Acq On : 12-29-03 07:43:15 PM Operator: stephw
Sample : cc51-0.50 Inst : GC-KK-LL
Misc : op9468,gkk51,35,,,2,1,water MultiplIr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\MSDCHEM\1\METHODS\504_1.M (Chemstation Integrator)
Title : EDB/DBCP by EPA 504.1 or SW846 8011
Last Update : Mon Dec 29 12:14:46 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
1	1,2-Dibromoethane	0.500	0.435	13.0	88	0.00
2 S	4-Bromofluorobenzene	4.000	3.755	6.1	94	0.00
3	1,2-Dibromo-3-chloropropane	0.500	0.492	1.6	95	0.00

Signal #2

1	1,2-Dibromoethane	0.500	0.437	12.6	87	0.00
2 S	4-Bromofluorobenzene	4.000	3.736	6.6	93	0.00
3	1,2-Dibromo-3-chloropropa	0.500	0.493	1.4	97	0.00

Evaluate Continuing Calibration Report - Not Founds

Signal #1 : C:\MSDCHEM\1\DATA\1229EDB\KK01609.D\ECD1A.CH Vial: 30
Signal #2 : C:\MSDCHEM\1\DATA\1229EDB\KK01609.0\ECD2B.CH
Acq On : 12-29-03 07:43:15 PM Operator: stephw
Sample : cc51-0.50 Inst : GC-KK-LL
Misc : op9468,gkk51,35,,,2,1,water MultiplIr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\MSDCHEM\1\METHODS\504_1.M (Chemstation Integrator)
Title : EDB/DBCP by EPA 504.1 or SW846 8011
Last Update : Mon Dec 29 12:14:46 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)

Signal #2

(#) = Out of Range SPCC's out = 0 CCC's out = 0
KK01584.D 504_1.M Tue Dec 30 07:41:28 2003

Continuing Calibration Summary

Job Number: F21252
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GKK51-CC51
Lab FileID: KK01620.D

Evaluate Continuing Calibration Report

```
Signal #1 : C:\MSDCHEM\1\DATA\1229EDB\KK01620.D\ECD1A.CH Vial: 30
Signal #2 : C:\MSDCHEM\1\DATA\1229EDB\KK01620.D\ECD2B.CH
Acq On    : 29 Dec 2003  11:21 pm                    Operator: stephw
Sample    : cc51-0.50                                Inst    : GC-KK-LL
Misc      : op9467,gkk51,35,,,2,1,water              Multiplr: 1.00
IntFile Signal #1: EVENTS.E     IntFile Signal #2: EVENTS2.E

Method       : C:\MSDCHEM\1\METHODS\504_1.M (Chemstation Integrator)
Title        : EDB/DBCP by EPA 504.1 or SW846 8011
Last Update  : Mon Dec 29 12:14:46 2003
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
1	1,2-Dibromoethane	0.500	0.455	9.0	92	0.00
2 S	4-Bromofluorobenzene	4.000	3.774	5.6	94	0.00
3	1,2-Dibromo-3-chloropropane	0.500	0.480	4.0	93	0.00
Signal #2						
1	1,2-Dibromoethane	0.500	0.449	10.2	89	0.00
2 S	4-Bromofluorobenzene	4.000	3.661	8.5	91	0.00
3	1,2-Dibromo-3-chloropropa	0.500	0.471	5.8	93	0.00

Evaluate Continuing Calibration Report - Not Founds

```
Signal #1 : C:\MSDCHEM\1\DATA\1229EDB\KK01620.D\ECD1A.CH Vial: 30
Signal #2 : C:\MSDCHEM\1\DATA\1229EDB\KK01620.D\ECD2B.CH
Acq On    : 29 Dec 2003  11:21 pm                    Operator: stephw
Sample    : cc51-0.50                                Inst    : GC-KK-LL
Misc      : op9467,gkk51,35,,,2,1,water              Multiplr: 1.00
IntFile Signal #1: EVENTS.E     IntFile Signal #2: EVENTS2.E

Method       : C:\MSDCHEM\1\METHODS\504_1.M (Chemstation Integrator)
Title        : EDB/DBCP by EPA 504.1 or SW846 8011
Last Update  : Mon Dec 29 12:14:46 2003
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
Signal #2						

```
(#) = Out of Range              SPCC's out = 0  CCC's out = 0
 KK01584.D  504_1.M          Tue Dec 30 07:41:28 2003
```

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: F21252
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP9429-MB	IJ19077.D	1	12/24/03	SD	12/23/03	OP9429	GIJ922

The QC reported here applies to the following samples: **Method:** EPA 610

F21252-4, F21252-5, F21252-8, F21252-11, F21252-12

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Accnaphthene	ND	5.0	2.0	ug/l	
208-96-8	Acenaphthylene	ND	5.0	2.0	ug/l	
120-12-7	Anthracene	ND	5.0	2.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.0	2.0	ug/l	
50-32-8	Benzo(a)pyrcne	ND	5.0	2.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.0	2.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.0	2.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.0	2.0	ug/l	
218-01-9	Chrysene	ND	5.0	2.0	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.0	2.0	ug/l	
206-44-0	Fluoranthene	ND	5.0	2.0	ug/l	
86-73-7	Fluorene	ND	5.0	2.0	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.0	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.0	ug/l	
90-12-0	1-Methylnaphthalene	ND	5.0	2.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.0	2.0	ug/l	
85-01-8	Phenanthrene	ND	5.0	2.0	ug/l	
129-00-0	Pyrene	ND	5.0	2.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
321-60-8	2-Fluorobiphenyl	90%	42-123%
84-15-1	o-Terphenyl	98%	51-123%

Blank Spike Summary

Job Number: F21252
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP9429-BS	IJ19076.D	1	12/24/03	SD	12/23/03	OP9429	GIJ922

The QC reported here applies to the following samples: **Method:** EPA 610

F21252-4, F21252-5, F21252-8, F21252-11, F21252-12

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
83-32-9	Acenaphthene	25	24.1	96	71-113
208-96-8	Acenaphthylene	25	21.8	87	63-102
120-12-7	Anthracene	25	23.8	95	71-110
56-55-3	Benzo(a)anthracene	25	23.9	96	70-114
50-32-8	Benzo(a)pyrene	25	24.2	97	67-114
205-99-2	Benzo(b)fluoranthene	25	24.2	97	69-115
191-24-2	Benzo(g,h,i)perylene	25	23.8	95	61-117
207-08-9	Benzo(k)fluoranthene	25	23.8	95	69-111
218-01-9	Chrysene	25	24.6	98	70-114
53-70-3	Dibenzo(a,h)anthracene	25	24.1	96	64-114
206-44-0	Fluoranthene	25	24.4	98	71-114
86-73-7	Fluorene	25	23.7	95	69-111
193-39-5	Indeno(1,2,3-cd)pyrene	25	23.2	93	63-112
91-20-3	Naphthalene	25	22.1	88	66-105
90-12-0	1-Methylnaphthalene	25	23.5	94	71-112
91-57-6	2-Methylnaphthalene	25	22.1	88	65-106
85-01-8	Phenanthrene	25	24.0	96	69-112
129-00-0	Pyrene	25	24.5	98	70-114

CAS No.	Surrogate Recoveries	BSP	Limits
321-60-8	2-Fluorobiphenyl	91%	42-123%
84-15-1	o-Terphenyl	97%	51-123%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F21252
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP9429-MS	IJ19082.D	1	12/24/03	SD	12/23/03	OP9429	GIJ922
OP9429-MSD	IJ19083.D	1	12/24/03	SD	12/23/03	OP9429	GIJ922
F21199-4	IJ19081.D	1	12/24/03	SD	12/23/03	OP9429	GIJ922

The QC reported here applies to the following samples: **Method:** EPA 610

F21252-4, F21252-5, F21252-8, F21252-11, F21252-12

CAS No.	Compound	F21199-4 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	ND		51	36.5	72	41.9	82	14	59-123/20
208-96-8	Acenaphthylene	ND		51	32.8	64	37.6	74	14	51-114/20
120-12-7	Anthracene	ND		51	38.1	75	44.0	86	14	64-114/17
56-55-3	Benzo(a)anthracene	ND		51	40.1	79	46.6	91	15	66-115/17
50-32-8	Benzo(a)pyrene	ND		51	41.0	80	47.4	93	14	62-118/17
205-99-2	Benzo(b)fluoranthene	ND		51	40.5	79	47.1	92	15	66-117/17
191-24-2	Benzo(g,h,i)perylene	ND		51	40.6	80	47.0	92	15	59-120/17
207-08-9	Benzo(k)fluoranthene	ND		51	40.4	79	46.9	92	15	64-116/16
218-01-9	Chrysene	ND		51	41.3	81	48.0	94	15	66-117/16
53-70-3	Dibenzo(a,h)anthracene	ND		51	41.1	81	47.6	93	15	57-124/18
206-44-0	Fluoranthene	ND		51	39.6	78	46.4	91	16	67-116/17
86-73-7	Fluorene	ND		51	35.9	70	41.5	81	14	58-122/19
193-39-5	Indeno(1,2,3-cd)pyrene	ND		51	39.4	77	45.7	90	15	59-116/18
91-20-3	Naphthalene	ND		51	33.2	65	38.1	75	14	47-114/20
90-12-0	1-Methylnaphthalene	ND		51	35.6	70	40.8	80	14	55-128/21
91-57-6	2-Methylnaphthalene	ND		51	33.4	65	38.4	75	14	51-117/21
85-01-8	Phenanthrene	ND		51	37.2	73	43.3	85	15	63-116/18
129-00-0	Pyrene	ND		51	39.8	78	46.6	91	16	67-116/17

CAS No.	Surrogate Recoveries	MS	MSD	F21199-4	Limits
321-60-8	2-Fluorobiphenyl	65%	76%	61%	42-123%
84-15-1	o-Terphenyl	73%	86%	68%	51-123%

Semivolatile Surrogate Recovery Summary

Job Number: F21252
Account: EEINCJX EEI
Project: CSFF MCAS New River

Method: EPA 610 **Matrix:** AQ

Samples and QC shown here apply to the above metbod

Lab Sample ID	Lab File ID	S1 [a]	S2 [a]
F21252-4	IJ19089.D	96.0	100.0
F21252-5	IJ19090.D	95.0	101.0
F21252-8	IJ19091.D	88.0	95.0
F21252-11	IJ19097.D	0.0* [b]	0.0* [b]
F21252-11	IJ19098.D	98.0	98.0
F21252-11	IJ19092.D	105.0	102.0
F21252-12	IJ19099.D	94.0	93.0
F21252-12	IJ19093.D	99.0	107.0
OP9429-BS	IJ19076.D	91.0	97.0
OP9429-MB	IJ19077.D	90.0	98.0
OP9429-MS	IJ19082.D	65.0	73.0
OP9429-MSD	IJ19083.D	76.0	86.0

Surrogate Compounds	Recovery Limits
S1 = 2-Fluorobiphenyl	42-123%
S2 = o-Terphenyl	51-123%

(a) Reeovery from GC signal #1
(b) Outside control limits due to dilution.

6.4

GC Surrogate Retention Time Summary

Job Number: F21252
Account: EEINCJX EEI
Project: CSFF MCAS New River

Check Std:	GIJ922-CC922	**Injection Date:**	12/24/03
Lab File ID:	IJ19075.D	**Injection Time:**	05:33
Instrument ID:	GCIJ	**Method:**	EPA 610

	S1 [a] RT	S2 [a] RT
Check Std	5.69	10.20

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
OP9429-BS	IJ19076.D	12/24/03	06:01	5.69	10.20
OP9429-MB	IJ19077.D	12/24/03	06:30	5.69	10.20
ZZZZZZ	IJ19078.D	12/24/03	06:59	5.68	10.20
ZZZZZZ	IJ19079.D	12/24/03	07:27	5.68	10.20
ZZZZZZ	IJ19080.D	12/24/03	07:56	5.69	10.20
F21199-4	IJ19081.D	12/24/03	08:40	5.68	10.19
OP9429-MS	IJ19082.D	12/24/03	09:09	5.69	10.20
OP9429-MSD	IJ19083.D	12/24/03	09:37	5.69	10.20
ZZZZZZ	IJ19084.D	12/24/03	10:06	5.69	10.20
ZZZZZZ	IJ19085.D	12/24/03	10:35	5.69	10.20

Surrogate Compounds

S1 = 2-Fluorobiphenyl
S2 = o-Terphenyl

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: F21252
Account: EEINCJX EEI
Project: CSFF MCAS New River

Check Std:	GIJ922-CC922	**Injection Date:**	12/24/03
Lab File ID:	IJ19086.D	**Injection Time:**	11:04
Instrument ID:	GCIJ	**Method:**	EPA 610

	S1 [a] RT	S2 [a] RT
Check Std	5.69	10.20

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
ZZZZZZ	IJ19087.D	12/24/03	11:33	5.69	10.20
ZZZZZZ	IJ19088.D	12/24/03	12:01	5.69	10.20
F21252-4	IJ19089.D	12/24/03	12:30	5.69	10.20
F21252-5	IJ19090.D	12/24/03	12:59	5.69	10.21
F21252-8	IJ19091.D	12/24/03	13:28	5.69	10.20
F21252-11	IJ19092.D	12/24/03	13:57	5.69	10.21
F21252-12	IJ19093.D	12/24/03	14:25	5.70	10.20

Surrogate Compounds

S1 = 2-Fluorobiphenyl
S2 = o-Terphenyl

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: F21252
Account: EEINCJX EEI
Project: CSFF MCAS New River

Check Std:	GIJ922-CC922	**Injection Date:**	12/24/03
Lab File ID:	IJ19094.D	**Injection Time:**	14:54
Instrument ID:	GCIJ	**Method:**	EPA 610

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	5.69	6.47	10.20	11.58

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
F21203-2	IJ19095.D	12/24/03	15:23	5.69		10.20	
ZZZZZZ	IJ19096.D	12/24/03	15:52	5.69		10.20	
F21252-11	IJ19097.D	12/24/03	16:20	0.00		0.00	
F21252-11	IJ19098.D	12/24/03	16:49	5.69		10.20	
F21252-12	IJ19099.D	12/24/03	17:18	5.69		10.20	
GIJ922-ECC922	IJ19100.D	12/24/03	17:46	5.69	6.46	10.20	11.58

Surrogate Compounds

S1 = 2-Fluorobiphenyl
S2 = o-Terphenyl

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

Initial Calibration Summary

Job Number: F21252
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GIJ922-ICC922
Lab FileID: IJ19041.D

Response Factor Report FID 1

Method : C:\HPCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title : PAH's BY EPA 610 OR 8100
Last Update : Tue Dec 23 14:17:24 2003
Response via : Initial Calibration

Calibration Files
5 =IJ19039.D 10 =IJ19040.D 20 =IJ19041.D
30 =IJ19042.D 40 =IJ19043.D 50 =IJ19044.D

		Compound	5	10	20	30	40	50	Avg		%RSD
1)		Naphthalene	1.197	1.287	1.247	1.212	1.231	1.256	1.238	E4	2.60
2)		2-Methyl Naphthalen	1.164	1.245	1.208	1.198	1.205	1.228	1.208	E4	2.28
3)		1-Methyl Naphthalen	1.140	1.215	1.181	1.170	1.175	1.197	1.180	E4	2.15
4)	S	2-Fluorobiphenyl	1.025	1.111	1.073	1.067	1.073	1.096	1.074	E4	2.75
5)		Acenaphthylene	1.156	1.245	1.224	1.218	1.226	1.254	1.220	E4	2.82
6)		Acenaphthene	1.174	1.272	1.245	1.243	1.248	1.275	1.243	E4	2.95
7)		Fluorene	1.155	1.251	1.224	1.221	1.226	1.252	1.221	E4	2.88
8)		Phenanthrene	1.141	1.253	1.226	1.218	1.221	1.248	1.218	E4	3.30
9)		Anthracene	1.212	1.285	1.242	1.229	1.218	1.242	1.238	E4	2.11
10)	S	O-Terphenyl	1.224	1.305	1.260	1.245	1.248	1.272	1.259	E4	2.21
11)		Fluoranthene	1.195	1.286	1.242	1.230	1.235	1.261	1.241	E4	2.49
12)		Pyrene	1.146	1.281	1.240	1.229	1.231	1.257	1.231	E4	3.72
13)		Benzo(a)Anthracene	1.188	1.281	1.246	1.236	1.243	1.268	1.244	E4	2.59
14)		Chrysene	1.220	1.293	1.243	1.227	1.229	1.252	1.244	E4	2.15
15)		Benzo(b)Fluoranthen	1.194	1.298	1.255	1.257	1.265	1.300	1.262	E4	3.07
16)		Benzo(k)Fluoranthen	1.277	1.329	1.285	1.255	1.258	1.270	1.279	E4	2.12
17)		Benzo(a) Pyrene	1.170	1.242	1.206	1.192	1.198	1.220	1.205	E4	2.04
18)		Indeno(1,2,3-cd)pyr	1.185	1.263	1.231	1.222	1.229	1.253	1.230	E4	2.22
19)		Dibenzo(a,h)anthrac	1.230	1.284	1.241	1.233	1.236	1.256	1.247	E4	1.64
20)		Benzo(g,h,i) Peryle	1.233	1.285	1.248	1.239	1.246	1.267	1.253	E4	1.56

Signal #2 Calibration Files
5 =IJ19039.D 10 =IJ19040.D 20 =IJ19041.D
30 =IJ19042.D 40 =IJ19043.D 50 =IJ19044.D

		Compound	5	10	20	30	40	50	Avg		%RSD
1)		Naphthalene	1.782	1.900	1.840	1.819	1.828	1.865	1.839	E4	2.19
2)		2-Methyl Naphthalen	1.700	1.821	1.768	1.752	1.760	1.798	1.767	E4	2.34
3)		1-Methyl Naphthalen	1.661	1.778	1.729	1.716	1.722	1.761	1.728	E4	2.36
4)	S	2-Fluorobiphenyl	1.525	1.636	1.594	1.585	1.594	1.628	1.594	E4	2.47
5)		Acenaphthylene	1.738	1.867	1.827	1.812	1.820	1.859	1.821	E4	2.52
6)		Acenaphthene	1.757	1.895	1.844	1.831	1.839	1.878	1.841	E4	2.59
7)		Fluorene	1.704	1.844	1.797	1.786	1.797	1.835	1.794	E4	2.77
8)		Phenanthrene	1.623	1.796	1.768	1.764	1.794	1.828	1.762	E4	4.08
9)		Anthracene	1.813	1.908	1.830	1.803	1.787	1.838	1.830	E4	2.32
10)	S	O-Terphenyl	1.799	1.920	1.854	1.834	1.840	1.875	1.854	E4	2.21
11)		Fluoranthene	1.771	1.890	1.828	1.810	1.813	1.851	1.827	E4	2.21
12)		Pyrene	1.783	1.903	1.840	1.821	1.828	1.864	1.840	E4	2.22
13)		Benzo(a)Anthracene	1.808	1.919	1.853	1.835	1.842	1.875	1.855	E4	2.06
14)		Chrysene	1.776	1.873	1.812	1.793	1.803	1.838	1.816	E4	1.91
15)		Benzo(b)Fluoranthen	1.793	1.916	1.852	1.851	1.862	1.888	1.860	E4	2.22
16)		Benzo(k)Fluoranthen	1.824	1.941	1.877	1.839	1.840	1.883	1.867	E4	2.31
17)		Benzo(a) Pyrene	1.720	1.828	1.771	1.754	1.761	1.792	1.771	E4	2.06
18)		Indeno(1,2,3-cd)pyr	1.757	1.884	1.838	1.827	1.862	1.898	1.844	E4	2.73
19)		Dibenzo(a,h)anthrac	1.791	1.880	1.815	1.782	1.766	1.794	1.805	E4	2.23
20)		Benzo(g,h,i) Peryle	1.787	1.905	1.844	1.823	1.826	1.859	1.841	E4	2.16

Initial Calibration Summary

Job Number: F21252
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GIJ922-ICC922
Lab FileID: IJ19041.D

Average % RSD = 2.4

(#) = Out of Range

8100_H2.M Sun Dec 28 10:54:43 2003

Continuing Calibration Summary

Job Number: F21252
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GIJ922-CC922
Lab FileID: IJ19075.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\1223PAH\IJ19075.D\FID1B.CH Vial: 31
Signal #2 : C:\HPCHEM\1\DATA\1223PAH\IJ19075.D\FID2A.CH
Acq On : 24 Dec 2003 5:33 am Operator: sarahm
Sample : cc922-30 Inst : FID 1
Misc : op9419,gij922,980,,,1,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : C:\HPCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title : PAH's BY EPA 610 OR 8100
Last Update : Tue Dec 23 14:17:24 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Naphthalene	30.000	30.020	-0.1	102	0.00
2		2-Methyl Naphthalene	30.000	30.089	-0.3	101	0.00
3		1-Methyl Naphthalene	30.000	30.123	-0.4	101	0.00
4	S	2-Fluorobiphenyl	30.000	30.104	-0.3	101	0.00
5		Acenaphthylene	30.000	30.295	-1.0	101	0.00
6		Acenaphthene	30.000	30.294	-1.0	101	0.00
7		Fluorene	30.000	30.294	-1.0	101	0.00
8		Phenanthrene	30.000	30.387	-1.3	101	0.00
9		Anthracene	30.000	30.212	-0.7	101	0.00
10	S	O-Terphenyl	30.000	30.162	-0.5	102	0.00
11		Fluoranthene	30.000	30.282	-0.9	102	0.00
12		Pyrene	30.000	30.366	-1.2	101	0.00
13		Benzo(a)Anthracene	30.000	30.184	-0.6	101	0.00
14		Chrysene	30.000	30.044	-0.1	102	0.00
15		Benzo(b)Fluoranthene	30.000	30.258	-0.9	101	0.00
16		Benzo(k)Fluoranthene	30.000	29.914	0.3	102	0.00
17		Benzo(a) Pyrene	30.000	30.070	-0.2	101	0.00
18		Indeno(1,2,3-cd)pyrene	30.000	30.093	-0.3	101	0.00
19		Dibenzo(a,h)anthracene	30.000	30.162	-0.5	102	0.00
20		Benzo(g,h,i) Perylene	30.000	30.116	-0.4	102	0.00

Signal #2

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Naphthalene	30.000	30.065	-0.2	101	0.00
2		2-Methyl Naphthalene	30.000	30.077	-0.3	101	0.00
3		1-Methyl Naphthalene	30.000	30.084	-0.3	101	0.00
4	S	2-Fluorobiphenyl	30.000	30.159	-0.5	101	0.00
5		Acenaphthylene	30.000	30.150	-0.5	101	0.00
6		Acenaphthene	30.000	30.138	-0.5	101	0.00
7		Fluorene	30.000	30.190	-0.6	101	0.00
8		Phenanthrene	30.000	30.327	-1.1	101	0.00
9		Anthracene	30.000	29.904	0.3	101	0.00
10	S	O-Terphenyl	30.000	30.091	-0.3	101	0.00
11		Fluoranthene	30.000	30.026	-0.1	101	0.00
12		Pyrene	30.000	30.082	-0.3	101	0.00
13		Benzo(a)Anthracene	30.000	29.982	0.1	101	0.00
14		Chrysene	30.000	30.100	-0.3	102	0.00
15		Benzo(b)Fluoranthene	30.000	29.959	0.1	100	0.00

Continuing Calibration Summary

Job Number: F21252
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GIJ922-CC922
Lab FileID: IJ19075.D

16	Benzo(k)Fluoranthene	30.000	29.853	0.5	101	0.00
17	Benzo(a) Pyrene	30.000	29.972	0.1	101	0.00
18	Indeno(1,2,3-cd)pyrene	30.000	29.968	0.1	101	0.00
19	Dibenzo(a,h)anthracene	30.000	29.945	0.2	101	0.00
20	Benzo(g,h,i) Perylene	30.000	29.886	0.4	101	0.00

Average % D = 0.5

(#) = Out of Range SPCC's out = 0 CCC's out = 0
IJ19042.D 8100_H2.M Sun Dec 28 11:35:54 2003

Continuing Calibration Summary

Job Number: F21252
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GIJ922-CC922
Lab FileID: IJ19086.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\1223PAH\IJ19086.D\FID1B.CH Vial: 20
Signal #2 : C:\HPCHEM\1\DATA\1223PAH\IJ19086.D\FID2A.CH
Acq On : 24 Dec 2003 11:04 am Operator: sarahm
Sample : cc922-20 Inst : FID 1
Misc : op9429,gij922,1000,,,1,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : C:\HPCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title : PAH's BY EPA 610 OR 8100
Last Update : Tue Dec 23 14:17:24 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Naphthalene	20.000	20.356	-1.8	101	0.00
2		2-Methyl Naphthalene	20.000	20.200	-1.0	101	0.00
3		1-Methyl Naphthalene	20.000	20.265	-1.3	101	0.00
4	S	2-Fluorobiphenyl	20.000	20.130	-0.6	101	0.00
5		Acenaphthylene	20.000	20.306	-1.5	101	0.00
6		Acenaphthene	20.000	20.325	-1.6	101	0.00
7		Fluorene	20.000	20.325	-1.6	101	0.00
8		Phenanthrene	20.000	20.375	-1.9	101	0.00
9		Anthracene	20.000	20.436	-2.2	102	0.00
10	S	O-Terphenyl	20.000	20.399	-2.0	102	0.00
11		Fluoranthene	20.000	20.368	-1.8	102	0.00
12		Pyrene	20.000	20.444	-2.2	101	0.00
13		Benzo(a)Anthracene	20.000	20.313	-1.6	101	0.00
14		Chrysene	20.000	20.391	-2.0	102	0.00
15		Benzo(b)Fluoranthene	20.000	20.295	-1.5	102	0.00
16		Benzo(k)Fluoranthene	20.000	20.375	-1.9	101	0.00
17		Benzo(a) Pyrene	20.000	20.327	-1.6	102	0.00
18		Indeno(1,2,3-cd)pyrene	20.000	20.236	-1.2	101	0.00
19		Dibenzo(a,h)anthracene	20.000	20.490	-2.4	103	0.00
20		Benzo(g,h,i) Perylene	20.000	20.360	-1.8	102	0.00

Signal #2

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Naphthalene	20.000	20.240	-1.2	101	0.00
2		2-Methyl Naphthalene	20.000	20.171	-0.9	101	0.00
3		1-Methyl Naphthalene	20.000	20.185	-0.9	101	0.00
4	S	2-Fluorobiphenyl	20.000	20.219	-1.1	101	0.01
5		Acenaphthylene	20.000	20.216	-1.1	101	0.01
6		Acenaphthene	20.000	20.223	-1.1	101	0.01
7		Fluorene	20.000	20.234	-1.2	101	0.01
8		Phenanthrene	20.000	20.166	-0.8	101	0.01
9		Anthracene	20.000	20.212	-1.1	101	0.00
10	S	O-Terphenyl	20.000	20.277	-1.4	101	0.01
11		Fluoranthene	20.000	20.214	-1.1	101	0.01
12		Pyrene	20.000	20.230	-1.2	101	0.01
13		Benzo(a)Anthracene	20.000	20.203	-1.0	101	0.01
14		Chrysene	20.000	20.271	-1.4	102	0.01
15		Benzo(b)Fluoranthene	20.000	20.174	-0.9	101	0.01

Continuing Calibration Summary

Job Number: F21252
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GIJ922-CC922
Lab FileID: IJ19086.D

16	Benzo(k)Fluoranthene	20.000	20.170	-0.9	100	0.00
17	Benzo(a) Pyrene	20.000	20.208	-1.0	101	0.01
18	Indeno(1,2,3-cd)pyrene	20.000	20.035	-0.2	101	0.00
19	Dibenzo(a,h)anthracene	20.000	20.362	-1.8	101	0.00
20	Benzo(g,h,i) Perylene	20.000	20.133	-0.7	100	0.00

Average % D = 1.4

(#) = Out of Range SPCC's out = 0 CCC's out = 0
IJ19041.D 8100_H2.M Sun Dec 28 10:27:01 2003

Continuing Calibration Summary

Job Number: F21252
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GIJ922-CC922
Lab FileID: IJ19094.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\1223PAH\IJ19094.D\FID1B.CH Vial: 20
Signal #2 : C:\HPCHEM\1\DATA\1223PAH\IJ19094.D\FID2A.CH
Acq On : 24 Dec 2003 2:54 pm Operator: sarahm
Sample : cc922-20 Inst : FID 1
Misc : op9429,gij922,880,,,1,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : C:\HPCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title : PAH's BY EPA 610 OR 8100
Last Update : Tue Dec 23 14:17:24 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Naphthalene	20.000	20.522	-2.6	102	0.00
2		2-Methyl Naphthalene	20.000	20.395	-2.0	102	0.00
3		1-Methyl Naphthalene	20.000	20.454	-2.3	102	0.00
4	S	2-Fluorobiphenyl	20.000	20.350	-1.8	102	0.00
5		Acenaphthylene	20.000	20.501	-2.5	102	0.00
6		Acenaphthene	20.000	20.537	-2.7	103	0.00
7		Fluorene	20.000	20.553	-2.8	103	0.00
8		Phenanthrene	20.000	20.566	-2.8	102	0.00
9		Anthracene	20.000	20.623	-3.1	103	0.00
10	S	O-Terphenyl	20.000	20.549	-2.7	103	0.00
11		Fluoranthene	20.000	20.546	-2.7	103	0.00
12		Pyrene	20.000	20.645	-3.2	102	0.00
13		Benzo(a)Anthracene	20.000	20.556	-2.8	103	0.00
14		Chrysene	20.000	20.613	-3.1	103	0.00
15		Benzo(b)Fluoranthene	20.000	20.483	-2.4	103	0.00
16		Benzo(k)Fluoranthene	20.000	20.758	-3.8	103	0.00
17		Benzo(a) Pyrene	20.000	20.595	-3.0	103	0.00
18		Indeno(1,2,3-cd)pyrene	20.000	20.378	-1.9	102	0.00
19		Dibenzo(a,h)anthracene	20.000	20.694	-3.5	104	0.00
20		Benzo(g,h,i) Perylene	20.000	20.508	-2.5	103	-0.01

Signal #2

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Naphthalene	20.000	20.485	-2.4	102	0.00
2		2-Methyl Naphthalene	20.000	20.424	-2.1	102	0.00
3		1-Methyl Naphthalene	20.000	20.406	-2.0	102	0.00
4	S	2-Fluorobiphenyl	20.000	20.457	-2.3	102	0.00
5		Acenaphthylene	20.000	20.429	-2.1	102	0.00
6		Acenaphthene	20.000	20.450	-2.2	102	0.00
7		Fluorene	20.000	20.422	-2.1	102	0.00
8		Phenanthrene	20.000	20.457	-2.3	102	0.00
9		Anthracene	20.000	20.362	-1.8	102	0.00
10	S	O-Terphenyl	20.000	20.493	-2.5	102	0.01
11		Fluoranthene	20.000	20.422	-2.1	102	0.00
12		Pyrene	20.000	20.449	-2.2	102	0.00
13		Benzo(a)Anthracene	20.000	20.466	-2.3	102	0.01
14		Chrysene	20.000	20.582	-2.9	103	0.01
15		Benzo(b)Fluoranthene	20.000	20.438	-2.2	103	0.00

Continuing Calibration Summary

Job Number: F21252
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GIJ922-CC922
Lab FileID: IJ19094.D

16	Benzo(k)Fluoranthene	20.000	20.392	-2.0	101	0.00
17	Benzo(a) Pyrene	20.000	20.471	-2.4	102	0.00
18	Indeno(1,2,3-cd)pyrene	20.000	20.189	-0.9	101	0.00
19	Dibenzo(a,h)anthracene	20.000	20.562	-2.8	102	0.00
20	Benzo(g,h,i) Perylene	20.000	20.274	-1.4	101	0.00

Average % D = 2.4

(#) = Out of Range SPCC's out = 0 CCC's out = 0
IJ19041.D 8100_H2.M Sun Dec 28 09:43:08 2003

Continuing Calibration Summary

Job Number: F21252 **Sample:** GIJ922-ECC922
Account: EEINCJX EEI **Lab FileID:** IJ19100.D
Project: CSFF MCAS New River

Evaluate Continuing Calibration Report

```
Signal #1 : C:\HPCHEM\1\DATA\1223PAH\IJ19100.D\FID1B.CH  Vial: 20
Signal #2 : C:\HPCHEM\1\DATA\1223PAH\IJ19100.D\FID2A.CH
Acq On    : 24 Dec 2003    5:46 pm                    Operator: sarahm
Sample    : ecc922-20                                 Inst    : FID 1
Misc      : op9429,gij922,880,,,1,4,water             Multiplr: 1.00
IntFile Signal #1: events.e     IntFile Signal #2: events2.e

Method       : C:\HPCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title        : PAH's BY EPA 610 OR 8100
Last Update  : Tue Dec 23 14:17:24 2003
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  15%     Max. Rel. Area : 200%
```

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Naphthalene	20.000	20.579	-2.9	102	0.00
2		2-Methyl Naphthalene	20.000	20.404	-2.0	102	0.00
3		1-Methyl Naphthalene	20.000	20.490	-2.4	102	0.00
4	S	2-Fluorobiphenyl	20.000	20.353	-1.8	102	0.00
5		Acenaphthylene	20.000	20.565	-2.8	103	0.00
6		Acenaphthene	20.000	20.598	-3.0	103	0.00
7		Fluorene	20.000	20.612	-3.1	103	0.00
8		Phenanthrene	20.000	20.627	-3.1	102	0.00
9		Anthracene	20.000	20.686	-3.4	103	0.00
10	S	O-Terphenyl	20.000	20.629	-3.1	103	0.00
11		Fluoranthene	20.000	20.595	-3.0	103	0.00
12		Pyrene	20.000	20.680	-3.4	103	0.00
13		Benzo(a)Anthracene	20.000	20.540	-2.7	103	0.00
14		Chrysene	20.000	20.632	-3.2	103	0.00
15		Benzo(b)Fluoranthene	20.000	20.434	-2.2	103	0.00
16		Benzo(k)Fluoranthene	20.000	20.676	-3.4	103	0.00
17		Benzo(a) Pyrene	20.000	20.582	-2.9	103	0.00
18		Indeno(1,2,3-cd)pyrene	20.000	20.224	-1.1	101	0.00
19		Dibenzo(a,h)anthracene	20.000	20.564	-2.8	103	0.00
20		Benzo(g,h,i) Perylene	20.000	20.336	-1.7	102	-0.01

Signal #2

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Naphthalene	20.000	20.473	-2.4	102	0.00
2		2-Methyl Naphthalene	20.000	20.396	-2.0	102	0.00
3		1-Methyl Naphthalene	20.000	20.425	-2.1	102	0.00
4	S	2-Fluorobiphenyl	20.000	20.480	-2.4	102	0.00
5		Acenaphthylene	20.000	20.487	-2.4	102	0.00
6		Acenaphthene	20.000	20.474	-2.4	102	0.00
7		Fluorene	20.000	20.402	-2.0	102	0.00
8		Phenanthrene	20.000	20.400	-2.0	102	0.00
9		Anthracene	20.000	20.480	-2.4	102	0.00
10	S	O-Terphenyl	20.000	20.508	-2.5	103	0.00
11		Fluoranthene	20.000	20.423	-2.1	102	0.00
12		Pyrene	20.000	20.450	-2.2	102	0.00
13		Benzo(a)Anthracene	20.000	20.473	-2.4	102	0.00
14		Chrysene	20.000	20.611	-3.1	103	0.00
15		Benzo(b)Fluoranthene	20.000	20.385	-1.9	102	0.00

Continuing Calibration Summary

Job Number: F21252
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GIJ922-ECC922
Lab FileID: IJ19100.D

16	Benzo(k)Fluoranthene	20.000	20.418	-2.1	102	0.00
17	Benzo(a) Pyrene	20.000	20.421	-2.1	102	0.00
18	Indeno(1,2,3-cd)pyrene	20.000	20.006	-0.0	100	0.00
19	Dibenzo(a,h)anthracene	20.000	20.367	-1.8	101	0.00
20	Benzo(g,h,i) Perylene	20.000	20.000	0.0	100	0.00

Average % D = 2.4

(#) = Out of Range SPCC's out = 0 CCC's out = 0
IJ19041.D 8100_H2.M Sun Dec 28 09:43:10 2003

Southeast
ACCUTEST.
Laboratories

12/08/05

Technical Report for

EEI

CSFF MCAS New River

CTO 3

Accutest Job Number: F21298

Sampling Date: 12/19/03

Report to:

EEI

bmorris@eeimail.com

ATTN: Bill Morris

Total number of pages in report: 35

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Sections: 1 2 3 4

Table of Contents

-1-

Section 1: Sample Summary **3**
Section 2: Sample Results **4**
2.1: F21298-1: USTCSFF-122MW07 4
2.2: F21298-2: USTCSFF-122MW08 6
2.3: F21298-3: USTCSFF-122MW03 8
2.4: F21298-4: USTCSFF-122MW11 10
Section 3: Misc. Forms **12**
3.1: Chain of Custody 13
Section 4: GC Volatiles - QC Data Summaries **15**
4.1: Method Blank Summary 16
4.2: Blank Spike Summary 18
4.3: Matrix Spike/Matrix Spike Duplicate Summary 21
4.4: Surrogate Recovery Summaries 23
4.5: GC Surrogate Retention Time Summaries 25
4.6: Initial and Continuing Calibration Summaries 29

1

Sample Summary

EEI

Job No: F21298

CSFF MCAS New River
Project No: CTO 3

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
F21298-1	12/19/03	12:50	BM	12/20/03	AQ	Ground Water	USTCSFF-122MW07
F21298-2	12/19/03	13:40	BM	12/20/03	AQ	Ground Water	USTCSFF-122MW08
F21298-3	12/19/03	14:45	BM	12/20/03	AQ	Ground Water	USTCSFF-122MW03
F21298-4	12/19/03	12:45	BM	12/20/03	AQ	Ground Water	USTCSFF-122MW11

Report of Analysis

Client Sample ID:	USTCSFF-122MW07		
Lab Sample ID:	F21298-1	**Date Sampled:**	12/19/03
Matrix:	AQ - Ground Water	**Date Received:**	12/20/03
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	CD044346.D	1	12/31/03	BM	n/a	n/a	GCD1832
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	2.9	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	97%		70-123%
98-08-8	aaa-Trifluorotoluene	98%		73-122%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-122MW07		
Lab Sample ID:	F21298-1	**Date Sampled:**	12/19/03
Matrix:	AQ - Ground Water	**Date Received:**	12/20/03
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK01625.D	1	12/30/03	SKW	12/29/03	OP9467	GKK51
Run #2							

	Initial Volume	Final Volume
Run #1	36.7 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0095	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	97%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-122MW08		
Lab Sample ID:	F21298-2	**Date Sampled:**	12/19/03
Matrix:	AQ - Ground Water	**Date Received:**	12/20/03
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	CD044347.D	1	12/31/03	BM	n/a	n/a	GCD1832
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Diehlorobenzene	0.62	1.0	0.50	ug/l	J
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoverics	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	97%		70-123%
98-08-8	aaa-Trifluorotoluene	97%		73-122%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-122MW08		
Lab Sample ID:	F21298-2	**Date Sampled:**	12/19/03
Matrix:	AQ - Ground Water	**Date Received:**	12/20/03
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK01626.D	1	12/30/03	SKW	12/29/03	OP9467	GKK51
Run #2							

	Initial Volume	Final Volume
Run #1	37.9 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.018	0.0092	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	109%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exeeeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-122MW03		
Lab Sample ID:	F21298-3	**Date Sampled:**	12/19/03
Matrix:	AQ - Ground Water	**Date Received:**	12/20/03
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD044348.D	1	12/31/03	BM	n/a	n/a	GCD1832
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	97%		70-123%
98-08-8	aaa-Trifluorotoluene	97%		73-122%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Iudicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-122MW03		
Lab Sample ID:	F21298-3	**Date Sampled:**	12/19/03
Matrix:	AQ - Ground Water	**Date Received:**	12/20/03
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK01627.D	1	12/30/03	SKW	12/29/03	OP9467	GKK51
Run #2							

	Initial Volume	Final Volume
Run #1	38.3 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.018	0.0091	ug/l	

CAS No.	Surrogate Reeoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	105%		60-139%

ND = Not deteeted MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-122MW11		
Lab Sample ID:	F21298-4	**Date Sampled:**	12/19/03
Matrix:	AQ - Ground Water	**Date Received:**	12/20/03
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD044349.D	1	12/31/03	BM	n/a	n/a	GCD1832
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	97%		70-123%
98-08-8	aaa-Trifluorotoluene	97%		73-122%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-122MW11		
Lab Sample ID:	F21298-4	**Date Sampled:**	12/19/03
Matrix:	AQ - Ground Water	**Date Received:**	12/20/03
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK01628.D	1	12/30/03	SKW	12/29/03	OP9467	GKK51
Run #2							

	Initial Volume	Final Volume
Run #1	37.9 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.018	0.0092	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	105%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indieates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

CHAIN OF CUSTODY

ACCUTEST Laboratories

4405 VINELAND ROAD • SUITE C-15
ORLANDO, FL 32811
TEL: 407-425-6700 • FAX: 407-425-0707

ACCUTEST JOB #:
ACCUTEST QUOTE #: F21298

CLIENT INFORMATION

ENGINEERING & ENVIRONMENT
NAME: 824 Gumbranch Rd Suite 5
ADDRESS: Jacksonville NC 28540
CITY, STATE, ZIP:
SEND REPORT TO:
PHONE # Bill Morris 910-989-3214

FACILITY INFORMATION

CSFF
PROJECT NAME: MCAS NEW RIVER
LOCATION: CTO 3
PROJECT NO.
FAX # (910) 450-

ANALYTICAL INFORMATION

6020 / 5041

MATRIX CODES

DW - DRINKING WATER
GW - GROUND WATER
WW - WASTE WATER
SO - SOIL
SL - SLUDGE
OI - OIL
LIQ - OTHER LIQUID
SOL - OTHER SOLID

ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION DATE	COLLECTION TIME	SAMPLED BY:	MATRIX	# OF BOTTLES	PRESERVATION	6020 / 5041	LAB USE ONLY
1	USTCSFF-122MW07	12/19/03	1250	BM	GW	3		X	
2	USTCSFF-122MW08	12/19/03	1340	BM	GW	3		X	
3	USTCSFF-122MW03	12/19/03	1445	BM	GW	3		X	
4	USTCSFF-122MW11	12/19/03	1245	MM	GW	3		X	

DATA TURNAROUND INFORMATION

- [x] STANDARD — APPROVED BY:
- [ ] 48 HOUR RUSH
- [ ] 24 HOUR EMERGENCY
- [ ] OTHER

EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED

DATA DELIVERABLE INFORMATION

- [ ] STANDARD
- [ ] COMMERCIAL "B"
- [ ] DISK DELIVERABLE
- [ ] STATE FORMS
- [x] OTHER (SPECIFY) NEESA 0

COMMENTS/REMARKS

3 vials total for 6020 & EDB(504.1)

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESION, INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
1.	12/19/03 1555	1. FedEx 8434 9077 9121	2.	12/20/03 1035	Muna Mohammed
RELINQUISHED BY:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
3.		3.	4.		4.
RELINQUISHED BY:	DATE TIME:	RECEIVED BY:	SEAL #	PRESERVE WHERE APPLICABLE ☐	ON ICE ☐ TEMPERATURE 3.0 °C
5.		5.			

F21298: Chain of Custody
Page 1 of 2

ACCUTEST LABORATORIES SOUTHEAST SAMPLE RECEIPT CONFIRMATION

Accutest's Job Number: F21298

Client: Engineering + Enviro Project: CSFF

Date Received: 12/20/03 Time Received: 0930

of Coolers Received: 1 Cooler Temperatures: 3.0

Delivery Method: (FedEx) UPS Accutest Courier Greyhound Delivery Other

Air Bill Number:

Cooler Custody Seals Intact ?	(Yes)	No	
Chain of Custody Provided ?	(Yes)	No	
COC Match Bottle Label ID's ?	(Yes)	No	
Sample Labels Present on all bottles ?	(Yes)	No	
All Analyses Marked On COC ?	(Yes)	No	
Are All Bottles Intact ?	(Yes)	No	
Samples Preserved Correctly ?	(Yes)	No	
Correct Number of Containers Used ?	(Yes)	No	
Sufficient Sample Volume ?	(Yes)	No	
Trip Blank Provided ?	Yes	(No)	
Trip Blank on COC ?	Yes	(No)	
Trip Blank Intact ?	Yes	No	(N/A)
Trip Blank Matrix ?	Soil	Water	(N/A)
Number of Encores ?	0		
Number of Soil Field Kits ?	0		

Summary of Comments: Split the vials b/w 602 (2 vials) and EDB (1 vial.

Signature: Nura Mohammed Date: 12/20/03

ASBO/HW 05/11/03

F21298: Chain of Custody
Page 2 of 2

GC Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Reeovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: F21298
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GCD1832-MB	CD044343.D	1	12/31/03	BM	n/a	n/a	GCD1832

The QC reported here applies to the following samples: **Method:** EPA 601/602

F21298-1, F21298-2, F21298-3, F21298-4

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
352-33-0	1-Chloro-4-fluorobenzene	96%	70-123%
98-08-8	aaa-Trifluorotoluene	96%	73-122%

Method Blank Summary

Job Number: F21298
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP9467-MB	KK01614.D	1	12/29/03	SKW	12/29/03	OP9467	GKK51

The QC reported here applies to the following samples: **Method:** EPA 504.1

F21298-1, F21298-2, F21298-3, F21298-4

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.020	0.010	ug/l	

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	100%	60-139%

Blank Spike Summary

Job Number: F21298
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GCD1832-BS	CD044342.D	1	12/31/03	BM	n/a	n/a	GCD1832

The QC reported here applies to the following samples: **Method:** EPA 601/602

F21298-1, F21298-2, F21298-3, F21298-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	20	20.0	100	86-121
108-90-7	Chlorobenzene	20	19.3	97	81-119
95-50-1	1,2-Dichlorobenzene	20	19.3	97	75-120
541-73-1	1,3-Dichlorobenzene	20	19.6	98	77-121
106-46-7	1,4-Dichlorobenzene	20	19.3	97	75-122
100-41-4	Ethylbenzene	20	19.3	97	81-126
1634-04-4	Methyl Tert Butyl Ether	20	22.5	113	76-117
108-88-3	Toluene	20	20.0	100	82-123
1330-20-7	Xylenes (total)	60	58.7	98	82-125

CAS No.	Surrogate Recoveries	BSP	Limits
352-33-0	1-Chloro-4-fluorobenzene	99%	70-123%
98-08-8	aaa-Trifluorotoluene	100%	73-122%

Blank Spike Summary

Job Number: F21298
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP9467-BS	KK01612.D	1	12/29/03	SKW	12/29/03	OP9467	GKK51

The QC reported here applies to the following samples: **Method:** EPA 504.1

F21298-1, F21298-2, F21298-3, F21298-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
106-93-4	1,2-Dibromoethane	0.25	0.26	104	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	107%	60-139%

Blank Spike Summary

Job Number: F21298
Account: EEINCJX EE1
Project: CSFF MCAS New River

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP9467-BS2	KK01613.D	1	12/29/03	SKW	12/29/03	OP9467	GKK51

The QC reported here applies to the following samples: **Method:** EPA 504.1

F21298-1, F21298-2, F21298-3, F21298-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
106-93-4	1,2-Dibromoethane	0.25	0.25	100	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	102%	60-139%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F21298
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F21352-5MS	CD044356.D	1	12/31/03	BM	n/a	n/a	GCD1832
F21352-5MSD	CD044357.D	1	12/31/03	BM	n/a	n/a	GCD1832
F21352-5	CD044355.D	1	12/31/03	BM	n/a	n/a	GCD1832

The QC reported here applies to the following samples: **Method:** EPA 601/602

F21298-1, F21298-2, F21298-3, F21298-4

CAS No.	Compound	F21352-5 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND		20	19.4	97	19.2	96	1	77-125/6
108-90-7	Chlorobenzene	ND		20	18.6	93	18.2	91	2	78-120/8
95-50-1	1,2-Dichlorobenzene	ND		20	17.8	89	18.0	90	1	69-125/7
541-73-1	1,3-Dichlorobenzene	ND		20	18.4	92	18.3	92	1	71-126/7
106-46-7	1,4-Dichlorobenzene	ND		20	18.0	90	17.8	89	1	67-129/7
100-41-4	Ethylbenzene	ND		20	18.7	94	18.5	93	1	74-127/6
1634-04-4	Methyl Tert Butyl Ether	ND		20	20.0	100	20.5	103	2	66-127/9
108-88-3	Toluene	ND		20	19.1	96	19.0	95	1	77-124/5
1330-20-7	Xylenes (total)	ND		60	56.5	94	55.5	93	2	76-125/5

CAS No.	Surrogate Recoveries	MS	MSD	F21352-5	Limits
352-33-0	1-Chloro-4-fluorobenzene	100%	100%	95%	70-123%
98-08-8	aaa-Trifluorotoluene	103%	102%	98%	73-122%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F21298
Account: EEINCJX EEI
Projeet: CSFF MCAS New River

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytieal Batch
OP9467-MS	KK01616.D	1	12/29/03	SKW	12/29/03	OP9467	GKK51
OP9467-MSD	KK01617.D	1	12/29/03	SKW	12/29/03	OP9467	GKK51
F21330-1	KK01615.D	1	12/29/03	SKW	12/29/03	OP9467	GKK51

The QC reported here applies to the following samples: **Method:** EPA 504.1

F21298-1, F21298-2, F21298-3, F21298-4

CAS No.	Compound	F21330-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
106-93-4	1,2-Dibromoethane	ND		0.235	0.21	90	0.22	96	5	65-135/25

CAS No.	Surrogate Recoveries	MS	MSD	F21330-1	Limits
460-00-4	4-Bromofluorobenzene	100%	103%	103%	60-139%

Volatile Surrogate Recovery Summary

Job Number: F21298
Account: EEINCJX EEI
Project: CSFF MCAS New River

Method: EPA 601/602 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S2 [a]
F21298-1	CD044346.D	97.0	98.0
F21298-2	CD044347.D	97.0	97.0
F21298-3	CD044348.D	97.0	97.0
F21298-4	CD044349.D	97.0	97.0
F21352-5MS	CD044356.D	100.0	103.0
F21352-5MSD	CD044357.D	100.0	102.0
GCD1832-BS	CD044342.D	99.0	100.0
GCD1832-MB	CD044343.D	96.0	96.0

Surrogate Compounds	Recovery Limits
S1 = 1-Chloro-4-fluorobenzene	70-123%
S2 = aaa-Trifluorotoluene	73-122%

(a) Recovery from GC signal #2

Volatile Surrogate Recovery Summary

Job Number: F21298
Account: EEINCJX EEI
Project: CSFF MCAS New River

Method: EPA 504.1 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]
F21298-1	KK01625.D	97.0
F21298-2	KK01626.D	109.0
F21298-3	KK01627.D	105.0
F21298-4	KK01628.D	105.0
OP9467-BS	KK01612.D	107.0
OP9467-BS2	KK01613.D	102.0
OP9467-MB	KK01614.D	100.0
OP9467-MS	KK01616.D	100.0
OP9467-MSD	KK01617.D	103.0

Surrogate Compounds	Recovery Limits
S1 = 4-Bromofluorobenzene	60-139%

(a) Recovery from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F21298
Accouut: EEINCJX EEI
Projeet: CSFF MCAS New River

Check Std:	GCD1832-CC1831	**Injection Date:**	12/31/03
Lab File ID:	CD044352.D	**Injeetion Time:**	16:55
Instrument ID:	GCCD	**Method:**	EPA 601/602

	S1 [a] RT	S2 [a] RT
Check Std	8.76	5.36

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
ZZZZZZ	CD044353.D	12/31/03	17:19	8.75	5.35
ZZZZZZ	CD044354.D	12/31/03	17:44	8.75	5.35
F21352-5	CD044355.D	12/31/03	18:09	8.76	5.36
F21352-5MS	CD044356.D	12/31/03	18:33	8.76	5.37
F21352-5MSD	CD044357.D	12/31/03	18:57	8.75	5.36
ZZZZZZ	CD044358.D	12/31/03	19:22	8.75	5.36
ZZZZZZ	CD044359.D	12/31/03	19:47	8.75	5.36
ZZZZZZ	CD044360.D	12/31/03	20:12	8.76	5.36
ZZZZZZ	CD044361.D	12/31/03	20:36	8.75	5.36
ZZZZZZ	CD044362.D	12/31/03	21:01	8.76	5.36

Surrogate Compounds

S1 = 1-Chloro-4-fluorobenzene
S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F21298
Account: EEINCJX EEI
Project: CSFF MCAS New River

Check Std:	GKK51-CC51	**Injection Date:**	12/29/03
Lab File ID:	KK01609.D	**Injectiou Time:**	19:43
Instrument ID:	GCKK	**Method:**	EPA 504.1

	S1 [a] RT
Cheek Std	6.70

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT
OP9468-MS	KK01610.D	12/29/03	20:03	6.70
OP9468-MSD	KK01611.D	12/29/03	20:22	6.70
OP9467-BS	KK01612.D	12/29/03	20:42	6.70
OP9467-BS2	KK01613.D	12/29/03	21:02	6.70
OP9467-MB	KK01614.D	12/29/03	21:22	6.70
F21330-1	KK01615.D	12/29/03	21:42	6.70
OP9467-MS	KK01616.D	12/29/03	22:02	6.70
OP9467-MSD	KK01617.D	12/29/03	22:21	6.70
ZZZZZZ	KK01618.D	12/29/03	22:41	6.70
ZZZZZZ	KK01619.D	12/29/03	23:01	6.70

Surrogate Compounds

S1 = 4-Bromofluorobenzene

(a) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F21298
Account: EEINCJX EEI
Project: CSFF MCAS New River

Check Std:	GKK51-CC51	**Injection Date:**	12/29/03
Lab File ID:	KK01620.D	**Injection Time:**	23:21
Instrument ID:	GCKK	**Method:**	EPA 504.1

	S1 [a] RT	S1 [b] RT
Check Std	6.96	6.70

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
ZZZZZZ	KK01621.D	12/29/03	23:41		6.70
ZZZZZZ	KK01622.D	12/30/03	00:01		6.70
ZZZZZZ	KK01623.D	12/30/03	00:21		6.70
ZZZZZZ	KK01624.D	12/30/03	00:40		6.70
F21298-1	KK01625.D	12/30/03	01:00		6.70
F21298-2	KK01626.D	12/30/03	01:20		6.70
F21298-3	KK01627.D	12/30/03	01:40		6.70
F21298-4	KK01628.D	12/30/03	02:00		6.70
GKK51-ECC51	KK01629.D	12/30/03	02:20	6.96	6.70

Surrogate Compounds

S1 = 4-Bromofluorobenzene

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F21298
Account: EEINCJX EE1
Project: CSFF MCAS New River

Check Std:	GCD1831-ICC1831	**Injection Date:**	12/31/03
Lab File ID:	CD044338.D	**Injection Time:**	10:47
Instrument ID:	GCCD	**Method:**	EPA 601/602

	S1 [a] RT	S2 [a] RT
Check Std	8.76	5.36

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
GCD1831-BS	CD044342.D	12/31/03	12:25	8.77	5.36
GCD1832-BS	CD044342.D	12/31/03	12:25	8.77	5.36
GCD1831-MB	CD044343.D	12/31/03	13:03	8.76	5.36
GCD1832-MB	CD044343.D	12/31/03	13:03	8.76	5.36
ZZZZZZ	CD044344.D	12/31/03	13:39	8.76	5.36
ZZZZZZ	CD044345.D	12/31/03	14:03	8.76	5.36
F21298-1	CD044346.D	12/31/03	14:28	8.75	5.35
F21298-2	CD044347.D	12/31/03	14:52	8.75	5.36
F21298-3	CD044348.D	12/31/03	15:17	8.75	5.36
F21298-4	CD044349.D	12/31/03	15:41	8.76	5.36
ZZZZZZ	CD044350.D	12/31/03	16:06	8.76	5.36
ZZZZZZ	CD044351.D	12/31/03	16:30	8.76	5.35

Surrogate Compounds

S1 = 1-Chloro-4-fluorobenzene
S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #2

Initial Calibration Summary

Job Number: F21298
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GCD1831-ICC1831
Lab FileID: CD044338.D

Response Factor Report VOA2

Method : C:\HPCHEM\2\METHODS\GCCD1231.M (Chemstation Integrator)
Title : EPA 602/8021B
Last Update : Wed Dec 31 12:23:05 2003
Response via : Initial Calibration

Calibration Files
1 =CD044336.D 2 =CD044337.D 3 =CD044338.D
4 =CD044339.D 5 =CD044340.D 6 =CD044341.D

	Compound	1	2	3	4	5	6	Avg		%RSD
1)	Methyl tert Butyl E	1.122	1.172	1.225	1.185	1.366	1.156	1.204	E3	7.16
2)	Di-Isopropyl ether	2.102	2.226	2.284	2.244	2.303	2.247	2.234	E3	3.16
3)	BENZENE	4.949	5.800	5.784	5.788	5.881	5.813	5.669	E3	6.25
4) S	a,a,a-TFT(S)	1.571	1.633	1.681	1.705	1.705	1.665	1.660	E3	3.08
5)	TOLUENE	5.105	5.973	5.809	5.833	5.921	5.815	5.743	E3	5.56
6) S	1-Chloro-4-Fluorobe	2.930	2.975	3.048	3.136	3.119	3.112	3.053	E3	2.77
7)	CHLOROBENZENE	7.175	6.728	6.304	6.309	6.415	6.363	6.549	E3	5.26
8)	ETHYLBENZENE		5.886	5.402	5.350	5.413	5.308	5.472	E3	4.30
9)	m,p-XYLENE	5.346	5.950	5.713	5.792	5.845	5.743	5.732	E3	3.60
10)	o-XYLENE	4.984	5.543	5.363	5.353	5.434	5.346	5.337	E3	3.53
11)	1,3-DICHLOROBENZENE	5.225	5.581	5.480	5.521	5.620	5.281	5.452	E3	2.97
12)	1,4-DICHLOROBENZENE	5.670	5.856	5.666	5.747	5.924	5.849	5.786	E3	1.85
13)	1,2-DICHLOROBENZENE	4.440	4.624	4.447	4.511	4.557	4.480	4.510	E3	1.56

Signal #2 Calibration Files
1 =CD044336.D 2 =CD044337.D 3 =CD044338.D
4 =CD044339.D 5 =CD044340.D 6 =CD044341.D

	Compound	1	2	3	4	5	6	Avg		%RSD
1)	Methyl tert Butyl E	7.942	7.653	7.362	7.136	8.822	7.451	7.728	E2	7.79
2)	Di-Isopropyl ether	1.403	1.516	1.498	1.478	1.509	1.491	1.483	E3	2.77
3)	BENZENE	3.687	4.141	4.053	4.036	4.092	4.043	4.009	E3	4.05
4) S	a,a,a-TFT(S)	1.055	1.070	1.087	1.098	1.147	1.137	1.099	E3	3.35
5)	TOLUENE	3.841	4.250	4.195	4.187	4.280	4.212	4.161	E3	3.86
6) S	1-Chloro-4-Fluorobe	2.014	2.019	2.082	2.122	2.152	2.179	2.095	E3	3.28
7)	CHLOROBENZENE	4.742	4.749	4.599	4.633	4.711	4.707	4.690	E3	1.29
8)	ETHYLBENZENE	3.681	3.994	3.927	3.987	4.030	4.000	3.936	E3	3.30
9)	m,p-XYLENE	3.866	4.302	4.156	4.231	4.275	4.256	4.181	E3	3.88
10)	o-XYLENE	3.666	3.980	3.902	3.939	3.976	3.954	3.903	E3	3.06
11)	1,3-DICHLOROBENZENE	3.967	4.147	4.109	4.206	4.317	4.304	4.175	E3	3.15
12)	1,4-DICHLOROBENZENE	4.269	4.392	4.324	4.390	4.528	4.546	4.408	E3	2.49
13)	1,2-DICHLOROBENZENE	3.475	3.441	3.395	3.455	3.517	3.525	3.468	E3	1.41

Average % RSD = 3.6

(#) = Out of Range

GCCD1231.M Fri Jan 02 08:40:24 2004 QRXY

Continuing Calibration Summary

Job Number: F21298
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GCD1832-CC1831
Lab FileID: CD044352.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\123103\CD044352.D\FID1A.CH Vial: 17
Signal #2 : C:\HPCHEM\2\DATA\123103\CD044352.D\FID2B.CH
Acq On : 31 Dec 2003 4:55 pm Operator: BarbaraM
Sample : CC1831-20 Inst : VOA2
Misc : gc3076,gcd1832,,,,,1 Multiplr: 1.00
IntFile Signal #1: PID.E IntFile Signal #2: FID.E

Method : C:\HPCHEM\2\METHODS\GCCD1231.M (Chemstation Integrator)
Title : EPA 602/8021B
Last Update : Wed Dec 31 12:23:05 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	20.000	21.795	-9.0	107	0.00
2		Di-Isopropyl ether	20.000	19.156	4.2	94	0.00
3		BENZENE	20.000	19.707	1.5	97	0.00
4	S	a,a,a-TFT(S)	20.000	19.627	1.9	97	0.00
5		TOLUENE	20.000	20.233	-1.2	100	0.00
6	S	1-Chloro-4-Fluorobenzene	20.000	20.109	-0.5	101	0.00
7		CHLOROBENZENE	20.000	19.640	1.8	102	0.00
8		ETHYLBENZENE	20.000	20.049	-0.2	102	0.00
9		m,p-XYLENE	40.000	41.199	-3.0	103	0.00
10		o-XYLENE	20.000	20.418	-2.1	102	-0.01
11		1,3-DICHLOROBENZENE	20.000	20.425	-2.1	102	-0.02
12		1,4-DICHLOROBENZENE	20.000	20.042	-0.2	102	-0.02
13		1,2-DICHLOROBENZENE	20.000	19.883	0.6	101	-0.02

Signal #2

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	20.000	24.421	-22.1#	128	0.02
2		Di-Isopropyl ether	20.000	21.040	-5.2	104	0.00
3		BENZENE	20.000	20.609	-3.0	102	0.00
4	S	a,a,a-TFT(S)	20.000	20.168	-0.8	102	0.00
5		TOLUENE	20.000	20.629	-3.1	102	0.00
6	S	1-Chloro-4-Fluorobenzene	20.000	20.149	-0.7	101	0.00
7		CHLOROBENZENE	20.000	20.215	-1.1	103	0.00
8		ETHYLBENZENE	20.000	20.469	-2.3	103	0.00
9		m,p-XYLENE	40.000	40.791	-2.0	103	0.00
10		o-XYLENE	20.000	20.499	-2.5	103	0.00
11		1,3-DICHLOROBENZENE	20.000	20.264	-1.3	103	-0.02
12		1,4-DICHLOROBENZENE	20.000	20.077	-0.4	102	-0.02
13		1,2-DICHLOROBENZENE	20.000	19.896	0.5	102	-0.02

Average % D = 2.8

(#) = Out of Range SPCC's out = 0 CCC's out = 0
CD044338.D GCCD1231.M Fri Jan 02 08:39:03 2004 QRXY

Continuing Calibration Summary

Job Number: F21298 **Sample:** GCD1831-CC1831
Account: EEINCJX EEI **Lab FileID:** CD044363.D
Project: CSFF MCAS New River

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\123103\CD044363.D\FID1A.CH Vial: 27
Signal #2 : C:\HPCHEM\2\DATA\123103\CD044363.D\FID2B.CH
Acq On : 31 Dec 2003 9:26 pm Operator: BarbaraM
Sample : CC1831-20 Inst : VOA2
Misc : gc3077,gcd1831,,,,,1 MultiplIr: 1.00
IntFile Signal #1: PID.E IntFile Signal #2: FID.E

Method : C:\HPCHEM\2\METHODS\GCCD1231.M (Chemstation Integrator)
Title : EPA 602/8021B
Last Update : Wed Dec 31 12:23:05 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	20.000	22.415	-12.1	110	0.00
2		Di-Isopropyl ether	20.000	20.565	-2.8	101	0.00
3		BENZENE	20.000	20.769	-3.8	102	0.00
4	S	a,a,a-TFT(S)	20.000	20.498	-2.5	101	0.00
5		TOLUENE	20.000	20.710	-3.6	102	0.00
6	S	1-Chloro-4-Fluorobenzene	20.000	20.322	-1.6	102	0.00
7		CHLOROBENZENE	20.000	19.556	2.2	102	0.00
8		ETHYLBENZENE	20.000	20.074	-0.4	102	0.00
9		m,p-XYLENE	40.000	40.605	-1.5	102	0.00
10		o-XYLENE	20.000	20.431	-2.2	102	0.00
11		1,3-DICHLOROBENZENE	20.000	20.206	-1.0	101	-0.01
12		1,4-DICHLOROBENZENE	20.000	19.750	1.3	101	-0.01
13		1,2-DICHLOROBENZENE	20.000	20.091	-0.5	102	-0.01

Signal #2

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	20.000	21.668	-8.3	114	0.01
2		Di-Isopropyl ether	20.000	20.417	-2.1	101	0.00
3		BENZENE	20.000	20.335	-1.7	101	0.00
4	S	a,a,a-TFT(S)	20.000	19.933	0.3	101	0.00
5		TOLUENE	20.000	20.292	-1.5	101	0.00
6	S	1-Chloro-4-Fluorobenzene	20.000	19.969	0.2	100	0.00
7		CHLOROBENZENE	20.000	19.740	1.3	101	0.00
8		ETHYLBENZENE	20.000	20.380	-1.9	102	0.00
9		m,p-XYLENE	40.000	40.319	-0.8	101	0.00
10		o-XYLENE	20.000	20.177	-0.9	101	0.00
11		1,3-DICHLOROBENZENE	20.000	19.876	0.6	101	0.00
12		1,4-DICHLOROBENZENE	20.000	19.662	1.7	100	-0.01
13		1,2-DICHLOROBENZENE	20.000	19.993	0.0	102	0.00

Average % D = 2.2

(#) = Out of Range SPCC's out = 0 CCC's out = 0
CD044338.D GCCD1231.M Fri Jan 02 08:39:04 2004 QRXY

Initial Calibration Summary

Job Number: F21298
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GKK51-ICC51
Lab FileID: KK01583.D

Response Factor Report GC-KK-LL

Method : C:\MSDCHEM\1\METHODS\504_1.M (Chemstation Integrator)
Title : EDB/DBCP by EPA 504.1 or SW846 8011
Last Update : Mon Dec 29 12:14:46 2003
Response via : Initial Calibration

Calibration Files
.125 =KK01582.D .250 =KK01583.D .500 =KK01584.D
0.75 =KK01585.D 1.0 =KK01586.D

	Compound	.125	.250	.500	0.75	1.0	Avg		%RSD
1)	1,2-Dibromoethane	4.918	5.266	4.676	4.301	4.450	4.722	E4	8.12
2) S	4-Bromofluorobenzene	3.218	3.296	2.989	2.740	2.705	2.990	E3	8.99
3)	1,2-Dibromo-3-chlorop	0.873	0.916	0.976	0.955	1.010	0.946	E5	5.60
Signal #2									
1)	1,2-Dibromoethane	3.919	4.088	3.713	3.303	3.431	3.691	E4	8.86
2) S	4-Bromofluorobenzene	4.245	4.180	3.942	3.604	3.663	3.927	E3	7.42
3)	1,2-Dibromo-3-chlorop	7.383	7.612	7.871	7.704	8.150	7.744	E4	3.71

(#) = Out of Range

504_1.M Tue Dec 30 07:41:43 2003

Continuing Calibration Summary

Job Number: F21298
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GKK51-CC51
Lab FileID: KK01609.D

Evaluate Continuing Calibration Report

Signal #1 : C:\MSDCHEM\1\DATA\1229EDB\KK01609.D\ECD1A.CH Vial: 30
Signal #2 : C:\MSDCHEM\1\DATA\1229EDB\KK01609.D\ECD2B.CH
Acq On : 12-29-03 07:43:15 PM Operator: stephw
Sample : cc51-0.50 Inst : GC-KK-LL
Misc : op9468,gkk51,35,,,2,1,water MultiplR: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\MSDCHEM\1\METHODS\504_1.M (Chemstation Integrator)
Title : EDB/DBCP by EPA 504.1 or SW846 8011
Last Update : Mon Dec 29 12:14:46 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
1	1,2-Dibromoethane	0.500	0.435	13.0	88	0.00
2 S	4-Bromofluorobenzene	4.000	3.755	6.1	94	0.00
3	1,2-Dibromo-3-chloropropane	0.500	0.492	1.6	95	0.00
Signal #2						
1	1,2-Dibromoethane	0.500	0.437	12.6	87	0.00
2 S	4-Bromofluorobenzene	4.000	3.736	6.6	93	0.00
3	1,2-Dibromo-3-chloropropa	0.500	0.493	1.4	97	0.00

Evaluate Continuing Calibration Report - Not Founds

Signal #1 : C:\MSDCHEM\1\DATA\1229ED8\KK01609.D\ECD1A.CH Vial: 30
Signal #2 : C:\MSDCHEM\1\DATA\1229EDB\KK01609.D\ECD2B.CH
Acq On : 12-29-03 07:43:15 PM Operator: stephw
Sample : cc51-0.50 Inst : GC-KK-LL
Misc : op9468,gkk51,35,,,2,1,water MultiplR: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\MSDCHEM\1\METHODS\504_1.M (Chemstation Integrator)
Title : EDB/D8CP by EPA 504.1 or SW846 8011
Last Update : Mon Dec 29 12:14:46 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
Signal #2						

(#) = Out of Range SPCC's out = 0 CCC's out = 0
KK01584.D 504_1.M Tue Dec 30 07:41:28 2003

Continuing Calibration Summary

Job Number: F21298 **Sample:** GKK51-CC51
Account: EEINCJX EEI **Lab FileID:** KK01620.D
Project: CSFF MCAS New River

Evaluate Continuing Calibration Report

Signal #1 : C:\MSDCHEM\1\DATA\1229EDB\KK01620.D\ECD1A.CH Vial: 30
Signal #2 : C:\MSDCHEM\1\DATA\1229EDB\KK01620.D\ECD2B.CH
Acq On : 29 Dec 2003 11:21 pm Operator: stephw
Sample : cc51-0.50 Inst : GC-KK-LL
Misc : op9467,gkk51,35,,,2,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\MSDCHEM\1\METHODS\504_1.M (Chemstation Integrator)
Title : ED8/DBCP by EPA 504.1 or SW846 8011
Last Update : Mon Dec 29 12:14:46 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
1	1,2-Dibromoethane	0.500	0.455	9.0	92	0.00
2 S	4-Bromofluorobenzene	4.000	3.774	5.6	94	0.00
3	1,2-Dibromo-3-chloropropane	0.500	0.480	4.0	93	0.00
Signal #2						
1	1,2-Dibromoethane	0.500	0.449	10.2	89	0.00
2 S	4-Bromofluorobenzene	4.000	3.661	8.5	91	0.00
3	1,2-Dibromo-3-chloropropa	0.500	0.471	5.8	93	0.00

Evaluate Continuing Calibration Report - Not Founds

Signal #1 : C:\MSDCHEM\1\DATA\1229EDB\KK01620.D\ECD1A.CH Vial: 30
Signal #2 : C:\MSDCHEM\1\DATA\1229EDB\KK01620.D\ECD2B.CH
Acq On : 29 Dec 2003 11:21 pm Operator: stephw
Sample : cc51-0.50 Inst : GC-KK-LL
Misc : op9467,gkk51,35,,,2,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\MSDCHEM\1\METHODS\504_1.M (Chemstation Integrator)
Title : EDB/D8CP by EPA 504.1 or SW846 8011
Last Update : Mon Dec 29 12:14:46 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
Signal #2						

(#) = Out of Range SPCC's out = 0 CCC's out = 0
KK01584.D 504_1.M Tue Dec 30 07:41:28 2003

Continuing Calibration Summary

Job Number: F21298
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GKK51-ECC51
Lab FileID: KK01629.D

Evaluate Continuing Calibration Report

```
Signal #1 : C:\MSDCHEM\1\DATA\1229EDB\KK01629.D\ECD1A.CH Vial: 20
Signal #2 : C:\MSDCHEM\1\DATA\1229EDB\KK01629.D\ECD2B.CH
Acq On    : 12-30-03 02:20:14 AM                    Operator: stephw
Sample    : ecc51-0.25                              Inst    : GC-KK-LL
Misc      : op9467,gkk51,35,,,2,1,water             Multiplr: 1.00
IntFile Signal #1: EVENTS.E     IntFile Signal #2: EVENTS2.E

Method       : C:\MSDCHEM\1\METHODS\504_1.M (Chemstation Integrator)
Title        : EDB/DBCP by EPA 504.1 or SW846 8011
Last Update  : Mon Dec 29 12:14:46 2003
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
1	1,2-Dibromoethane	0.250	0.236	5.6	85	0.00
2 S	4-Bromofluorobenzene	2.000	2.059	-3.0	93	0.00
3	1,2-Dibromo-3-chloropropane	0.250	0.236	5.6	97	0.00
Signal #2						
1	1,2-Dibromoethane	0.250	0.236	5.6	85	0.00
2 S	4-Bromofluorobenzene	2.000	2.046	-2.3	96	0.00
3	1,2-Dibromo-3-chloropropa	0.250	0.239	4.4	97	0.00

Evaluate Continuing Calibration Report - Not Founds

```
Signal #1 : C:\MSDCHEM\1\DATA\1229EDB\KK01629.D\ECD1A.CH Vial: 20
Signal #2 : C:\MSDCHEM\1\DATA\1229EDB\KK01629.D\ECD2B.CH
Acq On    : 12-30-03 02:20:14 AM                    Operator: stephw
Sample    : ecc51-0.25                              Inst    : GC-KK-LL
Misc      : op9467,gkk51,35,,,2,1,water             Multiplr: 1.00
IntFile Signal #1: EVENTS.E     IntFile Signal #2: EVENTS2.E

Method       : C:\MSDCHEM\1\METHODS\504_1.M (Chemstation Integrator)
Title        : EDB/DBCP by EPA 504.1 or SW846 8011
Last Update  : Mon Dec 29 12:14:46 2003
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
Signal #2						

```
  (#) = Out of Range              SPCC's out = 0  CCC's out = 0
   KK01583.D  504_1.M          Tue Dec 30 08:36:53 2003
```

Southeast
ACCUTEST.
Laboratories

12/08/05

Technical Report for

EEI

Camp Lejeune-Campbell St. Fuel Farm

844271

Accutest Job Number: F21333

Sampling Date: 12/20/03

Report to:

EEI

bmorris@eeimail.com

ATTN: Bill Morris

Total number of pages in report: 72

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Sections: 1 2 3 4 5 6 7

Table of Contents

-1-

Section 1: Sample Summary 3
Section 2: Case Narrative/Conformance Summary 4
Section 3: Sample Results 5
3.1: F21333-1: CSFF-EFF-003 5
3.2: F21333-2: RWC-1 8
3.3: F21333-3: RWB-1 9
3.4: F21333-4: RWB-3 10
3.5: F21333-5: RWB-3D 11
3.6: F21333-6: TRIP BLANK 12
Section 4: Misc. Forms 13
4.1: Chain of Custody 14
Section 5: GC Volatiles - QC Data Summaries 16
5.1: Method Blank Summary 17
5.2: Blank Spike Summary 20
5.3: Matrix Spike/Matrix Spike Duplicate Summary 23
5.4: Surrogate Recovery Summaries 26
5.5: GC Surrogate Retention Time Summaries 27
5.6: Initial and Continuing Calibration Summaries 32
Section 6: Metals Analysis - QC Data Summaries 41
6.1: Inst QC MA3627: As,Ba,Cd,Cr,Fe,Pb,Mn,Se 42
6.2: Prep QC MP6183: As,Ba,Cd,Cr,Fe,Pb,Mn,Se 63
6.3: IDL and Linear Range Summaries 68
Section 7: General Chemistry - QC Data Summaries 70
7.1: Method Blank and Spike Results Summary 71
7.2: Duplicate Results Summary 72

Sample Summary

EEI

Job No: F21333

Camp Lejeune-Campbell St. Fuel Farm
Project No: 844271

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
F21333-1	12/20/03	14:00	MM	12/23/03	AQ	Ground Water	CSFF-EFF-003
F21333-2	12/20/03	14:20	MM	12/23/03	AQ	Ground Water	RWC-1
F21333-3	12/20/03	14:30	MM	12/23/03	AQ	Ground Water	RWB-1
F21333-4	12/20/03	14:40	MM	12/23/03	AQ	Ground Water	RWB-3
F21333-5	12/20/03	14:40	MM	12/23/03	AQ	Ground Water	RWB-3D
F21333-6	12/20/03	00:00	MM	12/23/03	AQ	Trip Blank Water	TRIP BLANK

Accutest Laboratories Southeast, Inc.
Analytical Narrative

Client: EEI
Site: Camp Lejuene- Campbell St. Fuel Farm
Job No.: F21333
Report Date: January 13, 2004

6 samples were collected on December 20, 2003 and received on December 23, 2003. Samples were intact and properly cooled. A listing of the Laboratory Sample ID, Client Sample ID, and dates of collection are presented in the Results Summary section of this report.
We did not receive a 610-PAH bottle for sample RWC-1 (F21333-1). We only received an Oil and Grease bottle, therefore no analysis was performed. Bill Morris was contact via e-mail.
All method specified holding times, calibrations and quality control performance criteria were met, with the following notes.

VOCs, EPA 601/602:

- The MS/MSD associated with analytical batch GCD1828 each had one RPD above acceptance limits. The associated Blank Spike was within acceptance limits. Data not adversely affected.
- The MS/MSD associated with analytical batch GCD1834 each had various recoveries below acceptance limits. The associated Blank Spike was within acceptance limits. Data not adversely affected.

Metals, SW846 6010B/7000:

- The Duplicate associated with batch MP6183 had one RPD above acceptance limits. The Blank Spike was within limits. Data not adversely affected.
- The Serial Dilution associated with batch MP6183 had various RPDs above acceptance limits. The Blank Spike was within limits. Data not adversely affected.

General Chemistry, TDS:

- The Duplicate associated with batch GN13455 had one RPD below acceptance limits due to low duplicate and sample concentrations. Data not adversely affected.

Accutest Laboratories Southeast, Inc. certifies that this report meets the project requirements for analytical data produced for the samples as received at the Accutest Laboratories Southeast location as stated in the Analytical Task Order and the COC. In addition, Accutest Laboratories Southeast, Inc. certifies that data as reported meet the Data Quality Objectives for precision, accuracy and completeness as specified in the Accutest Laboratories Southeast, Inc. Quality Manual for other that conditions detailed above. It is recommended by Accutest Laboratories Southeast, Inc. that this report is to be used in its entirety. Accutest Laboratories Southeast, Inc. is not responsible for any assumptions of data quality if partial data packages are used to interpret data. The Accutest Laboratories Southeast, Inc. Laboratory Director as verified by the signature on the front page has authorized release of this report.

Narrative prepared by:

Date: January 13, 2004

Sue O. Bell, Project Manager (signature on file)

Report of Analysis

Client Sample ID:	CSFF-EFF-003		
Lab Sample ID:	F21333-1	**Date Sampled:**	12/20/03
Matrix:	AQ - Ground Water	**Date Received:**	12/23/03
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD044314.D	1	12/31/03	BM	n/a	n/a	GCD1828
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	96%		70-123%
98-08-8	aaa-Trifluorotoluene	96%		73-122%

ND = Not deteeted MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CSFF-EFF-003		
Lab Sample ID:	F21333-1	**Date Sampled:**	12/20/03
Matrix:	AQ - Ground Water	**Date Received:**	12/23/03
		Percent Solids:	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	< 10	10	ug/l	1	12/30/03	12/30/03	DM	SW846 6010B [1]	SW846 3010A [2]
Barium	< 200	200	ug/l	1	12/30/03	12/30/03	DM	SW846 6010B [1]	SW846 3010A [2]
Cadmium	< 5.0	5.0	ug/l	1	12/30/03	12/30/03	DM	SW846 6010B [1]	SW846 3010A [2]
Chromium	< 10	10	ug/l	1	12/30/03	12/30/03	DM	SW846 6010B [1]	SW846 3010A [2]
Iron	< 300	300	ug/l	1	12/30/03	12/30/03	DM	SW846 6010B [1]	SW846 3010A [2]
Lead	< 5.0	5.0	ug/l	1	12/30/03	12/30/03	DM	SW846 6010B [1]	SW846 3010A [2]
Manganese	< 15	15	ug/l	1	12/30/03	12/30/03	DM	SW846 6010B [1]	SW846 3010A [2]
Selenium	< 10	10	ug/l	1	12/30/03	12/30/03	DM	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA3627
(2) Prep QC Batch: MP6183

RL = Reporting Limit

Report of Analysis

Client Sample ID:	CSFF-EFF-003		
Lab Sample ID:	F21333-1	**Date Sampled:**	12/20/03
Matrix:	AQ - Ground Water	**Date Received:**	12/23/03
		Percent Solids:	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Hardness, Total as CaCO3	187	4.0	mg/l	1	01/02/04	DM	SW846 6010B/SM 2340B
Solids, Total Dissolved	203	10	mg/l	1	12/29/03	SJL	EPA 160.1
Solids, Total Suspended [a]	10.0	6.7	mg/l	1	12/24/03 14:15	LE	EPA 160.2

(a) Limited volume, 60 ml of sample used.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	RWC-1		
Lab Sample ID:	F21333-2	**Date Sampled:**	12/20/03
Matrix:	AQ - Ground Water	**Date Received:**	12/23/03
Method:	EPA 601/602	**Pereent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Bateb	Analytical Batch
Run #1	CD044315.D	1	12/31/03	BM	n/a	n/a	GCD1828
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Rnn# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	94%		70-123%
98-08-8	aaa-Trifluorotoluene	95%		73-122%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indieates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RWB-1		
Lab Sample ID:	F21333-3	**Date Sampled:**	12/20/03
Matrix:	AQ - Ground Water	**Date Received:**	12/23/03
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	CD044344.D	1	12/31/03	BM	n/a	n/a	GCD1832
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Pnrgeable Aromatics, Full List

CAS No.	Componnd	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	21.4	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	100%		70-123%
98-08-8	aaa-Trifluorotoluene	99%		73-122%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RWB-3		
Lab Sample ID:	F21333-4	**Date Sampled:**	12/20/03
Matrix:	AQ - Ground Water	**Date Received:**	12/23/03
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	CD044345.D	5	12/31/03	BM	n/a	n/a	GCD1832
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	188	5.0	2.5	ug/l	
108-90-7	Chlorobenzene	ND	5.0	2.5	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.0	2.5	ug/l	
541-73-1	1,3-Dichlorobenzene	2.8	5.0	2.5	ug/l	J
106-46-7	1,4-Dichlorobenzene	ND	5.0	2.5	ug/l	
100-41-4	Ethylbenzene	49.5	5.0	2.5	ug/l	
1634-04-4	Methyl Tert Butyl Ether	38.8	5.0	2.5	ug/l	
108-88-3	Toluene	122	5.0	2.5	ug/l	
1330-20-7	Xylenes (total)	194	15	5.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	104%		70-123%
98-08-8	aaa-Trifluorotoluene	104%		73-122%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indieates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RWB-3D		
Lab Sample ID:	F21333-5	**Date Sampled:**	12/20/03
Matrix:	AQ - Ground Water	**Date Received:**	12/23/03
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD044350.D	1	12/31/03	BM	n/a	n/a	GCD1832
Run #2 [a]	CD044397.D	5	01/02/04	BM	n/a	n/a	GCD1834

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	197 [b]	5.0	2.5	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Diehlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Diehlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	49.6	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	40.5	1.0	0.50	ug/l	
108-88-3	Toluene	127 [b]	5.0	2.5	ug/l	
1330-20-7	Xylenes (total)	199	3.0	1.0	ug/l	

CAS No.	Surrogate Rccoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	112%	102%	70-123%
98-08-8	aaa-Trifluorotoluene	112%	101%	73-122%

(a) All hits confirmed by dual column analysis.
(b) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicatcs value exceeds calibration rangc
J = Indicates an estimated valuc
B = Indicates analyte found in associated method blank
N = Indicates presumptive cvidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	F21333-6	**Date Sampled:**	12/20/03
Matrix:	AQ - Trip Blank Water	**Date Reeeived:**	12/23/03
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD044351.D	1	12/31/03	BM	n/a	n/a	GCD1832
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Diehlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	97%		70-123%
98-08-8	aaa-Trifluorotoluene	97%		73-122%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

COC Number: CSFF-122003

F21333

CHAIN-OF-CUSTODY RECORD

Engineering & Environment Inc. - Piney Green Rd. Lot 203 - 910-539-5606

Receiving LAB: Accutest

Project Name	Project Location		
Campbell Street Fuel Farm	CAMP LEJEUNE, NC (New River Air Station)		
Project Number	**Contact**	**P.O. Number**	**Reviewed by**
	Bill Morris		
Client Rep	**Project Manager**		
US NAVY - LANTDIV	Mike Slade		

Item No.	Sample Number	Date	Time	Comp	Grab	Sample Description	Number of Containers	VOC 602	METALS 6010	TOTAL HARDNESS	TSS/TDS 160.1/160.2	SVOC 610	Analysis Desired
1	CSFF-EFF-003	12/20/03	14:00		X	System Effluent Sample	7	X	X	X	X	X	
2	RWC-1	12/20/03	14:20		X	RWC-1	3	X					
3	RWB-1	12/20/03	14:30		X	RWB-1	3	X					
4	RWB-3	12/20/03	14:40		X	RWB-3	3	X					
5	RWB-3D	12/20/03	14:40		X	RWB-3 DUP	3	X					
6	Trip Blank	12/20/03	—		X	Trip Blank	3	X					
7													
8													
9													
10													

Transfer Number	Item Number	Transfers Relinquished By	Transfers Accepted By	Date	Time	Remarks
1	1-6		FedEx 841731537663	12/22/03	16:00	
2		FedEx	Muramoammad	12/23/03	1080.	14 Day TAT
3						

3.0.

F21333: Chain of Custody
Page 1 of 2

ACCUTEST

F21333

ACCUTEST LABORATORIES SOUTHEAST SAMPLE RECEIPT CONFIRMATION

Accutest's Job Number: F21333

Client: Campbell street Fuel Project: Camp LEJEUNE

Date Received: 12-23-03 Time Received: 10:30

of Coolers Received: 1 Cooler Temperatures: 3.0

Delivery Method: (FedEx) UPS Accutest Courier Greyhound Delivery Other

Air Bill Number:

Cooler Custody Seals Intact ?	(Yes)	No	
Chain of Custody Provided ?	(Yes)	No	
COC Match Bottle Label ID's ?	(Yes)	No	
Sample Labels Present on all bottles ?	(Yes)	No	
All Analyses Marked On COC ?	(Yes)	No	
Are All Bottles Intact ?	(Yes)	No	
Samples Preserved Correctly ?	(Yes)	No	
Correct Number of Containers Used ?	(Yes)	No	
Sufficient Sample Volume ?	(Yes)	No	
Trip Blank Provided ?	(Yes)	No	
Trip Blank on COC ?	(Yes)	No	
Trip Blank Intact ?	(Yes)	No	N/A
Trip Blank Matrix ?	Soil	(Water)	N/A
Number of Encores ?	0		
Number of Soil Field Kits ?	0		

Summary of Comments: Did not receive a bottle for OID analysis instead received bottle for Oil & GE

Signature: Carla B Date: 12-23-03

Called Sue Bell

ASBO/HW 05/11/03

F21333: Chain of Custody
Page 2 of 2

GC Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: F21333
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GCD1828-MB	CD044293.D	1	12/30/03	BM	n/a	n/a	GCD1828

The QC reported here applies to the following samples: **Method:** EPA 601/602

F21333-1, F21333-2

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
352-33-0	1-Chloro-4-fluorobenzene	98%	70-123%
98-08-8	aaa-Trifluorotoluene	96%	73-122%

Method Blank Summary

Job Number: F21333
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GCD1832-MB	CD044343.D	1	12/31/03	BM	n/a	n/a	GCD1832

The QC reported here applies to the following samples: **Method:** EPA 601/602

F21333-3, F21333-4, F21333-5, F21333-6

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
352-33-0	1-Chloro-4-fluorobenzene	96%	70-123%
98-08-8	aaa-Trifluorotoluene	96%	73-122%

Method Blank Summary

Job Number: F21333
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GCD1834-MB	CD044396.D	1	01/02/04	BM	n/a	n/a	GCD1834

5.1 G

The QC reported here applies to tbe following samples: **Mcthod:** EPA 601/602

F21333-5

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries		Limits
352-33-0	1-Chloro-4-fluorobenzene	97%	70-123%
98-08-8	aaa-Trifluorotoluene	95%	73-122%

Blank Spike Summary

Job Number: F21333
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GCD1828-BS	CD044292.D	1	12/30/03	BM	n/a	n/a	GCD1828

The QC reported here applies to the following samples: **Method:** EPA 601/602

F21333-1, F21333-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	20	19.3	97	86-121
108-90-7	Chlorobenzene	20	18.9	95	81-119
95-50-1	1,2-Dichlorobenzene	20	19.4	97	75-120
541-73-1	1,3-Dichlorobenzene	20	19.7	99	77-121
106-46-7	1,4-Dichlorobenzene	20	19.2	96	75-122
100-41-4	Ethylbenzene	20	18.6	93	81-126
1634-04-4	Methyl Tert Butyl Ether	20	19.0	95	76-117
108-88-3	Toluene	20	19.1	96	82-123
1330-20-7	Xylenes (total)	60	57.2	95	82-125

CAS No.	Surrogate Recoveries	BSP	Limits
352-33-0	1-Chloro-4-fluorobenzene	100%	70-123%
98-08-8	aaa-Trifluorotoluene	99%	73-122%

Blank Spike Summary

Job Number: F21333
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GCD1832-BS	CD044342.D	1	12/31/03	BM	n/a	n/a	GCD1832

The QC reported here applies to the following samples: **Method:** EPA 601/602

F21333-3, F21333-4, F21333-5, F21333-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	20	20.0	100	86-121
108-90-7	Chlorobenzene	20	19.3	97	81-119
95-50-1	1,2-Dichlorobenzene	20	19.3	97	75-120
541-73-1	1,3-Dichlorobenzene	20	19.6	98	77-121
106-46-7	1,4-Dichlorobenzene	20	19.3	97	75-122
100-41-4	Ethylbenzene	20	19.3	97	81-126
1634-04-4	Methyl Tert Butyl Ether	20	22.5	113	76-117
108-88-3	Toluene	20	20.0	100	82-123
1330-20-7	Xylenes (total)	60	58.7	98	82-125

CAS No.	Surrogate Recoveries	BSP	Limits
352-33-0	1-Chloro-4-fluorobenzene	99%	70-123%
98-08-8	aaa-Trifluorotoluene	100%	73-122%

Blank Spike Summary

Job Number: F21333
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GCD1834-BS	CD044395.D	1	01/02/04	BM	n/a	n/a	GCD1834

5.2

The QC reported here applies to the following samples: **Method:** EPA 601/602

F21333-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	20	19.8	99	86-121
108-88-3	Toluene	20	19.5	98	82-123

CAS No.	Surrogate Recoveries	BSP	Limits
352-33-0	1-Chloro-4-fluorobenzene	101%	70-123%
98-08-8	aaa-Trifluorotoluene	99%	73-122%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F21333
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F21333-2MS	CD044316.D	1	12/31/03	BM	n/a	n/a	GCD1828
F21333-2MSD	CD044317.D	1	12/31/03	BM	n/a	n/a	GCD1828
F21333-2	CD044315.D	1	12/31/03	BM	n/a	n/a	GCD1828

The QC reported here applies to the following samples: **Method:** EPA 601/602

F21333-1, F21333-2

CAS No.	Compound	F21333-2 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND		20	18.9	95	18.8	94	1	77-125/6
108-90-7	Chlorobenzene	ND		20	17.7	89	17.6	88	1	78-120/8
95-50-1	1,2-Dichlorobenzene	ND		20	17.1	86	17.5	88	2	69-125/7
541-73-1	1,3-Dichlorobenzene	ND		20	17.3	87	17.5	88	1	71-126/7
106-46-7	1,4-Dichlorobenzene	ND		20	16.9	85	17.2	86	2	67-129/7
100-41-4	Ethylbenzene	ND		20	17.7	89	17.6	88	1	74-127/6
1634-04-4	Methyl Tert Butyl Ether	ND		20	18.4	92	21.8	109	17*	66-127/9
108-88-3	Toluene	ND		20	18.2	91	18.3	92	1	77-124/5
1330-20-7	Xylenes (total)	ND		60	53.6	89	53.3	89	1	76-125/5

CAS No.	Surrogate Recoveries	MS	MSD	F21333-2	Limits
352-33-0	1-Chloro-4-fluorobenzene	98%	98%	94%	70-123%
98-08-8	aaa-Trifluorotoluene	98%	99%	95%	73-122%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F21333
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F21352-5MS	CD044356.D	1	12/31/03	BM	n/a	n/a	GCD1832
F21352-5MSD	CD044357.D	1	12/31/03	BM	n/a	n/a	GCD1832
F21352-5	CD044355.D	1	12/31/03	BM	n/a	n/a	GCD1832

5.3

The QC reported here applies to the following samples: **Method:** EPA 601/602

F21333-3, F21333-4, F21333-5, F21333-6

CAS No.	Compouud	F21352-5 ug/I	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND		20	19.4	97	19.2	96	1	77-125/6
108-90-7	Chlorobenzene	ND		20	18.6	93	18.2	91	2	78-120/8
95-50-1	1,2-Dichlorobenzene	ND		20	17.8	89	18.0	90	1	69-125/7
541-73-1	1,3-Dichlorobenzene	ND		20	18.4	92	18.3	92	1	71-126/7
106-46-7	1,4-Dichlorobenzene	ND		20	18.0	90	17.8	89	1	67-129/7
100-41-4	Ethylbenzene	ND		20	18.7	94	18.5	93	1	74-127/6
1634-04-4	Methyl Tert Butyl Ether	ND		20	20.0	100	20.5	103	2	66-127/9
108-88-3	Toluene	ND		20	19.1	96	19.0	95	1	77-124/5
1330-20-7	Xylenes (total)	ND		60	56.5	94	55.5	93	2	76-125/5

CAS No.	Surrogate Recoveries	MS	MSD	F21352-5	Limits
352-33-0	1-Chloro-4-fluorobenzene	100%	100%	95%	70-123%
98-08-8	aaa-Trifluorotoluene	103%	102%	98%	73-122%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F21333
Account: EEINCJX EE1
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F21333-5MS	CD044403.D	5	01/02/04	BM	n/a	n/a	GCD1834
F21333-5MSD	CD044404.D	5	01/02/04	BM	n/a	n/a	GCD1834
F21333-5 [a]	CD044397.D	5	01/02/04	BM	n/a	n/a	GCD1834

5.3

The QC reported here applies to the following samples: **Method:** EPA 601/602

F21333-5

CAS No.	Compound	F21333-5 ng/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	197		100	247	50*	245	48*	1	77-125/6
108-88-3	Toluene	127		100	195	68*	191	64*	2	77-124/5

CAS No.	Surrogate Recoveries	MS	MSD	F21333-5	Limits
352-33-0	1-Chloro-4-fluorobenzene	104%	104%	102%	70-123%
98-08-8	aaa-Trifluorotoluene	102%	104%	101%	73-122%

(a) All hits confirmed by dual column analysis.

Volatile Surrogate Recovery Summary

Job Number: F21333
Account: EEINCJX EE1
Project: Camp Lejeune-Campbell St. Fuel Farm

Method: EPA 601/602 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S2 [a]
F21333-1	CD044314.D	96.0	96.0
F21333-2	CD044315.D	94.0	95.0
F21333-3	CD044344.D	100.0	99.0
F21333-4	CD044345.D	104.0	104.0
F21333-5	CD044397.D	102.0	101.0
F21333-5	CD044350.D	112.0	112.0
F21333-6	CD044351.D	97.0	97.0
F21333-2MS	CD044316.D	98.0	98.0
F21333-2MSD	CD044317.D	98.0	99.0
F21333-5MS	CD044403.D	104.0	102.0
F21333-5MSD	CD044404.D	104.0	104.0
F21352-5MS	CD044356.D	100.0	103.0
F21352-5MSD	CD044357.D	100.0	102.0
GCD1828-BS	CD044292.D	100.0	99.0
GCD1828-MB	CD044293.D	98.0	96.0
GCD1832-BS	CD044342.D	99.0	100.0
GCD1832-MB	CD044343.D	96.0	96.0
GCD1834-BS	CD044395.D	101.0	99.0
GCD1834-MB	CD044396.D	97.0	95.0

Surrogate Compounds	Recovery Limits
S1 = 1-Chloro-4-fluorobenzene	70-123%
S2 = aaa-Trifluorotoluene	73-122%

(a) Recovery from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F21333
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GCD1828-CC1827	**Injection Date:**	12/30/03
Lab File ID:	CD044313.D	**Injection Time:**	23:46
Instrument ID:	GCCD	**Method:**	EPA 601/602

	S1 [a] RT	S2 [a] RT
Check Std	8.76	5.35

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
F21333-1	CD044314.D	12/31/03	00:11	8.75	5.36
F21333-2	CD044315.D	12/31/03	00:36	8.75	5.35
F21333-2MS	CD044316.D	12/31/03	01:00	8.75	5.35
F21333-2MSD	CD044317.D	12/31/03	01:25	8.75	5.35
GCD1829-BS	CD044320.D	12/31/03	02:39	8.75	5.35
GCD1829-MB	CD044321.D	12/31/03	03:04	8.76	5.36
ZZZZZZ	CD044322.D	12/31/03	03:28	8.75	5.35

Surrogate Compounds

S1 = 1-Chloro-4-fluorobenzene
S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F21333
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GCD1832-CC1831	**Injection Date:**	12/31/03
Lab File ID:	CD044352.D	**Injection Time:**	16:55
Instrument ID:	GCCD	**Method:**	EPA 601/602

	S1 [a] RT	S2 [a] RT
Check Std	8.76	5.36

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
ZZZZZZ	CD044353.D	12/31/03	17:19	8.75	5.35
ZZZZZZ	CD044354.D	12/31/03	17:44	8.75	5.35
F21352-5	CD044355.D	12/31/03	18:09	8.76	5.36
F21352-5MS	CD044356.D	12/31/03	18:33	8.76	5.37
F21352-5MSD	CD044357.D	12/31/03	18:57	8.75	5.36
ZZZZZZ	CD044358.D	12/31/03	19:22	8.75	5.36
ZZZZZZ	CD044359.D	12/31/03	19:47	8.75	5.36
ZZZZZZ	CD044360.D	12/31/03	20:12	8.76	5.36
ZZZZZZ	CD044361.D	12/31/03	20:36	8.75	5.36
ZZZZZZ	CD044362.D	12/31/03	21:01	8.76	5.36

Surrogate Compounds

S1 = 1-Chloro-4-fluorobenzene
S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F21333
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GCD1834-CC1831	**Injection Date:**	01/02/04
Lab File ID:	CD044394.D	**Injection Time:**	08:15
Instrument ID:	GCCD	**Method:**	EPA 601/602

	S1 [a] RT	S2 [a] RT
Check Std	8.76	5.35

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
GCD1834-BS	CD044395.D	01/02/04	08:53	8.77	5.36
GCD1835-BS	CD044395.D	01/02/04	08:53	8.77	5.36
GCD1834-MB	CD044396.D	01/02/04	09:28	8.77	5.36
GCD1835-MB	CD044396.D	01/02/04	09:28	8.77	5.36
F21333-5	CD044397.D	01/02/04	10:05	8.76	5.36
ZZZZZZ	CD044399.D	01/02/04	10:54	8.76	5.36
ZZZZZZ	CD044402.D	01/02/04	12:23	8.75	5.35
F21333-5MS	CD044403.D	01/02/04	12:48	8.75	5.36
F21333-5MSD	CD044404.D	01/02/04	13:13	8.75	5.36

Surrogate Compounds

S1 = 1-Chloro-4-fluorobenzene
S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F21333
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GCD1827-ICC1827	**Injection Date:**	12/30/03
Lab File ID:	CD044288.D	**Injection Time:**	12:12
Instrument ID:	GCCD	**Method:**	EPA 601/602

	S1 [a] RT	S2 [a] RT
Check Std	8.74	5.35

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
GCD1827-BS	CD044292.D	12/30/03	13:50	8.76	5.35
GCD1828-BS	CD044292.D	12/30/03	13:50	8.76	5.35
GCD1827-MB	CD044293.D	12/30/03	14:25	8.76	5.35
GCD1828-MB	CD044293.D	12/30/03	14:25	8.76	5.35
ZZZZZZ	CD044294.D	12/30/03	15:13	8.75	5.35
ZZZZZZ	CD044295.D	12/30/03	16:23	8.75	5.35
ZZZZZZ	CD044296.D	12/30/03	16:47	8.74	5.35
ZZZZZZ	CD044297.D	12/30/03	17:12	8.74	5.34
ZZZZZZ	CD044298.D	12/30/03	17:36	8.74	5.35
F21308-1	CD044299.D	12/30/03	18:01	8.75	5.35
F21308-1MS	CD044300.D	12/30/03	18:25	8.75	5.36
F21308-1MSD	CD044301.D	12/30/03	18:50	8.75	5.35

Surrogate Compounds

S1 = 1-Chloro-4-fluorobenzene
S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F21333
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GCD1831-ICC1831	**Injection Date:**	12/31/03
Lab File ID:	CD044338.D	**Injection Time:**	10:47
Instrument ID:	GCCD	**Method:**	EPA 601/602

	S1 [a] RT	S2 [a] RT
Check Std	8.76	5.36

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
GCD1831-BS	CD044342.D	12/31/03	12:25	8.77	5.36
GCD1832-BS	CD044342.D	12/31/03	12:25	8.77	5.36
GCD1831-MB	CD044343.D	12/31/03	13:03	8.76	5.36
GCD1832-MB	CD044343.D	12/31/03	13:03	8.76	5.36
F21333-3	CD044344.D	12/31/03	13:39	8.76	5.36
F21333-4	CD044345.D	12/31/03	14:03	8.76	5.36
ZZZZZZ	CD044346.D	12/31/03	14:28	8.75	5.35
ZZZZZZ	CD044347.D	12/31/03	14:52	8.75	5.36
ZZZZZZ	CD044348.D	12/31/03	15:17	8.75	5.36
ZZZZZZ	CD044349.D	12/31/03	15:41	8.76	5.36
F21333-5	CD044350.D	12/31/03	16:06	8.76	5.36
F21333-6	CD044351.D	12/31/03	16:30	8.76	5.35

Surrogate Compounds

S1 = 1-Chloro-4-fluorobenzene
S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #2

Initial Calibration Summary

Job Number: F21333
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GCD1827-ICC1827
Lab FileID: CD044288.D

Response Factor Report VOA2

Method : C:\HPCHEM\2\METHODS\GCCD1230.M (Chemstation Integrator)
Title : EPA 602/8021B
Last Update : Tue Dec 30 13:49:32 2003
Response via : Initial Calibration

Calibration Files
1 =CD044286.D 2 =CD044287.D 3 =CD044288.D
4 =CD044289.D 5 =CD044290.D 6 =CD044291.D

		Compound	1	2	3	4	5	6	Avg		%RSD
1)		Methyl tert Butyl E	1.055	1.180	1.209	1.265	1.223	1.340	1.212	E3	7.82
2)		Di-Isopropyl ether	2.203	2.226	2.302	2.312	2.266	2.267	2.263	E3	1.87
3)		BENZENE	5.230	5.789	5.844	5.873	5.759	5.820	5.719	E3	4.25
4)	S	a,a,a-TFT(S)	1.549	1.612	1.697	1.714	1.700	1.690	1.660	E3	3.93
5)		TOLUENE	5.446	5.941	5.903	5.930	5.797	5.855	5.812	E3	3.22
6)	S	1-Chloro-4-Fluorobe	2.904	3.000	3.089	3.139	3.144	3.131	3.068	E3	3.16
7)		CHLOROBENZENE	7.479	6.775	6.402	6.394	6.284	6.349	6.614	E3	6.92
8)		ETHYLBENZENE		5.924	5.456	5.379	5.259	5.325	5.469	E3	4.84
9)		m,p-XYLENE	5.687	6.002	5.829	5.880	5.729	5.727	5.809	E3	2.04
10)		o-XYLENE	5.238	5.594	5.409	5.432	5.270	5.328	5.378	E3	2.42
11)		1,3-DICHLOROBENZENE	5.504	5.547	5.547	5.584	5.529	5.220	5.489	E3	2.44
12)		1,4-DICHLOROBENZENE	5.951	5.881	5.798	5.905	5.785	5.817	5.856	E3	1.14
13)		1,2-DICHLOROBENZENE	4.742	4.609	4.464	4.570	4.511	4.506	4.567	E3	2.19

Signal #2 Calibration Files
1 =CD044286.D 2 =CD044287.D 3 =CD044288.D
4 =CD044289.D 5 =CD044290.D 6 =CD044291.D

		Compound	1	2	3	4	5	6	Avg		%RSD
1)		Methyl tert Butyl E	7.095	7.694	7.445	7.693	7.619	9.150	7.783	E2	9.09
2)		Di-Isopropyl ether	1.532	1.539	1.501	1.520	1.490	1.498	1.513	E3	1.32
3)		BENZENE	3.938	4.213	4.084	4.108	4.019	4.083	4.074	E3	2.26
4)	S	a,a,a-TFT(S)	1.062	1.083	1.098	1.125	1.134	1.170	1.112	E3	3.49
5)		TOLUENE	4.188	4.339	4.246	4.245	4.191	4.250	4.243	E3	1.29
6)	S	1-Chloro-4-Fluorobe	2.116	2.062	2.091	2.113	2.162	2.191	2.122	E3	2.22
7)		CHLOROBENZENE	5.116	4.841	4.689	4.735	4.643	4.720	4.791	E3	3.60
8)		ETHYLBENZENE	3.908	4.091	3.974	4.012	3.944	4.006	3.989	E3	1.59
9)		m,p-XYLENE	4.187	4.340	4.214	4.267	4.203	4.247	4.243	E3	1.31
10)		o-XYLENE	3.961	4.006	4.019	3.983	3.904	3.958	3.972	E3	1.03
11)		1,3-DICHLOROBENZENE	4.331	4.169	4.219	4.310	4.199	4.309	4.256	E3	1.61
12)		1,4-DICHLOROBENZENE	4.757	4.437	4.393	4.494	4.477	4.585	4.524	E3	2.90
13)		1,2-DICHLOROBENZENE	3.711	3.404	3.434	3.512	3.482	3.552	3.516	E3	3.11

Average % RSD = 3.1

(#) = Out of Range

GCCD1230.M Wed Dec 31 09:50:21 2003 QRXY

Continuing Calibration Summary

Job Number: F21333 **Sample:** GCD1827-CC1827
Account: EEINCJX EEI **Lab FileID:** CD044302.D
Project: Camp Lejeune-Campbell St. Fuel Farm

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\123003\CD044302.D\FID1A.CH Vial: 18
Signal #2 : C:\HPCHEM\2\DATA\123003\CD044302.D\FID2B.CH
Acq On : 30 Dec 2003 7:14 pm Operator: BarbaraM
Sample : CC1827-20 Inst : VOA2
Misc : gc3077,gcd1827,,,,,1 MultiplIr: 1.00
IntFile Signal #1: PID.E IntFile Signal #2: FID.E

Method : C:\HPCHEM\2\METHODS\GCCD1230.M (Chemstation Integrator)
Title : EPA 602/8021B
Last Update : Tue Dec 30 13:49:15 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	20.000	22.584	-12.9	113	0.00
2		Di-Isopropyl ether	20.000	20.322	-1.6	100	0.00
3		BENZENE	20.000	20.539	-2.7	101	0.00
4	S	a,a,a-TFT(S)	20.000	20.356	-1.8	100	0.00
5		TOLUENE	20.000	20.447	-2.2	101	0.00
6	S	1-Chloro-4-Fluorobenzene	20.000	20.068	-0.3	100	0.01
7		CHLOROBENZENE	20.000	19.415	2.9	100	0.01
8		ETHYLBENZENE	20.000	20.014	-0.1	100	0.01
9		m,p-XYLENE	40.000	40.265	-0.7	100	0.01
10		o-XYLENE	20.000	20.351	-1.8	101	0.02
11		1,3-DICHLOROBENZENE	20.000	20.212	-1.1	100	0.02
12		1,4-DICHLOROBENZENE	20.000	19.660	1.7	99	0.02
13		1,2-DICHLOROBENZENE	20.000	19.845	0.8	102	0.03

Signal #2

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	20.000	22.325	-11.6	117	0.00
2		Di-Isopropyl ether	20.000	20.181	-0.9	102	0.00
3		BENZENE	20.000	20.197	-1.0	101	0.00
4	S	a,a,a-TFT(S)	20.000	19.649	1.8	99	0.00
5		TOLUENE	20.000	20.188	-0.9	101	0.00
6	S	1-Chloro-4-Fluorobenzene	20.000	19.718	1.4	100	0.00
7		CHLOROBENZENE	20.000	19.538	2.3	100	0.00
8		ETHYLBENZENE	20.000	20.102	-0.5	101	0.01
9		m,p-XYLENE	40.000	40.039	-0.1	101	0.00
10		o-XYLENE	20.000	20.213	-1.1	100	0.01
11		1,3-DICHLOROBENZENE	20.000	19.870	0.6	100	0.02
12		1,4-DICHLOROBENZENE	20.000	19.453	2.7	100	0.02
13		1,2-DICHLOROBENZENE	20.000	19.645	1.8	101	0.02

Average % D = 2.2

(#) = Out of Range SPCC's out = 0 CCC's out = 0
CD044288.D GCCD1230.M Wed Dec 31 08:43:50 2003 QRXY

5.6

Continuing Calibration Summary

Job Number: F21333
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GCD1828-CC1827
Lab FileID: CD044313.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\123003\CD044313.D\FID1A.CH Vial: 29
Signal #2 : C:\HPCHEM\2\DATA\123003\CD044313.D\FID2B.CH
Acq On : 30 Dec 2003 11:46 pm Operator: BarbaraM
Sample : CC1827-20 Inst : VOA2
Misc : gc3073,gcd1828,,,,,1 MultiplIr: 1.00
IntFile Signal #1: PID.E IntFile Signal #2: FID.E

Method : C:\HPCHEM\2\METHODS\GCCD1230.M (Chemstation Integrator)
Title : EPA 602/8021B
Last Update : Tue Dec 30 13:49:15 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	20.000	21.928	-9.6	110	0.00
2		Di-Isopropyl ether	20.000	18.849	5.8	93	0.00
3		BENZENE	20.000	19.523	2.4	96	0.00
4	S	a,a,a-TFT(S)	20.000	19.492	2.5	95	0.00
5		TOLUENE	20.000	19.629	1.9	97	0.01
6	S	1-Chloro-4-Fluorobenzene	20.000	19.430	2.9	96	0.02
7		CHLOROBENZENE	20.000	19.017	4.9	98	0.02
8		ETHYLBENZENE	20.000	19.607	2.0	98	0.02
9		m,p-XYLENE	40.000	39.665	0.8	99	0.02
10		o-XYLENE	20.000	20.087	-0.4	100	0.02
11		1,3-DICHLOROBENZENE	20.000	19.761	1.2	98	0.02
12		1,4-DICHLOROBENZENE	20.000	19.397	3.0	98	0.02
13		1,2-DICHLOROBENZENE	20.000	19.595	2.0	100	0.02

Signal #2

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	20.000	24.091	-20.5#	126	0.00
2		Di-Isopropyl ether	20.000	20.021	-0.1	101	0.00
3		BENZENE	20.000	20.077	-0.4	100	0.00
4	S	a,a,a-TFT(S)	20.000	19.643	1.8	99	0.00
5		TOLUENE	20.000	19.957	0.2	100	0.00
6	S	1-Chloro-4-Fluorobenzene	20.000	19.799	1.0	100	0.01
7		CHLOROBENZENE	20.000	19.393	3.0	99	0.01
8		ETHYLBENZENE	20.000	20.113	-0.6	101	0.01
9		m,p-XYLENE	40.000	39.711	0.7	100	0.01
10		o-XYLENE	20.000	20.081	-0.4	99	0.01
11		1,3-DICHLOROBENZENE	20.000	19.667	1.7	99	0.02
12		1,4-DICHLOROBENZENE	20.000	19.029	4.9	98	0.02
13		1,2-DICHLOROBENZENE	20.000	19.446	2.8	100	0.02

Average % D = 3.0

(#) = Out of Range SPCC's out = 0 CCC's out = 0
CD044288.D GCCD1230.M Wed Dec 31 08:43:51 2003 QRXY

Continuing Calibration Summary

Job Number: F21333
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GCD1829-CC1827
Lab FileID: CD044324.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\123003\CD044324.D\FID1A.CH Vial: 39
Signal #2 : C:\HPCHEM\2\DATA\123003\CD044324.D\FID2B.CH
Acq On : 31 Dec 2003 4:18 am Operator: BarbaraM
Sample : CC1827-20 Inst : VOA2
Misc : gc3077,gcd1829,,,,,1 Multiplr: 1.00
IntFile Signal #1: PID.E IntFile Signal #2: FID.E

Method : C:\HPCHEM\2\METHODS\GCCD1230.M (Chemstation Integrator)
Title : EPA 602/8021B
Last Update : Tue Dec 30 13:49:15 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	20.000	23.256	-16.3#	117	0.00
2		Di-Isopropyl ether	20.000	19.971	0.1	98	0.01
3		BENZENE	20.000	20.217	-1.1	99	0.01
4	S	a,a,a-TFT(S)	20.000	20.249	-1.2	99	0.01
5		TOLUENE	20.000	20.041	-0.2	99	0.01
6	S	1-Chloro-4-Fluorobenzene	20.000	19.763	1.2	98	0.01
7		CHLOROBENZENE	20.000	18.999	5.0	98	0.02
8		ETHYLBENZENE	20.000	19.662	1.7	99	0.02
9		m,p-XYLENE	40.000	39.238	1.9	98	0.02
10		o-XYLENE	20.000	19.964	0.2	99	0.02
11		1,3-DICHLOROBENZENE	20.000	19.748	1.3	98	0.02
12		1,4-DICHLOROBENZENE	20.000	19.118	4.4	97	0.02
13		1,2-DICHLOROBENZENE	20.000	19.880	0.6	102	0.02

Signal #2

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	20.000	25.140	-25.7#	131	0.00
2		Di-Isopropyl ether	20.000	19.840	0.8	100	0.00
3		BENZENE	20.000	19.842	0.8	99	0.00
4	S	a,a,a-TFT(S)	20.000	19.609	2.0	99	0.00
5		TOLUENE	20.000	19.796	1.0	99	0.00
6	S	1-Chloro-4-Fluorobenzene	20.000	20.375	-1.9	103	0.00
7		CHLOROBENZENE	20.000	19.205	4.0	98	0.00
8		ETHYLBENZENE	20.000	19.671	1.6	99	0.01
9		m,p-XYLENE	40.000	39.666	0.8	100	0.01
10		o-XYLENE	20.000	20.020	-0.1	99	0.01
11		1,3-DICHLOROBENZENE	20.000	19.280	3.6	97	0.02
12		1,4-DICHLOROBENZENE	20.000	19.262	3.7	99	0.02
13		1,2-DICHLOROBENZENE	20.000	19.968	0.2	102	0.02

Average % D = 3.1

(#) = Out of Range SPCC's out = 0 CCC's out = 0
CD044288.D GCCD1230.M Wed Dec 31 08:43:53 2003 QRXY

Initial Calibration Summary

Job Number: F21333
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GCD1831-ICC1831
Lab FileID: CD044338.D

Response Factor Report VOA2

Method : C:\HPCHEM\2\METHODS\GCCD1231.M (Chemstation Integrator)
Title : EPA 602/8021B
Last Update : Wed Dec 31 12:23:05 2003
Response via : Initial Calibration

Calibration Files
1 =CD044336.D 2 =CD044337.D 3 =CD044338.D
4 =CD044339.D 5 =CD044340.D 6 =CD044341.D

		Compound	1	2	3	4	5	6	Avg		%RSD
1)		Methyl tert Butyl E	1.122	1.172	1.225	1.185	1.366	1.156	1.204	E3	7.16
2)		Di-Isopropyl ether	2.102	2.226	2.284	2.244	2.303	2.247	2.234	E3	3.16
3)		BENZENE	4.949	5.800	5.784	5.788	5.881	5.813	5.669	E3	6.25
4)	S	a,a,a-TFT(S)	1.571	1.633	1.681	1.705	1.705	1.665	1.660	E3	3.08
5)		TOLUENE	5.105	5.973	5.809	5.833	5.921	5.815	5.743	E3	5.56
6)	S	1-Chloro-4-Fluorobe	2.930	2.975	3.048	3.136	3.119	3.112	3.053	E3	2.77
7)		CHLOROBENZENE	7.175	6.728	6.304	6.309	6.415	6.363	6.549	E3	5.26
8)		ETHYLBENZENE		5.886	5.402	5.350	5.413	5.308	5.472	E3	4.30
9)		m,p-XYLENE	5.346	5.950	5.713	5.792	5.845	5.743	5.732	E3	3.60
10)		o-XYLENE	4.984	5.543	5.363	5.353	5.434	5.346	5.337	E3	3.53
11)		1,3-DICHLOROBENZENE	5.225	5.581	5.480	5.521	5.620	5.281	5.452	E3	2.97
12)		1,4-DICHLOROBENZENE	5.670	5.856	5.666	5.747	5.924	5.849	5.786	E3	1.85
13)		1,2-DICHLOROBENZENE	4.440	4.624	4.447	4.511	4.557	4.480	4.510	E3	1.56

Signal #2 Calibration Files
1 =CD044336.D 2 =CD044337.D 3 =CD044338.D
4 =CD044339.D 5 =CD044340.D 6 =CD044341.D

		Compound	1	2	3	4	5	6	Avg		%RSD
1)		Methyl tert Butyl E	7.942	7.653	7.362	7.136	8.822	7.451	7.728	E2	7.79
2)		Di-Isopropyl ether	1.403	1.516	1.498	1.478	1.509	1.491	1.483	E3	2.77
3)		BENZENE	3.687	4.141	4.053	4.036	4.092	4.043	4.009	E3	4.05
4)	S	a,a,a-TFT(S)	1.055	1.070	1.087	1.098	1.147	1.137	1.099	E3	3.35
5)		TOLUENE	3.841	4.250	4.195	4.187	4.280	4.212	4.161	E3	3.86
6)	S	1-Chloro-4-Fluorobe	2.014	2.019	2.082	2.122	2.152	2.179	2.095	E3	3.28
7)		CHLOROBENZENE	4.742	4.749	4.599	4.633	4.711	4.707	4.690	E3	1.29
8)		ETHYLBENZENE	3.681	3.994	3.927	3.987	4.030	4.000	3.936	E3	3.30
9)		m,p-XYLENE	3.866	4.302	4.156	4.231	4.275	4.256	4.181	E3	3.88
10)		o-XYLENE	3.666	3.980	3.902	3.939	3.976	3.954	3.903	E3	3.06
11)		1,3-DICHLOROBENZENE	3.967	4.147	4.109	4.206	4.317	4.304	4.175	E3	3.15
12)		1,4-DICHLOROBENZENE	4.269	4.392	4.324	4.390	4.528	4.546	4.408	E3	2.49
13)		1,2-DICHLOROBENZENE	3.475	3.441	3.395	3.455	3.517	3.525	3.468	E3	1.41

Average % RSD = 3.6

(#) = Out of Range

GCCD1231.M Fri Jan 02 08:40:24 2004 QRXY

Continuing Calibration Summary

Job Number: F21333
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GCD1832-CC1831
Lab FileID: CD044352.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\123103\CD044352.D\FID1A.CH Vial: 17
Signal #2 : C:\HPCHEM\2\DATA\123103\CD044352.D\FID2B.CH
Acq On : 31 Dec 2003 4:55 pm Operator: BarbaraM
Sample : CC1831-20 Inst : VOA2
Misc : gc3076,gcd1832,,,,,1 Multiplr: 1.00
IntFile Signal #1: PID.E IntFile Signal #2: FID.E

Method : C:\HPCHEM\2\METHODS\GCCD1231.M (Chemstation Integrator)
Title : EPA 602/8021B
Last Update : Wed Dec 31 12:23:05 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	Methyl tert Butyl Ether	20.000	21.795	-9.0	107	0.00
2	Di-Isopropyl ether	20.000	19.156	4.2	94	0.00
3	BENZENE	20.000	19.707	1.5	97	0.00
4 S	a,a,a-TFT(S)	20.000	19.627	1.9	97	0.00
5	TOLUENE	20.000	20.233	-1.2	100	0.00
6 S	1-Chloro-4-Fluorobenzene	20.000	20.109	-0.5	101	0.00
7	CHLOROBENZENE	20.000	19.640	1.8	102	0.00
8	ETHYLBENZENE	20.000	20.049	-0.2	102	0.00
9	m,p-XYLENE	40.000	41.199	-3.0	103	0.00
10	o-XYLENE	20.000	20.418	-2.1	102	-0.01
11	1,3-DICHLOROBENZENE	20.000	20.425	-2.1	102	-0.02
12	1,4-DICHLOROBENZENE	20.000	20.042	-0.2	102	-0.02
13	1,2-DICHLOROBENZENE	20.000	19.883	0.6	101	-0.02

Signal #2

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	Methyl tert Butyl Ether	20.000	24.421	-22.1#	128	0.02
2	Di-Isopropyl ether	20.000	21.040	-5.2	104	0.00
3	BENZENE	20.000	20.609	-3.0	102	0.00
4 S	a,a,a-TFT(S)	20.000	20.168	-0.8	102	0.00
5	TOLUENE	20.000	20.629	-3.1	102	0.00
6 S	1-Chloro-4-Fluorobenzene	20.000	20.149	-0.7	101	0.00
7	CHLOROBENZENE	20.000	20.215	-1.1	103	0.00
8	ETHYLBENZENE	20.000	20.469	-2.3	103	0.00
9	m,p-XYLENE	40.000	40.791	-2.0	103	0.00
10	o-XYLENE	20.000	20.499	-2.5	103	0.00
11	1,3-DICHLOROBENZENE	20.000	20.264	-1.3	103	-0.02
12	1,4-DICHLOROBENZENE	20.000	20.077	-0.4	102	-0.02
13	1,2-DICHLOROBENZENE	20.000	19.896	0.5	102	-0.02

Average % D = 2.8

(#) = Out of Range SPCC's out = 0 CCC's out = 0
CD044338.0 GCCD1231.M Fri Jan 02 08:39:03 2004 QRXY

Continuing Calibration Summary

Job Number: F21333
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GCD1831-CC1831
Lab FileID: CD044363.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\123103\CD044363.D\FID1A.CH Vial: 27
Signal #2 : C:\HPCHEM\2\DATA\123103\CD044363.D\FID2B.CH
Acq On : 31 Dec 2003 9:26 pm Operator: BarbaraM
Sample : CC1831-20 Inst : VOA2
Misc : gc3077,gcd1831,,,,,1 MultiplIr: 1.00
IntFile Signal #1: PID.E IntFile Signal #2: FID.E

Method : C:\HPCHEM\2\METHODS\GCCD1231.M (Chemstation Integrator)
Title : EPA 602/8021B
Last Update : Wed Dec 31 12:23:05 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	Methyl tert Butyl Ether	20.000	22.415	-12.1	110	0.00
2	Di-Isopropyl ether	20.000	20.565	-2.8	101	0.00
3	BENZENE	20.000	20.769	-3.8	102	0.00
4 S	a,a,a-TFT(S)	20.000	20.498	-2.5	101	0.00
5	TOLUENE	20.000	20.710	-3.6	102	0.00
6 S	1-Chloro-4-Fluorobenzene	20.000	20.322	-1.6	102	0.00
7	CHLOROBENZENE	20.000	19.556	2.2	102	0.00
8	ETHYLBENZENE	20.000	20.074	-0.4	102	0.00
9	m,p-XYLENE	40.000	40.605	-1.5	102	0.00
10	o-XYLENE	20.000	20.431	-2.2	102	0.00
11	1,3-DICHLOROBENZENE	20.000	20.206	-1.0	101	-0.01
12	1,4-DICHLOROBENZENE	20.000	19.750	1.3	101	-0.01
13	1,2-DICHLOROBENZENE	20.000	20.091	-0.5	102	-0.01

Signal #2

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	Methyl tert Butyl Ether	20.000	21.668	-8.3	114	0.01
2	Di-Isopropyl ether	20.000	20.417	-2.1	101	0.00
3	BENZENE	20.000	20.335	-1.7	101	0.00
4 S	a,a,a-TFT(S)	20.000	19.933	0.3	101	0.00
5	TOLUENE	20.000	20.292	-1.5	101	0.00
6 S	1-Chloro-4-Fluorobenzene	20.000	19.969	0.2	100	0.00
7	CHLOROBENZENE	20.000	19.740	1.3	101	0.00
8	ETHYLBENZENE	20.000	20.380	-1.9	102	0.00
9	m,p-XYLENE	40.000	40.319	-0.8	101	0.00
10	o-XYLENE	20.000	20.177	-0.9	101	0.00
11	1,3-DICHLOROBENZENE	20.000	19.876	0.6	101	0.00
12	1,4-DICHLOROBENZENE	20.000	19.662	1.7	100	-0.01
13	1,2-DICHLOROBENZENE	20.000	19.993	0.0	102	0.00

Average % D = 2.2

(#) = Out of Range SPCC's out = 0 CCC's out = 0
CD044338.D GCCD1231.M Fri Jan 02 08:39:04 2004 QRXY

Continuing Calibration Summary

Job Number: F21333
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GCD1834-CC1831
Lab FileID: CD044394.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\010204\CD044394.D\FID1A.CH Vial: 1
Signal #2 : C:\HPCHEM\2\DATA\010204\CD044394.D\FID2B.CH
Acq On : 2 Jan 2004 8:15 am Operator: BarbaraM
Sample : CC1831-40 Inst : V0A2
Misc : gc3076,gcd1834,,,,,1 Multiplr: 1.00
IntFile Signal #1: PID.E IntFile Signal #2: FID.E

Method : C:\HPCHEM\2\METHODS\GCCD1231.M (Chemstation Integrator)
Title : EPA 602/8021B
Last Update : Wed Dec 31 12:23:05 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	Methyl tert Butyl Ether	40.000	36.524	8.7	93	0.00
2	Di-Isopropyl ether	40.000	38.496	3.8	96	0.00
3	BENZENE	40.000	40.892	-2.2	100	0.00
4 S	a,a,a-TFT(S)	20.000	20.726	-3.6	101	0.00
5	TOLUENE	40.000	40.871	-2.2	101	0.00
6 S	1-Chloro-4-Fluorobenzene	20.000	20.874	-4.4	102	0.00
7	CHLOROBENZENE	40.000	39.172	2.1	102	0.01
8	ETHYLBENZENE	40.000	39.812	0.5	102	0.00
9	m,p-XYLENE	80.000	81.657	-2.1	101	0.00
10	o-XYLENE	40.000	40.787	-2.0	102	0.00
11	1,3-DICHLOROBENZENE	40.000	41.108	-2.8	101	-0.01
12	1,4-DICHLOROBENZENE	40.000	40.634	-1.6	102	-0.02
13	1,2-DICHLOROBENZENE	40.000	40.678	-1.7	102	-0.02

Signal #2

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	Methyl tert Butyl Ether	40.000	34.737	13.2	94	0.00
2	Di-Isopropyl ether	40.000	39.001	2.5	98	0.00
3	BENZENE	40.000	40.029	-0.1	99	0.00
4 S	a,a,a-TFT(S)	20.000	20.127	-0.6	101	0.00
5	TOLUENE	40.000	40.400	-1.0	100	0.00
6 S	1-Chloro-4-Fluorobenzene	20.000	20.549	-2.7	101	0.00
7	CHLOROBENZENE	40.000	39.611	1.0	100	0.00
8	ETHYLBENZENE	40.000	40.615	-1.5	100	0.00
9	m,p-XYLENE	80.000	81.261	-1.6	100	0.00
10	o-XYLENE	40.000	40.740	-1.9	101	0.00
11	1,3-DICHLOROBENZENE	40.000	40.512	-1.3	101	-0.02
12	1,4-DICHLOROBENZENE	40.000	40.225	-0.6	101	-0.02
13	1,2-DICHLOROBENZENE	40.000	40.057	-0.1	101	-0.02

Average % D = 2.5

(#) = Out of Range SPCC's out = 0 CCC's out = 0
CD044339.D GCCD1231.M Mon Jan 05 09:41:54 2004 QRXY

5.6

Continuing Calibration Summary

Job Number: F21333
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GCD1834-CC1831
Lab FileID: CD044405.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\010204\CD044405.D\FID1A.CH Vial: 11
Signal #2 : C:\HPCHEM\2\DATA\010204\CD044405.D\FID2B.CH
Acq On : 2 Jan 2004 1:38 pm Operator: BarbaraM
Sample : CC1831-20 Inst : VOA2
Misc : gc3076,gcd1834,,,,,1 Multiplr: 1.00
IntFile Signal #1: PID.E IntFile Signal #2: FID.E

Method : C:\HPCHEM\2\METHODS\GCCD1231.M (Chemstation Integrator)
Title : EPA 602/8021B
Last Update : Wed Dec 31 12:23:05 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	Methyl tert Butyl Ether	20.000	21.007	-5.0	103	0.00
2	Di-Isopropyl ether	20.000	18.734	6.3	92	0.00
3	BENZENE	20.000	18.967	5.2	93	0.00
4 S	a,a,a-TFT(S)	20.000	18.684	6.6	92	0.00
5	TOLUENE	20.000	19.378	3.1	96	0.00
6 S	1-Chloro-4-Fluorobenzene	20.000	19.114	4.4	96	0.00
7	CHLOROBENZENE	20.000	19.104	4.5	99	0.00
8	ETHYLBENZENE	20.000	19.580	2.1	99	0.00
9	m,p-XYLENE	40.000	40.118	-0.3	101	0.00
10	o-XYLENE	20.000	20.159	-0.8	100	0.00
11	1,3-DICHLOROBENZENE	20.000	20.028	-0.1	100	0.00
12	1,4-DICHLOROBENZENE	20.000	19.692	1.5	101	0.00
13	1,2-DICHLOROBENZENE	20.000	20.099	-0.5	102	-0.01

Signal #2

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	Methyl tert Butyl Ether	20.000	20.041	-0.2	105	0.00
2	Di-Isopropyl ether	20.000	20.529	-2.6	102	0.00
3	BENZENE	20.000	20.337	-1.7	101	0.00
4 S	a,a,a-TFT(S)	20.000	20.006	-0.0	101	0.00
5	TOLUENE	20.000	20.526	-2.6	102	D.00
6 S	1-Chloro-4-Fluorobenzene	20.000	20.132	-0.7	101	0.00
7	CHLOROBENZENE	20.000	20.000	0.0	102	0.00
8	ETHYLBENZENE	20.000	20.324	-1.6	102	0.00
9	m,p-XYLENE	40.000	40.626	-1.6	102	0.00
10	o-XYLENE	20.000	20.529	-2.6	103	0.00
11	1,3-DICHLOROBENZENE	20.000	20.154	-0.8	102	0.00
12	1,4-DICHLOROBENZENE	20.000	19.825	0.9	101	0.00
13	1,2-DICHLOROBENZENE	20.000	20.012	-0.1	102	0.00

Average % D = 2.1

(#) = Out of Range SPCC's out = 0 CCC's out = 0
CD044338.D GCCD1231.M Mon Jan 05 09:42:27 2004 QRXY

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Instrument Runlogs
- Initial and Continuing Calibration Blanks
- Initial and Continuing Calibration Checks
- High and Low Check Standards
- Interfering Element Check Standards
- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries
- IDL and Linear Range Summaries

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: F21333
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR123003.ASC Date Analyzed: 12/30/03 Methods: SW846 6010B
Analyst: DM Run ID: MA3627
Parameters: As,Ba,Cd,Cr,Fe,Pb,Mn,Se

Time	Sample Description	Dilution Factor	PS Recov	Comments
09:47	MA3627-ICV1	1		
09:50	MA3627-ICB1	1		
09:53	MA3627-CRI1	1		
09:56	MA3627-CRI2	1		
09:59	MA3627-ICSA1	1		
10:02	MA3627-ICSAB1	1		
10:09	MA3627-CCV1	1		
10:13	MA3627-CCB1	1		
10:16	MP6170-MB1	1		
10:19	MP6170-B1	1		
10:24	F21237-1	1		(sample used for QC only; not part of login F21333)
10:27	MP6170-D1	1		
10:30	MP6170-SD1	5		
10:33	MP6170-PDS	1		
10:36	MP6170-S1	1		
10:39	MP6170-S2	1		
10:43	ZZZZZZ	1		
10:47	ZZZZZZ	1		
10:50	MA3627-CCV2	1		
10:54	MA3627-CCB2	1		
10:57	ZZZZZZ	1		
11:01	ZZZZZZ	1		
11:04	ZZZZZZ	1		
11:07	ZZZZZZ	1		
11:10	ZZZZZZ	1		
11:13	ZZZZZZ	1		
11:16	MP6169-MB1	1		
11:20	MP6169-B1	1		
11:24	F21128-2	1		(sample used for QC only; not part of login F21333)
11:27	MP6169-D1	1		
11:30	MA3627-CCV3	1		
11:34	MA3627-CCB3	1		
11:37	MP6169-SD1	5		

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: F21333
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR123003.ASC Date Analyzed: 12/30/03 Methods: SW846 6010B
Analyst: DM Run ID: MA3627
Parameters: As,Ba,Cd,Cr,Fe,Pb,Mn,Se

Time	Sample Description	Dilution Factor	PS Recov	Comments
11:40	MP6169-PDS	1		
11:43	MP6169-S1	1		
11:47	MP6169-S2	1		
11:51	ZZZZZZ	1		
11:54	ZZZZZZ	1		
11:57	ZZZZZZ	1		
12:00	ZZZZZZ	1		
12:03	ZZZZZZ	1		
12:06	ZZZZZZ	1		
12:10	MA3627-CCV4	1		
12:14	MA3627-CCB4	1		
12:30	MP6180-MB1	1		
12:33	MP6180-B1	1		
12:37	F21289-1	1		(sample used for QC only; not part of login F21333)
12:41	MP6180-D1	1		
12:44	MP6180-SD1	5		
12:47	MP6180-S1	1		
12:50	MP6180-S2	1		
12:54	ZZZZZZ	1		
12:57	ZZZZZZ	1		
13:00	ZZZZZZ	1		
13:04	MA3627-CCV5	1		
13:08	MA3627-CCB5	1		
13:11	ZZZZZZ	1		
13:14	ZZZZZZ	1		
13:17	ZZZZZZ	1		
13:20	ZZZZZZ	1		
13:23	ZZZZZZ	1		
13:28	ZZZZZZ	1		
13:31	ZZZZZZ	1		
13:34	ZZZZZZ	1		
13:38	ZZZZZZ	1		
13:41	ZZZZZZ	1		

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: F21333
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR123003.ASC Date Analyzed: 12/30/03 Methods: SW846 6010B
Analyst: DM Run ID: MA3627
Parameters: As,Ba,Cd,Cr,Fe,Pb,Mn,Se

Time	Sample Description	Dilution Factor	PS Recov	Comments
13:44	MA3627-CCV6	1		
13:48	MA3627-CCB6	1		
13:51	ZZZZZZ	1		
13:54	ZZZZZZ	1		
13:57	ZZZZZZ	1		
14:01	ZZZZZZ	1		
14:04	ZZZZZZ	1		
14:07	ZZZZZZ	1		
14:10	ZZZZZZ	10		
14:13	ZZZZZZ	1		
14:16	MA3627-CCV7	1		
14:21	MA3627-CCB7	1		
14:24	MP6166-MB1	1		
14:27	MP6166-B1	1		
14:31	F21111-1	1		(sample used for QC only; not part of login F21333)
14:34	MP6166-D1	1		
14:37	MP6166-SD1	5		
14:40	MP6166-S1	1		
14:44	MP6166-S2	1		
14:48	MA3627-CRI3	1		
14:51	MA3627-CCV8	1		
14:55	MA3627-CCB8	1		
15:03	MP6182-MB1	1		
15:06	MP6182-B1	1		
15:10	F21303-2	1		(sample used for QC only; not part of login F21333)
15:14	MP6182-D1	1		
15:17	MP6182-SD1	5		
15:20	MP6182-S1	1		
15:23	MP6182-S2	1		
15:27	ZZZZZZ	1		
15:30	ZZZZZZ	1		
15:33	ZZZZZZ	1		
15:37	MA3627-CCV9	1		

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: F21333
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR123003.ASC Date Analyzed: 12/30/03 Methods: SW846 6010B
Analyst: DM Run ID: MA3627
Parameters: As,Ba,Cd,Cr,Fe,Pb,Mn,Se

Time	Sample Description	Dilution Factor	PS Recov	Comments
15:41	MA3627-CCB9	1		
15:44	ZZZZZZ	1		
15:47	ZZZZZZ	1		
15:50	ZZZZZZ	1		
15:53	ZZZZZZ	1		
15:56	ZZZZZZ	1		
16:00	MP6183-MB1	1		
16:03	MP6183-B1	1		
16:07	F21333-1	1		
16:10	MP6183-D1	1		
16:13	MP6183-SD1	5		
16:16	MA3627-CCV10	1		
16:20	MA3627-CCB10	1		
16:23	MP6183-S1	1		
16:27	MP6183-S2	1		
---------->	Last reportable sample/prep for job F21333			
16:31	ZZZZZZ	1		
16:34	ZZZZZZ	1		
16:37	ZZZZZZ	1		
16:40	ZZZZZZ	1		
16:43	ZZZZZZ	1		
16:46	ZZZZZZ	1		
16:50	ZZZZZZ	1		
16:53	ZZZZZZ	1		
16:56	MA3627-CCV11	1		
17:00	MA3627-CCB11	1		
---------->	Last reportable CCB for job F21333			
17:03	ZZZZZZ	1		
17:06	ZZZZZZ	1		
17:09	ZZZZZZ	1		
17:13	ZZZZZZ	1		
17:16	ZZZZZZ	1		
17:19	ZZZZZZ	1		
17:22	ZZZZZZ	1		
17:25	ZZZZZZ	1		

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: F21333
Account: EEINCCX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR123003.ASC Date Analyzed: 12/30/03 Methods: SW846 6010B
Analyst: DM Run ID: MA3627
Parameters: As,Ba,Cd,Cr,Fe,Pb,Mn,Se

Time	Sample Description	Dilution Factor	PS Recov	Comments
17:28	ZZZZZZ	1		
17:32	ZZZZZZ	1		
17:35	MA3627-CCV12	1		
17:39	MA3627-CCB12	1		
17:42	MP6184-MB1	1		
17:45	MP6184-B1	1		
17:49	F21360-1	1		(sample used for QC only; not part of login F21333)
17:52	MP6184-D1	1		
17:55	MP6184-SD1	5		
17:59	MP6184-S1	1		
18:02	MP6184-S2	1		
18:06	ZZZZZZ	1		
18:09	ZZZZZZ	1		
18:12	ZZZZZZ	1		
18:15	MA3627-CCV13	1		
18:19	MA3627-CCB13	1		
18:22	ZZZZZZ	1		
18:26	ZZZZZZ	1		
18:29	ZZZZZZ	1		
18:32	ZZZZZZ	1		
18:35	ZZZZZZ	1		
18:38	ZZZZZZ	1		
18:41	ZZZZZZ	1		
18:45	ZZZZZZ	1		
18:48	ZZZZZZ	1		
18:51	ZZZZZZ	1		
18:54	MA3627-CCV14	1		
18:58	MA3627-CCB14	1		
19:01	ZZZZZZ	1		
19:04	ZZZZZZ	1		
19:08	ZZZZZZ	1		
19:11	ZZZZZZ	1		
19:14	ZZZZZZ	1		

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: F21333
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR123003.ASC Date Analyzed: 12/30/03 Methods: SW846 6010B
Analyst: DM Run ID: MA3627
Parameters: As,Ba,Cd,Cr,Fe,Pb,Mn,Se

Time	Sample Description	Dilution Factor	PS Recov	Comments
19:17	ZZZZZZ	1		
19:21	MA3627-CRI4	1		
19:24	MA3627-CCV1S	1		
19:28	MA3627-CCB1S	1		

Refer to raw data for calibration curve and standards.

INTERNAL STANDARD SUMMARY

Login Number: F21333
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR123003.ASC Date Analyzed: 12/30/03 Methods: SW846 6010B
Analyst: DM Run ID: MA3627
Parameters: As,Ba,Cd,Cr,Fe,Pb,Mn,Se

Time	Sample Description	Istd#1
09:47	MA3627-ICV1	5002
09:50	MA3627-ICB1	4939 R
09:53	MA3627-CRI1	5017
09:56	MA3627-CRI2	4948
09:59	MA3627-ICSA1	4761
10:02	MA3627-ICSAB1	4761
10:09	MA3627-CCV1	4992
10:13	MA3627-CCB1	4932
10:16	MP6170-MB1	4940
10:19	MP6170-B1	4866
10:24	F21237-1	4844
10:27	MP6170-D1	4890
10:30	MP6170-SD1	4918
10:33	MP6170-PDS	4905
10:36	MP6170-S1	4965
10:39	MP6170-S2	5002
10:43	ZZZZZZ	4862
10:47	ZZZZZZ	4915
10:50	MA3627-CCV2	4969
10:54	MA3627-CCB2	4940
10:57	ZZZZZZ	4894
11:01	ZZZZZZ	4895
11:04	ZZZZZZ	4842
11:07	ZZZZZZ	4905
11:10	ZZZZZZ	4864
11:13	ZZZZZZ	5071
11:16	MP6169-MB1	4859
11:20	MP6169-B1	4903
11:24	F21128-2	5090
11:27	MP6169-D1	4983
11:30	MA3627-CCV3	4946
11:34	MA3627-CCB3	4970
11:37	MP6169-SD1	5016

INTERNAL STANDARD SUMMARY

Login Number: F21333
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR123003.ASC Date Analyzed: 12/30/03 Methods: SW846 6010B
Analyst: DM Run ID: MA3627
Parameters: As,Ba,Cd,Cr,Fe,Pb,Mn,Se

Time	Sample Description	Istd#1
11:40	MP6169-2DS	5020
11:43	MP6169-S1	4989
11:47	MP6169-S2	4982
11:51	ZZZZZZ	5000
11:54	ZZZZZZ	4958
11:57	ZZZZZZ	5012
12:00	ZZZZZZ	5072
12:03	ZZZZZZ	5305
12:06	ZZZZZZ	5123
12:10	MA3627-CCV4	5014
12:14	MA3627-CCB4	4932
12:30	MP6180-MB1	4821
12:33	MP6180-B1	4894
12:37	F21289-1	4896
12:41	MP6180-D1	4943
12:44	MP6180-SD1	4894
12:47	MP6180-S1	4928
12:50	MP6180-S2	5023
12:54	ZZZZZZ	5029
12:57	ZZZZZZ	5071
13:00	ZZZZZZ	4967
13:04	MA3627-CCV5	4976
13:08	MA3627-CCB5	4949
13:11	ZZZZZZ	4931
13:14	ZZZZZZ	5030
13:17	ZZZZZZ	4850
13:20	ZZZZZZ	4920
13:23	ZZZZZZ	4930
13:28	ZZZZZZ	5011
13:31	ZZZZZZ	4902
13:34	ZZZZZZ	4930
13:38	ZZZZZZ	4898
13:41	ZZZZZZ	5034

INTERNAL STANDARD SUMMARY

Login Number: F21333
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR123003.ASC Date Analyzed: 12/30/03 Methods: SW846 6010B
Analyst: DM Run ID: MA3627
Parameters: As,Ba,Cd,Cr,Fe,Pb,Mn,Se

Time	Sample Description	Istd#1
13:44	MA3627-CCV6	4982
13:48	MA3627-CCB6	4973
13:51	ZZZZZZ	5218
13:54	ZZZZZZ	4949
13:57	ZZZZZZ	5099
14:01	ZZZZZZ	4953
14:04	ZZZZZZ	4991
14:07	ZZZZZZ	4882
14:10	ZZZZZZ	5057
14:13	ZZZZZZ	4883
14:16	MA3627-CCV7	5033
14:21	MA3627-CCB7	4914
14:24	MP6166-MB1	5045
14:27	MP6166-B1	5013
14:31	F21111-1	5151
14:34	MP6166-D1	5137
14:37	MP6166-SD1	5028
14:40	MP6166-S1	5048
14:44	MP6166-S2	5042
14:48	MA3627-CRI3	4945
14:51	MA3627-CCV8	5043
14:55	MA3627-CCB8	4941
15:03	MP6182-MB1	4955
15:06	MP6182-B1	4969
15:10	F21303-2	4916
15:14	MP6182-D1	4992
15:17	MP6182-SD1	4952
15:20	MP6182-S1	4853
15:23	MP6182-S2	4954
15:27	ZZZZZZ	4946
15:30	ZZZZZZ	5046
15:33	ZZZZZZ	4917
15:37	MA3627-CCV9	4958

INTERNAL STANDARD SUMMARY

Login Number: F21333
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR123003.ASC Date Analyzed: 12/30/03 Methods: SW846 6010B
Analyst: DM Run ID: MA3627
Parameters: As,Ba,Cd,Cr,Fe,Pb,Mn,Se

Time	Sample Description	Istd#1
15:41	MA3627-CCB9	4902
15:44	ZZZZZZ	4902
15:47	ZZZZZZ	4957
15:50	ZZZZZZ	4908
15:53	ZZZZZZ	4975
15:56	ZZZZZZ	4984
16:00	MP6183-MB1	4930
16:03	MP6183-B1	4975
16:07	F21333-1	4910
16:10	MP6183-D1	4906
16:13	MP6183-SD1	4988
16:16	MA3627-CCV10	4957
16:20	MA3627-CCB10	4989
16:23	MP6183-S1	4972
16:27	MP6183-S2	4924
16:31	ZZZZZZ	4889
16:34	ZZZZZZ	4894
16:37	ZZZZZZ	4922
16:40	ZZZZZZ	5003
16:43	ZZZZZZ	4887
16:46	ZZZZZZ	4926
16:50	ZZZZZZ	4932
16:53	ZZZZZZ	5355
16:56	MA3627-CCV11	4970
17:00	MA3627-CCB11	4955
17:03	ZZZZZZ	6969 !
17:06	ZZZZZZ	5058
17:09	ZZZZZZ	4926
17:13	ZZZZZZ	4975
17:16	ZZZZZZ	4988
17:19	ZZZZZZ	4949
17:22	ZZZZZZ	5179
17:25	ZZZZZZ	5015

INTERNAL STANDARD SUMMARY

Login Number: F21333
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR123003.ASC Date Analyzed: 12/30/03 Methods: SW846 6010B
Analyst: DM Run ID: MA3627
Parameters: As,Ba,Cd,Cr,Fe,Pb,Mn,Se

Time	Sample Description	Istd#1
17:28	ZZZZZZ	4975
17:32	ZZZZZZ	4931
17:35	MA3627-CCV12	4940
17:39	MA3627-CCB12	4872
17:42	MP6184-MB1	4826
17:45	MP6184-B1	4971
17:49	F21360-1	6591 !
17:52	MP6184-D1	6140
17:55	MP6184-SD1	5258
17:59	MP6184-S1	6110
18:02	MP6184-S2	5931
18:06	ZZZZZZ	5860
18:09	ZZZZZZ	5067
18:12	ZZZZZZ	5345
18:15	MA3627-CCV13	4879
18:19	MA3627-CCB13	4873
18:22	ZZZZZZ	5227
18:26	ZZZZZZ	5335
18:29	ZZZZZZ	5695
18:32	ZZZZZZ	5061
18:35	ZZZZZZ	4830
18:38	ZZZZZZ	4728
18:41	ZZZZZZ	4779
18:45	ZZZZZZ	4745
18:48	ZZZZZZ	4741
18:51	ZZZZZZ	4842
18:54	MA3627-CCV14	4840
18:58	MA3627-CCB14	4807
19:01	ZZZZZZ	4804
19:04	ZZZZZZ	4968
19:08	ZZZZZZ	5189
19:11	ZZZZZZ	4948
19:14	ZZZZZZ	4907

INTERNAL STANDARD SUMMARY

Login Number: F21333
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR123003.ASC Date Analyzed: 12/30/03 Methods: SW846 6010B
Analyst: DM Run ID: MA3627
Parameters: As,Ba,Cd,Cr,Fe,Pb,Mn,Se

Time	Sample Description	Istd#1
19:17	ZZZZZZ	4863
19:21	MA3627-CRI4	4941
19:24	MA3627-CCV15	4920
19:28	MA3627-CCB15	4872

R = Reference for ISTD limits. ! = Outside limits.

LEGEND:

Istd#	Parameter	Limits
Istd#1	Yttrium	60-125 %

6.1.1

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: F21333
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR123003.ASC Date Analyzed: 12/30/03 Methods: SW846 6010B
QC Limits: result < RL Run ID: MA3627 Units: ug/l

Time: / Sample ID: / Metal	RL	IDL	09:50 ICB1 raw	final	10:13 CCB1 raw	final	10:54 CCB2 raw	final	11:34 CCB3 raw	final
Aluminum	200	6.6								
Antimony	5.0	1.5	anr							
Arsenic	10	2.8	0.28	<10	-0.050	<10	-0.50	<10	-0.64	<10
Barium	200	.5	0.48	<200	0.49	<200	0.62	<200	0.89	<200
Beryllium	5.0	.3								
Cadmium	5.0	.3	0.12	<5.0	0.38	<5.0	0.47	<5.0	0.60	<5.0
Calcium	1000	3.8								
Chromium	10	.4	0.17	<10	-0.020	<10	-0.61	<10	1.2	<10
Cobalt	50	.5								
Copper	25	.44	anr							
Iron	300	7.1	52.0	<300	48.1	<300	28.5	<300	69.0	<300
Lead	5.0	1.2	1.5	<5.0	4.0	<5.0	4.2	<5.0	3.2	<5.0
Magnesium	5000	9.9								
Manganese	15	.16	0.30	<15	0.50	<15	0.80	<15	0.92	<15
Molybdenum	50	.75								
Nickel	40	1.1								
Selenium	10	2	1.8	<10	3.2	<10	2.5	<10	1.0	<10
Silver	10	.6	anr							
Sodium	5000	150								
Zinc	20	.59	anr							

(*) Outside of QC limits
(anr) Analyte not requested

6.1.2

BLANK RESULTS SUMMARY
Part I - Initial and Continuing Calibration Blanks

Login Number: F21333
Account: EEINCJX - EE1
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR123003.ASC Date Analyzed: 12/30/03 Methods: SW846 6010B
QC Limits: result < RL Run ID: MA3627 Units: ug/l

Time: / Sample ID: / Metal	RL	IDL	12:14 CCB4 raw	final	13:08 CCB5 raw	final	13:48 CCB6 raw	final	14:21 CCB7 raw	final
Aluminum	200	6.6								
Antimony	5.0	1.5	anr							
Arsenic	10	2.8	1.2	<10	0.69	<10	-1.2	<10	-0.89	<10
Barium	200	.5	0.75	<200	0.82	<200	0.61	<200	0.98	<200
Beryllium	5.0	.3								
Cadmium	5.0	.3	0.59	<5.0	0.64	<5.0	0.44	<5.0	0.75	<5.0
Calcium	1000	3.8								
Chromium	10	.4	0.14	<10	0.80	<10	-0.22	<10	0.99	<10
Cobalt	50	.5								
Copper	25	.44	anr							
Iron	300	7.1	33.2	<300	59.7	<300	38.0	<300	63.7	<300
Lead	5.0	1.2	1.7	<5.0	2.0	<5.0	2.3	<5.0	2.2	<5.0
Magnesium	5000	9.9								
Manganese	15	.16	0.78	<15	0.83	<15	0.74	<15	0.96	<15
Molybdenum	50	.75								
Nickel	40	1.1								
Selenium	10	2	3.6	<10	3.0	<10	5.2	<10	0.96	<10
Silver	10	.6	anr							
Sodium	5000	150								
Zinc	20	.59	anr							

(*) Outside of QC limits
(anr) Analyte not requested

6.1.2

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: F21333
Account: EBINCJX - EBI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR123003.ASC Date Analyzed: 12/30/03 Methods: SW846 6010B
QC Limits: result < RL Run ID: MA3627 Units: ug/l

Time: / Sample ID: / Metal	RL	IDL	14:55 CCB8 raw	final	15:41 CCB9 raw	final	16:20 CCB10 raw	final	17:00 CCB11 raw	final
Aluminum	200	6.6								
Antimony	5.0	1.5	anr							
Arsenic	10	2.8	-0.86	<10	-1.8	<10	1.7	<10	-0.080	<10
Barium	200	.5	0.91	<200	0.22	<200	0.42	<200	0.45	<200
Beryllium	5.0	.3								
Cadmium	5.0	.3	0.25	<5.0	-0.010	<5.0	0.18	<5.0	0.38	<5.0
Calcium	1000	3.8								
Chromium	10	.4	0.33	<10	0.12	<10	1.2	<10	0.62	<10
Cobalt	50	.5								
Copper	25	.44	anr							
Iron	300	7.1	48.9	<300	55.7	<300	69.6	<300	68.5	<300
Lead	5.0	1.2	4.7	<5.0	1.5	<5.0	1.3	<5.0	1.2	<5.0
Magnesium	5000	9.9								
Manganese	15	.16	0.83	<15	0.050	<15	0.23	<15	0.25	<15
Molybdenum	50	.75								
Nickel	40	1.1								
Selenium	10	2	6.7	<10	1.5	<10	-0.26	<10	1.3	<10
Silver	10	.6	anr							
Sodium	5000	150								
Zinc	20	.59	anr							

(*) Outside of QC limits
(anr) Analyte not requested

6.1.2
6

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: F21333
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR123003.ASC Date Analyzed: 12/30/03 Methods: SW846 6010B
QC Limits: 90 to 110 % Recovery Run ID: MA3627 Units: ug/l

Time:		09:47			10:09			10:50	
Sample ID:	ICV	ICV1		CCV	CCV1		CCV	CCV2	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum									
Antimony	anr								
Arsenic	2000	2010	100.5	2000	2010	100.5	2000	2040	102.0
Barium	2000	2030	101.5	2000	2050	102.5	2000	2040	102.0
Beryllium									
Cadmium	2000	2090	104.5	2000	2080	104.0	2000	2110	105.5
Calcium									
Chromium	2000	1990	99.5	2000	1980	99.0	2000	2010	100.5
Cobalt									
Copper	anr								
Iron	40000	41300	103.3	40000	41200	103.0	40000	41500	103.8
Lead	2000	2050	102.5	2000	2000	100.0	2000	2060	103.0
Magnesium									
Manganese	2000	2040	102.0	2000	2030	101.5	2000	2060	103.0
Molybdenum									
Nickel									
Selenium	2000	2100	105.0	2000	2080	104.0	2000	2160	108.0
Silver	anr								
Sodium									
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

6.1.3

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: F21333
Account: EEINCCX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR123003.ASC Date Analyzed: 12/30/03 Methods: SW846 6010B
QC Limits: 90 to 110 % Recovery Run ID: MA3627 Units: ug/l

Time:		11:30			12:10			13:04	
Sample ID:	CCV	CCV3		CCV	CCV4		CCV	CCV5	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum									
Antimony	anr								
Arsenic	2000	2070	103.5	2000	2070	103.5	2000	1980	99.0
Barium	2000	2040	102.0	2000	1990	99.5	2000	2040	102.0
Beryllium									
Cadmium	2000	2150	107.5	2000	2140	107.0	2000	2060	103.0
Calcium									
Chromium	2000	2040	102.0	2000	2020	101.0	2000	1970	98.5
Cobalt									
Copper	anr								
Iron	40000	42100	105.3	40000	41800	104.5	40000	40400	101.0
Lead	2000	2100	105.0	2000	2060	103.0	2000	2010	100.5
Magnesium									
Manganese	2000	2080	104.0	2000	2050	102.5	2000	2020	101.0
Molybdenum									
Nickel									
Selenium	2000	2180	109.0	2000	2180	109.0	2000	2070	103.5
Silver	anr								
Sodium									
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: F21333
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR123003.ASC Date Analyzed: 12/30/03 Methods: SW846 6010B
QC Limits: 90 to 110 % Recovery Run ID: MA3627 Units: ug/l

Time:		13:44			14:16			14:51	
Sample ID:	CCV	CCV6		CCV	CCV7		CCV	CCV8	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum									
Antimony	anr								
Arsenic	2000	1990	99.5	2000	1940	97.0	2000	1930	96.5
Barium	2000	2050	102.5	2000	2030	101.5	2000	2000	100.0
Beryllium									
Cadmium	2000	2060	103.0	2000	2030	101.5	2000	2020	101.0
Calcium									
Chromium	2000	1980	99.0	2000	1950	97.5	2000	1940	97.0
Cobalt									
Copper	anr								
Iron	40000	40400	101.0	40000	39900	99.8	40000	39600	99.0
Lead	2000	2020	101.0	2000	2000	100.0	2000	1980	99.0
Magnesium									
Manganese	2000	2020	101.0	2000	2000	100.0	2000	1980	99.0
Molybdenum									
Nickel									
Selenium	2000	2080	104.0	2000	2030	101.5	2000	2020	101.0
Silver	anr								
Sodium									
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

6.1.3

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: F21333
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR123C03.ASC Date Analyzed: 12/30/03 Methods: SW846 6010B
QC Limits: 90 to 110 % Recovery Run ID: MA3627 Units: ug/l

Time: / Sample ID: / Metal	CCV True	15:37 CCV9 Results	% Rec	CCV True	16:16 CCV10 Results	% Rec	CCV True	16:56 CCV11 Results	% Rec
Aluminum									
Antimony	anr								
Arsenic	2000	1940	97.0	2000	1940	97.0	2000	1970	98.5
Barium	2000	2020	101.0	2000	2030	101.5	2000	2050	102.5
Beryllium									
Cadmium	2000	2050	102.5	2000	2040	102.0	2000	2080	104.0
Calcium									
Chromium	2000	1960	98.0	2000	1960	98.0	2000	1990	99.5
Cobalt									
Copper	anr								
Iron	40000	40000	100.0	40000	39800	99.5	40000	40800	102.0
Lead	2000	2020	101.0	2000	2010	100.5	2000	2020	101.0
Magnesium									
Manganese	2000	2000	100.0	2000	2000	100.0	2000	2030	101.5
Molybdenum									
Nickel									
Selenium	2000	2050	102.5	2000	2030	101.5	2000	2040	102.0
Silver	anr								
Sodium									
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

6.1.3

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: F21333
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR123003.ASC Date Analyzed: 12/30/03 Methods: SW846 6010B
QC Limits: 70 to 130 % Recovery Run ID: MA3627 Units: ug/l

Time:			09:53		09:56		14:48	
Sample ID:	CRI	CRIA	CRI1		CRI2		CRI3	
Metal	True	True	Results	% Rec	Results	% Rec	Results	% Rec
Aluminum	400							
Antimony	10							
Arsenic	20				18.1	90.5		
Barium	400				403	100.8		
Beryllium	10							
Cadmium	10				10.2	102.0		
Calcium	2000							
Chromium	20		10.2	102.0	20.2	101.0		
Cobalt	100							
Copper	50							
Iron	600				611	101.8		
Lead	10		7.0	140.0	11.8	118.0		
Magnesium	10000							
Manganese	30				31.2	104.0		
Molybdenum	100							
Nickel	80							
Selenium	10				10.8	108.0		
Silver	20							
Sodium	10000							
Zinc	40							

(*) Outside of QC limits
(anr) Analyte not requested

6.1.4

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: F21333
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR123003.ASC Date Analyzed: 12/30/03 Methods: SW846 6010B
QC Limits: 80 to 120 % Recovery Run ID: MA3627 Units: ug/l

Time:			09:59		10:02	
Sample ID:	ICSA	ICSAB	ICSA1		ICSAB1	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	500000	500000	523000	104.6	537000	107.4
Antimony		1000	3.7		1010	101.0
Arsenic		1000	2.6		990	99.0
Barium		500	2.6		539	107.8
Beryllium		500	-0.92		506	101.2
Cadmium		1000	3.2		1010	101.0
Calcium	500000	500000	483000H	96.6	482000H	96.4
Chromium		500	2.0		479	95.8
Cobalt		500	0.66		497	99.4
Copper		500	-4.7		537	107.4
Iron	200000	200000	209000	104.5	205000	102.5
Lead		1000	3.6		1000	100.0
Magnesium	500000	500000	567000	113.4	573000	114.6
Manganese		500	0.37		493	98.6
Molybdenum		1000	-4.5		953	95.3
Nickel		1000	3.4		1010	101.0
Selenium		1000	5.8		1010	101.0
Silver		1000	1.8		1100	110.0
Sodium			75.1		346	
Zinc		1000	2.6		935	93.5

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: F21333
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

QC Batch ID: MP6183
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date: 12/30/03

Metal	RL	IDL	MB raw	final
Aluminum	200	6.6		
Antimony	5.0	1.5		
Arsenic	10	2.8	-3.9	<10
Barium	200	.5	-0.64	<200
Beryllium	5.0	.3		
Cadmium	5.0	.3	-0.82	<5.0
Calcium	1000	3.8		
Chromium	10	.4	-1.2	<10
Cobalt	50	.5		
Copper	25	.44		
Iron	300	7.1	-23	<300
Lead	5.0	1.2	-0.75	<5.0
Magnesium	5000	9.9		
Manganese	15	.16	-0.76	<15
Molybdenum	50	.75		
Nickel	40	1.1		
Selenium	10	2	1.3	<10
Silver	10	.6		
Sodium	5000	150		
Zinc	20	.59		

Associated samples MP6183: F21333-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: F21333
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

QC Batch ID: MP6183
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/L

Prep Date: 12/30/03 12/30/03

Metal	F21333-1 Original	DUP	RPD	QC Limits	F21333-1 Original	MS	Spikelot MPFLICP	% Rec	QC Limits
Aluminum									
Antimony									
Arsenic	0.0	0.0	NC	0-12	0.0	4040	4000	101.0	83-116
Barium	29.6	28.3	4.5	0-13	29.6	4100	4000	101.8	82-116
Beryllium									
Cadmium	0.0	0.0	NC	0-13	0.0	105	100	105.0	80-115
Calcium									
Chromium	0.0	0.0	NC	0-12	0.0	401	400	100.3	82-120
Cobalt									
Copper									
Iron	39.9	0.0	200.0(a)	0-14	39.9	27900	27000	103.2	76-125
Lead	1.8	1.8	0.0	0-10	1.8	1040	1000	103.8	84-118
Magnesium									
Manganese	8.5	8.1	4.8	0-13	8.5	1030	1000	102.2	75-125
Molybdenum									
Nickel									
Selenium	0.0	0.0	NC	0-13	0.0	4140	4000	103.5	84-121
Silver									
Sodium									
Zinc									

Associated samples MP6183: F21333-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) RPD acceptable due to low duplicate and sample concentrations.

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: F21333
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

QC Batch ID: MP6183
Matrix Type: AQUEOUS

Methods: SW846 601CB
Units: ug/l

Prep Date: 12/30/03

Metal	F21333-1 Original	MSD	Spikelot MPFLICP	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony						
Arsenic	0.0	3960	4000	99.0	2.0	20
Barium	29.6	4010	4000	99.5	2.2	20
Beryllium						
Cadmium	0.0	103	100	103.0	1.9	20
Calcium						
Chromium	0.0	394	400	98.5	1.8	20
Cobalt						
Copper						
Iron	39.9	28300	27000	104.7	1.4	20
Lead	1.8	1020	1000	101.8	1.9	20
Magnesium						
Manganese	8.5	1010	1000	100.2	2.0	20
Molybdenum						
Nickel						
Selenium	0.0	4110	4000	102.8	0.7	20
Silver						
Sodium						
Zinc						

Associated samples MP6183: F21333-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: F21333
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

QC Batch ID: MP6183
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date: 12/30/03

Metal	BSP Result	Spikelot MPFLICP	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic	3880	4000	97.0	80-120
Barium	3890	4000	97.3	80-120
Beryllium				
Cadmium	103	100	103.0	80-120
Calcium				
Chromium	392	400	98.0	80-120
Cobalt				
Copper				
Iron	28200	27000	104.4	80-120
Lead	986	1000	98.6	80-120
Magnesium				
Manganese	995	1000	99.5	80-120
Molybdenum				
Nickel				
Selenium	3920	4000	98.0	80-120
Silver				
Sodium				
Zinc				

Associated samples MP6183: F21333-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

6.2.3

SERIAL DILUTION RESULTS SUMMARY

Login Number: F21333
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

QC Batch ID: MP6183
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date: 12/30/03

Metal	F21333-1 Original	SDL 1:5	RPD	QC Limits
Aluminum				
Antimony				
Arsenic	0.00	0.00	NC	0-10
Barium	29.6	28.2	4.8	0-10
Beryllium				
Cadmium	0.00	0.00	NC	0-10
Calcium				
Chromium	0.00	0.00	NC	0-10
Cobalt				
Copper				
Iron	39.9	0.00	100.0(a)	0-10
Lead	1.77	0.00	100.0(a)	0-10
Magnesium				
Manganese	8.46	6.78	19.9*(b)	0-10
Molybdenum				
Nickel				
Selenium	0.00	0.00	NC	0-10
Silver				
Sodium				
Zinc				

Associated samples MP6183: F21333-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
(b) Serial dilution indicates possible matrix interference.

6.2.4

Instrument Detection Limits

Job Number: F21333
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Instrument ID: TJATRACE1 **Effective Date:** 04/15/02

Analyte	IDL ug/l
Aluminum	6.6
Antimony	1.5
Arsenic	2.8
Barium	.5
Beryllium	.3
Cadmium	.3
Calcium	3.8
Chromium	.4
Cobalt	.5
Copper	.44
Iron	7.1
Lead	1.2
Magnesium	9.9
Manganese	.16
Molybdenum	.75
Nickel	1.1
Potassium	13.8
Selenium	2
Silver	.6
Sodium	145
Thallium	1.5
Tin	1.5
Vanadium	.47
Zinc	.59

The above applies to the following instrument runs:
MA3627

Instrument Linear Ranges

Job Number: F21333
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Instrument ID: TJATRACE1 **Effective Date:** 10/03/03

Analyte	Linear Range ug/l
Aluminum	1000000
Antimony	100000
Arsenic	50000
Barium	100000
Beryllium	50000
Cadmium	50000
Calcium	500000
Chromium	100000
Cobalt	100000
Copper	100000
Iron	1000000
Lead	100000
Magnesium	1000000
Manganese	50000
Molybdenum	100000
Nickel	100000
Potassium	1000000
Selenium	100000
Silver	1000
Sodium	250000
Thallium	100000
Tin	100000
Vanadium	100000
Zinc	100000

The above applies to the following instrument runs:
MA3627

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: F21333
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Solids, Total Dissolved	GN13457	10	<10	mg/l				
Solids, Total Suspended	GN13455	4.0	<4.0	mg/l				

Associated Samples:
Batch GN13455: F21333-1
Batch GN13457: F21333-1

7.1

7

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: F21333
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Solids, Total Dissolved	GN13457	F21333-1	mg/l	203	199	2.0	0-29%
Solids, Total Suspended	GN13455	F21310-1	mg/l	<4.0	<4.0	0.0(a)	0-33%

Associated Samples:
Batch GN13455: F21333-1
Batch GN13457: F21333-1
(a) RPD acceptable due to low duplicate and sample concentrations.

7.2

Southeast
ACCUTEST.
Laboratories

12/08/05

Technical Report for

EEI

CSFF MCAS New River

CTO 3

Accutest Job Number: F21563

Sampling Date: 01/12/04

Report to:

EEI

bmorris@eeimail.com

ATTN: Bill Morris

Total number of pages in report: 20

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Sections: 1 2 3 4 5

Table of Contents

-1-

Section 1: Sample Summary **3**
Section 2: Case Narrative/Conformance Summary **4**
Section 3: Sample Results **5**
3.1: F21563-1: CSFF-EFF-003 5
Section 4: Misc. Forms **6**
4.1: Chain of Custody 7
Section 5: GC Semi-volatiles - QC Data Summaries **9**
5.1: Method Blank Summary 10
5.2: Blank Spike Summary 11
5.3: Matrix Spike/Matrix Spike Duplicate Summary 12
5.4: Surrogate Recovery Summaries 13
5.5: GC Surrogate Retention Time Summaries 14
5.6: Initial and Continuing Calibration Summaries 15

Sample Summary

EEI

Job No: F21563

CSFF MCAS New River
Project No: CTO 3

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
F21563-1	01/12/04	11:50	BS	01/13/04	AQ	Ground Water	CSFF-EFF-003

Accutest Laboratories Southeast, Inc.
Analytical Narrative

Client: EEI
Site: CSFF MCAS New River
Job No.: F21563
Report Date: January 27, 2004

1 sample was collected on January 12, 2004 and received on January 13, 2004. Samples were intact and properly cooled. A listing of the Laboratory Sample ID, Client Sample ID, and dates of collection are presented in the Results Summary section of this report.
All method specified holding times, calibrations and quality control performance criteria were met.

Accutest Laboratories Southeast, Inc. certifies that this report meets the project requirements for analytical data produced for the samples as received at the Accutest Laboratories Southeast location as stated in the Analytical Task Order and the COC. In addition, Accutest Laboratories Southeast, Inc. certifies that data as reported meet the Data Quality Objectives for precision, accuracy and completeness as specified in the Accutest Laboratories Southeast, Inc. Quality Manual for other that conditions detailed above. It is recommended by Accutest Laboratories Southeast, Inc. that this report is to be used in its entirety. Accutest Laboratories Southeast, Inc. is not responsible for any assumptions of data quality if partial data packages are used to interpret data. The Accutest Laboratories Southeast, Inc. Laboratory Director as verified by the signature on the front page has authorized release of this report.

Narrative prepared by:

Date: January 27, 2004

Sue O. Bell, Project Manager (signature on file)

Report of Analysis

Client Sample ID:	CSFF-EFF-003		
Lab Sample ID:	F21563-1	**Date Sampled:**	01/12/04
Matrix:	AQ - Ground Water	**Date Received:**	01/13/04
Method:	EPA 610 EPA 610	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IJ19289.D	1	01/22/04	SD	01/19/04	OP9584	GIJ932
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.0	2.0	ug/l	
208-96-8	Acenaphthylene	ND	5.0	2.0	ug/l	
120-12-7	Anthracene	ND	5.0	2.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.0	2.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.0	2.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.0	2.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.0	2.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.0	2.0	ug/l	
218-01-9	Chrysene	ND	5.0	2.0	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.0	2.0	ug/l	
206-44-0	Fluoranthene	ND	5.0	2.0	ug/l	
86-73-7	Fluorene	ND	5.0	2.0	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.0	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.0	ug/l	
90-12-0	1-Methylnaphthalene	ND	5.0	2.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.0	2.0	ug/l	
85-01-8	Phenanthrene	ND	5.0	2.0	ug/l	
129-00-0	Pyrene	ND	5.0	2.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	90%		42-123%
84-15-1	o-Terphenyl	90%		51-123%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

CHAIN OF CUSTODY

ACCUTEST Laboratories
4405 VINELAND ROAD • SUITE C-15
ORLANDO, FL 32811
TEL: 407-425-6700 • FAX: 407-425-0707

ACCUTEST JOB #: F21563
ACCUTEST QUOTE #:

CLIENT INFORMATION

NAME: Engineering & Environment Inc
ADDRESS: 924 Gumbranch rd Suite 5
CITY: Jacksonville STATE: NC ZIP: 28540
SEND REPORT TO:
PHONE #:

FACILITY INFORMATION

PROJECT NAME: CSFF
LOCATION: New river air station
PROJECT NO.:
FAX #:

ANALYTICAL INFORMATION

MATRIX CODES

DW - DRINKING WATER
GW - GROUND WATER
WW - WASTE WATER
SO - SOIL
SL - SLUDGE
OI - OIL
LIQ - OTHER LIQUID
SOL - OTHER SOLID

ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION DATE	COLLECTION TIME	SAMPLED BY:	MATRIX	# OF BOTTLES	PRESERVATION HCl	PRESERVATION NaOH	PRESERVATION H2SO4	PRESERVATION NONE	610	LAB USE ONLY
1	CSFF-EFF-003	1-12-04	11:50	BS	GW	2				X	X	

DATA TURNAROUND INFORMATION

- ☐ STANDARD
- ☐ 48 HOUR RUSH
- ☐ 24 HOUR EMERGENCY
- ☒ OTHER

APPROVED BY:

EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED

DATA DELIVERABLE INFORMATION

- ☐ STANDARD
- ☐ COMMERCIAL "B"
- ☐ DISK DELIVERABLE
- ☒ STATE FORMS
- ☐ OTHER (SPECIFY)

COMMENTS/REMARKS

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESION, INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
1.	1-12-04 16:23	1. 941522577976	2.	1/13/04 0931	2. Muna Mohammed
RELINQUISHED BY:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
3.		3.	4.		4.
RELINQUISHED BY:	DATE TIME:	RECEIVED BY:	SEAL #	PRESERVE WHERE APPLICABLE ☐	ON ICE ☐ TEMPERATURE 2.8 °C
5.		5.			

F21563: Chain of Custody
Page 1 of 2

ACCUTEST LABORATORIES SOUTHEAST SAMPLE RECEIPT CONFIRMATION

Accutest's Job Number: F21563

Client: Engineering + Environment Project: CSFF

Date Received: 11/13/04 Time Received: 0930

of Coolers Received: 1 Cooler Temperatures: 2.0

Delivery Method: (FedEx) UPS Accutest Courier Greyhound Delivery Other

Air Bill Number: _____

Cooler Custody Seals Intact ?	(Yes)	No	
Chain of Custody Provided ?	(Yes)	No	
COC Match Bottle Label ID's ?	(Yes)	No	
Sample Labels Present on all bottles ?	(Yes)	No	
All Analyses Marked On COC ?	(Yes)	No	
Are All Bottles Intact ?	(Yes)	No	
Samples Preserved Correctly ?	(Yes)	No	
Correct Number of Containers Used ?	(Yes)	No	
Sufficient Sample Volume ?	(Yes)	No	
Trip Blank Provided ?	Yes	(No)	
Trip Blank on COC ?	Yes	(No)	
Trip Blank Intact ?	Yes	No	(N/A)
Trip Blank Matrix ?	Soil	Water	(N/A)
Number of Encores ?	(0)		
Number of Soil Field Kits ?	(0)		

Summary of Comments: _____

Signature: Muna Mohammed Date: 11/13/04

Review Signature: _____

ASBD 12/30/03

F21563: Chain of Custody
Page 2 of 2

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplieate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: F21563
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP9584-MB	IJ19288.D	1	01/22/04	SD	01/19/04	OP9584	GIJ932

The QC reported here applies to the following samples: **Method:** EPA 610

F21563-1

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.0	2.0	ug/l	
208-96-8	Acenaphthylene	ND	5.0	2.0	ug/l	
120-12-7	Anthracene	ND	5.0	2.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.0	2.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.0	2.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.0	2.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.0	2.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.0	2.0	ug/l	
218-01-9	Chrysene	ND	5.0	2.0	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.0	2.0	ug/l	
206-44-0	Fluoranthene	ND	5.0	2.0	ug/l	
86-73-7	Fluorene	ND	5.0	2.0	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.0	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.0	ug/l	
90-12-0	1-Methylnaphthalene	ND	5.0	2.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.0	2.0	ug/l	
85-01-8	Phenanthrene	ND	5.0	2.0	ug/l	
129-00-0	Pyrene	ND	5.0	2.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
321-60-8	2-Fluorobiphenyl	91%	42-123%
84-15-1	o-Terphenyl	91%	51-123%

Blank Spike Summary

Job Number: F21563
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP9584-BS	IJ19287.D	1	01/22/04	SD	01/19/04	OP9584	GIJ932

5.2.4

The QC reported here applies to the following samples: **Method:** EPA 610

F21563-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
83-32-9	Acenaphthene	25	24.3	97	71-113
208-96-8	Acenaphthylene	25	21.5	86	63-102
120-12-7	Anthracene	25	23.6	94	71-110
56-55-3	Benzo(a)anthracene	25	23.6	94	70-114
50-32-8	Benzo(a)pyrene	25	24.1	96	67-114
205-99-2	Benzo(b)fluoranthene	25	24.2	97	69-115
191-24-2	Benzo(g,h,i)perylene	25	24.3	97	61-117
207-08-9	Benzo(k)fluoranthene	25	23.7	95	69-111
218-01-9	Chrysene	25	24.6	98	70-114
53-70-3	Dibenzo(a,h)anthracene	25	24.1	96	64-114
206-44-0	Fluoranthene	25	24.0	96	71-114
86-73-7	Fluorene	25	23.6	94	69-111
193-39-5	Indeno(1,2,3-cd)pyrene	25	23.0	92	63-112
91-20-3	Naphthalene	25	22.3	89	66-105
90-12-0	1-Methylnaphthalene	25	24.1	96	71-112
91-57-6	2-Methylnaphthalene	25	22.6	90	65-106
85-01-8	Phenanthrene	25	23.4	94	69-112
129-00-0	Pyrene	25	24.1	96	70-114

CAS No.	Surrogate Recoveries	BSP	Limits
321-60-8	2-Fluorobiphenyl	90%	42-123%
84-15-1	o-Terphenyl	93%	51-123%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F21563
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP9584-MS	IJ19290.D	1	01/22/04	SD	01/19/04	OP9584	GIJ932
OP9584-MSD	IJ19291.D	1	01/22/04	SD	01/19/04	OP9584	GIJ932
F21563-1	IJ19289.D	1	01/22/04	SD	01/19/04	OP9584	GIJ932

The QC reported here applies to the following samples: **Method:** EPA 610

F21563-1

CAS No.	Compound	F21563-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	ND		50	51.2	102	50.6	101	1	59-123/20
208-96-8	Acenaphthylene	ND		50	45.5	91	45.5	91	0	51-114/20
120-12-7	Anthracene	ND		50	49.5	99	48.8	98	1	64-114/17
56-55-3	Benzo(a)anthracene	ND		50	48.8	98	47.9	96	2	66-115/17
50-32-8	Benzo(a)pyrene	ND		50	50.1	100	49.3	99	2	62-118/17
205-99-2	Benzo(b)fluoranthene	ND		50	49.6	99	49.6	99	0	66-117/17
191-24-2	Benzo(g,h,i)perylene	ND		50	51.1	102	50.5	101	1	59-120/17
207-08-9	Benzo(k)fluoranthene	ND		50	49.7	99	48.1	96	3	64-116/16
218-01-9	Chrysene	ND		50	50.5	101	49.7	99	2	66-117/16
53-70-3	Dibenzo(a,h)anthracene	ND		50	50.9	102	50.2	100	1	57-124/18
206-44-0	Fluoranthene	ND		50	49.0	98	48.8	98	0	67-116/17
86-73-7	Fluorene	ND		50	49.4	99	49.2	98	0	58-122/19
193-39-5	Indeno(1,2,3-cd)pyrene	ND		50	48.9	98	48.0	96	2	59-116/18
91-20-3	Naphthalene	ND		50	46.3	93	47.1	94	2	47-114/20
90-12-0	1-Methylnaphthalene	ND		50	50.1	100	50.8	102	1	55-128/21
91-57-6	2-Methylnaphthalene	ND		50	47.3	95	47.9	96	1	51-117/21
85-01-8	Phenanthrene	ND		50	49.0	98	48.4	97	1	63-116/18
129-00-0	Pyrene	ND		50	49.9	100	49.0	98	2	67-116/17

CAS No.	Surrogate Recoveries	MS	MSD	F21563-1	Limits
321-60-8	2-Fluorobiphenyl	92%	94%	90%	42-123%
84-15-1	o-Terphenyl	94%	94%	90%	51-123%

Semivolatile Surrogate Recovery Summary

Job Number: F21563
Account: EEINCJX EEI
Project: CSFF MCAS New River

Method: EPA 610	**Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S2 [a]
F21563-1	IJ19289.D	90.0	90.0
OP9584-BS	IJ19287.D	90.0	93.0
OP9584-MB	IJ19288.D	91.0	91.0
OP9584-MS	IJ19290.D	92.0	94.0
OP9584-MSD	IJ19291.D	94.0	94.0

Surrogate Compounds	Recovery Limits
S1 = 2-Fluorobiphenyl	42-123%
S2 = o-Terphenyl	51-123%

(a) Recovery from GC signal #1

5.4

GC Surrogate Retention Time Summary

Job Number: F21563
Account: EEINCJX EEI
Project: CSFF MCAS New River

Check Std:	GIJ932-CC928	**Injection Date:**	01/22/04
Lab File ID:	IJ19286.D	**Injection Time:**	12:26
Instrument ID:	GCIJ	**Method:**	EPA 610

	S1 [a] RT	S2 [a] RT
Check Std	5.71	10.24

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
OP9584-BS	IJ19287.D	01/22/04	12:57	5.71	10.24
OP9584-MB	IJ19288.D	01/22/04	13:26	5.72	10.25
F21563-1	IJ19289.D	01/22/04	13:54	5.72	10.25
OP9584-MS	IJ19290.D	01/22/04	14:23	5.72	10.25
OP9584-MSD	IJ19291.D	01/22/04	14:52	5.72	10.25

Surrogate Compounds

S1 = 2-Fluorobiphenyl
S2 = o-Terphenyl

(a) Retention time from GC signal #1

Initial Calibration Summary

Job Number: F21563
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GIJ928-ICC928
Lab FileID: IJ19184.D

Response Factor Report FID 1

Method : C:\HPCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title : PAH's 8Y EPA 610 OR 8100
Last Update : Wed Jan 14 07:33:44 2004
Response via : Initial Calibration

Calibration Files
5 =IJ19182.D 10 =IJ19183.D 20 =IJ19184.D
30 =IJ19185.D 40 =IJ19186.D 50 =IJ19187.D

		Compound	5	10	20	30	40	50	Avg		%RSD
1)		Naphthalene	1.607	1.598	1.575	1.579	1.577	1.616	1.592	E4	1.09
2)		2-Methyl Naphthalen	1.554	1.537	1.522	1.524	1.527	1.567	1.538	E4	1.19
3)		1-Methyl Naphthalen	1.555	1.518	1.494	1.492	1.499	1.537	1.516	E4	1.71
4)	S	2-Fluorobiphenyl	1.350	1.381	1.324	1.363	1.369	1.411	1.366	E4	2.15
5)		Acenaphthylene	1.620	1.559	1.559	1.561	1.571	1.619	1.582	E4	1.90
6)		Acenaphthene	1.646	1.634	1.607	1.601	1.598	1.650	1.623	E4	1.45
7)		Fluorene	1.585	1.598	1.573	1.573	1.563	1.614	1.585	E4	1.19
8)		Phenanthrene	1.508	1.553	1.554	1.565	1.560	1.612	1.559	E4	2.14
9)		Anthracene	1.724	1.667	1.601	1.594	1.580	1.623	1.631	E4	3.34
10)	S	O-Terphenyl	1.734	1.666	1.624	1.614	1.602	1.647	1.648	E4	2.92
11)		Fluoranthene	1.655	1.637	1.592	1.602	1.573	1.629	1.615	E4	1.90
12)		Pyrene	1.691	1.677	1.582	1.588	1.582	1.624	1.624	E4	3.03
13)		Benzo(a)Anthracene	1.533	1.581	1.568	1.589	1.589	1.627	1.581	E4	1.94
14)		Chrysene	1.776	1.698	1.618	1.612	1.598	1.626	1.654	E4	4.17
15)		Benzo(b)Fluoranthen	1.523	1.557	1.576	1.597	1.597	1.667	1.586	E4	3.07
16)		Benzo(k)Fluoranthen	1.875	1.794	1.675	1.657	1.642	1.643	1.714	E4	5.68
17)		Benzo(a) Pyrene	1.594	1.580	1.533	1.534	1.530	1.566	1.556	E4	1.77
18)		Indeno(1,2,3-cd)pyr	1.531	1.543	1.512	1.519	1.530	1.570	1.534	E4	1.34
19)		Dibenzo(a,h)anthrac	1.704	1.650	1.574	1.563	1.565	1.596	1.609	E4	3.53
20)		Benzo(g,h,i) Peryle	1.695	1.636	1.601	1.568	1.565	1.599	1.611	E4	3.03

Signal #2 Calibration Files
5 =IJ19182.D 10 =IJ19183.D 20 =IJ19184.D
30 =IJ19185.D 40 =IJ19186.D 50 =IJ19187.D

		Compound	5	10	20	30	40	50	Avg		%RSD
1)		Naphthalene	2.282	2.241	2.198	2.201	2.200	2.251	2.229	E4	1.55
2)		2-Methyl Naphthalen	2.158	2.125	2.102	2.112	2.113	2.173	2.130	E4	1.35
3)		1-Methyl Naphthalen	2.126	2.093	2.064	2.069	2.067	2.126	2.091	E4	1.40
4)	S	2-Fluorobiphenyl	1.918	1.924	1.910	1.913	1.913	1.971	1.925	E4	1.19
5)		Acenaphthylene	2.229	2.224	2.198	2.197	2.190	2.260	2.216	E4	1.19
6)		Acenaphthene	2.262	2.254	2.227	2.226	2.214	2.286	2.245	E4	1.20
7)		Fluorene	2.204	2.205	2.172	2.170	2.158	2.230	2.190	E4	1.25
8)		Phenanthrene	2.035	2.098	2.092	2.119	2.133	2.221	2.116	E4	2.89
9)		Anthracene	2.448	2.264	2.200	2.186	2.154	2.230	2.247	E4	4.68
10)	S	O-Terphenyl	2.304	2.281	2.234	2.234	2.220	2.288	2.260	E4	1.55
11)		Fluoranthene	2.265	2.245	2.190	2.198	2.193	2.250	2.223	E4	1.51
12)		Pyrene	2.354	2.274	2.216	2.221	2.220	2.278	2.260	E4	2.38
13)		Benzo(a)Anthracene	2.307	2.283	2.226	2.235	2.229	2.280	2.260	E4	1.52
14)		Chrysene	2.291	2.247	2.206	2.204	2.183	2.228	2.226	E4	1.74
15)		Benzo(b)Fluoranthen	2.238	2.246	2.201	2.211	2.221	2.293	2.235	E4	1.48
16)		Benzo(k)Fluoranthen	2.330	2.308	2.226	2.242	2.237	2.277	2.270	E4	1.86
17)		Benzo(a) Pyrene	2.192	2.172	2.113	2.123	2.121	2.172	2.149	E4	1.56
18)		Indeno(1,2,3-cd)pyr	2.166	2.158	2.122	2.146	2.172	2.256	2.170	E4	2.11
19)		Dibenzo(a,h)anthrac	2.304	2.248	2.132	2.118	2.081	2.093	2.162	E4	4.23
20)		Benzo(g,h,i) Peryle	2.246	2.214	2.140	2.139	2.152	2.202	2.182	E4	2.07

5.6

Initial Calibration Summary

Job Number: F21563
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GIJ928-ICC928
Lab FileID: IJ19184.D

Average % RSD = 2.2

(#) = Out of Range

8100_H2.M Wed Jan 14 08:50:40 2004

5.6

Continuing Calibration Summary

Job Number: F21563
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GIJ932-CC928
Lab FileID: IJ19286.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\0122PAH\IJ19286.D\FID1B.CH Vial: 1
Signal #2 : C:\HPCHEM\1\DATA\0122PAH\IJ19286.D\FID2A.CH
Acq On : 22 Jan 2004 12:26 pm Operator: sarahm
Sample : cc928-20 Inst : FID 1
Misc : op9584,gij932,1000,,,1,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : C:\HPCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title : PAH's BY EPA 610 OR 8100
Last Update : Thu Jan 22 12:52:09 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Naphthalene	20.000	19.448	2.8	98	0.00
2		2-Methyl Naphthalene	20.000	19.192	4.0	97	0.00
3		1-Methyl Naphthalene	20.000	19.201	4.0	97	0.00
4	S	2-Fluorobiphenyl	20.000	19.406	3.0	100	0.00
5		Acenaphthylene	20.000	18.899	5.5	96	0.00
6		Acenaphthene	20.000	19.119	4.4	97	0.00
7		Fluorene	20.000	18.726	6.4	94	0.00
8		Phenanthrene	20.000	18.227	8.9	91	0.00
9		Anthracene	20.000	18.579	7.1	95	0.00
10	S	O-Terphenyl	20.000	18.539	7.3	94	0.00
11		Fluoranthene	20.000	17.866	10.7	91	0.00
12		Pyrene	20.000	17.636	11.8	91	0.00
13		Benzo(a)Anthracene	20.000	17.521	12.4	88	0.00
14		Chrysene	20.000	18.165	9.2	93	0.00
15		Benzo(b)Fluoranthene	20.000	17.794	11.0	90	0.00
16		Benzo(k)Fluoranthene	20.000	18.456	7.7	94	0.00
17		Benzo(a) Pyrene	20.000	18.037	9.8	92	0.00
18		Indeno(1,2,3-cd)pyrene	20.000	17.826	10.9	90	0.00
19		Dibenzo(a,h)anthracene	20.000	18.464	7.7	94	0.00
20		Benzo(g,h,i) Perylene	20.000	18.771	6.1	94	0.00

Signal #2

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Naphthalene	20.000	19.336	3.3	98	0.00
2		2-Methyl Naphthalene	20.000	19.042	4.8	97	0.00
3		1-Methyl Naphthalene	20.000	19.447	2.8	99	0.00
4	S	2-Fluorobiphenyl	20.000	19.347	3.3	97	0.00
5		Acenaphthylene	20.000	19.112	4.4	96	0.00
6		Acenaphthene	20.000	19.271	3.6	97	0.00
7		Fluorene	20.000	18.858	5.7	95	0.00
8		Phenanthrene	20.000	17.404	13.0	88	0.00
9		Anthracene	20.000	19.947	0.3	102	0.00
10	S	O-Terphenyl	20.000	18.607	7.0	94	0.00
11		Fluoranthene	20.000	18.217	8.9	92	0.00
12		Pyrene	20.000	18.136	9.3	92	0.00
13		Benzo(a)Anthracene	20.000	17.992	10.0	91	0.00
14		Chrysene	20.000	17.955	10.2	91	0.00
15		Benzo(b)Fluoranthene	20.000	17.747	11.3	90	0.00

Continuing Calibration Summary

Job Number: F21563
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GIJ932-CC928
Lab FileID: IJ19286.D

16	Benzo(k)Fluoranthene	20.000	19.182	4.1	98	0.00
17	Benzo(a) Pyrene	20.000	18.328	8.4	93	0.00
18	Indeno(1,2,3-cd)pyrene	20.000	18.014	9.9	92	0.00
19	Dibenzo(a,h)anthracene	20.000	18.853	5.7	96	0.00
20	Benzo(g,h,i) Perylene	20.000	18.592	7.0	95	0.00

Average % D = 7.1

(#) = Out of Range SPCC's out = 0 CCC's out = 0
IJ19184.D 8100_H2.M Fri Jan 23 07:21:39 2004

Continuing Calibration Summary

Job Number: F21563 **Sample:** GIJ932-CC928
Account: EEINCJX EEI **Lab FileID:** IJ19292.D
Project: CSFF MCAS New River

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\0122PAH\IJ19292.D\FID1B.CH Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\0122PAH\IJ19292.D\FID2A.CH
Acq On : 22 Jan 2004 3:21 pm Operator: sarahm
Sample : cc928-30 Inst : FID 1
Misc : op9584,gij932,500,,,1,1,water MultiplIr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : C:\HPCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title : PAH's BY EPA 610 OR 8100
Last Update : Thu Jan 22 12:52:09 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Naphthalene	30.000	29.675	1.1	100	0.02
2		2-Methyl Naphthalene	30.000	29.415	2.0	99	0.02
3		1-Methyl Naphthalene	30.000	29.272	2.4	99	0.02
4	S	2-Fluorobiphenyl	30.000	29.864	0.5	100	0.02
5		Acenaphthylene	30.000	29.126	2.9	98	0.02
6		Acenaphthene	30.000	29.442	1.9	99	0.02
7		Fluorene	30.000	29.054	3.2	98	0.02
8		Phenanthrene	30.000	28.973	3.4	96	0.02
9		Anthracene	30.000	28.706	4.3	98	0.02
10	S	O-Terphenyl	30.000	28.719	4.3	98	0.01
11		Fluoranthene	30.000	28.311	5.6	95	0.01
12		Pyrene	30.000	28.133	6.2	96	0.01
13		Benzo(a)Anthracene	30.000	28.689	4.4	95	0.02
14		Chrysene	30.000	28.638	4.5	98	0.02
15		Benzo(b)Fluoranthene	30.000	29.107	3.0	96	0.02
16		Benzo(k)Fluoranthene	30.000	28.980	3.4	100	0.02
17		Benzo(a) Pyrene	30.000	29.191	2.7	99	0.02
18		Indeno(1,2,3-cd)pyrene	30.000	29.206	2.6	98	0.02
19		Dibenzo(a,h)anthracene	30.000	29.277	2.4	100	0.02
20		Benzo(g,h,i) Perylene	30.000	29.798	0.7	102	0.02

Signal #2

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Naphthalene	30.000	29.190	2.7	99	0.01
2		2-Methyl Naphthalene	30.000	28.953	3.5	97	0.00
3		1-Methyl Naphthalene	30.000	29.399	2.0	99	0.01
4	S	2-Fluorobiphenyl	30.000	28.597	4.7	96	0.00
5		Acenaphthylene	30.000	29.094	3.0	98	0.01
6		Acenaphthene	30.000	29.376	2.1	99	0.01
7		Fluorene	30.000	29.051	3.2	98	0.00
8		Phenanthrene	30.000	27.441	8.5	91	0.00
9		Anthracene	30.000	29.329	2.2	100	0.00
10	S	O-Terphenyl	30.000	28.927	3.6	98	0.00
11		Fluoranthene	30.000	28.680	4.4	97	0.00
12		Pyrene	30.000	28.631	4.6	97	0.00
13		Benzo(a)Anthracene	30.000	28.630	4.6	96	0.01
14		Chrysene	30.000	28.525	4.9	96	0.01
15		Benzo(b)Fluoranthene	30.000	28.249	5.8	95	0.01

Continuing Calibration Summary

Job Number: F21563
Account: EEINCJX EEI
Projeet: CSFF MCAS New River

Sample: GIJ932-CC928
Lab FileID: IJ19292.D

16	Benzo(k)Fluoranthene	30.000	29.993	0.0	101	0.01
17	Benzo(a) Pyrene	30.000	29.231	2.6	99	0.01
18	Indeno(1,2,3-cd)pyrene	30.000	29.158	2.8	98	0.01
19	Dibenzo(a,h)anthracene	30.000	30.060	-0.2	102	0.01
20	Benzo(g,h,i) Perylene	30.000	29.683	1.1	101	0.02

Average % D = 3.2

(#) = Out of Range SPCC's out = 0 CCC's out = 0
IJ19185.D 8100_H2.M Fri Jan 23 07:22:04 2004

March 2004 Laboratory Reports

Southeast
ACCUTEST.
Laboratories

12/08/05

Technical Report for

EEI

CSFF MCAS New River

CTO 3

Accutest Job Number: F22896

Sampling Date: 03/18/04

Report to:

EEI

bmorris@eeimail.com

ATTN: Bill Morris

Total number of pages in report: **80**

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Sections: 1 2 3 4 5 6

Table of Contents

Section 1: Sample Summary **3**
Section 2: Case Narrative/Conformance Summary 4
Section 3: Sample Results 5
3.1: F22896-1: USTCSFF-MW 11 5
3.2: F22896-2: USTCSFF-MW 14 7
3.3: F22896-3: USTCSFF-MW 12 9
3.4: F22896-4: USTCSFF-MW 16 11
3.5: F22896-5: USTCSFF-DW 06 13
3.6: F22896-6: USTCSFF-MW 21 16
3.7: F22896-7: USTCSFF-MW 24 18
3.8: F22896-8: USTCSFF-122 MW11 20
3.9: F22896-9: TRIP BLANK 22
Section 4: Misc. Forms **23**
4.1: Chain of Custody 24
Section 5: GC Volatiles - QC Data Summaries **26**
5.1: Method Blank Summary 27
5.2: Blank Spike Summary 30
5.3: Matrix Spike/Matrix Spike Duplicate Summary 34
5.4: Surrogate Recovery Summaries 37
5.5: GC Surrogate Retention Time Summaries 39
5.6: Initial and Continuing Calibration Summaries 45
Section 6: GC Semi-volatiles - QC Data Summaries **63**
6.1: Method Blank Summary 64
6.2: Blank Spike Summary 66
6.3: Matrix Spike/Matrix Spike Duplicate Summary 67
6.4: Surrogate Recovery Summaries 68
6.5: GC Surrogate Retention Time Summaries 69
6.6: Initial and Continuing Calibration Summaries 71

Sample Summary

EEI

Job No: F22896

CSFF MCAS New River
Project No: CTO 3

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
F22896-1	03/18/04	08:20	TE	03/19/04	AQ	Ground Water	USTCSFF-MW 11
F22896-2	03/18/04	09:25	TE	03/19/04	AQ	Ground Water	USTCSFF-MW 14
F22896-3	03/18/04	09:50	TE	03/19/04	AQ	Ground Water	USTCSFF-MW 12
F22896-4	03/18/04	10:30	TE	03/19/04	AQ	Ground Water	USTCSFF-MW 16
F22896-5	03/18/04	12:00	TE	03/19/04	AQ	Ground Water	USTCSFF-DW 06
F22896-6	03/18/04	12:20	TE	03/19/04	AQ	Ground Water	USTCSFF-MW 21
F22896-7	03/18/04	13:15	TE	03/19/04	AQ	Ground Water	USTCSFF-MW 24
F22896-8	03/18/04	14:15	TE	03/19/04	AQ	Ground Water	USTCSFF-122 MW11
F22896-9	03/18/04	00:00	TE	03/19/04	AQ	Trip Blank Water	TRIP BLANK

Accutest Laboratories Southeast, Inc.
Analytical Narrative

Client: EEI
Site: CSFF MCAS New River
Job No.: F22896
Report Date: April 05, 2004

9 samples were collected on March 18, 2004 and received on March 19, 2004. Samples were intact and properly cooled. A listing of the Laboratory Sample ID, Client Sample ID, and dates of collection are presented in the Results Summary section of this report.
All method specified holding times, calibrations and quality control performance criteria were met, with the following notes.

PAHs, 610:

- The MS/MSD associated with prep batch OP10055 had recoveries and RPDs below and/or above acceptance limits. The Blank Spike was within limits. Data not adversely affected.

Accutest Laboratories Southeast, Inc. certifies that this report meets the project requirements for analytical data produced for the samples as received at the Accutest Laboratories Southeast location as stated in the Analytical Task Order and the COC. In addition, Accutest Laboratories Southeast, Inc. certifies that data as reported meet the Data Quality Objectives for precision, accuracy and completeness as specified in the Accutest Laboratories Southeast, Inc. Quality Manual for other that conditions detailed above. It is recommended by Accutest Laboratories Southeast, Inc. that this report is to be used in its entirety. Accutest Laboratories Southeast, Inc. is not responsible for any assumptions of data quality if partial data packages are used to interpret data. The Accutest Laboratories Southeast, Inc. Laboratory Director as verified by the signature on the front page has authorized release of this report.

Narrative prepared by:

Date: April 05, 2004

Sue O. Bell, Project Manager (signature on file)

Report of Analysis

Client Sample ID:	USTCSFF-MW 11		
Lab Sample ID:	F22896-1	**Date Sampled:**	03/18/04
Matrix:	AQ - Ground Water	**Date Received:**	03/19/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	QR021581.D	1	03/30/04	RA	n/a	n/a	GQR923
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	94%		70-123%
563-58-6	1,1-Dichloropropene	98%		86-112%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indieates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW 11		
Lab Sample ID:	F22896-1	**Date Sampled:**	03/18/04
Matrix:	AQ - Ground Water	**Date Received:**	03/19/04
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD15712.D	1	03/30/04	SKW	03/30/04	OP10096	GDD498
Run #2							

	Initial Volnme	Final Volume
Run #1	36.8 ml	2.0 ml
Run #2		

CAS No.	Compound	Resnlt	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0095	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	90%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicatcs value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW 14		
Lab Sample ID:	F22896-2	**Date Sampled:**	03/18/04
Matrix:	AQ - Ground Water	**Date Received:**	03/19/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	QR021582.D	1	03/30/04	RA	n/a	n/a	GQR923
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compouud	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	96%		70-123%
563-58-6	1,1-Dichloropropene	100%		86-112%

ND = Not deteeted MDL - Method Deteetion Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW 14		
Lab Sample ID:	F22896-2	**Date Sampled:**	03/18/04
Matrix:	AQ - Ground Water	**Date Received:**	03/19/04
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD15715.D	1	03/31/04	SKW	03/30/04	OP10096	GDD498
Run #2							

	Initial Volume	Final Volume
Run #1	37.2 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0094	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	85%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW 12		
Lab Sample ID:	F22896-3	**Date Sampled:**	03/18/04
Matrix:	AQ - Ground Water	**Date Received:**	03/19/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	QR021583.D	1	03/30/04	RA	n/a	n/a	GQR923
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	99%		70-123%
563-58-6	1,1-Dichloropropene	98%		86-112%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW 12		
Lab Sample ID:	F22896-3	**Date Sampled:**	03/18/04
Matrix:	AQ - Ground Water	**Date Received:**	03/19/04
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD15716.D	1	03/31/04	SKW	03/30/04	OP10096	GDD498
Run #2							

	Initial Volume	Final Volume
Run #1	37.0 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0095	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	88%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indieates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indieates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW 16		
Lab Sample ID:	F22896-4	**Date Sampled:**	03/18/04
Matrix:	AQ - Ground Water	**Date Received:**	03/19/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	QR021638.D	1	04/01/04	RA	n/a	n/a	GQR926
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	42.7	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	7.0	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	44.3	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	107%		70-123%
563-58-6	1,1-Dichloropropene	105%		86-112%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exeeeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW 16		
Lab Sample ID:	F22896-4	**Date Sampled:**	03/18/04
Matrix:	AQ - Ground Water	**Date Received:**	03/19/04
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD15718.D	1	03/31/04	SKW	03/30/04	OP10096	GDD498
Run #2							

	Initial Volume	Final Volume
Run #1	37.9 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.018	0.0092	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	79%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-DW 06		
Lab Sample ID:	F22896-5	**Date Sampled:**	03/18/04
Matrix:	AQ - Ground Water	**Date Received:**	03/19/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	QR021584.D	1	03/30/04	RA	n/a	n/a	GQR923
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	94%		70-123%
563-58-6	1,1-Dichloropropene	97%		86-112%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in assoeiated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-DW 06		
Lab Sample ID:	F22896-5	**Date Sampled:**	03/18/04
Matrix:	AQ - Ground Water	**Date Received:**	03/19/04
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD15719.D	1	03/31/04	SKW	03/30/04	OP10096	GDD498
Run #2							

	Initial Volume	Final Volume
Run #1	36.2 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0097	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Rnn# 2	Limits
460-00-4	4-Bromofluorobenzene	83%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-DW 06		
Lab Sample ID:	F22896-5	**Date Sampled:**	03/18/04
Matrix:	AQ - Ground Water	**Date Received:**	03/19/04
Method:	EPA 610 EPA 610	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IJ19587.D	1	03/29/04	SD	03/24/04	OP10055	GIJ953
Run #2							

	Initial Volume	Final Volume
Run #1	990 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.1	2.0	ug/l	
208-96-8	Acenaphthylene	ND	5.1	2.0	ug/l	
120-12-7	Anthracene	ND	5.1	2.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.1	2.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.1	2.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.1	2.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.1	2.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.1	2.0	ug/l	
218-01-9	Chrysene	ND	5.1	2.0	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.1	2.0	ug/l	
206-44-0	Fluoranthene	ND	5.1	2.0	ug/l	
86-73-7	Fluorene	ND	5.1	2.0	ug/l	
193-39-5	Indeno(1,2,3-ed)pyrene	ND	5.1	2.0	ug/l	
91-20-3	Naphthalene	ND	5.1	2.0	ug/l	
90-12-0	1-Methylnaphthalene	ND	5.1	2.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.1	2.0	ug/l	
85-01-8	Phenanthrene	ND	5.1	2.0	ug/l	
129-00-0	Pyrene	ND	5.1	2.0	ug/l	

CAS No.	Surrogate Recoverics	Run# 1	Ruu# 2	Limits
321-60-8	2-Fluorobiphenyl	87%		42-123%
84-15-1	o-Terphenyl	95%		51-123%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in assoeiated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW 21		
Lab Sample ID:	F22896-6	**Date Sampled:**	03/18/04
Matrix:	AQ - Ground Water	**Date Received:**	03/19/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	QR021647.D	5	04/01/04	RA	n/a	n/a	GQR926
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	230	5.0	2.5	ug/l	
108-90-7	Chlorobenzene	ND	5.0	2.5	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.0	2.5	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	2.5	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	2.5	ug/l	
100-41-4	Ethylbenzene	176	5.0	2.5	ug/l	
1634-04-4	Methyl Tert Butyl Ether	153	5.0	2.5	ug/l	
108-88-3	Toluene	48.2	5.0	2.5	ug/l	
1330-20-7	Xylenes (total)	604	15	5.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	103%		70-123%
563-58-6	1,1-Dichloropropene	95%		86-112%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW 21		
Lab Sample ID:	F22896-6	**Date Sampled:**	03/18/04
Matrix:	AQ - Ground Water	**Date Received:**	03/19/04
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD15720.D	1	03/31/04	SKW	03/30/04	OP10096	GDD498
Run #2							

	Initial Volume	Final Volume
Run #1	38.3 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.018	0.0091	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	74%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW 24		
Lab Sample ID:	F22896-7	**Date Sampled:**	03/18/04
Matrix:	AQ - Ground Water	**Date Received:**	03/19/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	QR021592.D	10	03/30/04	RA	n/a	n/a	GQR923
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	576	10	5.0	ug/l	
108-90-7	Chlorobenzene	ND	10	5.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	10	5.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	10	5.0	ug/l	
106-46-7	1,4-Diehlorobenzene	ND	10	5.0	ug/l	
100-41-4	Ethylbenzene	251	10	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	57.7	10	5.0	ug/l	
108-88-3	Toluene	264	10	5.0	ug/l	
1330-20-7	Xylenes (total)	869	30	10	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	100%		70-123%
563-58-6	1,1-Dichloropropene	97%		86-112%

(a) Confirmed by MS/MSD.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptivc evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW 24		
Lab Sample ID:	F22896-7	**Date Sampled:**	03/18/04
Matrix:	AQ - Ground Water	**Date Received:**	03/19/04
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD15721.D	1	03/31/04	SKW	03/30/04	OP10096	GDD498
Run #2							

	Initial Volume	Final Volume
Run #1	38.1 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.018	0.0092	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	83%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-122 MW11		
Lab Sample ID:	F22896-8	**Date Sampled:**	03/18/04
Matrix:	AQ - Ground Water	**Date Received:**	03/19/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	QR021589.D	1	03/30/04	RA	n/a	n/a	GQR923
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	94%		70-123%
563-58-6	1,1-Dichloropropene	98%		86-112%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-122 MW11		
Lab Sample ID:	F22896-8	**Date Sampled:**	03/18/04
Matrix:	AQ - Ground Water	**Date Received:**	03/19/04
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD15722.D	1	03/31/04	SKW	03/30/04	OP10096	GDD498
Run #2							

	Initial Volume	Final Volume
Run #1	37.8 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0093	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	86%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	F22896-9	**Date Sampled:**	03/18/04
Matrix:	AQ - Trip Blank Water	**Date Received:**	03/19/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	QR021585.D	1	03/30/04	RA	n/a	n/a	GQR923
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	93%		70-123%
563-58-6	1,1-Dichloropropene	98%		86-112%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

CHAIN OF CUSTODY

ACCUTEST Laboratories

4405 VINELAND ROAD • SUITE C-15
ORLANDO, FL 32811
TEL: 407-425-6700 • FAX: 407-425-0707

ACCUTEST JOB #:

ACCUTEST QUOTE #: F22896

CLIENT INFORMATION

NAME: Engineering & Environment
ADDRESS: 824 Gumbranch rd
CITY: Jacksonville STATE: NC ZIP: 28540
SEND REPORT TO:
PHONE #: 910-989-3214

FACILITY INFORMATION

PROJECT NAME: CSFF
LOCATION: Camp Lejeune
PROJECT NO.:
FAX #: 910-989-3341

ANALYTICAL INFORMATION

MATRIX CODES

DW - DRINKING WATER
GW - GROUND WATER
WW - WASTE WATER
SO - SOIL
SL - SLUDGE
OI - OIL
LIQ - OTHER LIQUID
SOL - OTHER SOLID

ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION DATE	COLLECTION TIME	SAMPLED BY:	MATRIX	# OF BOTTLES	PRESERVATION HCL	NaOH	HNO3	H2SO4	NONE	VOC 602	504.1 (EDB)	610												LAB USE ONLY
1	UST CSFF - MW11	3/18/04	0820	TE	GW	6	X				X	3	X													
2	UST CSFF - MW14		0925	TE	GW	6	X				X	3	X													
3	UST CSFF - MW12		0950	TE	GW	6	X				X	3	X													
4	UST CSFF - MW16		1030	TE	GW	6	X				X	3	X													
5	UST CSFF - ~~MW~~ DW06		1200	TE	GW	8	X				X	3	X	X												
6	UST CSFF - MW21		1220	TE	GW	6	X				X	3	X													
7	UST CSFF - MW24	3/18/04	1345	TE	GW	6	X				X	3	X													
8	~~UST CSFF - MW~~ UST CSFF - 122 MW81	3/18/04	1345	TE	GW	6	X				X	3	X													
	~~UST CSFF - MW~~	—		TE	GW		X					3														
	~~UST CSFF - MW~~	—		TE	GW		X					3														
9	TRIP BLANK	3/18/04	1600	—	W	2					X															

DATA TURNAROUND INFORMATION

- ☑ STANDARD
- ☐ 48 HOUR RUSH
- ☐ 24 HOUR EMERGENCY
- ☐ OTHER

APPROVED BY: _____

EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED

DATA DELIVERABLE INFORMATION

- ☐ STANDARD
- ☐ COMMERCIAL "B"
- ☐ DISK DELIVERABLE
- ☐ STATE FORMS
- ☑ OTHER (SPECIFY) Navy SAP

COMMENTS/REMARKS

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESION, INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
1.	3/18/04 1630	1. FED EX	2. FED EX	3/19/04 0900	2.
RELINQUISHED BY:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
3.		3.	4.		4.
RELINQUISHED BY:	DATE TIME:	RECEIVED BY:	SEAL #	PRESERVE WHERE APPLICABLE ☐	ON ICE ☐	TEMPERATURE 3.8° C
5.		5.				

F22896: Chain of Custody
Page 1 of 2

ACCUTEST LABORATORIES SOUTHEAST SAMPLE RECEIPT CONFIRMATION

Accutest's Job Number: F22896

Client: Engineering + Environment Project: CSFF

Date Received: 3/19/04 Time Received: 09:00

of Coolers Received: 1 Cooler Temperatures: 3.8°C

Delivery Method: (FedEx) UPS Accutest Courier Greyhound Delivery Other

Air Bill Number: _____

Cooler Custody Seals Intact ?	(Yes)	No	
Chain of Custody Provided ?	(Yes)	No	
COC Match Bottle Label ID's ?	(Yes)	No	
Sample Labels Present on all bottles ?	(Yes)	No	
All Analyses Marked On COC ?	(Yes)	No	
Are All Bottles Intact ?	(Yes)	No	
Samples Preserved Correctly ?	(Yes)	No	
Correct Number of Containers Used ?	(Yes)	No	
Sufficient Sample Volume ?	(Yes)	No	
Trip Blank Provided ?	(Yes)	No	
Trip Blank on COC ?	(Yes)	No	
Trip Blank Intact ?	(Yes)	No	N/A
Trip Blank Matrix ?	Soil	(Water)	N/A
Number of Encores ?	0		
Number of Soil Field Kits ?	0		

Summary of Comments: _____

Signature: Jeff Matuff Date: 3/19/04

Review Signature: _____

ASBD 12/30/03

F22896: Chain of Custody
Page 2 of 2

GC Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: F22896
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GQR923-MB	QR021577.D	1	03/30/04	RA	n/a	n/a	GQR923

5.1

The QC reported here applies to the following samples: **Method:** EPA 601/602

F22896-1, F22896-2, F22896-3, F22896-5, F22896-7, F22896-8, F22896-9

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
352-33-0	1-Chloro-4-fluorobenzene	93%	70-123%
352-33-0	1-Chloro-4-fluorobenzene	100%	70-123%
563-58-6	1,1-Dichloropropene	98%	86-112%
563-58-6	1,1-Dichloropropene	106%	86-112%

Method Blank Summary

Job Number: F22896
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GQR926-MB	QR021637.D	1	04/01/04	RA	n/a	n/a	GQR926

5.1

The QC reported here applies to the following samples: **Method:** EPA 601/602

F22896-4, F22896-6

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
352-33-0	1-Chloro-4-fluorobenzene	94%	70-123%
352-33-0	1-Chloro-4-fluorobenzene	105%	70-123%
563-58-6	1,1-Dichloropropene	96%	86-112%
563-58-6	1,1-Dichloropropene	107%	86-112%

Method Blank Summary

Job Number: F22896
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP10096-MB	DD15709.D	1	03/30/04	SKW	03/30/04	OP10096	GDD498

5.1

The QC reported here applies to the following samples: **Method:** EPA 504.1

F22896-1, F22896-2, F22896-3, F22896-4, F22896-5, F22896-6, F22896-7, F22896-8

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.020	0.010	ug/l	

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	92%	60-139%

Blank Spike Summary

Job Number: F22896
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Bateh	Analytical Bateh
GQR923-BS	QR021576.D	1	03/30/04	RA	n/a	n/a	GQR923

The QC reported here applies to the following samples: **Method:** EPA 601/602

F22896-1, F22896-2, F22896-3, F22896-5, F22896-7, F22896-8, F22896-9

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	20	20.1	101	86-121
108-90-7	Chlorobenzene	20	20.0	100	81-119
95-50-1	1,2-Dichlorobenzene	20	19.2	96	75-120
541-73-1	1,3-Dichlorobenzene	20	20.1	101	77-121
106-46-7	1,4-Diehlorobenzene	20	20.1	101	75-122
100-41-4	Ethylbenzene	20	19.8	99	81-126
1634-04-4	Methyl Tert Butyl Ether	20	20.5	103	76-117
108-88-3	Toluene	20	19.2	96	82-123
1330-20-7	Xylenes (total)	60	57.6	96	82-125

CAS No.	Surrogate Recoveries	BSP	Limits
352-33-0	1-Chloro-4-fluorobenzene	104%	70-123%
352-33-0	1-Chloro-4-fluorobenzene	102%	70-123%
563-58-6	1,1-Dichloropropene	98%	86-112%
563-58-6	1,1-Dichloropropene	99%	86-112%

Blank Spike Summary

Job Number: F22896
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GQR926-BS	QR021636.D	1	04/01/04	RA	n/a	n/a	GQR926

The QC reported here applies to the following samples: **Method:** EPA 601/602

F22896-4, F22896-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	20	21.2	106	86-121
108-90-7	Chlorobenzene	20	20.6	103	81-119
95-50-1	1,2-Diehlorobenzene	20	20.0	100	75-120
541-73-1	1,3-Dichlorobenzene	20	20.5	103	77-121
106-46-7	1,4-Dichlorobenzene	20	20.8	104	75-122
100-41-4	Ethylbenzene	20	20.9	105	81-126
1634-04-4	Methyl Tert Butyl Ether	20	22.4	112	76-117
108-88-3	Toluene	20	20.5	103	82-123
1330-20-7	Xylenes (total)	60	61.4	102	82-125

CAS No.	Surrogate Recoveries	BSP	Limits
352-33-0	1-Chloro-4-fluorobenzene	106%	70-123%
352-33-0	1-Chloro-4-fluorobenzene	103%	70-123%
563-58-6	1,1-Dichloropropene	97%	86-112%
563-58-6	1,1-Dichloropropene	97%	86-112%

Blank Spike Summary

Job Number: F22896
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP10096-BS	DD15710.D	1	03/30/04	SKW	03/30/04	OP10096	GDD498

The QC reported here applies to the following samples: **Method:** EPA 504.1

F22896-1, F22896-2, F22896-3, F22896-4, F22896-5, F22896-6, F22896-7, F22896-8

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
106-93-4	1,2-Dibromoethane	0.25	0.24	96	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	93%	60-139%

Blank Spike Summary

Job Number: F22896
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP10096-BS2	DD15711.D	1	03/30/04	SKW	03/30/04	OP10096	GDD498

The QC reported here applies to the following samples: **Method:** EPA 504.1

F22896-1, F22896-2, F22896-3, F22896-4, F22896-5, F22896-6, F22896-7, F22896-8

CAS No.	Componnd	Spike ug/l	BSP ug/l	BSP %	Limits
106-93-4	1,2-Dibromoethane	0.25	0.26	104	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	94%	60-139%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F22896
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F22896-1MS	QR021587.D	1	03/30/04	RA	n/a	n/a	GQR923
F22896-1MSD	QR021588.D	1	03/30/04	RA	n/a	n/a	GQR923
F22896-1	QR021581.D	1	03/30/04	RA	n/a	n/a	GQR923

The QC reported here applies to the following samples: **Method:** EPA 601/602

F22896-1, F22896-2, F22896-3, F22896-5, F22896-7, F22896-8, F22896-9

CAS No.	Compound	F22896-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND		20	19.5	98	19.6	98	1	77-125/6
108-90-7	Chlorobenzene	ND		20	19.6	98	20.0	100	2	78-120/8
95-50-1	1,2-Dichlorobenzene	ND		20	19.3	97	19.2	96	1	69-125/7
541-73-1	1,3-Dichlorobenzene	ND		20	19.6	98	19.4	97	1	71-126/7
106-46-7	1,4-Dichlorobenzene	ND		20	19.8	99	19.5	98	2	67-129/7
100-41-4	Ethylbenzene	ND		20	19.2	96	19.3	97	1	74-127/6
1634-04-4	Methyl Tert Butyl Ether	ND		20	19.7	99	20.3	102	3	66-127/9
108-88-3	Toluene	ND		20	18.7	94	18.8	94	1	77-124/5
1330-20-7	Xylenes (total)	ND		60	56.0	93	56.3	94	1	76-125/5

CAS No.	Surrogate Recoveries	MS	MSD	F22896-1	Limits
352-33-0	1-Chloro-4-fluorobenzene	104%	104%	94%	70-123%
352-33-0	1-Chloro-4-fluorobenzene	100%	101%		70-123%
563-58-6	1,1-Dichloropropene	98%	98%	98%	86-112%
563-58-6	1,1-Dichloropropene	97%	97%		86-112%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F22896
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F22896-6MS	QR021648.D	5	04/01/04	RA	n/a	n/a	GQR926
F22896-6MSD	QR021649.D	5	04/01/04	RA	n/a	n/a	GQR926
F22896-6	QR021647.D	5	04/01/04	RA	n/a	n/a	GQR926

The QC reported here applies to the following samples: **Method:** EPA 601/602

F22896-4, F22896-6

CAS No.	Compound	F22896-6 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	230		100	330	100	324	94	2	77-125/6
108-90-7	Chlorobenzene	ND		100	105	105	103	103	2	78-120/8
95-50-1	1,2-Dichlorobenzene	ND		100	107	107	105	105	2	69-125/7
541-73-1	1,3-Dichlorobenzene	ND		100	109	109	109	109	0	71-126/7
106-46-7	1,4-Dichlorobenzene	ND		100	112	112	111	111	1	67-129/7
100-41-4	Ethylbenzene	176		100	275	99	270	94	2	74-127/6
1634-04-4	Methyl Tert Butyl Ether	153		100	248	95	251	98	1	66-127/9
108-88-3	Toluene	48.2		100	143	95	141	93	1	77-124/5
1330-20-7	Xylenes (total)	604		300	892	96	877	91	2	76-125/5

CAS No.	Surrogate Recoveries	MS	MSD	F22896-6	Limits
352-33-0	1-Chloro-4-fluorobenzene	106%	105%	103%	70-123%
352-33-0	1-Chloro-4-fluorobenzene	107%	105%		70-123%
563-58-6	1,1-Dichloropropene	96%	96%	95%	86-112%
563-58-6	1,1-Dichloropropene	98%	95%		86-112%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F22896
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP10096-MS	DD15713.D	1	03/30/04	SKW	03/30/04	OP10096	GDD498
OP10096-MSD	DD15714.D	1	03/31/04	SKW	03/30/04	OP10096	GDD498
F22896-1	DD15712.D	1	03/30/04	SKW	03/30/04	OP10096	GDD498

The QC reported here applies to the following samples: **Method:** EPA 504.1

F22896-1, F22896-2, F22896-3, F22896-4, F22896-5, F22896-6, F22896-7, F22896-8

CAS No.	Compound	F22896-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
106-93-4	1,2-Dibromoethane	ND		0.233	0.22	95	0.22	93	0	65-135/25

CAS No.	Surrogate Recoveries	MS	MSD	F22896-1	Limits
460-00-4	4-Bromofluorobenzene	86%	84%	90%	60-139%

Volatile Surrogate Recovery Summary

Job Number: F22896
Account: EEINCJX EEI
Project: CSFF MCAS New River

Method: EPA 601/602 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S2 [a]
F22896-1	QR021581.D	94.0	98.0
F22896-2	QR021582.D	96.0	100.0
F22896-3	QR021583.D	99.0	98.0
F22896-4	QR021638.D	107.0	105.0
F22896-5	QR021584.D	94.0	97.0
F22896-6	QR021647.D	103.0	95.0
F22896-7	QR021592.D	100.0	97.0
F22896-8	QR021589.D	94.0	98.0
F22896-9	QR021585.D	93.0	98.0
F22896-1MS	QR021587.D	104.0	98.0
F22896-1MSD	QR021588.D	104.0	98.0
F22896-6MS	QR021648.D	106.0	96.0
F22896-6MSD	QR021649.D	105.0	96.0
GQR923-BS	QR021576.D	104.0	98.0
GQR923-MB	QR021577.D	93.0	98.0
GQR926-BS	QR021636.D	106.0	97.0
GQR926-MB	QR021637.D	94.0	96.0

Surrogate Compounds	Recovery Limits
S1 = 1-Chloro-4-fluorobenzene	70-123%
S2 = 1,1-Dichloropropene	86-112%

(a) Recovery from GC signal #1

5.4

Volatile Surrogate Recovery Summary

Job Number: F22896
Account: EEINCJX EEI
Project: CSFF MCAS New River

Method: EPA 504.1 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]
F22896-1	DD15712.D	90.0
F22896-2	DD15715.D	85.0
F22896-3	DD15716.D	88.0
F22896-4	DD15718.D	79.0
F22896-5	DD15719.D	83.0
F22896-6	DD15720.D	74.0
F22896-7	DD15721.D	83.0
F22896-8	DD15722.D	86.0
OP10096-BS	DD15710.D	93.0
OP10096-BS2	DD15711.D	94.0
OP10096-MB	DD15709.D	92.0
OP10096-MS	DD15713.D	86.0
OP10096-MSD	DD15714.D	84.0

Surrogate Compounds	Recovery Limits
S1 = 4-Bromofluorobenzene	60-139%

(a) Recovery from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F22896
Account: EEINCJX EE1
Project: CSFF MCAS New River

Check Std:	GQR923-CC920	**Injection Date:**	03/30/04
Lab File ID:	QR021575.D	**Injection Time:**	09:13
Instrument ID:	GCQR	**Method:**	EPA 601/602

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	11.95	11.97	6.95	6.97

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
GQR923-BS	QR021576.D	03/30/04	09:51	11.95	11.97	6.97	6.99
GQR923-MB	QR021577.D	03/30/04	10:20	11.95	11.97	6.96	6.98
F22896-1	QR021581.D	03/30/04	14:40	11.96		6.96	
F22896-2	QR021582.D	03/30/04	15:09	11.96		6.96	
F22896-3	QR021583.D	03/30/04	15:38	11.97		6.96	
F22896-5	QR021584.D	03/30/04	16:07	11.97		6.97	
F22896-9	QR021585.D	03/30/04	16:36	11.97		6.97	

Surrogate Compounds

S1 = 1-Chloro-4-fluorobenzene
S2 = 1,1-Dichloropropene

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F22896
Account: EEINCJX EEI
Project: CSFF MCAS New River

Check Std:	GQR923-CC920	**Injection Date:**	03/30/04
Lab File ID:	QR021586.D	**Injection Time:**	17:05
Instrument ID:	GCQR	**Method:**	EPA 601/602

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	11.96	11.98	6.97	6.99

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
F22896-1MS	QR021587.D	03/30/04	17:34	11.96	11.98	6.97	6.99
F22896-1MSD	QR021588.D	03/30/04	18:03	11.96	11.98	6.96	6.98
F22896-8	QR021589.D	03/30/04	18:32	11.97		6.97	
F22896-7	QR021592.D	03/30/04	20:08	11.96		6.96	
ZZZZZZ	QR021593.D	03/30/04	20:37	11.96		6.96	
ZZZZZZ	QR021594.D	03/30/04	21:06	11.96		6.95	
ZZZZZZ	QR021595.D	03/30/04	21:35	11.96		6.96	
ZZZZZZ	QR021596.D	03/30/04	22:04	11.96		6.96	
ZZZZZZ	QR021597.D	03/30/04	22:33	11.96		6.96	

Surrogate Compouuds

S1 = 1-Chloro-4-fluorobenzene
S2 = 1,1-Dichloropropene

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F22896
Account: EEINCJX EEI
Project: CSFF MCAS New River

Check Std:	GQR926-CC920	**Injection Date:**	04/01/04
Lab File ID:	QR021635.D	**Injection Time:**	09:12
Instrument ID:	GCQR	**Method:**	EPA 601/602

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	11.95	11.97	6.95	6.97

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
GQR926-BS	QR021636.D	04/01/04	10:11	11.95	11.97	6.96	6.98
GQR926-MB	QR021637.D	04/01/04	10:40	11.96	11.98	6.96	6.98
F22896-4	QR021638.D	04/01/04	11:10	11.95		6.96	
ZZZZZZ	QR021640.D	04/01/04	12:08	11.96		6.96	
ZZZZZZ	QR021641.D	04/01/04	12:37	11.96		6.96	
ZZZZZZ	QR021642.D	04/01/04	13:07	11.96		6.96	
ZZZZZZ	QR021643.D	04/01/04	13:35	11.96		6.96	
ZZZZZZ	QR021645.D	04/01/04	14:40	11.96		6.97	

Surrogate Compounds

S1 = 1-Chloro-4-fluorobenzene
S2 = 1,1-Dichloropropene

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F22896
Account: EEINCJX EEI
Projeet: CSFF MCAS New River

Check Std:	GQR926-CC920	**Injection Date:**	04/01/04
Lab File ID:	QR021646.D	**Injection Time:**	16:20
Instrument ID:	GCQR	**Method:**	EPA 601/602

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	11.96	11.98	6.97	6.99

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
F22896-6	QR021647.D	04/01/04	16:49	11.95		6.96	
F22896-6MS	QR021648.D	04/01/04	17:18	11.95	11.97	6.96	6.98
F22896-6MSD	QR021649.D	04/01/04	17:47	11.96	11.98	6.96	6.98
ZZZZZZ	QR021650.D	04/01/04	18:19	11.97		6.96	
ZZZZZZ	QR021651.D	04/01/04	18:51	11.96		6.97	
ZZZZZZ	QR021652.D	04/01/04	19:23	11.96		6.96	

Surrogate Compounds

S1 = 1-Chloro-4-fluorobenzene
S2 = 1,1-Dichloropropene

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F22896
Account: EEINCJX EEI
Project: CSFF MCAS New River

Check Std:	GDD498-ICC498	**Injection Date:**	03/30/04
Lab File ID:	DD15703.D	**Injection Time:**	20:27
Instrument ID:	GCDD	**Method:**	EPA 504.1

	S1 [a] RT
Check Std	7.00

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT
OP10096-MB	DD15709.D	03/30/04	22:26	7.00
OP10096-BS	DD15710.D	03/30/04	22:46	7.00
OP10096-BS2	DD15711.D	03/30/04	23:06	7.00
F22896-1	DD15712.D	03/30/04	23:26	7.00
OP10096-MS	DD15713.D	03/30/04	23:46	7.00
OP10096-MSD	DD15714.D	03/31/04	00:05	7.00
F22896-2	DD15715.D	03/31/04	00:25	7.00
F22896-3	DD15716.D	03/31/04	00:45	7.00

Surrogate Compounds

S1 = 4-Bromofluorobenzene

(a) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F22896
Account: EEINCJX EEI
Project: CSFF MCAS New River

Check Std:	GDD498-CC498	**Injection Date:**	03/31/04
Lab File ID:	DD15717.D	**Injection Time:**	01:05
Instrument ID:	GCDD	**Method:**	EPA 504.1

	S1 [a] RT
Check Std	7.00

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT
F22896-4	DD15718.D	03/31/04	01:25	7.00
F22896-5	DD15719.D	03/31/04	01:44	7.00
F22896-6	DD15720.D	03/31/04	02:04	7.00
F22896-7	DD15721.D	03/31/04	02:24	7.00
F22896-8	DD15722.D	03/31/04	02:44	7.00
ZZZZZZ	DD15723.D	03/31/04	03:04	7.00
ZZZZZZ	DD15724.D	03/31/04	03:24	7.00
ZZZZZZ	DD15725.D	03/31/04	03:43	7.00
ZZZZZZ	DD15726.D	03/31/04	04:03	7.00

Surrogate Compounds

S1 = 4-Bromofluorobenzene

(a) Retention time from GC signal #2

Initial Calibration Summary

Job Number: F22896
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GDD498-ICC498
Lab FileID: DD15703.D

Response Factor Report ECD 4

Method : C:\HPCHEM\2\METHODS\504_1.M (Chemstation Integrator)
Title : EDB/DBCP by EPA 504.1 or SW846 8011
Last Update : Wed Mar 31 08:26:52 2004
Response via : Initial Calibration

Calibration Files
.125=DD15702.D .250=DD15703.D .500=DD15704.D 0.75=DD15705.D
0.75 =DD15705.D 1.0 =DD15706.D

	Compound	.125	.250	.500	0.75	1.0	Avg		%RSD
1)	1,2-Dibromoethane	4.346	3.925	3.653	3.717	3.633	3.855	E5	7.73
2) S	4-Bromofluorobenzene	4.344	3.915	3.600	3.560	3.428	3.769	E4	9.75
3)	1,2,3-Trichloropropan	8.7B4	7.962	7.485	7.421	7.071	7.745	E4	8.55
4)	1,2-Dibromo-3-chlorop	9.117	8.422	8.428	8.766	8.694	8.686	E5	3.30

Signal #2

1)	1,2-Dibromoethane	2.254	2.067	1.958	2.075	2.049	2.080	E5	5.17
2) S	4-Bromofluorobenzene	1.725	1.614	1.569	1.571	1.564	1.609	E4	4.23
3)	1,2,3-Trichloropropan	4.919	4.386	4.021	3.916	3.785	4.205	E4	10.87
4)	1,2-Dibromo-3-chlorop	4.005	3.855	3.912	4.105	3.981	3.971	E5	2.40

(#) = Out of Range

504_1.M Wed Mar 31 10:29:16 2004 ECD3

5.6

Initial Calibration Verification

Job Number: F22896
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GDD498-ICV498
Lab FileID: DD15708.D

Evaluate Continuing Calibration Report

```
Signal #1 : C:\HPCHEM\2\DATA\0330EDB\DD15708.D\ECD1A.CH  Vial: 40
Signal #2 : C:\HPCHEM\2\DATA\0330EDB\DD15708.D\ECD2B.CH
Acq On    : 30 Mar 2004  10:06 pm                    Operator: stephw
Sample    : ICV498-0.25                              Inst    : ECD 4
Misc      : op10096,gdd498,35,,,2,1,water            MultiplIr: 1.00
IntFile Signal #1: EVENTS.E     IntFile Signal #2: EVENTS2.E

Method       : C:\HPCHEM\2\METHODS\504_1.M (Chemstation Integrator)
Title        : EDB/DBCP by EPA 504.1 or SW846 8011
Last Update  : Wed Mar 31 08:26:52 2004
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	1,2-Dibromoethane	0.250	0.258	-3.2	101	0.00	5.23- 5.43
2 S	4-Bromofluorobenzene	2.000	2.096	-4.8	101	0.00	6.69- 6.89
3	1,2,3-Trichloropropane		----------NA----------				
4	1,2-Dibromo-3-chloropr	0.250	0.232	7.2	96	0.00	9.04- 9.24
*****	Signal #2 *****						
1	1,2-Dibromoethane	0.250	0.256	-2.4	103	0.00	5.48- 5.68
2 S	4-Bromofluorobenzene	2.000	2.049	-2.4	102	0.00	6.90- 7.10
3	1,2,3-Trichloropropane		----------NA----------				
4	1,2-Dibromo-3-chloropr	0.250	0.219	12.4	90	0.00	9.35- 9.55

```
(#) = Out of Range              SPCC's out = 0  CCC's out = 0
 DD15703.D  504_1.M          Wed Mar 31 10:29:31 2004   ECD3
```

Continuing Calibration Summary

Job Number: F22896
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GDD498-CC498
Lab FileID: DD15717.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\0330EDB\DD15717.D\ECD1A.CH Vial: 35
Signal #2 : C:\HPCHEM\2\DATA\0330EDB\DD15717.D\ECD2B.CH
Acq On : 31 Mar 2004 1:05 am Operator: stephw
Sample : CC498-0.25 Inst : ECD 4
Misc : op10096,gdd498,35,,,2,1,water MultiplIr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\2\METHODS\504_1.M (Chemstation Integrator)
Title : EDB/DBCP by EPA 504.1 or SW846 8011
Last Update : Wed Mar 31 08:26:52 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	1,2-Dibromoethane	0.250	0.264	-5.6	104	0.00	5.23- 5.43
2 S	4-Bromofluorobenzene	2.000	2.095	-4.8	101	0.00	6.69- 6.89
3	1,2,3-Trichloropropane	0.250	0.263	-5.2	102	0.00	6.87- 7.07
4	1,2-Dibromo-3-chloropr	0.250	0.247	1.2	102	0.00	9.04- 9.24
*****	Signal #2 *****						
1	1,2-Dibromoethane	0.250	0.258	-3.2	104	0.00	5.48- 5.68
2 S	4-Bromofluorobenzene	2.000	1.922	3.9	96	0.00	6.90- 7.10
3	1,2,3-Trichloropropane	0.250	0.260	-4.0	100	0.00	7.29- 7.49
4	1,2-Dibromo-3-chloropr	0.250	0.244	2.4	101	0.00	9.35- 9.55

(#) = Out of Range SPCC's out = 0 CCC's out = 0
DD15703.D 504_1.M Wed Mar 31 10:29:32 2004 ECD3

5.5

Continuing Calibration Summary

Job Number: F22896
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GDD498-CC498
Lab FileID: DD15727.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\0330EDB\DD15727.D\ECD1A.CH Vial: 36
Signal #2 : C:\HPCHEM\2\DATA\0330EDB\DD15727.D\ECD2B.CH
Acq On : 31 Mar 2004 4:23 am Operator: stephw
Sample : CC498-0.50 Inst : ECD 4
Misc : op10096,gdd498,35,,,2,1,water MultiplIr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\2\METHODS\504_1.M (Chemstation Integrator)
Title : EDB/DBCP by EPA 504.1 or SW846 8011
Last Update : Wed Mar 31 08:26:52 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	1,2-Dibromoethane	0.500	0.499	0.2	105	0.00	5.23- 5.43
2 S	4-Bromofluorobenzene	4.000	3.823	4.4	100	0.00	6.69- 6.89
3	1,2,3-Trichloropropane	0.500	0.487	2.6	101	0.00	6.87- 7.07
4	1,2-Dibromo-3-chloropr	0.500	0.497	0.6	102	0.00	9.04- 9.24
*****	Signal #2 *****						
1	1,2-Dibromoethane	0.500	0.495	1.0	105	0.00	5.48- 5.68
2 S	4-Bromofluorobenzene	4.000	4.007	-0.2	103	0.00	6.90- 7.10
3	1,2,3-Trichloropropane	0.500	0.485	3.0	102	0.00	7.29- 7.49
4	1,2-Dibromo-3-chloropr	0.500	0.492	1.6	100	0.00	9.35- 9.55

(#) = Out of Range SPCC's out = 0 CCC's out = 0
DD15704.D 504_1.M Wed Mar 31 10:29:48 2004 ECD3

Initial Calibration Summary

Job Number: F22896
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GQR920-ICC920
Lab FileID: QR021534.D

Response Factor Report VOA3

Method : C:\HPCHEM\1\METHODS\QR0326.M (Chemstation Integrator)
Title : EPA 601/602 & SWA 5030B/8021B
Last Update : Sat Mar 27 13:56:14 2004
Response via : Initial Calibration

Calibration Files
1 =QR021530.D 2 =QR021531.D 3 =QR021532.D
4 =QR021533.D 5 =QR021534.D 6 =QR021535.D 7 =QR021536.D

Compound	1	2	3	4	5	6	7	Avg	%RSD
1) I Fluorobenzene	ISTD								
2)c VINYL CHLORIDE	0.341	0.277	0.241	0.207	0.180	0.159	0.152	0.223	30.87#
3) 1,1-Dichloroethen		0.322	0.315	0.304	0.279	0.283	0.278	0.297	6.51
4) Methyl tert 8utyl	0.568	0.384	0.305	0.308	0.279	0.277	0.272	0.342	31.24
5) trans-1,2-Dichlor		1.209	1.129	1.150	1.048	1.067	1.055	1.110	5.77
6) Di-Isopropyl ethe	0.458	0.435	0.424	0.432	0.395	0.397	0.393	0.419	5.94
7) cis-1,2-Dichloroe	0.698	0.638	0.621	0.640	0.587	0.598	0.592	0.625	6.18
8)S 1,1-Dichloroprope	0.579	0.582	0.582	0.582	0.577	0.578	0.576	0.579	0.44
9) 8enzene		1.382	1.274	1.325	1.200	1.201	1.185	1.261	6.34
10) Trichloroethene	1.001	0.886	0.823	0.878	0.783	0.822	0.832	0.861	8.26
11) 2-Chloroethylviny	0.580	0.508	0.549	0.602	0.569	0.592	0.585	0.569	5.59
12) cis-1,3-Dichlorop	0.467	0.407	0.411	0.432	0.406	0.411	0.409	0.420	5.33
13) Toluene	1.666	1.506	1.414	1.482	1.351	1.354	1.349	1.446	8.04
14) trans-1,3-Dichlor	0.565	0.497	0.523	0.565	0.542	0.567	0.563	0.546	4.99
15) Tetrachloroethene	0.815	0.735	0.710	0.739	0.674	0.688	0.684	0.721	6.72
16)S 1-Chloro-4-fluoro	1.013	1.017	1.055	1.077	1.081	1.098	1.095	1.062	3.30
17) Chlorobenzene		1.825	1.702	1.768	1.629	1.641	1.631	1.699	4.82
18) Ethylbenzene	1.573	1.444	1.364	1.432	1.304	1.297	1.284	1.386	7.57
19) m,p-Xylene	1.755	1.618	1.565	1.640	1.499	1.499	1.480	1.579	6.29
20) o-Xylene	1.540	1.425	1.376	1.443	1.311	1.316	1.303	1.388	6.31
21) 1,3-Dichlorobenze	2.186	1.948	2.062	2.259	2.163	2.230	2.238	2.155	5.21
22) 1,4-Dichlorobenze	2.148	1.881	2.047	2.254	2.179	2.264	2.268	2.149	6.62
23) 1,2-Dichlorobenze	2.087	1.797	1.892	2.037	1.937	1.972	1.966	1.955	4.84

Signal #2 Calibration Files
1 =QR021530.D 2 =QR021531.D 3 =QR021532.D
4 =QR021533.D 5 =QR021534.D 6 =QR021535.D 7 =QR021536.D

Compound	1	2	3	4	5	6	7	Avg	%RSD
25) I Bromochloromethane	ISTD								
26)c DICHLORODIFLUOROM	0.167	0.182	0.294	0.303	0.277	0.272	0.268	0.252	21.60#
27)c CHLOROMETHANE	0.573	0.570	0.765	0.762	0.639	0.588	0.527	0.632	15.16
28)c VINYL CHLORIDE #2	0.678	0.671	0.734	0.680	0.574	0.521	0.513	0.624	14.00
29)c BROMOMETHANE	0.372	0.313	0.431	0.445	0.375	0.383	0.362	0.383	11.53
30)c CHLOROETHANE	0.643	0.610	0.753	0.708	0.609	0.587	0.584	0.642	10.10
31)c TRICHLOROFLUOROME	0.651	0.648	0.715	0.684	0.583	0.547	0.539	0.624	10.94
32) 1,1-Dichloroethen	0.553	0.556	0.676	0.693	0.596	0.599	0.568	0.606	9.38
33) Methylene Chlorid	1.062	0.408	0.729	0.734	0.610	0.593	0.568	0.672	30.36
34) trans-1,2-Dichlor	1.068	1.116	1.167	1.207	1.052	0.988	0.918	1.074	9.35
35) 1,1-Dichloroethan	0.915	0.980	1.106	1.130	0.979	0.930	0.831	0.981	10.79
36) cis-1,2-Dichloroe	0.956	1.049	1.235	1.299	1.153	1.103	1.014	1.116	10.97
37) Chloroform	1.684	1.643	1.699	1.671	1.469	1.340	1.250	1.537	11.97
38) 1,1,1-Trichloroet	2.091	1.524	1.133	1.088	0.945	0.860	0.813	1.208	37.71
39)S 1,1-Dichloroprope	1.259	1.234	1.179	1.175	1.151	1.141	1.109	1.178	4.44

Initial Calibration Summary

Job Number: F22896
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GQR920-ICC920
Lab FileID: QR021534.D

40)	Carbon Tetrachlor	5.033	3.461	1.668	1.468	1.198	1.106	1.031	2.138	71.38
41)	1,2-Dichloroethan	2.266	1.757	1.453	1.444	1.257	1.171	1.091	1.491	27.27
42)	Trichloroethene #	1.340	1.376	1.539	1.633	1.404	1.364	1.278	1.419	8.70
43)	1,2-Dichloropropa	1.372	1.294	1.304	1.315	1.133	1.060	0.984	1.209	12.29
44)	Bromodichlorometh	1.314	1.226	1.309	1.330	1.161	1.126	1.037	1.215	9.18
45)	2-Chloroethylviny	0.331	0.310	0.418	0.482	0.456	0.437	0.440	0.410	15.81
46)	cis-1,3-Dichlorop	1.068	1.090	1.332	1.378	1.240	1.189	1.125	1.203	9.95
47)	trans-1,3-Dichlor	0.767	0.815	1.128	1.245	1.155	1.119	1.070	1.043	17.30
48)	1,1,2-Trichloroet	1.585	1.541	1.712	1.700	1.527	1.385	1.302	1.536	9.86
49)	Tetrachloroethene	1.726	1.776	1.883	1.881	1.636	1.505	1.411	1.688	10.75
50)	Dibromochlorometh	0.868	0.889	1.062	1.105	0.989	0.929	0.863	0.958	10.08
51)s	1-Chloro-4-fluoro	0.763	0.761	0.768	0.772	0.773	0.749	0.726	0.759	2.20
52)	Chlorobenzene #2	1.481	0.900	0.770	0.783	0.717	0.679	0.648	0.854	33.79
53)	Bromoform	0.363	0.392	0.625	0.708	0.667	0.667	0.646	0.581	24.39
54)	1,1,2,2-Tetrachlo	1.169	1.165	1.430	1.471	1.395	1.189	1.130	1.279	11.46
55)	1,3-Dichlorobenze	0.816	0.844	1.325	1.456	1.393	1.291	1.270	1.199	21.66
56)	1,4-Dichlorobenze	1.065	1.075	1.437	1.557	1.472	1.358	1.335	1.328	14.39
57)	1,2-Dichlorobenze	1.121	1.149	1.552	1.667	1.548	1.415	1.398	1.407	14.71

Average % RSD = 13.2

(#) = Out of Range

QR0326.M Mon Mar 29 13:53:40 2004 QRXY

Continuing Calibration Summary

Job Number: F22896
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GQR923-CC920
Lab FileID: QR021575.D

Evaluate Continuing Calibration Report

Signal #1 : X:\HPCHEM\1\DATA\033004\QR021575.D\FID1B.CH Vial: 1
Signal #2 : X:\HPCHEM\1\DATA\033004\QR021575.D\AIB2A.CH
Acq On : 30 Mar 2004 9:13 am Operator: RachidA
Sample : CC920-20 Inst : VOA3
Misc : gc335310,gqr923,,,,, MultiplIr: 1.00
IntFile Signal #1: PID.E IntFile Signal #2: ELCD.E

Method : X:\HPCHEM\1\METHODS\QR0326.M (Chemstation Integrator)
Title : EPA 601/602 & SWA 5030B/8021B
Last Update : Sat Mar 27 13:56:14 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Fluorobenzene	20.000	20.000	0.0	96	-0.02
2	c	VINYL CHLORIDE	20.000	19.075	4.6	93	0.00
3		1,1-Dichloroethene	20.000	18.197	9.0	93	0.00
4		Methyl tert Butyl Ether	40.000	40.813	-2.0	97	-0.02
5		trans-1,2-Dichloroethene	20.000	19.595	2.0	100	-0.02
6		Di-Isopropyl ether	20.000	19.622	1.9	100	-0.02
7		cis-1,2-Dichloroethene	20.000	19.481	2.6	100	-0.02
8	S	1,1-Dichloropropene	20.000	19.713	1.4	95	-0.02
9		Benzene	40.000	39.606	1.0	100	-0.02
10		Trichloroethene	20.000	18.985	5.1	100	-0.02
11		2-Chloroethylvinyl ether	20.000	18.956	5.2	91	-0.01
12		cis-1,3-Dichloropropene	20.000	19.901	0.5	99	-0.01
13		Toluene	40.000	39.227	1.9	101	-0.01
14		trans-1,3-Dichloropropene	20.000	20.153	-0.8	98	-0.01
15		Tetrachloroethene	20.000	19.840	0.8	102	0.00
16	S	1-Chloro-4-fluorobenzene	20.000	20.998	-5.0	99	0.00
17		Chlorobenzene	20.000	19.923	0.4	100	0.00
18		Ethylbenzene	40.000	39.255	1.9	100	0.00
19		m,p-Xylene	80.000	79.329	0.8	101	0.00
20		o-Xylene	40.000	39.437	1.4	101	0.00
21		1,3-Dichlorobenzene	20.000	20.732	-3.7	99	0.00
22		1,4-Dichlorobenzene	20.000	20.722	-3.6	98	0.00
23		1,2-Dichlorobenzene	20.000	20.039	-0.2	97	0.00

Signal #2

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
25	I	Bromochloromethane	20.000	20.000	0.0	100	-0.02
26	c	DICHLORODIFLUOROMETHANE	20.000	19.796	1.0	100	-0.01
27	c	CHLOROMETHANE	20.000	21.584	-7.9	109	0.00
28	c	VINYL CHLORIDE #2	20.000	19.472	2.6	98	0.00
29	c	BROMOMETHANE	20.000	19.685	1.6	104	-0.03
30	c	CHLOROETHANE	20.000	20.075	-0.4	102	0.00
31	c	TRICHLOROFLUOROMETHANE	20.000	21.682	-8.4	109	0.00
32		1,1-Dichloroethene #2	20.000	19.163	4.2	100	0.00
33		Methylene Chloride	20.000	18.147	9.3	94	0.00
34		trans-1,2-Dichloroethene #2	20.000	20.548	-2.7	104	-0.02
35		1,1-Dichloroethane	20.000	20.289	-1.4	104	-0.02

Continuing Calibration Summary

Job Number: F22896
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GQR923-CC920
Lab FileID: QR021575.D

36		cis-1,2-Dichloroethene #2	20.000	20.435	-2.2	104	-0.02
37		Chloroform	20.000	20.409	-2.0	102	-0.02
38		1,1,1-Trichloroethane	20.000	20.637	-3.2	104	-0.02
39	S	1,1-Dichloropropene #2	20.000	19.770	1.2	101	-0.02
40		Carbon Tetrachloride	20.000	20.575	-2.9	106	-0.02
41		1,2-Dichloroethane	20.000	19.963	0.2	101	-0.02
42		Trichloroethene #2	20.000	20.114	-0.6	103	-0.02
43		1,2-Dichloropropane	20.000	20.421	-2.1	104	-0.02
44		Bromodichloromethane	20.000	20.160	-0.8	104	-0.01
45		2-Chloroethylvinyl ether #2	20.000	19.196	4.0	95	-0.02
46		cis-1,3-Dichloropropene #2	20.000	20.562	-2.8	104	-0.01
47		trans-1,3-Dichloropropene #	20.000	20.326	-1.6	102	-0.01
48		1,1,2-Trichloroethane	20.000	20.532	-2.7	102	-0.01
49		Tetrachloroethene #2	20.000	21.099	-5.5	106	-0.01
50		Dibromochloromethane	20.000	19.851	0.7	100	0.00
51	s	1-Chloro-4-fluorobenzene #2	20.000	20.802	-4.0	102	0.00
52		Chlorobenzene #2	20.000	20.363	-1.8	102	0.00
53		Bromoform	20.000	19.201	4.0	97	0.00
54		1,1,2,2-Tetrachloroethane	20.000	19.163	4.2	92	0.00
55		1,3-Dichlorobenzene #2	20.000	21.153	-5.8	103	0.00
56		1,4-Dichlorobenzene #2	20.000	20.313	-1.6	99	0.00
57		1,2-Dichlorobenzene #2	20.000	20.701	-3.5	101	0.00

Average % D = 2.8

(#) = Out of Range SPCC's out = 0 CCC's out = 0

QR021534.D QR0326.M Tue Mar 30 09:25:46 2004

5.6

Continuing Calibration Summary

Job Number: F22896
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GQR923-CC920
Lab FileID: QR021586.D

Evaluate Continuing Calibration Report

Signal #1 : X:\HPCHEM\1\DATA\033004\QR021586.D\FID1B.CH Vial: 12
Signal #2 : X:\HPCHEM\1\DATA\033004\QR021586.D\AIB2A.CH
Acq On : 30 Mar 2004 5:05 pm Operator: RachidA
Sample : CC920-20 Inst : VOA3
Misc : gc3349,gqr923,,,,, Multiplr: 1.00
IntFile Signal #1: PID.E IntFile Signal #2: ELCD.E

Method : X:\HPCHEM\1\METHODS\QR0326.M (Chemstation Integrator)
Title : EPA 601/602 & SWA 5030B/8021B
Last Update : Sat Mar 27 13:56:14 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Fluorobenzene	20.000	20.000	0.0	96	0.00
2	c	VINYL CHLORIDE	20.000	21.222	-6.1	102	0.00
3		1,1-Dichloroethene	20.000	18.381	8.1	94	0.02
4		Methyl tert Butyl Ether	40.000	43.280	-8.2	103	0.00
5		trans-1,2-Dichloroethene	20.000	20.486	-2.4	105	0.00
6		Di-Isopropyl ether	20.000	20.695	-3.5	106	0.00
7		cis-1,2-Dichloroethene	20.000	20.409	-2.0	105	0.00
8	S	1,1-Dichloropropene	20.000	19.551	2.2	95	0.00
9		Benzene	40.000	41.061	-2.7	104	0.00
10		Trichloroethene	20.000	19.751	1.2	105	0.00
11		2-Chloroethylvinyl ether	20.000	20.628	-3.1	100	0.00
12		cis-1,3-Dichloropropene	20.000	20.921	-4.6	105	0.00
13		Toluene	40.000	40.420	-1.1	104	0.00
14		trans-1,3-Dichloropropene	20.000	21.490	-7.4	104	0.00
15		Tetrachloroethene	20.000	20.329	-1.6	105	0.00
16	S	1-Chloro-4-fluorobenzene	20.000	20.814	-4.1	99	0.00
17		Chlorobenzene	20.000	20.901	-4.5	105	0.00
18		Ethylbenzene	40.000	40.555	-1.4	104	0.00
19		m,p-Xylene	80.000	81.712	-2.1	104	0.00
20		o-Xylene	40.000	41.071	-2.7	105	0.00
21		1,3-Dichlorobenzene	20.000	21.737	-8.7	104	0.00
22		1,4-Dichlorobenzene	20.000	21.946	-9.7	104	0.00
23		1,2-Dichlorobenzene	20.000	21.249	-6.2	103	0.00

Signal #2

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
25	I	Bromochloromethane	20.000	20.000	0.0	104	0.00
26	c	DICHLORODIFLUOROMETHANE	20.000	22.725	-13.6	119	0.00
27	c	CHLOROMETHANE	20.000	27.975	-39.9#	142	0.00
28	c	VINYL CHLORIDE #2	20.000	21.977	-9.9	114	0.00
29	c	BROMOMETHANE	20.000	33.640	-68.2#	178	0.07
30	c	CHLOROETHANE	20.000	20.606	-3.0	109	0.02
31	c	TRICHLOROFLUOROMETHANE	20.000	22.733	-13.7	119	0.00
32		1,1-Dichloroethene #2	20.000	19.728	1.4	107	0.02
33		Methylene Chloride	20.000	20.040	-0.2	108	0.03
34		trans-1,2-Dichloroethene #2	20.000	21.082	-5.4	111	0.00
35		1,1-Dichloroethane	20.000	21.052	-5.3	112	0.00

Continuing Calibration Summary

Job Number: F22896
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GQR923-CC920
Lab FileID: QR021586.D

36	cis-1,2-Dichloroethene #2	20.000	20.859	-4.3	111	0.00
37	Chloroform	20.000	21.504	-7.5	112	0.00
38	1,1,1-Trichloroethane	20.000	21.175	-5.9	111	0.00
39 S	1,1-Dichloropropene #2	20.000	19.586	2.1	104	0.00
40	Carbon Tetrachloride	20.000	21.301	-6.5	114	0.00
41	1,2-Dichloroethane	20.000	21.203	-6.0	112	0.00
42	Trichloroethene #2	20.000	21.227	-6.1	113	0.00
43	1,2-Dichloropropane	20.000	21.433	-7.2	113	0.00
44	Bromodichloromethane	20.000	21.121	-5.6	113	0.00
45	2-Chloroethylvinyl ether #2	20.000	21.183	-5.9	109	0.00
46	cis-1,3-Dichloropropene #2	20.000	21.359	-6.8	112	0.00
47	trans-1,3-Dichloropropene #	20.000	21.302	-6.5	111	0.00
48	1,1,2-Trichloroethane	20.000	21.312	-6.6	110	0.00
49	Tetrachloroethene #2	20.000	21.709	-8.5	113	0.00
50	Dibromochloromethane	20.000	20.920	-4.6	110	0.00
51 s	1-Chloro-4-fluorobenzene #2	20.000	20.427	-2.1	104	0.00
52	Chlorobenzene #2	20.000	20.729	-3.6	108	0.00
53	Bromoform	20.000	20.961	-4.8	110	0.00
54	1,1,2,2-Tetrachloroethane	20.000	21.751	-8.8	108	0.00
55	1,3-Dichlorobenzene #2	20.000	22.152	-10.8	112	0.00
56	1,4-Dichlorobenzene #2	20.000	21.540	-7.7	110	0.00
57	1,2-Dichlorobenzene #2	20.000	21.198	-6.0	108	0.00

Average % D = 7.2

(#) = Out of Range SPCC's out = 0 CCC's out = 2

QR021534.D QR0326.M Tue Mar 30 09:25:48 2004

5.6

Continuing Calibration Summary

Job Number: F22896
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GQR923-CC920
Lab FileID: QR021598.D

Evaluate Continuing Calibration Report

Signal #1 : X:\HPCHEM\1\DATA\033004\QR021598.D\FID1B.CH Vial: 23
Signal #2 : X:\HPCHEM\1\DATA\033004\QR021598.D\AIB2A.CH
Acq On : 30 Mar 2004 11:03 pm Operator: RachidA
Sample : cc920-20 Inst : V0A3
Misc : gc3353,gqr923,,,,, Multiplr: 1.00
IntFile Signal #1: PID.E IntFile Signal #2: ELCD.E

Method : X:\HPCHEM\1\METHODS\QR0326.M (Chemstation Integrator)
Title : EPA 601/602 & SWA 5030B/8021B
Last Update : Sat Mar 27 13:56:14 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Fluorobenzene	20.000	20.000	0.0	96	0.00
2	c	VINYL CHLORIDE	20.000	19.314	3.4	94	0.00
3		1,1-Dichloroethene	20.000	16.194	19.0#	83	0.01
4		Methyl tert Butyl Ether	40.000	39.396	1.5	94	-0.01
5		trans-1,2-Dichloroethene	20.000	18.146	9.3	92	0.00
6		Di-Isopropyl ether	20.000	18.662	6.7	95	0.00
7		cis-1,2-Dichloroethene	20.000	18.275	8.6	94	0.00
8	S	1,1-Dichloropropene	20.000	19.374	3.1	94	0.00
9		Benzene	40.000	36.798	8.0	93	0.00
10		Trichloroethene	20.000	17.632	11.8	93	0.00
11		2-Chloroethylvinyl ether	20.000	17.567	12.2	85	0.00
12		cis-1,3-Dichloropropene	20.000	18.057	9.7	90	0.00
13		Toluene	40.000	36.303	9.2	93	0.00
14		trans-1,3-Dichloropropene	20.000	18.304	8.5	89	0.00
15		Tetrachloroethene	20.000	18.106	9.5	93	0.00
16	S	1-Chloro-4-fluorobenzene	20.000	20.715	-3.6	98	0.00
17		Chlorobenzene	20.000	18.771	6.1	94	0.00
18		Ethylbenzene	40.000	36.220	9.5	93	0.00
19		m,p-Xylene	80.000	72.879	8.9	92	0.00
20		o-Xylene	40.000	36.601	8.5	93	0.00
21		1,3-Dichlorobenzene	20.000	19.336	3.3	93	0.00
22		1,4-Dichlorobenzene	20.000	19.479	2.6	92	0.00
23		1,2-Dichlorobenzene	20.000	19.063	4.7	93	0.00

Signal #2

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
25	I	Bromochloromethane	20.000	20.000	0.0	99	0.00
26	c	DICHLORODIFLUOROMETHANE	20.000	19.668	1.7	99	0.00
27	c	CHLOROMETHANE	20.000	19.258	3.7	99	0.00
28	c	VINYL CHLORIDE #2	20.000	19.669	1.7	98	0.00
29	c	BROMOMETHANE	20.000	30.485	-52.4#	155	0.07
30	c	CHLOROETHANE	20.000	18.763	6.2	95	0.01
31	c	TRICHLOROFLUOROMETHANE	20.000	20.456	-2.3	103	0.00
32		1,1-Dichloroethene #2	20.000	17.029	14.9	89	0.00
33		Methylene Chloride	20.000	18.462	7.7	95	0.02
34		trans-1,2-Dichloroethene #2	20.000	19.050	4.7	97	0.00
35		1,1-Dichloroethane	20.000	19.158	4.2	99	0.00

Continuing Calibration Summary

Job Number: F22896
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GQR923-CC920
Lab FileID: QR021598.D

36	cis-1,2-Dichloroethene #2	20.000	19.292	3.5	98	0.00
37	Chloroform	20.000	19.338	3.3	97	0.00
38	1,1,1-Trichloroethane	20.000	18.936	5.3	95	0.00
39 S	1,1-Dichloropropene #2	20.000	19.610	2.0	99	0.00
40	Carbon Tetrachloride	20.000	18.927	5.4	98	0.00
41	1,2-Dichloroethane	20.000	19.236	3.8	97	0.00
42	Trichloroethene #2	20.000	19.052	4.7	98	0.00
43	1,2-Dichloropropane	20.000	19.494	2.5	99	0.00
44	Bromodichloromethane	20.000	18.883	5.6	97	0.00
45	2-Chloroethylvinyl ether #2	20.000	18.217	8.9	89	0.00
46	cis-1,3-Dichloropropene #2	20.000	18.742	6.3	95	0.00
47	trans-1,3-Dichloropropene #	20.000	18.568	7.2	93	0.00
48	1,1,2-Trichloroethane	20.000	19.863	0.7	98	0.00
49	Tetrachloroethene #2	20.000	19.328	3.4	97	0.00
50	Dibromochloromethane	20.000	19.265	3.7	97	0.00
51 s	1-Chloro-4-fluorobenzene #2	20.000	20.871	-4.4	102	0.00
52	Chlorobenzene #2	20.000	19.323	3.4	97	0.00
53	Bromoform	20.000	18.916	5.4	95	0.00
54	1,1,2,2-Tetrachloroethane	20.000	19.895	0.5	95	0.00
55	1,3-Dichlorobenzene #2	20.000	20.054	-0.3	97	0.00
56	1,4-Dichlorobenzene #2	20.000	19.867	0.7	97	0.00
57	1,2-Dichlorobenzene #2	20.000	19.651	1.7	96	0.00

Average % D = 6.5

(#) = Out of Range SPCC's out = 0 CCC's out = 1

QR021534.D QR0326.M Tue Mar 30 09:25:51 2004

5.6

Continuing Calibration Summary

Job Number: F22896
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GQR926-CC920
Lab FileID: QR021635.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\040104\QR021635.D\FID1B.CH Vial: 1
Signal #2 : C:\HPCHEM\1\DATA\040104\QR021635.D\AIB2A.CH
Acq On : 1 Apr 2004 9:12 am Operator: RachidA
Sample : CC920-20 Inst : V0A3
Misc : gc3349,gqr926,,,,, Multiplr: 1.00
IntFile Signal #1: PID.E IntFile Signal #2: ELCD.E

Method : C:\HPCHEM\1\METHODS\QR0326.M (Chemstation Integrator)
Title : EPA 601/602 & SWA 5030B/B021B
Last Update : Thu Apr 01 10:01:45 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Fluorobenzene	20.000	20.000	0.0	96	-0.02
2	c	VINYL CHLORIDE	20.000	19.829	0.9	96	0.00
3		1,1-Dichloroethene	20.000	17.599	12.0	90	0.00
4		Methyl tert Butyl Ether	40.000	42.489	-6.2	101	-0.02
5		trans-1,2-Dichloroethene	20.000	19.661	1.7	100	-0.02
6		Di-Isopropyl ether	20.000	20.277	-1.4	104	-0.02
7		cis-1,2-Dichloroethene	20.000	19.907	0.5	102	-0.02
8	S	1,1-Dichloropropene	20.000	19.372	3.1	94	-0.02
9		Benzene	40.000	40.301	-0.8	102	-0.02
10		Trichloroethene	20.000	19.238	3.8	102	-0.02
11		2-Chloroethylvinyl ether	20.000	18.954	5.2	91	-0.01
12		cis-1,3-Dichloropropene	20.000	20.451	-2.3	102	-0.01
13		Toluene	40.000	39.707	0.7	102	-0.01
14		trans-1,3-Dichloropropene	20.000	20.793	-4.0	101	-0.01
15		Tetrachloroethene	20.000	19.945	0.3	103	-0.01
16	S	1-Chloro-4-fluorobenzene	20.000	21.283	-6.4	101	-0.01
17		Chlorobenzene	20.000	20.349	-1.7	102	-0.01
18		Ethylbenzene	40.000	39.813	0.5	102	-0.01
19		m,p-Xylene	80.000	80.491	-0.6	102	-0.01
20		o-Xylene	40.000	40.058	-0.1	102	-0.01
21		1,3-Dichlorobenzene	20.000	21.220	-6.1	102	0.00
22		1,4-Dichlorobenzene	20.000	21.464	-7.3	102	0.00
23		1,2-Dichlorobenzene	20.000	20.581	-2.9	100	0.00

Signal #2

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
25	I	Bromochloromethane	20.000	20.000	0.0	95	-0.02
26	c	DICHLORODIFLUOROMETHANE	20.000	20.278	-1.4	98	-0.01
27	c	CHLOROMETHANE	20.000	21.867	-9.3	106	0.00
28	c	VINYL CHLORIDE #2	20.000	20.197	-1.0	97	0.00
29	c	BROMOMETHANE	20.000	18.661	6.7	94	0.00
30	c	CHLOROETHANE	20.000	19.090	4.6	93	0.00
31	c	TRICHLOROFLUOROMETHANE	20.000	21.039	-5.2	102	0.00
32		1,1-Dichloroethene #2	20.000	19.076	4.6	95	0.00
33		Methylene Chloride	20.000	19.387	3.1	96	0.02
34		trans-1,2-Dichloroethene #2	20.000	20.735	-3.7	101	-0.02
35		1,1-Dichloroethane	20.000	20.738	-3.7	102	-0.02

Continuing Calibration Summary

Job Number: F22896
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GQR926-CC920
Lab FileID: QR021635.D

36	cis-1,2-Dichloroethene #2	20.000	20.852	-4.3	101	-0.02
37	Chloroform	20.000	21.186	-5.9	101	-0.02
38	1,1,1-Trichloroethane	20.000	19.660	1.7	95	-0.02
39 S	1,1-Dichloropropene #2	20.000	19.999	0.0	98	-0.02
40	Carbon Tetrachloride	20.000	19.912	0.4	99	-0.02
41	1,2-Dichloroethane	20.000	20.967	-4.8	101	-0.02
42	Trichloroethene #2	20.000	20.990	-4.9	103	-0.02
43	1,2-Dichloropropane	20.000	21.173	-5.9	103	-0.02
44	Bromodichloromethane	20.000	20.892	-4.5	103	-0.02
45	2-Chloroethylvinyl ether #2	20.000	19.712	1.4	93	-0.02
46	cis-1,3-Dichloropropene #2	20.000	21.751	-8.8	105	-0.01
47	trans-1,3-Dichloropropene #	20.000	21.350	-6.8	102	-0.02
48	1,1,2-Trichloroethane	20.000	21.204	-6.0	101	-0.01
49	Tetrachloroethene #2	20.000	21.755	-8.8	104	-0.02
50	Dibromochloromethane	20.000	20.567	-2.8	99	-0.01
51 s	1-Chloro-4-fluorobenzene #2	20.000	21.465	-7.3	101	-0.01
52	Chlorobenzene #2	20.000	21.364	-6.8	102	-0.02
53	Bromoform	20.000	19.556	2.2	95	-0.01
54	1,1,2,2-Tetrachloroethane	20.000	21.134	-5.7	97	-0.01
55	1,3-Dichlorobenzene #2	20.000	21.563	-7.8	100	0.00
56	1,4-Dichlorobenzene #2	20.000	22.108	-10.5	103	0.00
57	1,2-Dichlorobenzene #2	20.000	21.595	-8.0	101	0.00

Average % D = 4.2

(#) = Out of Range SPCC's out = 0 CCC's out = 0

QR021534.D QR0326.M Fri Apr 02 14:53:35 2004 QRXY

5.6

Continuing Calibration Summary

Job Number: F22896
Account: EEINCJX EBI
Project: CSFF MCAS New River

Sample: GQR926-CC920
Lab FileID: QR021646.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\040104\QR021646.D\FID1B.CH Vial: 12
Signal #2 : C:\HPCHEM\1\DATA\040104\QR021646.D\AIB2A.CH
Acq On : 1 Apr 2004 4:20 pm Operator: RachidA
Sample : CC920-20 Inst : VOA3
Misc : gc3359,gqr926,,,,, Multiplr: 1.00
IntFile Signal #1: PID.E IntFile Signal #2: ELCD.E

Method : C:\HPCHEM\1\METHODS\QR0326.M (Chemstation Integrator)
Title : EPA 601/602 & SWA 5030B/8021B
Last Update : Thu Apr 01 10:01:45 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Fluorobenzene	20.000	20.000	0.0	96	0.00
2	c	VINYL CHLORIDE	20.000	21.592	-8.0	103	0.02
3		1,1-Dichloroethene	20.000	18.406	8.0	94	0.00
4		Methyl tert Butyl Ether	40.000	45.171	-12.9	107	0.00
5		trans-1,2-Dichloroethene	20.000	19.725	1.4	100	0.00
6		Di-Isopropyl ether	20.000	20.452	-2.3	104	0.00
7		cis-1,2-Dichloroethene	20.000	20.007	-0.0	102	0.00
8	S	1,1-Dichloropropene	20.000	19.215	3.9	93	0.00
9		Benzene	40.000	40.881	-2.2	103	0.00
10		Trichloroethene	20.000	19.315	3.4	102	0.00
11		2-Chloroethylvinyl ether	20.000	19.949	0.3	96	0.00
12		cis-1,3-Dichloropropene	20.000	20.684	-3.4	103	0.00
13		Toluene	40.000	40.091	-0.2	103	0.00
14		trans-1,3-Dichloropropene	20.000	20.937	-4.7	101	0.00
15		Tetrachloroethene	20.000	20.155	-0.8	104	0.00
16	S	1-Chloro-4-fluorobenzene	20.000	21.141	-5.7	100	0.00
17		Chlorobenzene	20.000	20.509	-2.5	103	0.00
18		Ethylbenzene	40.000	40.253	-0.6	103	0.00
19		m,p-Xylene	80.000	81.238	-1.5	103	0.00
20		o-Xylene	40.000	40.572	-1.4	103	0.00
21		1,3-Dichlorobenzene	20.000	21.273	-6.4	102	0.00
22		1,4-Dichlorobenzene	20.000	21.446	-7.2	102	0.00
23		1,2-Dichlorobenzene	20.000	20.606	-3.0	100	0.00

Signal #2

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
25	I	Bromochloromethane	20.000	20.000	0.0	94	0.00
26	c	DICHLORODIFLUOROMETHANE	20.000	22.911	-14.6	109	0.00
27	c	CHLOROMETHANE	20.000	27.606	-38.0#	127	0.00
28	c	VINYL CHLORIDE #2	20.000	23.392	-17.0	109	0.01
29	c	BROMOMETHANE	20.000	21.128	-5.6	105	0.00
30	c	CHLOROETHANE	20.000	22.414	-12.1	107	0.00
31	c	TRICHLOROFLUOROMETHANE	20.000	20.711	-3.6	99	0.00
32		1,1-Dichloroethene #2	20.000	20.347	-1.7	100	0.00
33		Methylene Chloride	20.000	19.784	1.1	97	0.01
34		trans-1,2-Dichloroethene #2	20.000	21.211	-6.1	101	0.00
35		1,1-Dichloroethane	20.000	21.267	-6.3	103	0.00

Continuing Calibration Summary

Job Number: F22896
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GQR926-CC920
Lab FileID: QR021646.D

36	cis-1,2-Dichloroethene #2	20.000	21.395	-7.0	102	0.00
37	Chloroform	20.000	21.600	-8.0	102	0.00
38	1,1,1-Trichloroethane	20.000	21.233	-6.2	100	0.00
39 S	1,1-Dichloropropene #2	20.000	19.630	1.9	95	0.00
40	Carbon Tetrachloride	20.000	21.562	-7.8	105	0.00
41	1,2-Dichloroethane	20.000	21.470	-7.3	102	0.00
42	Trichloroethene #2	20.000	21.191	-6.0	102	0.00
43	1,2-Dichloropropane	20.000	21.846	-9.2	104	0.00
44	Bromodichloromethane	20.000	21.699	-8.5	105	0.00
45	2-Chloroethylvinyl ether #2	20.000	20.948	-4.7	97	0.00
46	cis-1,3-Dichloropropene #2	20.000	22.223	-11.1	105	0.00
47	trans-1,3-Dichloropropene #	20.000	21.818	-9.1	103	0.00
48	1,1,2-Trichloroethane	20.000	21.167	-5.8	99	0.00
49	Tetrachloroethene #2	20.000	22.371	-11.9	105	0.00
5D	Dibromochloromethane	20.000	20.876	-4.4	99	0.00
51 s	1-Chloro-4-fluorobenzene #2	20.000	21.710	-8.6	100	0.00
52	Chlorobenzene #2	20.000	21.517	-7.6	102	0.00
53	Bromoform	20.000	19.945	0.3	95	0.00
54	1,1,2,2-Tetrachloroethane	20.000	20.690	-3.5	93	0.00
55	1,3-Dichlorobenzene #2	20.000	22.229	-11.1	102	0.00
56	1,4-Dichlorobenzene #2	20.000	22.080	-10.4	101	0.00
57	1,2-Dichlorobenzene #2	20.000	21.726	-8.6	100	0.00

Average % D = 6.4

(#) = Out of Range SPCC's out = 0 CCC's out = 1

QR021534.D QR0326.M Fri Apr 02 14:53:37 2004 QRXY

Continuing Calibration Summary

Job Number: F22896
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GQR927-CC920
Lab FileID: QR021657.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\040104\QR021657.D\FID1B.CH Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\040104\QR021657.D\AlB2A.CH
Acq On : 1 Apr 2004 9:57 pm Operator: RachidA
Sample : cc920-20 Inst : VOA3
Misc : gc3363,gqr927,,,,, Multiplr: 1.00
IntFile Signal #1: PID.E IntFile Signal #2: ELCD.E

Method : C:\HPCHEM\1\METHODS\QR0326.M (Chemstation Integrator)
Title : EPA 601/602 & SWA 5030B/8021B
Last Update : Thu Apr 01 10:01:45 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Fluorobenzene	20.000	20.000	0.0	96	0.00
2	c	VINYL CHLORIDE	20.000	20.733	-3.7	99	0.00
3		1,1-Dichloroethene	20.000	16.793	16.0#	85	0.00
4		Methyl tert Butyl Ether	40.000	42.293	-5.7	100	0.00
5		trans-1,2-Dichloroethene	20.000	18.859	5.7	95	0.00
6		Di-Isopropyl ether	20.000	19.703	1.5	100	0.00
7		cis-1,2-Dichloroethene	20.000	19.224	3.9	98	0.00
8	S	1,1-Dichloropropene	20.000	19.088	4.6	91	0.00
9		Benzene	40.000	38.679	3.3	97	0.00
10		Trichloroethene	20.000	19.447	2.8	102	0.00
11		2-Chloroethylvinyl ether	20.000	18.397	8.0	88	0.00
12		cis-1,3-Dichloropropene	20.000	19.409	3.0	96	0.00
13		Toluene	40.000	37.935	5.2	97	0.00
14		trans-1,3-Dichloropropene	20.000	19.705	1.5	95	0.00
15		Tetrachloroethene	20.000	19.137	4.3	98	0.00
16	S	1-Chloro-4-fluorobenzene	20.000	21.213	-6.1	100	0.00
17		Chlorobenzene	20.000	19.643	1.8	98	0.00
18		Ethylbenzene	40.000	38.072	4.8	97	0.00
19		m,p-Xylene	80.000	76.798	4.0	97	0.00
20		o-Xylene	40.000	38.530	3.7	97	0.00
21		1,3-Dichlorobenzene	20.000	20.078	-0.4	96	0.00
22		1,4-Dichlorobenzene	20.000	20.224	-1.1	95	0.00
23		1,2-Dichlorobenzene	20.000	19.668	1.7	95	0.00

Signal #2

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
25	I	Bromochloromethane	20.000	20.000	0.0	96	0.00
26	c	DICHLORODIFLUOROMETHANE	20.000	21.630	-8.1	105	0.00
27	c	CHLOROMETHANE	20.000	26.579	-32.9#	125	0.00
28	c	VINYL CHLORIDE #2	20.000	22.118	-10.6	106	0.00
29	c	BROMOMETHANE	20.000	19.202	4.0	97	0.01
30	c	CHLOROETHANE	20.000	20.013	-0.1	98	0.01
31	c	TRICHLOROFLUOROMETHANE	20.000	21.603	-8.0	105	0.00
32		1,1-Dichloroethene #2	20.000	18.441	7.8	93	0.00
33		Methylene Chloride	20.000	19.095	4.5	95	0.02
34		trans-1,2-Dichloroethene #2	20.000	20.250	-1.3	99	0.00
35		1,1-Dichloroethane	20.000	20.309	-1.5	100	0.00

Continuing Calibration Summary

Job Number: F22896
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GQR927-CC920
Lab FileID: QR021657.D

36		cis-1,2-Dichloroethene #2	20.000	20.281	-1.4	99	0.00
37		Chloroform	20.000	20.359	-1.8	98	0.00
38		1,1,1-Trichloroethane	20.000	20.141	-0.7	98	0.00
39	S	1,1-Dichloropropene #2	20.000	19.443	2.8	95	0.00
40		Carbon Tetrachloride	20.000	19.948	0.3	100	0.00
41		1,2-Dichloroethane	20.000	20.358	-1.8	99	0.00
42		Trichloroethene #2	20.000	21.181	-5.9	104	0.00
43		1,2-Dichloropropane	20.000	20.960	-4.8	102	0.00
44		Bromodichloromethane	20.000	20.048	-0.2	99	0.00
45		2-Chloroethylvinyl ether #2	20.000	18.849	5.8	89	0.00
46		cis-1,3-Dichloropropene #2	20.000	19.992	0.0	97	0.00
47		trans-1,3-Dichloropropene #	20.000	20.240	-1.2	98	0.00
48		1,1,2-Trichloroethane	20.000	20.520	-2.6	98	0.00
49		Tetrachloroethene #2	20.000	20.803	-4.0	101	0.00
50		Dibromochloromethane	20.000	19.862	0.7	97	0.00
51	s	1-Chloro-4-fluorobenzene #2	20.000	20.918	-4.6	99	0.00
52		Chlorobenzene #2	20.000	20.232	-1.2	98	0.00
53		Bromoform	20.000	19.678	1.6	96	0.00
54		1,1,2,2-Tetrachloroethane	20.000	19.096	4.5	89	0.00
55		1,3-Dichlorobenzene #2	20.000	20.493	-2.5	96	0.00
56		1,4-Dichlorobenzene #2	20.000	20.746	-3.7	97	0.00
57		1,2-Dichlorobenzene #2	20.000	20.683	-3.4	97	0.00

Average % D = 4.2

(#) = Out of Range SPCC's out = 0 CCC's out = 1

QR021534.D QR0326.M Fri Apr 02 14:53:38 2004 QRXY

5.6

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: F22896
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP10055-MB	IJ19585.D	1	03/29/04	SD	03/24/04	OP10055	GIJ953

The QC reported here applies to the following samples: **Method:** EPA 610

F22896-5

CAS No.	Compound	Result	RL	MDL	Uuits	Q
83-32-9	Acenaphthene	ND	5.0	2.0	ug/l	
208-96-8	Acenaphthylene	ND	5.0	2.0	ug/l	
120-12-7	Anthracene	ND	5.0	2.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.0	2.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.0	2.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.0	2.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.0	2.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.0	2.0	ug/l	
218-01-9	Chrysene	ND	5.0	2.0	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.0	2.0	ug/l	
206-44-0	Fluoranthene	ND	5.0	2.0	ug/l	
86-73-7	Fluorene	ND	5.0	2.0	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.0	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.0	ug/l	
90-12-0	1-Methylnaphthalene	ND	5.0	2.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.0	2.0	ug/l	
85-01-8	Phenanthrene	ND	5.0	2.0	ug/l	
129-00-0	Pyrene	ND	5.0	2.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
321-60-8	2-Fluorobiphenyl	78%	42-123%
84-15-1	o-Terphenyl	90%	51-123%

Method Blank Summary

Job Number: F22896
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP10055-MB	IJ19595.D	1	03/30/04	SD	03/24/04	OP10055	GIJ954

The QC reported here applies to the following samples: **Method:** EPA 610

F22896-5

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.0	2.0	ug/l	
208-96-8	Acenaphthylene	ND	5.0	2.0	ug/l	
120-12-7	Anthraeene	ND	5.0	2.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.0	2.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.0	2.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.0	2.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.0	2.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.0	2.0	ug/l	
218-01-9	Chrysene	ND	5.0	2.0	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.0	2.0	ug/l	
206-44-0	Fluoranthene	ND	5.0	2.0	ug/l	
86-73-7	Fluorene	ND	5.0	2.0	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.0	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.0	ug/l	
90-12-0	1-Methylnaphthalene	ND	5.0	2.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.0	2.0	ug/l	
85-01-8	Phenanthrene	ND	5.0	2.0	ug/l	
129-00-0	Pyrene	ND	5.0	2.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
321-60-8	2-Fluorobiphenyl	58%	42-123%
84-15-1	o-Terphenyl	88%	51-123%

Blank Spike Summary

Job Number: F22896
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP10055-BS	IJ19586.D	1	03/29/04	SD	03/24/04	OP10055	GIJ953

The QC reported here applies to the following samples: **Method:** EPA 610

F22896-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
83-32-9	Acenaphthene	25	21.5	86	71-113
208-96-8	Acenaphthylene	25	21.1	84	63-102
120-12-7	Anthracene	25	23.3	93	71-110
56-55-3	Benzo(a)anthracene	25	21.8	87	70-114
50-32-8	Benzo(a)pyrene	25	22.9	92	67-114
205-99-2	Benzo(b)fluoranthene	25	22.2	89	69-115
191-24-2	Benzo(g,h,i)perylene	25	21.5	86	61-117
207-08-9	Benzo(k)fluoranthene	25	23.0	92	69-111
218-01-9	Chrysene	25	23.1	92	70-114
53-70-3	Dibenzo(a,h)anthracene	25	22.2	89	64-114
206-44-0	Fluoranthene	25	23.2	93	71-114
86-73-7	Fluorene	25	22.2	89	69-111
193-39-5	Indeno(1,2,3-cd)pyrene	25	20.1	80	63-112
91-20-3	Naphthalene	25	19.8	79	66-105
90-12-0	1-Methylnaphthalene	25	22.2	89	71-112
91-57-6	2-Methylnaphthalene	25	20.3	81	65-106
85-01-8	Phenanthrene	25	21.9	88	69-112
129-00-0	Pyrene	25	23.5	94	70-114

CAS No.	Surrogate Recoveries	BSP	Limits
321-60-8	2-Fluorobiphenyl	87%	42-123%
84-15-1	o-Terphenyl	93%	51-123%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F22896
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP10055-MS	IJ19598.D	20	03/30/04	SD	03/24/04	OP10055	GIJ954
OP10055-MSD	IJ19599.D	20	03/30/04	SD	03/24/04	OP10055	GIJ954
F22900-6	IJ19588.D	1	03/29/04	SD	03/24/04	OP10055	GIJ953
F22900-6 [a]	IJ19596.D	5	03/30/04	SD	03/24/04	OP10055	GIJ954

The QC reported here applies to the following samples: **Method:** EPA 610

F22896-5

CAS No.	Compound	F22900-6 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	72.8 [b]		52.1	119	89	130	110	9	59-123/20
208-96-8	Acenaphthylene	ND [b]		52.1	ND	0*	ND	0*	nc	51-114/20
120-12-7	Anthracene	ND		52.1	ND	0*	ND	0*	nc	64-114/17
56-55-3	Benzo(a)anthracene	ND		52.1	ND	0*	ND	0*	nc	66-115/17
50-32-8	Benzo(a)pyrene	ND		52.1	ND	0*	ND	0*	nc	62-118/17
205-99-2	Benzo(b)fluoranthene	ND		52.1	ND	0*	ND	0*	nc	66-117/17
191-24-2	Benzo(g,h,i)perylene	ND		52.1	ND	0*	ND	0*	nc	59-120/17
207-08-9	Benzo(k)fluoranthene	ND		52.1	ND	0*	ND	0*	nc	64-116/16
218-01-9	Chrysene	ND		52.1	ND	0*	ND	0*	nc	66-117/16
53-70-3	Dibenzo(a,h)anthracene	ND		52.1	ND	0*	ND	0*	nc	57-124/18
206-44-0	Fluoranthene	ND		52.1	ND	0*	ND	0*	nc	67-116/17
86-73-7	Fluorene	29.0 [b]		52.1	ND	-56*	83.5	105	200*	58-122/19
193-39-5	Indeno(1,2,3-cd)pyrene	ND		52.1	ND	0*	ND	0*	nc	59-116/18
91-20-3	Naphthalene	1370 [d]		52.1	1580	403* [c]	1710	653* [c]	8	47-114/20
90-12-0	1-Methylnaphthalene	65.4 [b]		52.1	119	103	130	124	9	55-128/21
91-57-6	2-Methylnaphthalene	85.3 [b]		52.1	132	90	144	113	9	51-117/21
85-01-8	Phenanthrene	ND		52.1	ND	0*	ND	0*	nc	63-116/18
129-00-0	Pyrene	ND		52.1	ND	0*	ND	0*	nc	67-116/17

CAS No.	Surrogate Recoveries	MS	MSD	F22900-6	F22900-6	Limits
321-60-8	2-Fluorobiphenyl	71%	79%	111%	94%	42-123%
84-15-1	o-Terphenyl	109%	122%	104%	93%	51-123%

(a) All hits confirmed by dual column analysis.
(b) Result is from Run #2.
(c) Outside control limits due to high level in sample relative to spike amount.
(d) Result is from Run #3.

Semivolatile Surrogate Recovery Summary

Job Number: F22896
Account: EEINCJX EEI
Project: CSFF MCAS New River

Method: EPA 610	**Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S2 [a]
F22896-5	IJ19587.D	87.0	95.0
OP10055-BS	IJ19586.D	87.0	93.0
OP10055-MB	IJ19585.D	78.0	90.0
OP10055-MB	IJ19595.D	58.0	88.0
OP10055-MS	IJ19598.D	71.0	109.0
OP10055-MSD	IJ19599.D	79.0	122.0

Surrogate Compounds	Recovery Limits
S1 = 2-Fluorobiphenyl	42-123%
S2 = o-Terphenyl	51-123%

(a) Recovery from GC signal #1

GC Surrogate Retention Time Summary

Job Number: F22896
Account: EEINCJX EEI
Project: CSFF MCAS New River

Check Std:	GIJ953-CC928	**Injection Date:**	03/29/04
Lab File ID:	IJ19584.D	**Injection Time:**	20:42
Instrument ID:	GCIJ	**Method:**	EPA 610

	S1 [a] RT	SI [b] RT	S2 [a] RT	S2 [b] RT
Check Std	5.71	6.51	10.23	11.64

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
OP10055-MB	IJ19585.D	03/29/04	21:11	5.71		10.24	
OP10055-BS	IJ19586.D	03/29/04	21:40	5.71		10.23	
F22896-5	IJ19587.D	03/29/04	22:08	5.71		10.23	
F22900-6	IJ19588.D	03/29/04	22:37	5.70		10.23	
ZZZZZZ	IJ19591.D	03/30/04	00:03	5.71		10.23	
ZZZZZZ	IJ19592.D	03/30/04	00:32	5.70		10.23	
GIJ953-ECC928	IJ19593.D	03/30/04	01:00	5.71	6.51	10.23	11.64

Surrogate Compounds

S1 = 2-Fluorobiphenyl
S2 = o-Terphenyl

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F22896
Account: EEINCJX EEI
Project: CSFF MCAS New River

Check Std:	GIJ954-CC928	**Injection Date:**	03/30/04
Lab File ID:	IJ19594.D	**Injection Time:**	09:23
Instrument ID:	GCIJ	**Method:**	EPA 610

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	5.70	6.50	10.23	11.64

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
OP10055-MB	IJ19595.D	03/30/04	10:02	5.70		10.23	
F22900-6	IJ19596.D	03/30/04	10:31	5.70		10.23	
F22900-6	IJ19597.D	03/30/04	11:00	0.00		0.00	
OP10055-MS	IJ19598.D	03/30/04	11:28	5.72		10.24	
OP10055-MSD	IJ19599.D	03/30/04	11:57	5.72		10.25	
ZZZZZZ	IJ19600.D	03/30/04	12:26	5.70		10.23	
GIJ954-ECC928	IJ19601.D	03/30/04	12:55	5.71	6.51	10.23	11.64

Surrogate Compounds

S1 = 2-Fluorobiphenyl
S2 = o-Terphenyl

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

Initial Calibration Summary

Job Number: F22896
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GIJ928-ICC928
Lab FileID: IJ19184.D

Response Factor Report FID 1

Method : C:\HPCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title : PAH's BY EPA 610 OR 8100
Last Update : Wed Jan 14 07:33:44 2004
Response via : Initial Calibration

Calibration Files
5 =IJ19182.D 10 =IJ19183.D 20 =IJ19184.D
30 =IJ19185.D 40 =IJ19186.D 50 =IJ19187.D

		Compound	5	10	20	30	40	50	Avg		%RSD
1)		Naphthalene	1.607	1.598	1.575	1.579	1.577	1.616	1.592	E4	1.09
2)		2-Methyl Naphthalen	1.554	1.537	1.522	1.524	1.527	1.567	1.538	E4	1.19
3)		1-Methyl Naphthalen	1.555	1.518	1.494	1.492	1.499	1.537	1.516	E4	1.71
4)	S	2-Fluorobiphenyl	1.350	1.381	1.324	1.363	1.369	1.411	1.366	E4	2.15
5)		Acenaphthylene	1.620	1.559	1.559	1.561	1.571	1.619	1.582	E4	1.90
6)		Acenaphthene	1.646	1.634	1.607	1.601	1.598	1.650	1.623	E4	1.45
7)		Fluorene	1.585	1.598	1.573	1.573	1.563	1.614	1.585	E4	1.19
8)		Phenanthrene	1.508	1.553	1.554	1.565	1.560	1.612	1.559	E4	2.14
9)		Anthracene	1.724	1.667	1.601	1.594	1.580	1.623	1.631	E4	3.34
10)	S	O-Terphenyl	1.734	1.666	1.624	1.614	1.602	1.647	1.648	E4	2.92
11)		Fluoranthene	1.655	1.637	1.592	1.602	1.573	1.629	1.615	E4	1.90
12)		Pyrene	1.691	1.677	1.582	1.588	1.582	1.624	1.624	E4	3.03
13)		Benzo(a)Anthracene	1.533	1.581	1.568	1.589	1.589	1.627	1.581	E4	1.94
14)		Chrysene	1.776	1.698	1.618	1.612	1.598	1.626	1.654	E4	4.17
15)		Benzo(b)Fluoranthen	1.523	1.557	1.576	1.597	1.597	1.667	1.586	E4	3.07
16)		Benzo(k)Fluoranthen	1.875	1.794	1.675	1.657	1.642	1.643	1.714	E4	5.68
17)		Benzo(a) Pyrene	1.594	1.580	1.533	1.534	1.530	1.566	1.556	E4	1.77
18)		Indeno(1,2,3-cd)pyr	1.531	1.543	1.512	1.519	1.530	1.570	1.534	E4	1.34
19)		Dibenzo(a,h)anthrac	1.704	1.650	1.574	1.563	1.565	1.596	1.609	E4	3.53
20)		Benzo(g,h,i) Peryle	1.695	1.636	1.601	1.568	1.565	1.599	1.611	E4	3.03

Signal #2 Calibration Files
5 =IJ19182.D 10 =IJ19183.D 20 =IJ19184.D
30 =IJ19185.D 40 =IJ19186.D 50 =IJ19187.D

		Compound	5	10	20	30	40	50	Avg		%RSD
1)		Naphthalene	2.282	2.241	2.198	2.201	2.200	2.251	2.229	E4	1.55
2)		2-Methyl Naphthalen	2.158	2.125	2.102	2.112	2.113	2.173	2.130	E4	1.35
3)		1-Methyl Naphthalen	2.126	2.093	2.064	2.069	2.067	2.126	2.091	E4	1.40
4)	S	2-Fluorobiphenyl	1.918	1.924	1.910	1.913	1.913	1.971	1.925	E4	1.19
5)		Acenaphthylene	2.229	2.224	2.198	2.197	2.190	2.260	2.216	E4	1.19
6)		Acenaphthene	2.262	2.254	2.227	2.226	2.214	2.286	2.245	E4	1.20
7)		Fluorene	2.204	2.205	2.172	2.170	2.158	2.230	2.190	E4	1.25
8)		Phenanthrene	2.035	2.098	2.092	2.119	2.133	2.221	2.116	E4	2.89
9)		Anthracene	2.448	2.264	2.200	2.186	2.154	2.230	2.247	E4	4.68
10)	S	O-Terphenyl	2.304	2.281	2.234	2.234	2.220	2.288	2.260	E4	1.55
11)		Fluoranthene	2.265	2.245	2.190	2.198	2.193	2.250	2.223	E4	1.51
12)		Pyrene	2.354	2.274	2.216	2.221	2.220	2.278	2.260	E4	2.38
13)		Benzo(a)Anthracene	2.307	2.283	2.226	2.235	2.229	2.280	2.260	E4	1.52
14)		Chrysene	2.291	2.247	2.206	2.204	2.183	2.228	2.226	E4	1.74
15)		Benzo(b)Fluoranthen	2.238	2.246	2.201	2.211	2.221	2.293	2.235	E4	1.48
16)		Benzo(k)Fluoranthen	2.330	2.308	2.226	2.242	2.237	2.277	2.270	E4	1.86
17)		Benzo(a) Pyrene	2.192	2.172	2.113	2.123	2.121	2.172	2.149	E4	1.56
18)		Indeno(1,2,3-cd)pyr	2.166	2.158	2.122	2.146	2.172	2.256	2.170	E4	2.11
19)		Dibenzo(a,h)anthrac	2.304	2.248	2.132	2.118	2.081	2.093	2.162	E4	4.23
20)		Benzo(g,h,i) Peryle	2.246	2.214	2.140	2.139	2.152	2.202	2.182	E4	2.07

Initial Calibration Summary

Job Number: F22896
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GIJ928-ICC928
Lab FileID: IJI9184.D

Average % RSD = 2.2

(#) = Out of Range

8100_H2.M Wed Jan 14 08:50:40 2004

6.6

Continuing Calibration Summary

Job Number: F22896
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GIJ953-CC928
Lab FileID: IJ19584.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\0329PAH\IJ19584.D\FID1B.CH Vial: 18
Signal #2 : C:\HPCHEM\1\DATA\0329PAH\IJ19584.D\FID2A.CH
Acq On : 29 Mar 2004 8:42 pm Operator: sarahm
Sample : cc928-20 Inst : FID 1
Misc : op9972,gij953,1000,,,1,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : C:\HPCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title : PAH's BY EPA 610 OR 8100
Last Update : Fri Feb 27 08:33:10 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1		Naphthalene	20.000	21.005	-5.0	106	0.00	4.08- 4.28
2		2-Methyl Naphthalene	20.000	20.722	-3.6	105	0.00	4.98- 5.18
3		1-Methyl Naphthalene	20.000	21.302	-6.5	108	0.00	5.12- 5.32
4	S	2-Fluorobiphenyl	20.000	21.303	-6.5	110	0.00	5.61- 5.81
5		Acenaphthylene	20.000	20.999	-5.0	107	0.00	6.32- 6.52
6		Acenaphthene	20.000	21.234	-6.2	107	0.00	6.64- 6.84
7		Fluorene	20.000	21.010	-5.1	106	0.00	7.51- 7.71
8		Phenanthrene	20.000	20.351	-1.8	102	0.00	9.17- 9.37
9		Anthracene	20.000	21.733	-8.7	111	0.00	9.26- 9.46
10	S	O-Terphenyl	20.000	21.376	-6.9	108	0.00	10.14-10.34
11		Fluoranthene	20.000	21.167	-5.8	107	0.00	11.37-11.57
12		Pyrene	20.000	21.623	-8.1	111	0.00	11.74-11.94
13		Benzo(a)Anthracene	20.000	20.127	-0.6	101	0.00	14.04-14.24
14		Chrysene	20.000	21.836	-9.2	112	0.00	14.11-14.31
15		Benzo(b)Fluoranthene	20.000	20.095	-0.5	101	0.00	15.95-16.15
16		Benzo(k)Fluoranthene	20.000	21.932	-9.7	112	0.00	16.00-16.20
17		Benzo(a) Pyrene	20.000	21.157	-5.8	107	0.00	16.44-16.64
18		Indeno(1,2,3-cd)pyrene	20.000	19.597	2.0	99	0.00	18.12-18.32
19		Dibenzo(a,h)anthracene	20.000	20.837	-4.2	106	0.00	18.20-18.40
20		Benzo(g,h,i) Perylene	20.000	20.640	-3.2	104	0.00	18.44-18.64
*****		Signal #2 *****						
1		Naphthalene	20.000	20.804	-4.0	105	0.00	4.76- 4.96
2		2-Methyl Naphthalene	20.000	20.556	-2.8	104	0.00	5.64- 5.84
3		1-Methyl Naphthalene	20.000	21.717	-8.6	110	0.00	5.90- 6.10
4	S	2-Fluorobiphenyl	20.000	20.896	-4.5	105	0.00	6.42- 6.62
5		Acenaphthylene	20.000	21.208	-6.0	107	0.00	7.51- 7.71
6		Acenaphthene	20.000	21.468	-7.3	108	0.00	7.76- 7.96
7		Fluorene	20.000	20.943	-4.7	106	0.00	8.63- 8.83
8		Phenanthrene	20.000	19.865	0.7	100	0.00	10.65-10.85
9		Anthracene	20.000	22.664	-13.3	116	0.00	10.69-10.89
10	S	O-Terphenyl	20.000	21.538	-7.7	109	0.00	11.55-11.75
11		Fluoranthene	20.000	21.331	-6.7	108	0.00	13.02-13.22
12		Pyrene	20.000	21.790	-8.9	111	0.00	13.56-13.76
13		Benzo(a)Anthracene	20.000	20.910	-4.6	106	0.00	15.91-16.11
14		Chrysene	20.000	21.743	-8.7	110	0.00	16.09-16.29
15		Benzo(b)Fluoranthene	20.000	20.283	-1.4	103	0.00	17.97-18.17
16		Benzo(k)Fluoranthene	20.000	22.831	-14.2	116	0.00	18.02-18.22
17		Benzo(a) Pyrene	20.000	21.235	-6.2	108	0.00	18.69-18.89
18		Indeno(1,2,3-cd)pyrene	20.000	20.596	-3.0	105	0.00	20.45-20.65

Continuing Calibration Summary

Job Number: F22896
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GIJ953-CC928
Lab FileID: IJI9584.D

19	Dibenzo(a,h)anthracene	20.000	22.587	-12.9	115	0.00	20.52-20.72
20	Benzo(g,h,i) Perylene	20.000	21.233	-6.2	108	-0.01	21.06-21.26

(#) = Out of Range SPCC's out = 0 CCC's out = 0
IJ19184.D 8100_H2.M Tue Mar 30 08:01:01 2004

Continuing Calibration Summary

Job Number: F22896
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GIJ953-ECC928
Lab FileID: IJ19593.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\0329PAH\IJ19593.D\FID1B.CH Vial: 27
Signal #2 : C:\HPCHEM\1\DATA\0329PAH\IJ19593.D\FID2A.CH
Acq On : 30 Mar 2004 1:00 am Operator: sarahm
Sample : ecc928-20 Inst : FID 1
Misc : op9972,gij953,980,,,1,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : C:\HPCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title : PAH's BY EPA 610 OR 8100
Last Update : Fri Feb 27 08:33:10 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1		Naphthalene	20.000	19.626	1.9	99	0.00	4.08- 4.28
2		2-Methyl Naphthalene	20.000	19.495	2.5	99	0.00	4.98- 5.18
3		1-Methyl Naphthalene	20.000	20.790	-3.9	106	0.00	5.12- 5.32
4	S	2-Fluorobiphenyl	20.000	20.341	-1.7	105	0.00	5.61- 5.81
5		Acenaphthylene	20.000	19.654	1.7	100	0.00	6.32- 6.52
6		Acenaphthene	20.000	19.892	0.5	100	0.00	6.64- 6.84
7		Fluorene	20.000	19.651	1.7	99	0.00	7.51- 7.71
8		Phenanthrene	20.000	18.910	5.4	95	0.00	9.17- 9.37
9		Anthracene	20.000	20.783	-3.9	106	0.00	9.26- 9.46
10	S	O-Terphenyl	20.000	20.043	-0.2	102	0.00	10.14-10.34
11		Fluoranthene	20.000	19.759	1.2	100	0.00	11.37-11.57
12		Pyrene	20.000	20.192	-1.0	104	0.00	11.74-11.94
13		Benzo(a)Anthracene	20.000	18.867	5.7	95	0.00	14.04-14.24
14		Chrysene	20.000	20.516	-2.6	105	0.00	14.11-14.31
15		Benzo(b)Fluoranthene	20.000	18.742	6.3	94	0.00	15.95-16.15
16		Benzo(k)Fluoranthene	20.000	20.597	-3.0	105	0.00	16.00-16.20
17		Benzo(a) Pyrene	20.000	19.778	1.1	100	0.00	16.44-16.64
18		Indeno(1,2,3-cd)pyrene	20.000	18.258	8.7	93	0.00	18.12-18.32
19		Dibenzo(a,h)anthracene	20.000	19.757	1.2	101	0.00	18.20-18.40
20		Benzo(g,h,i) Perylene	20.000	19.238	3.8	97	0.00	18.44-18.64
*****		Signal #2 *****						
1		Naphthalene	20.000	19.654	1.7	100	0.00	4.76- 4.96
2		2-Methyl Naphthalene	20.000	19.352	3.2	98	0.00	5.64- 5.84
3		1-Methyl Naphthalene	20.000	20.843	-4.2	106	0.00	5.90- 6.10
4	S	2-Fluorobiphenyl	20.000	19.938	0.3	100	0.00	6.42- 6.62
5		Acenaphthylene	20.000	19.923	0.4	100	0.00	7.51- 7.71
6		Acenaphthene	20.000	20.119	-0.6	101	0.00	7.76- 7.96
7		Fluorene	20.000	19.588	2.1	99	0.00	8.63- 8.83
8		Phenanthrene	20.000	18.279	8.6	92	0.00	10.65-10.85
9		Anthracene	20.000	21.495	-7.5	110	0.00	10.69-10.89
10	S	O-Terphenyl	20.000	20.296	-1.5	103	0.00	11.55-11.75
11		Fluoranthene	20.000	19.980	0.1	101	0.00	13.02-13.22
12		Pyrene	20.000	20.419	-2.1	104	0.00	13.56-13.76
13		Benzo(a)Anthracene	20.000	19.668	1.7	100	0.00	15.91-16.11
14		Chrysene	20.000	20.404	-2.0	103	0.00	16.09-16.29
15		Benzo(b)Fluoranthene	20.000	18.938	5.3	96	0.00	17.97-18.17
16		Benzo(k)Fluoranthene	20.000	21.322	-6.6	109	0.00	18.02-18.22
17		Benzo(a) Pyrene	20.000	19.819	0.9	101	0.00	18.69-18.89
18		Indeno(1,2,3-cd)pyrene	20.000	18.259	8.7	93	0.00	20.45-20.65

Continuing Calibration Summary

Job Number: F22896
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GIJ953-ECC928
Lab FileID: IJ19593.D

19	Dibenzo(a,h)anthracene	20.000	21.090	-5.4	107	0.00	20.52-20.72
20	Benzo(g,h,i) Perylene	20.000	19.411	2.9	99	-0.01	21.06-21.26

(#) = Out of Range SPCC's out = 0 CCC's out = 0
IJ19184.D 8100_H2.M Tue Mar 30 08:01:03 2004

9.6

Continuing Calibration Summary

Job Number: F22896 **Sample:** GIJ954-CC928
Account: EEINCJX EEI **Lab FileID:** IJ19594.D
Project: CSFF MCAS New River

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\0330PAH\IJ19594.D\FID1B.CH Vial: 1
Signal #2 : C:\HPCHEM\1\DATA\0330PAH\IJ19594.D\FID2A.CH
Acq On : 30 Mar 2004 9:23 am Operator: sarahm
Sample : cc928-20 Inst : FID 1
Misc : op9972,gij954,1000,,,1,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : C:\HPCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title : PAH's BY EPA 610 OR 8100
Last Update : Fri Feb 27 08:33:10 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1		Naphthalene	20.000	19.964	0.2	101	0.00	4.08- 4.28
2		2-Methyl Naphthalene	20.000	19.783	1.1	100	0.00	4.98- 5.18
3		1-Methyl Naphthalene	20.000	21.159	-5.8	107	0.00	5.12- 5.32
4	S	2-Fluorobiphenyl	20.000	20.645	-3.2	107	0.00	5.61- 5.81
5		Acenaphthylene	20.000	20.025	-0.1	102	0.00	6.32- 6.52
6		Acenaphthene	20.000	20.290	-1.4	102	0.00	6.64- 6.84
7		Fluorene	20.000	19.959	0.2	100	0.00	7.51- 7.71
8		Phenanthrene	20.000	19.297	3.5	97	0.00	9.17- 9.37
9		Anthracene	20.000	21.145	-5.7	108	0.00	9.26- 9.46
10	S	O-Terphenyl	20.000	20.508	-2.5	104	0.00	10.14-10.34
11		Fluoranthene	20.000	20.209	-1.0	102	0.00	11.37-11.57
12		Pyrene	20.000	20.665	-3.3	106	0.00	11.74-11.94
13		Benzo(a)Anthracene	20.000	19.253	3.7	97	0.00	14.04-14.24
14		Chrysene	20.000	21.158	-5.8	108	0.00	14.11-14.31
15		Benzo(b)Fluoranthene	20.000	19.086	4.6	96	0.00	15.95-16.15
16		Benzo(k)Fluoranthene	20.000	21.223	-6.1	109	0.00	16.00-16.20
17		Benzo(a) Pyrene	20.000	20.248	-1.2	103	0.00	16.44-16.64
18		Indeno(1,2,3-cd)pyrene	20.000	18.437	7.8	94	0.00	18.12-18.32
19		Dibenzo(a,h)anthracene	20.000	19.894	0.5	102	0.00	18.20-18.40
20		Benzo(g,h,i) Perylene	20.000	19.510	2.4	98	-0.01	18.44-18.64
*****		Signal #2 *****						
1		Naphthalene	20.000	20.026	-0.1	102	-0.01	4.76- 4.96
2		2-Methyl Naphthalene	20.000	19.730	1.3	100	-0.01	5.64- 5.84
3		1-Methyl Naphthalene	20.000	21.291	-6.5	108	-0.01	5.90- 6.10
4	S	2-Fluorobiphenyl	20.000	20.275	-1.4	102	-0.01	6.42- 6.62
5		Acenaphthylene	20.000	20.345	-1.7	103	-0.01	7.51- 7.71
6		Acenaphthene	20.000	20.586	-2.9	104	-0.01	7.76- 7.96
7		Fluorene	20.000	20.024	-0.1	101	-0.01	8.63- 8.83
8		Phenanthrene	20.000	18.680	6.6	94	-0.01	10.65-10.85
9		Anthracene	20.000	21.961	-9.8	112	-0.01	10.69-10.89
10	S	O-Terphenyl	20.000	20.753	-3.8	105	-0.01	11.55-11.75
11		Fluoranthene	20.000	20.243	-1.2	103	-0.01	13.02-13.22
12		Pyrene	20.000	20.860	-4.3	106	-0.01	13.56-13.76
13		Benzo(a)Anthracene	20.000	20.089	-0.4	102	0.00	15.91-16.11
14		Chrysene	20.000	21.001	-5.0	106	0.00	16.09-16.29
15		Benzo(b)Fluoranthene	20.000	19.393	3.0	98	0.00	17.97-18.17
16		Benzo(k)Fluoranthene	20.000	21.972	-9.9	112	0.00	18.02-18.22
17		Benzo(a) Pyrene	20.000	20.371	-1.9	104	0.00	18.69-18.89
18		Indeno(1,2,3-cd)pyrene	20.000	18.829	5.9	96	-0.01	20.45-20.65

Continuing Calibration Summary

Job Number: F22896
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GIJ954-CC928
Lab FileID: IJ19594.D

19	Dibenzo(a,h)anthracene	20.000	21.741	-8.7	110	-0.01	20.52-20.72
20	Benzo(g,h,i) Perylene	20.000	19.647	1.8	100	-0.02	21.06-21.26

(#) = Out of Range SPCC's out = 0 CCC's out = 0
IJ19184.D 8100_H2.M Tue Mar 30 13:20:02 2004

Continuing Calibration Summary

Job Number: F22896
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GIJ954-ECC928
Lab FileID: IJ19601.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\0330PAH\IJ19601.D\FID1B.CH Vial: 8
Signal #2 : C:\HPCHEM\1\DATA\0330PAH\IJ19601.D\FID2A.CH
Acq On : 30 Mar 2004 12:55 pm Operator: sarahm
Sample : ecc928-30 Inst : FID 1
Misc : op10055,gij954,990,,,1,5,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : C:\HPCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title : PAH's BY EPA 610 OR 8100
Last Update : Fri Feb 27 08:33:10 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1		Naphthalene	30.000	32.141	-7.1	108	0.00	4.08- 4.28
2		2-Methyl Naphthalene	30.000	31.866	-6.2	107	0.00	4.98- 5.18
3		1-Methyl Naphthalene	30.000	32.432	-8.1	110	0.00	5.12- 5.32
4	S	2-Fluorobiphenyl	30.000	32.805	-9.3	110	0.00	5.61- 5.81
5		Acenaphthylene	30.000	32.186	-7.3	109	0.00	6.32- 6.52
6		Acenaphthene	30.000	32.464	-8.2	110	0.00	6.64- 6.84
7		Fluorene	30.000	32.140	-7.1	108	0.00	7.51- 7.71
8		Phenanthrene	30.000	31.673	-5.6	105	0.00	9.17- 9.37
9		Anthracene	30.000	32.580	-8.6	111	0.00	9.26- 9.46
10	S	O-Terphenyl	30.000	32.226	-7.4	110	0.00	10.14-10.34
11		Fluoranthene	30.000	32.134	-7.1	108	0.00	11.37-11.57
12		Pyrene	30.000	32.746	-9.2	112	0.00	11.74-11.94
13		Benzo(a)Anthracene	30.000	31.411	-4.7	104	0.00	14.04-14.24
14		Chrysene	30.000	32.821	-9.4	112	0.00	14.11-14.31
15		Benzo(b)Fluoranthene	30.000	31.299	-4.3	104	0.00	15.95-16.15
16		Benzo(k)Fluoranthene	30.000	32.689	-9.0	113	0.00	16.00-16.20
17		Benzo(a) Pyrene	30.000	32.226	-7.4	109	0.00	16.44-16.64
18		Indeno(1,2,3-cd)pyrene	30.000	30.328	-1.1	102	0.00	18.12-18.32
19		Dibenzo(a,h)anthracene	30.000	31.629	-5.4	108	0.00	18.20-18.40
20		Benzo(g,h,i) Perylene	30.000	31.053	-3.5	106	0.00	18.44-18.64
*****		Signal #2 *****						
1		Naphthalene	30.000	31.815	-6.1	107	0.00	4.76- 4.96
2		2-Methyl Naphthalene	30.000	31.633	-5.4	106	0.00	5.64- 5.84
3		1-Methyl Naphthalene	30.000	33.005	-10.0	111	0.00	5.90- 6.10
4	S	2-Fluorobiphenyl	30.000	32.042	-6.8	107	0.00	6.42- 6.62
5		Acenaphthylene	30.000	32.406	-8.0	109	0.00	7.51- 7.71
6		Acenaphthene	30.000	32.739	-9.1	110	0.00	7.76- 7.96
7		Fluorene	30.000	32.110	-7.0	108	0.00	8.63- 8.83
8		Phenanthrene	30.000	30.543	-1.8	102	0.00	10.65-10.85
9		Anthracene	30.000	31.431	-4.8	108	0.00	10.69-10.89
10	S	O-Terphenyl	30.000	32.742	-9.1	110	0.00	11.55-11.75
11		Fluoranthene	30.000	32.214	-7.4	109	0.00	13.02-13.22
12		Pyrene	30.000	32.545	-8.5	110	0.00	13.56-13.76
13		Benzo(a)Anthracene	30.000	32.093	-7.0	108	0.00	15.91-16.11
14		Chrysene	30.000	32.831	-9.4	111	0.00	16.09-16.29
15		Benzo(b)Fluoranthene	30.000	31.222	-4.1	105	0.00	17.97-18.17
16		Benzo(k)Fluoranthene	30.000	33.407	-11.4	113	0.00	18.02-18.22
17		Benzo(a) Pyrene	30.000	32.613	-8.7	110	0.00	18.69-18.89
18		Indeno(1,2,3-cd)pyrene	30.000	30.993	-3.3	104	0.00	20.45-20.65

Continuing Calibration Summary

Job Number: F22896
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GIJ954-ECC928
Lab FileID: IJ19601.D

19	Dibenzo(a,h)anthracene	30.000	34.259	-14.2	117	0.00	20.52-20.72
20	Benzo(g,h,i) Perylene	30.000	31.951	-6.5	109	0.00	21.06-21.26

(#) = Out of Range SPCC's out = 0 CCC's out = 0
IJ19185.D 8100_E2.M Tue Mar 30 13:28:39 2004

6.6

Southeast
ACCUTEST.
Laboratories

12/08/05

Technical Report for

EEI

Camp Lejeune-Campbell St. Fuel Farm

844271

Accutest Job Number: F22900

Sampling Date: 03/17/04

Report to:

EEI

bmorris@eeimail.com

ATTN: Bill Morris

Total number of pages in report: 90

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Sections: 1 2 3 4 5 6

Table of Contents

-1-

Section 1: Sample Summary **3**
Section 2: Case Narrative/Conformance Summary 4
Section 3: Sample Results 5
3.1: F22900-1: USTCSFF-122MW03 5
3.2: F22900-2: USTCSFF-122MW04 7
3.3: F22900-3: USTCSFF-122MW07 9
3.4: F22900-4: USTCSFF-13MW01 11
3.5: F22900-5: USTCSFF-122MW08 13
3.6: F22900-6: USTCSFF-13DW01 15
3.7: F22900-7: USTCSFF-122MW09 18
3.8: F22900-8: USTCSFF-DW02 21
3.9: F22900-9: USTCSFF-MW03 24
3.10: F22900-10: USTCSFF-DUP 26
Section 4: Misc. Forms **28**
4.1: Chain of Custody 29
Section 5: GC Volatiles - QC Data Summaries 31
5.1: Method Blank Summary 32
5.2: Blank Spike Summary 35
5.3: Matrix Spike/Matrix Spike Duplicate Summary 39
5.4: Surrogate Recovery Summaries 42
5.5: GC Surrogate Retention Time Summaries 44
5.6: Initial and Continuing Calibration Summaries 52
Section 6: GC Semi-volatiles - QC Data Summaries 73
6.1: Method Blank Summary 74
6.2: Blank Spike Summary 76
6.3: Matrix Spike/Matrix Spike Duplicate Summary 77
6.4: Surrogate Recovery Summaries 78
6.5: GC Surrogate Retention Time Summaries 79
6.6: Initial and Continuing Calibration Summaries 81

Sample Summary

EEI

Job No: F22900

Camp Lejeune-Campbell St. Fuel Farm
Project No: 844271

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
F22900-1	03/17/04	08:15	BS	03/19/04	AQ	Ground Water	USTCSFF-122MW03
F22900-2	03/17/04	08:50	BS	03/19/04	AQ	Ground Water	USTCSFF-122MW04
F22900-3	03/17/04	10:03	BS	03/19/04	AQ	Ground Water	USTCSFF-122MW07
F22900-4	03/17/04	10:50	BS	03/19/04	AQ	Ground Water	USTCSFF-13MW01
F22900-5	03/17/04	11:45	BS	03/19/04	AQ	Ground Water	USTCSFF-122MW08
F22900-6	03/17/04	13:00	BS	03/19/04	AQ	Ground Water	USTCSFF-13DW01
F22900-7	03/17/04	13:50	BS	03/19/04	AQ	Ground Water	USTCSFF-122MW09
F22900-8	03/17/04	15:05	BS	03/19/04	AQ	Ground Water	USTCSFF-DW02
F22900-9	03/17/04	16:10	BS	03/19/04	AQ	Ground Water	USTCSFF-MW03
F22900-10	03/17/04	00:00	BS	03/19/04	AQ	Ground Water	USTCSFF-DUP

Accutest Laboratories Southeast, Inc.
Analytical Narrative

Client: EEI
Site: Camp Lejuene-Campbell St. Fuel Farm
Job No.: F22900
Report Date: April 05, 2004

10 samples were collected on March 17, 2004 and received on March 19, 2004. Samples were intact and properly cooled. A listing of the Laboratory Sample ID, Client Sample ID, and dates of collection are presented in the Results Summary section of this report.
All method specified holding times, calibrations and quality control performance criteria were met, with the following notes.

PAHs, 610:

- Sample USTCSFF-122MW09 (F22900-7) required a 5X dilution due to matrix interference. Data has been footnoted accordingly.
- The MS/MSD associated with prep batch OP10055 had recoveries and RPDs below and/or above acceptance limits. The Blank Spike was within limits. Data not adversely affected.

Accutest Laboratories Southeast, Inc. certifies that this report meets the project requirements for analytical data produced for the samples as received at the Accutest Laboratories Southeast location as stated in the Analytical Task Order and the COC. In addition, Accutest Laboratories Southeast, Inc. certifies that data as reported meet the Data Quality Objectives for precision, accuracy and completeness as specified in the Accutest Laboratories Southeast, Inc. Quality Manual for other that conditions detailed above. It is recommended by Accutest Laboratories Southeast, Inc. that this report is to be used in its entirety. Accutest Laboratories Southeast, Inc. is not responsible for any assumptions of data quality if partial data packages are used to interpret data. The Accutest Laboratories Southeast, Inc. Laboratory Director as verified by the signature on the front page has authorized release of this report.

Narrative prepared by:

Date: April 05, 2004

Sue O. Bell, Project Manager (signature on file)

Report of Analysis

Client Sample ID:	USTCSFF-122MW03		
Lab Sample ID:	F22900-1	**Date Sampled:**	03/17/04
Matrix:	AQ - Ground Water	**Date Received:**	03/19/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Projcct:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	QR021593.D	1	03/30/04	RA	n/a	n/a	GQR923
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	93%		70-123%
563-58-6	1,1-Dichloropropene	98%		86-112%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-122MW03		
Lab Sample ID:	F22900-1	**Date Sampled:**	03/17/04
Matrix:	AQ - Ground Water	**Date Received:**	03/19/04
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD15723.D	1	03/31/04	SKW	03/30/04	OP10096	GDD498
Run #2							

	Initial Volume	Final Volume
Run #1	37.9 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.018	0.0092	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	88%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indieates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidenee of a compound

Report of Analysis

Client Sample ID:	USTCSFF-122MW04		
Lab Sample ID:	F22900-2	**Date Sampled:**	03/17/04
Matrix:	AQ - Ground Water	**Date Received:**	03/19/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	QR021594.D	1	03/30/04	RA	n/a	n/a	GQR923
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	95%		70-123%
563-58-6	1,1-Dichloropropene	98%		86-112%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-122MW04		
Lab Sample ID:	F22900-2	**Date Sampled:**	03/17/04
Matrix:	AQ - Ground Water	**Date Received:**	03/19/04
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD15724.D	1	03/31/04	SKW	03/30/04	OP10096	GDD498
Run #2							

	Initial Volume	Final Volume
Run #1	37.3 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0094	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	92%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-122MW07		
Lab Sample ID:	F22900-3	**Date Sampled:**	03/17/04
Matrix:	AQ - Ground Water	**Date Received:**	03/19/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	QR021595.D	1	03/30/04	RA	n/a	n/a	GQR923
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	98%		70-123%
563-58-6	1,1-Dichloropropene	97%		86-112%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-122MW07		
Lab Sample ID:	F22900-3	**Date Sampled:**	03/17/04
Matrix:	AQ - Ground Water	**Date Received:**	03/19/04
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD15725.D	1	03/31/04	SKW	03/30/04	OP10096	GDD498
Run #2							

	Initial Volume	Final Volume
Run #1	38.0 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.018	0.0092	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	78%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-13MW01		
Lab Sample ID:	F22900-4	**Date Sampled:**	03/17/04
Matrix:	AQ - Ground Water	**Date Received:**	03/19/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	QR021596.D	1	03/30/04	RA	n/a	n/a	GQR923
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	1.6	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	5.7	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Rnn# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	107%		70-123%
563-58-6	1,1-Dichloropropene	98%		86-112%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indieates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-13MW01		
Lab Sample ID:	F22900-4	**Date Sampled:**	03/17/04
Matrix:	AQ - Ground Water	**Date Received:**	03/19/04
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD15726.D	1	03/31/04	SKW	03/30/04	OP10096	GDD498
Run #2							

	Initial Volume	Final Volume
Run #1	38.6 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.018	0.0091	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	101%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-122MW08		
Lab Sample ID:	F22900-5	**Date Sampled:**	03/17/04
Matrix:	AQ - Ground Water	**Date Received:**	03/19/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	QR021597.D	1	03/30/04	RA	n/a	n/a	GQR923
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	0.69	1.0	0.50	ug/l	J
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	2.6	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	3.2	3.0	1.0	ug/l	

CAS No.	Surrogate Reeoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	99%		70-123%
563-58-6	1,1-Dichloropropene	98%		86-112%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-122MW08		
Lab Sample ID:	F22900-5	**Date Sampled:**	03/17/04
Matrix:	AQ - Ground Water	**Date Received:**	03/19/04
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD15728.D	1	03/31/04	SKW	03/30/04	OP10096	GDD498
Run #2							

	Initial Volume	Final Volume
Run #1	38.1 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Uuits	Q
106-93-4	1,2-Dibromoethane	ND	0.018	0.0092	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	89%		60-139%

ND = Not deteeted MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indieates analyte found in associated method blank
N = Indicates presumptivc evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-13DW01		
Lab Sample ID:	F22900-6	**Date Sampled:**	03/17/04
Matrix:	AQ - Ground Water	**Date Received:**	03/19/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	QR021622.D	1	03/31/04	RA	n/a	n/a	GQR925
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	9.3	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	8.7	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	2.1	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	14.5	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	106%		70-123%
563-58-6	1,1-Dichloropropene	96%		86-112%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-13DW01		
Lab Sample ID:	F22900-6	**Date Sampled:**	03/17/04
Matrix:	AQ - Ground Water	**Date Received:**	03/19/04
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD15729.D	1	03/31/04	SKW	03/30/04	OP10096	GDD498
Run #2							

	Initial Volume	Final Volume
Run #1	37.6 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0093	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	97%		60-139%

ND = Not deteeted MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-13DW01		
Lab Sample ID:	F22900-6	**Date Sampled:**	03/17/04
Matrix:	AQ - Ground Water	**Date Received:**	03/19/04
Method:	EPA 610 EPA 610	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IJ19588.D	1	03/29/04	SD	03/24/04	OP10055	GIJ953
Run #2 [a]	IJ19596.D	5	03/30/04	SD	03/24/04	OP10055	GIJ954
Run #3 [a]	IJ19597.D	50	03/30/04	SD	03/24/04	OP10055	GIJ954

	Initial Volume	Final Volume
Run #1	980 ml	1.0 ml
Run #2	980 ml	1.0 ml
Run #3	980 ml	1.0 ml

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	72.8 [b]	26	10	ug/l	
208-96-8	Acenaphthylene	ND [b]	26	10	ug/l	
120-12-7	Anthracene	ND	5.1	2.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.1	2.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.1	2.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.1	2.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.1	2.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.1	2.0	ug/l	
218-01-9	Chrysene	ND	5.1	2.0	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.1	2.0	ug/l	
206-44-0	Fluoranthene	ND	5.1	2.0	ug/l	
86-73-7	Fluorene	29.0 [b]	26	10	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.1	2.0	ug/l	
91-20-3	Naphthalene	1370 [c]	260	100	ug/l	
90-12-0	1-Methylnaphthalene	65.4 [b]	26	10	ug/l	
91-57-6	2-Methylnaphthalene	85.3 [b]	26	10	ug/l	
129-00-0	Pyrene	ND	5.1	2.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Run# 3	Limits
321-60-8	2-Fluorobiphenyl	111%	94%	0% [d]	42-123%
84-15-1	o-Terphenyl	104%	93%	0% [d]	51-123%

(a) All hits confirmed by dual column analysis.
(b) Result is from Run# 2
(c) Result is from Run# 3
(d) Outside control limits due to dilution.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-122MW09		
Lab Sample ID:	F22900-7	**Date Sampled:**	03/17/04
Matrix:	AQ - Ground Water	**Date Received:**	03/19/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	QR021623.D	1	03/31/04	RA	n/a	n/a	GQR925
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	0.87	1.0	0.50	ug/l	J
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Diehlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Diehlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	0.83	1.0	0.50	ug/l	J
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	1.1	3.0	1.0	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	105%		70-123%
563-58-6	1,1-Dichloropropene	97%		86-112%

(a) All hits confirmed by GC/MS.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-122MW09		
Lab Sample ID:	F22900-7	**Date Sampled:**	03/17/04
Matrix:	AQ - Ground Water	**Date Received:**	03/19/04
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeunc-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD15730.D	1	03/31/04	SKW	03/30/04	OP10096	GDD498
Run #2							

	Initial Volume	Final Volume
Run #1	38.1 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromocthane	ND	0.018	0.0092	ug/l	

CAS No.	Surrogate Recoverics	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	80%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-122MW09		
Lab Sample ID:	F22900-7	**Date Sampled:**	03/17/04
Matrix:	AQ - Ground Water	**Date Received:**	03/19/04
Method:	EPA 610 EPA 610	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	IJ19591.D	1	03/30/04	SD	03/24/04	OP10055	GIJ953
Run #2 [b]	IJ19600.D	5	03/30/04	SD	03/24/04	OP10055	GIJ954

	Initial Volume	Final Volume
Run #1	980 ml	1.0 ml
Run #2	990 ml	1.0 ml

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.1	2.0	ug/l	
208-96-8	Acenaphthylene	ND	5.1	2.0	ug/l	
120-12-7	Anthracene	ND	5.1	2.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.1	2.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.1	2.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.1	2.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.1	2.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.1	2.0	ug/l	
218-01-9	Chrysene	ND	5.1	2.0	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.1	2.0	ug/l	
206-44-0	Fluoranthene	ND	5.1	2.0	ug/l	
86-73-7	Fluorene	3.1	5.1	2.0	ug/l	J
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.1	2.0	ug/l	
91-20-3	Naphthalene	21.6 [c]	25	10	ug/l	J
90-12-0	1-Methylnaphthalene	16.0 [c]	25	10	ug/l	J
91-57-6	2-Methylnaphthalene	ND [c]	25	10	ug/l	
85-01-8	Phenanthrene	ND	5.1	2.0	ug/l	
129-00-0	Pyrene	ND	5.1	2.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	106%	95%	42-123%
84-15-1	o-Terphenyl	105%	98%	51-123%

(a) All hits confirmed by dual column analysis. Dilution required due to matrix interference.
(b) All hits confirmed by dual column analysis.
(c) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-DW02		
Lab Sample ID:	F22900-8	**Date Sampled:**	03/17/04
Matrix:	AQ - Ground Water	**Date Received:**	03/19/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Datc	Prep Batch	Analytical Batch
Run #1	QR021599.D	1	03/30/04	RA	n/a	n/a	GQR923
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	97%		70-123%
563-58-6	1,1-Dichloropropene	97%		86-112%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-DW02		
Lab Sample ID:	F22900-8	**Date Sampled:**	03/17/04
Matrix:	AQ - Ground Water	**Date Received:**	03/19/04
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD15731.D	1	03/31/04	SKW	03/30/04	OP10096	GDD498
Run #2							

	Initial Volume	Final Volume
Run #1	38.1 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.018	0.0092	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	89%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-DW02		
Lab Sample ID:	F22900-8	**Date Sampled:**	03/17/04
Matrix:	AQ - Ground Water	**Date Received:**	03/19/04
Method:	EPA 610 EPA 610	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	IJ19592.D	1	03/30/04	SD	03/24/04	OP10055	GIJ953
Run #2							

	Initial Volume	Final Volume
Run #1	980 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	28.5	5.1	2.0	ug/l	
208-96-8	Acenaphthylene	ND	5.1	2.0	ug/l	
120-12-7	Anthracene	ND	5.1	2.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.1	2.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.1	2.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.1	2.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.1	2.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.1	2.0	ug/l	
218-01-9	Chrysene	ND	5.1	2.0	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.1	2.0	ug/l	
206-44-0	Fluoranthene	ND	5.1	2.0	ug/l	
86-73-7	Fluorene	24.0	5.1	2.0	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.1	2.0	ug/l	
91-20-3	Naphthalene	11.0	5.1	2.0	ug/l	
90-12-0	1-Methylnaphthalene	ND	5.1	2.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.1	2.0	ug/l	
85-01-8	Phenanthrene	ND	5.1	2.0	ug/l	
129-00-0	Pyrene	ND	5.1	2.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	88%		42-123%
84-15-1	o-Terphenyl	101%		51-123%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW03		
Lab Sample ID:	F22900-9	**Date Sampled:**	03/17/04
Matrix:	AQ - Ground Water	**Date Received:**	03/19/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	QR021600.D	1	03/31/04	RA	n/a	n/a	GQR923
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	94%		70-123%
563-58-6	1,1-Dichloropropene	109%		86-112%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW03		
Lab Sample ID:	F22900-9	**Date Sampled:**	03/17/04
Matrix:	AQ - Ground Water	**Date Received:**	03/19/04
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD15732.D	1	03/31/04	SKW	03/30/04	OP10096	GDD498
Run #2							

	Initial Volume	Final Volume
Run #1	37.4 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0094	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	93%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a eompound

Report of Analysis

Client Sample ID:	USTCSFF-DUP		
Lab Sample ID:	F22900-10	**Date Sampled:**	03/17/04
Matrix:	AQ - Ground Water	**Date Received:**	03/19/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	QR021601.D	1	03/31/04	RA	n/a	n/a	GQR923
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	1.7	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	6.1	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	105%		70-123%
563-58-6	1,1-Dichloropropene	98%		86-112%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indieates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-DUP		
Lab Sample ID:	F22900-10	**Date Sampled:**	03/17/04
Matrix:	AQ - Ground Water	**Date Received:**	03/19/04
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD15733.D	1	03/31/04	SKW	03/30/04	OP10096	GDD498
Run #2							

	Initial Volume	Final Volume
Run #1	36.8 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0095	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	106%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in assoeiated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

CHAIN OF CUSTODY

ACCUTEST Laboratories
4405 VINELAND ROAD • SUITE C-15
ORLANDO, FL 32811
TEL: 407-425-6700 • FAX: 407-425-0707

ACCUTEST JOB #:
ACCUTEST QUOTE #: F22900

CLIENT INFORMATION
NAME: ENGINEERING & ENVIRONMENT
ADDRESS: 826 Gumbranch Rd
CITY, STATE, ZIP: JACKSONVILLE NC 28540
SEND REPORT TO
PHONE #: (910) 989-3244

FACILITY INFORMATION
PROJECT NAME: Campbell St. Fuel Farm-ASA
LOCATION: MCAS NEW RIVER
PROJECT NO.: CTO 0003
FAX #: (910) 989 3340 or (910) 450-9502

ANALYTICAL INFORMATION
USEPA 602 / 504.1 / 610

MATRIX CODES
DW - DRINKING WATER
GW - GROUND WATER
WW - WASTE WATER
SO - SOIL
SL - SLUDGE
OI - OIL
LIQ - OTHER LIQUID
SOL - OTHER SOLID

ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION DATE	TIME	SAMPLED BY:	MATRIX	# OF BOTTLES	PRESERVATION HCl	HNO3	H2SO4	NONE	NaOH	LAB USE ONLY
1	USTCSFF-122MW03	3/17/04	0815	TE	GW	3				3		
2	USTCSFF-122MW04		0850			3				3		
3	USTCSFF-122MW07		1003			3				3		
4	USTCSFF-13MW01		1050			3				3		
5	USTCSFF-122MW08		1145			3				3		
6	USTCSFF-13DW01		1310			3			2	3		
7	USTCSFF-122MW09		1350			3			2	3		
8	USTCSFF-DW02		1505			3			2	3		
9	USTCSFF-MW03		1610			3				3		
10	USTCSFF-DUP	3/17/04	—	TE	GW	3				3		

DATA TURNAROUND INFORMATION
- [X] STANDARD
- [ ] 48 HOUR RUSH
- [ ] 24 HOUR EMERGENCY
- [ ] OTHER

APPROVED BY:
EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED

DATA DELIVERABLE INFORMATION
- [ ] STANDARD
- [ ] COMMERCIAL "B"
- [ ] DISK DELIVERABLE
- [ ] STATE FORMS
- [X] OTHER (SPECIFY) NEESA 4

COMMENTS/REMARKS

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY

RELINQUISHED BY/SAMPLER:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
1.	3/18/04	1. FED EX	2. FED EX	3/19/04 09:00	2.
3.		3.	4.		4.
5.		5.	SEAL #	PRESERVE WHERE APPLICABLE ☐	ON ICE ☐ TEMPERATURE 2.6° C

F22900: Chain of Custody
Page 1 of 2

ACCUTEST LABORATORIES SOUTHEAST SAMPLE RECEIPT CONFIRMATION

Accutest's Job Number: F22900

Client: Engineering & Environment **Project:** Campbell St. Fuel Farm Area

Date Received: 3/19/04 **Time Received:** 09:00

of Coolers Received: 1 **Cooler Temperatures:** 2.6°C

Delivery Method: (FedEx) UPS Accutest Courier Greyhound Delivery Other

Air Bill Number:

Cooler Custody Seals Intact ?	(Yes)	No	
Chain of Custody Provided ?	(Yes)	No	
COC Match Bottle Label ID's ?	(Yes)	No	
Sample Labels Present on all bottles ?	(Yes)	No	
All Analyses Marked On COC ?	(Yes)	No	
Are All Bottles Intact ?	(Yes)	No	
Samples Preserved Correctly ?	(Yes)	No	
Correct Number of Containers Used ?	(Yes)	No	
Sufficient Sample Volume ?	(Yes)	No	
Trip Blank Provided ?	(Yes)	No	
Trip Blank on COC ?	Yes	(No)	
Trip Blank Intact ?	(Yes)	No	N/A
Trip Blank Matrix ?	Soil	(Water)	N/A
Number of Encores ?	0		
Number of Soil Field Kits ?	0		

Summary of Comments:

Signature: Jeff Nichols **Date:** 3/19/04

Review Signature:

ASBD 12/30/03

F22900: Chain of Custody
Page 2 of 2

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: F22900
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GQR923-MB	QR021577.D	1	03/30/04	RA	n/a	n/a	GQR923

The QC reported here applies to the following samples: **Method:** EPA 601/602

F22900-1, F22900-2, F22900-3, F22900-4, F22900-5, F22900-8, F22900-9, F22900-10

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
352-33-0	1-Chloro-4-fluorobenzene	93%	70-123%
352-33-0	1-Chloro-4-fluorobenzene	100%	70-123%
563-58-6	1,1-Dichloropropene	98%	86-112%
563-58-6	1,1-Dichloropropene	106%	86-112%

Method Blank Summary

Job Number: F22900
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GQR925-MB	QR021610.D	1	03/31/04	RA	n/a	n/a	GQR925

The QC reported here applies to the following samples: **Method:** EPA 601/602

F22900-6, F22900-7

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
352-33-0	1-Chloro-4-fluorobenzene	93%	70-123%
352-33-0	1-Chloro-4-fluorobenzene	101%	70-123%
563-58-6	1,1-Dichloropropene	98%	86-112%
563-58-6	1,1-Diehloropropene	107%	86-112%

Method Blank Summary

Job Number: F22900
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP10096-MB	DD15709.D	1	03/30/04	SKW	03/30/04	OP10096	GDD498

The QC reported here applies to the following samples: **Method:** EPA 504.1

F22900-1, F22900-2, F22900-3, F22900-4, F22900-5, F22900-6, F22900-7, F22900-8, F22900-9, F22900-10

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.020	0.010	ug/l	

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	92%	60-139%

Blank Spike Summary

Job Number: F22900
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GQR923-BS	QR021576.D	1	03/30/04	RA	n/a	n/a	GQR923

5.2

The QC reported here applies to the following samples: **Method:** EPA 601/602

F22900-1, F22900-2, F22900-3, F22900-4, F22900-5, F22900-8, F22900-9, F22900-10

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	20	20.1	101	86-121
108-90-7	Chlorobenzene	20	20.0	100	81-119
95-50-1	1,2-Dichlorobenzene	20	19.2	96	75-120
541-73-1	1,3-Dichlorobenzene	20	20.1	101	77-121
106-46-7	1,4-Dichlorobenzene	20	20.1	101	75-122
100-41-4	Ethylbenzene	20	19.8	99	81-126
1634-04-4	Methyl Tert Butyl Ether	20	20.5	103	76-117
108-88-3	Toluene	20	19.2	96	82-123
1330-20-7	Xylenes (total)	60	57.6	96	82-125

CAS No.	Surrogate Recoveries	BSP	Limits
352-33-0	1-Chloro-4-fluorobenzene	104%	70-123%
352-33-0	1-Chloro-4-fluorobenzene	102%	70-123%
563-58-6	1,1-Dichloropropene	98%	86-112%
563-58-6	1,1-Dichloropropene	99%	86-112%

Blank Spike Summary

Job Number: F22900
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GQR925-BS	QR021609.D	1	03/31/04	RA	n/a	n/a	GQR925

The QC reported here applies to the following samples: **Method:** EPA 601/602

F22900-6, F22900-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	20	20.4	102	86-121
108-90-7	Chlorobenzene	20	20.6	103	81-119
95-50-1	1,2-Dichlorobenzene	20	20.2	101	75-120
541-73-1	1,3-Dichlorobenzene	20	20.7	104	77-121
106-46-7	1,4-Dichlorobenzene	20	20.9	105	75-122
100-41-4	Ethylbenzene	20	19.9	100	81-126
1634-04-4	Methyl Tert Butyl Ether	20	21.1	106	76-117
108-88-3	Toluene	20	19.5	98	82-123
1330-20-7	Xylenes (total)	60	58.1	97	82-125

CAS No.	Surrogate Recoveries	BSP	Limits
352-33-0	1-Chloro-4-fluorobenzene	104%	70-123%
352-33-0	1-Chloro-4-fluorobenzene	104%	70-123%
563-58-6	1,1-Dichloropropene	98%	86-112%
563-58-6	1,1-Dichloropropene	97%	86-112%

5.2

Blank Spike Summary

Job Number: F22900
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP10096-BS	DD15710.D	1	03/30/04	SKW	03/30/04	OP10096	GDD498

5.2

The QC reported here applies to the following samples: **Method:** EPA 504.1

F22900-1, F22900-2, F22900-3, F22900-4, F22900-5, F22900-6, F22900-7, F22900-8, F22900-9, F22900-10

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
106-93-4	1,2-Dibromoethane	0.25	0.24	96	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	93%	60-139%

Blank Spike Summary

Job Number: F22900
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP10096-BS2	DD15711.D	1	03/30/04	SKW	03/30/04	OP10096	GDD498

5.2

The QC reported here applies to the following samples: **Method:** EPA 504.1

F22900-1, F22900-2, F22900-3, F22900-4, F22900-5, F22900-6, F22900-7, F22900-8, F22900-9, F22900-10

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
106-93-4	1,2-Dibromoethane	0.25	0.26	104	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	94%	60-139%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F22900
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F22896-1MS	QR021587.D	1	03/30/04	RA	n/a	n/a	GQR923
F22896-1MSD	QR021588.D	1	03/30/04	RA	n/a	n/a	GQR923
F22896-1	QR021581.D	1	03/30/04	RA	n/a	n/a	GQR923

5.3

The QC reported here applies to the following samples: **Method:** EPA 601/602

F22900-1, F22900-2, F22900-3, F22900-4, F22900-5, F22900-8, F22900-9, F22900-10

CAS No.	Compound	F22896-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND		20	19.5	98	19.6	98	1	77-125/6
108-90-7	Chlorobenzene	ND		20	19.6	98	20.0	100	2	78-120/8
95-50-1	1,2-Dichlorobenzene	ND		20	19.3	97	19.2	96	1	69-125/7
541-73-1	1,3-Dichlorobenzene	ND		20	19.6	98	19.4	97	1	71-126/7
106-46-7	1,4-Dichlorobenzene	ND		20	19.8	99	19.5	98	2	67-129/7
100-41-4	Ethylbenzene	ND		20	19.2	96	19.3	97	1	74-127/6
1634-04-4	Methyl Tert Butyl Ether	ND		20	19.7	99	20.3	102	3	66-127/9
108-88-3	Toluene	ND		20	18.7	94	18.8	94	1	77-124/5
1330-20-7	Xylenes (total)	ND		60	56.0	93	56.3	94	1	76-125/5

CAS No.	Surrogate Recoveries	MS	MSD	F22896-1	Limits
352-33-0	1-Chloro-4-fluorobenzene	104%	104%	94%	70-123%
352-33-0	1-Chloro-4-fluorobenzene	100%	101%		70-123%
563-58-6	1,1-Diehloropropene	98%	98%	98%	86-112%
563-58-6	1,1-Dichloropropene	97%	97%		86-112%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F22900
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Aualyzed	By	Prep Date	Prep Batcb	Analytical Batch
M38494-1MS	QR021615.D	1	03/31/04	RA	n/a	n/a	GQR925
M38494-1MSD	QR021616.D	1	03/31/04	RA	n/a	n/a	GQR925
M38494-1 [a]	QR021614.D	1	03/31/04	RA	n/a	n/a	GQR925

The QC reported here applies to the following samples: **Method:** EPA 601/602

F22900-6, F22900-7

CAS No.	Compound	M38494-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND		20	19.8	99	19.3	97	3	77-125/6
108-90-7	Chlorobenzene	ND		20	19.8	99	19.4	97	2	78-120/8
95-50-1	1,2-Dichlorobenzene	ND		20	19.2	96	19.3	97	1	69-125/7
541-73-1	1,3-Dichlorobenzene	ND		20	20.1	101	19.4	97	4	71-126/7
106-46-7	1,4-Dichlorobenzene	ND		20	20.2	101	19.7	99	3	67-129/7
100-41-4	Ethylbenzene	ND		20	19.6	98	19.2	96	2	74-127/6
1634-04-4	Methyl Tert Butyl Ether	ND		20	21.1	106	20.8	104	1	66-127/9
108-88-3	Toluene	ND		20	18.9	95	18.6	93	2	77-124/5
1330-20-7	Xylenes (total)	ND		60	57.3	96	56.1	94	2	76-125/5

CAS No.	Surrogate Recoveries	MS	MSD	M38494-1	Limits
352-33-0	1-Chloro-4-fluorobenzene	105%	105%	94%	70-123%
352-33-0	1-Chloro-4-fluorobenzene	100%	101%	96%	70-123%
563-58-6	1,1-Dichloropropene	97%	97%	97%	86-112%
563-58-6	1,1-Dichloropropene	94%	95%	102%	86-112%

(a) All hits confirmed by GC/MS.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F22900
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP10096-MS	DD15713.D	1	03/30/04	SKW	03/30/04	OP10096	GDD498
OP10096-MSD	DD15714.D	1	03/31/04	SKW	03/30/04	OP10096	GDD498
F22896-1	DD15712.D	1	03/30/04	SKW	03/30/04	OP10096	GDD498

The QC reported herc applies to the following samples: **Method:** EPA 504.1

F22900-1, F22900-2, F22900-3, F22900-4, F22900-5, F22900-6, F22900-7, F22900-8, F22900-9, F22900-10

CAS No.	Compound	F22896-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
106-93-4	1,2-Dibromoethane	ND		0.233	0.22	95	0.22	93	0	65-135/25

CAS No.	Surrogate Recoveries	MS	MSD	F22896-1	Limits
460-00-4	4-Bromofluorobenzene	86%	84%	90%	60-139%

Volatile Surrogate Recovery Summary

Job Number: F22900
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Method: EPA 601/602 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S2 [a]
F22900-1	QR021593.D	93.0	98.0
F22900-2	QR021594.D	95.0	98.0
F22900-3	QR021595.D	98.0	97.0
F22900-4	QR021596.D	107.0	98.0
F22900-5	QR021597.D	99.0	98.0
F22900-6	QR021622.D	106.0	96.0
F22900-7	QR021623.D	105.0	97.0
F22900-8	QR021599.D	97.0	97.0
F22900-9	QR021600.D	94.0	109.0
F22900-10	QR021601.D	105.0	98.0
F22896-1MS	QR021587.D	104.0	98.0
F22896-1MSD	QR021588.D	104.0	98.0
GQR923-BS	QR021576.D	104.0	98.0
GQR923-MB	QR021577.D	93.0	98.0
GQR925-BS	QR021609.D	104.0	98.0
GQR925-MB	QR021610.D	93.0	98.0
M38494-1MS	QR021615.D	105.0	97.0
M38494-1MSD	QR021616.D	105.0	97.0

Surrogate Compounds	Recovery Limits
S1 = 1-Chloro-4-fluorobenzene	70-123%
S2 = 1,1-Dichloropropene	86-112%

(a) Recovery from GC signal #1

Volatile Surrogate Recovery Summary

Job Number: F22900
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Method: EPA 504.1 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]
F22900-1	DD15723.D	88.0
F22900-2	DD15724.D	92.0
F22900-3	DD15725.D	78.0
F22900-4	DD15726.D	101.0
F22900-5	DD15728.D	89.0
F22900-6	DD15729.D	97.0
F22900-7	DD15730.D	80.0
F22900-8	DD15731.D	89.0
F22900-9	DD15732.D	93.0
F22900-10	DD15733.D	106.0
OP10096-BS	DD15710.D	93.0
OP10096-BS2	DD15711.D	94.0
OP10096-MB	DD15709.D	92.0
OP10096-MS	DD15713.D	86.0
OP10096-MSD	DD15714.D	84.0

Surrogate Compounds	Recovery Limits
S1 = 4-Bromofluorobenzene	60-139%

(a) Recovery from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F22900
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GQR923-CC920	**Injection Date:**	03/30/04
Lab File ID:	QR021575.D	**Injection Time:**	09:13
Instrument ID:	GCQR	**Method:**	EPA 601/602

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	11.95	11.97	6.95	6.97

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
GQR923-BS	QR021576.D	03/30/04	09:51	11.95	11.97	6.97	6.99
GQR923-MB	QR021577.D	03/30/04	10:20	11.95	11.97	6.96	6.98
F22896-1	QR021581.D	03/30/04	14:40	11.96		6.96	
ZZZZZZ	QR021582.D	03/30/04	15:09	11.96		6.96	
ZZZZZZ	QR021583.D	03/30/04	15:38	11.97		6.96	
ZZZZZZ	QR021584.D	03/30/04	16:07	11.97		6.97	
ZZZZZZ	QR021585.D	03/30/04	16:36	11.97		6.97	

Snrrogate Compounds

S1 = 1-Chloro-4-fluorobenzene
S2 = 1,1-Dichloropropene

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F22900
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GQR923-CC920	**Injection Date:**	03/30/04
Lab File ID:	QR021586.D	**Injection Time:**	17:05
Instrument ID:	GCQR	**Method:**	EPA 601/602

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	11.96	11.98	6.97	6.99

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
F22896-1MS	QR021587.D	03/30/04	17:34	11.96	11.98	6.97	6.99
F22896-1MSD	QR021588.D	03/30/04	18:03	11.96	11.98	6.96	6.98
ZZZZZZ	QR021589.D	03/30/04	18:32	11.97		6.97	
ZZZZZZ	QR021592.D	03/30/04	20:08	11.96		6.96	
F22900-1	QR021593.D	03/30/04	20:37	11.96		6.96	
F22900-2	QR021594.D	03/30/04	21:06	11.96		6.95	
F22900-3	QR021595.D	03/30/04	21:35	11.96		6.96	
F22900-4	QR021596.D	03/30/04	22:04	11.96		6.96	
F22900-5	QR021597.D	03/30/04	22:33	11.96		6.96	

Surrogate Compounds

S1 = 1-Chloro-4-fluorobenzene
S2 = 1,1-Dichloropropene

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F22900
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GQR923-CC920	**Injection Date:**	03/30/04
Lab File ID:	QR021598.D	**Injection Time:**	23:03
Instrument ID:	GCQR	**Method:**	EPA 601/602

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	11.96	11.98	6.96	6.98

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
F22900-8	QR021599.D	03/30/04	23:32	11.96		6.96	
F22900-9	QR021600.D	03/31/04	00:01	11.96		6.97	
F22900-10	QR021601.D	03/31/04	00:30	11.95		6.97	
GQR922-ECC920	QR021606.D	03/31/04	03:01	11.96	11.98	6.97	6.98
GQR923-ECC920	QR021606.D	03/31/04	03:01	11.96	11.98	6.97	6.98

Surrogate Compounds

S1 = 1-Chloro-4-fluorobenzene
S2 = 1,1-Dichloropropene

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F22900
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GQR925-CC920	**Injection Date:**	03/31/04
Lab File ID:	QR021619.D	**Injection Time:**	18:37
Instrument ID:	GCQR	**Method:**	EPA 601/602

	S1 [a] RT	S2 [a] RT
Check Std	11.96	6.97

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
ZZZZZZ	QR021620.D	03/31/04	19:09	11.96	6.97
ZZZZZZ	QR021621.D	03/31/04	19:41	11.96	6.96
F22900-6	QR021622.D	03/31/04	20:10	11.96	6.96
F22900-7	QR021623.D	03/31/04	20:39	11.96	6.97
ZZZZZZ	QR021624.D	03/31/04	21:08	11.96	6.97
ZZZZZZ	QR021625.D	03/31/04	21:37	11.96	6.97
ZZZZZZ	QR021626.D	03/31/04	22:06	11.96	6.96
ZZZZZZ	QR021627.D	03/31/04	22:35	11.95	6.96
ZZZZZZ	QR021628.D	03/31/04	23:04	11.96	6.96
ZZZZZZ	QR021629.D	03/31/04	23:33	11.96	6.96

Surrogate Compounds

S1 = 1-Chloro-4-fluorobenzene
S2 = 1,1-Dichloropropene

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: F22900
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GDD498-ICC498	**Injection Date:**	03/30/04
Lab File ID:	DD15703.D	**Injection Time:**	20:27
Instrument ID:	GCDD	**Method:**	EPA 504.1

	S1 [a] RT
Check Std	7.00

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT
OP10096-MB	DD15709.D	03/30/04	22:26	7.00
OP10096-BS	DD15710.D	03/30/04	22:46	7.00
OP10096-BS2	DD15711.D	03/30/04	23:06	7.00
F22896-1	DD15712.D	03/30/04	23:26	7.00
OP10096-MS	DD15713.D	03/30/04	23:46	7.00
OP10096-MSD	DD15714.D	03/31/04	00:05	7.00
ZZZZZZ	DD15715.D	03/31/04	00:25	7.00
ZZZZZZ	DD15716.D	03/31/04	00:45	7.00

Surrogate Compounds

S1 = 4-Bromofluorobenzene

(a) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F22900
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GDD498-CC498	**Injection Date:**	03/31/04
Lab File ID:	DD15717.D	**Injection Time:**	01:05
Instrument ID:	GCDD	**Method:**	EPA 504.1

	S1 [a] RT
Check Std	7.00

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT
ZZZZZZ	DD15718.D	03/31/04	01:25	7.00
ZZZZZZ	DD15719.D	03/31/04	01:44	7.00
ZZZZZZ	DD15720.D	03/31/04	02:04	7.00
ZZZZZZ	DD15721.D	03/31/04	02:24	7.00
ZZZZZZ	DD15722.D	03/31/04	02:44	7.00
F22900-1	DD15723.D	03/31/04	03:04	7.00
F22900-2	DD15724.D	03/31/04	03:24	7.00
F22900-3	DD15725.D	03/31/04	03:43	7.00
F22900-4	DD15726.D	03/31/04	04:03	7.00

Surrogate Compounds

S1 = 4-Bromofluorobenzene

(a) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F22900
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GDD498-CC498	**Injection Date:**	03/31/04
Lab File ID:	DD15727.D	**Injection Time:**	04:23
Instrument ID:	GCDD	**Method:**	EPA 504.1

	S1 [a] RT	S1 [b] RT
Check Std	6.79	7.00

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
F22900-5	DD15728.D	03/31/04	04:43		7.00
F22900-6	DD15729.D	03/31/04	05:03		7.00
F22900-7	DD15730.D	03/31/04	05:23		7.00
F22900-8	DD15731.D	03/31/04	05:42		7.00
F22900-9	DD15732.D	03/31/04	06:02		7.00
F22900-10	DD15733.D	03/31/04	06:22		7.00
GDD498-ECC498	DD15734.D	03/31/04	06:42	6.79	7.00

Surrogate Compounds

S1 = 4-Bromofluorobenzene

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F22900
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GQR924-CC920	**Injection Date:**	03/31/04
Lab File ID:	QR021608.D	**Injection Time:**	11:35
Instrument ID:	GCQR	**Method:**	EPA 601/602

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	11.96	11.98	6.97	6.99

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
GQR924-BS	QR021609.D	03/31/04	12:05	11.95	11.97	6.97	6.99
GQR925-BS	QR021609.D	03/31/04	12:05	11.95	11.97	6.97	6.99
GQR924-MB	QR021610.D	03/31/04	12:34	11.96	11.98	6.97	6.99
GQR925-MB	QR021610.D	03/31/04	12:34	11.96	11.98	6.97	6.99
F23012-3	QR021611.D	03/31/04	14:06		11.99		6.99
F23012-3MS	QR021612.D	03/31/04	15:10	11.96	11.98	6.96	6.98
F23012-3MSD	QR021613.D	03/31/04	15:39	11.96	11.98	6.96	6.98
M38494-1	QR021614.D	03/31/04	16:09	11.96	11.98	6.96	6.98
M38494-1MS	QR021615.D	03/31/04	16:38	11.96	11.98	6.96	6.98
M38494-1MSD	QR021616.D	03/31/04	17:07	11.96	11.98	6.96	6.98
ZZZZZZ	QR021617.D	03/31/04	17:36	11.97		6.97	
ZZZZZZ	QR021618.D	03/31/04	18:08	11.97		6.98	

Surrogate Compounds

S1 = 1-Chloro-4-fluorobenzene
S2 = 1,1-Dichloropropene

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

5.5

Initial Calibration Summary

Job Number: F22900
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GDD498-ICC498
Lab FileID: DD15703.D

Response Factor Report ECD 4

Method : C:\HPCHEM\2\METHODS\504_1.M (Chemstation Integrator)
Title : EDB/DBCP by EPA 504.1 or SW846 8011
Last Update : Wed Mar 31 08:26:52 2004
Response via : Initial Calibration

Calibration Files
.125=DD15702.D .250=DD15703.D .500=DD15704.D 0.75=DD15705.D
0.75 =DD15705.D 1.0 =DD15706.D

	Compound	.125	.250	.500	0.75	1.0	Avg		%RSD
1)	1,2-Dibromoethane	4.346	3.925	3.653	3.717	3.633	3.855	E5	7.73
2) S	4-Bromofluorobenzene	4.344	3.915	3.600	3.560	3.428	3.769	E4	9.75
3)	1,2,3-Trichloropropan	8.784	7.962	7.485	7.421	7.071	7.745	E4	8.55
4)	1,2-Dibromo-3-chlorop	9.117	8.422	8.428	8.766	8.694	8.686	E5	3.30

Signal #2

1)	1,2-Dibromoethane	2.254	2.067	1.958	2.075	2.049	2.080	E5	5.17
2) S	4-Bromofluorobenzene	1.725	1.614	1.569	1.571	1.564	1.609	E4	4.23
3)	1,2,3-Trichloropropan	4.919	4.386	4.021	3.916	3.785	4.205	E4	10.87
4)	1,2-Dibromo-3-chlorop	4.005	3.855	3.912	4.105	3.981	3.971	E5	2.40

(#) = Out of Range

504_1.M Wed Mar 31 10:29:16 2004 ECD3

5.6

Initial Calibration Verification

Job Number: F22900
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GDD498-ICV498
Lab FileID: DD15708.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\0330EDB\DD15708.D\ECD1A.CH Vial: 40
Signal #2 : C:\HPCHEM\2\DATA\0330EDB\DD15708.D\ECD2B.CH
Acq On : 30 Mar 2004 10:06 pm Operator: stephw
Sample : ICV498-0.25 Inst : ECD 4
Misc : op10096,gdd498,35,,,2,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\2\METHODS\504_1.M (Chemstation Integrator)
Title : EDB/DBCP by EPA 504.1 or SW846 8011
Last Update : Wed Mar 31 08:26:52 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	1,2-Dibromoethane	0.250	0.258	-3.2	101	0.00	5.23- 5.43
2 S	4-Bromofluorobenzene	2.000	2.096	-4.8	101	0.00	6.69- 6.89
3	1,2,3-Trichloropropane			----------NA----------			
4	1,2-Dibromo-3-chloropr	0.250	0.232	7.2	96	0.00	9.04- 9.24
*****	Signal #2 *****						
1	1,2-Dibromoethane	0.250	0.256	-2.4	103	0.00	5.48- 5.68
2 S	4-Bromofluorobenzene	2.000	2.049	-2.4	102	0.00	6.90- 7.10
3	1,2,3-Trichloropropane			----------NA----------			
4	1,2-Dibromo-3-chloropr	0.250	0.219	12.4	90	0.00	9.35- 9.55

(#) = Out of Range SPCC's out = 0 CCC's out = 0
DD15703.D 504_1.M Wed Mar 31 10:29:31 2004 ECD3

5.6

Continuing Calibration Summary

Job Number: F22900 **Sample:** GDD498-CC498
Account: EEINCJX EEI **Lab FileID:** DD15717.D
Project: Camp Lejeune-Campbell St. Fuel Farm

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\0330EDB\DD15717.D\ECD1A.CH Vial: 35
Signal #2 : C:\HPCHEM\2\DATA\0330EDB\DD15717.D\ECD2B.CH
Acq On : 31 Mar 2004 1:05 am Operator: stephw
Sample : CC498-0.25 Inst : ECD 4
Misc : op10096,gdd498,35,,,2,1,water MultiplIr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\2\METHODS\504_1.M (Chemstation Integrator)
Title : EDB/DBCP by EPA 504.1 or SW846 8011
Last Update : Wed Mar 31 08:26:52 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	1,2-Dibromoethane	0.250	0.264	-5.6	104	0.00	5.23- 5.43
2 S	4-Bromofluorobenzene	2.000	2.095	-4.8	101	0.00	6.69- 6.89
3	1,2,3-Trichloropropane	0.250	0.263	-5.2	102	0.00	6.87- 7.07
4	1,2-Dibromo-3-chloropr	0.250	0.247	1.2	102	0.00	9.04- 9.24
*****	Signal #2 *****						
1	1,2-Dibromoethane	0.250	0.258	-3.2	104	0.00	5.48- 5.68
2 S	4-Bromofluorobenzene	2.000	1.922	3.9	96	0.00	6.90- 7.10
3	1,2,3-Trichloropropane	0.250	0.260	-4.0	100	0.00	7.29- 7.49
4	1,2-Dibromo-3-chloropr	0.250	0.244	2.4	101	0.00	9.35- 9.55

(#) = Out of Range SPCC's out = 0 CCC's out = 0
DD15703.D 504_1.M Wed Mar 31 10:29:32 2004 ECD3

Continuing Calibration Summary

Job Number: F22900 **Sample:** GDD498-CC498
Account: EEINCJX EEI **Lab FileID:** DD15727.D
Project: Camp Lejeune-Campbell St. Fuel Farm

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\0330EDB\DD15727.D\ECD1A.CH Vial: 36
Signal #2 : C:\HPCHEM\2\DATA\0330EDB\DD15727.D\ECD2B.CH
Acq On : 31 Mar 2004 4:23 am Operator: stephw
Sample : CC498-0.50 Inst : ECD 4
Misc : op10096,gdd498,35,,,2,1,water MultiplIr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\2\METHODS\504_1.M (Chemstation Integrator)
Title : EDB/DBCP by EPA 504.1 or SW846 8011
Last Update : Wed Mar 31 08:26:52 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Oev 0.10min
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	1,2-Dibromoethane	0.500	0.499	0.2	105	0.00	5.23- 5.43
2 S	4-Bromofluorobenzene	4.000	3.823	4.4	100	0.00	6.69- 6.89
3	1,2,3-Trichloropropane	0.500	0.487	2.6	101	0.00	6.87- 7.07
4	1,2-Dibromo-3-chloropr	0.500	0.497	0.6	102	0.00	9.04- 9.24
*****	Signal #2 *****						
1	1,2-Dibromoethane	0.500	0.495	1.0	105	0.00	5.48- 5.68
2 S	4-Bromofluorobenzene	4.000	4.007	-0.2	103	0.00	6.90- 7.10
3	1,2,3-Trichloropropane	0.500	0.485	3.0	102	0.00	7.29- 7.49
4	1,2-Dibromo-3-chloropr	0.500	0.492	1.6	100	0.00	9.35- 9.55

(#) = Out of Range SPCC's out = 0 CCC's out = 0
DD15704.D 504_1.M Wed Mar 31 10:29:48 2004 ECD3

5.6

Continuing Calibration Summary

Job Number: F22900
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GDD498-ECC498
Lab FileID: DD15734.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\0330EDB\DD15734.D\ECD1A.CH Vial: 35
Signal #2 : C:\HPCHEM\2\DATA\0330EDB\DD15734.D\ECD2B.CH
Acq On : 31 Mar 2004 6:42 am Operator: stephw
Sample : ECC498-0.25 Inst : ECD 4
Misc : op10096,gdd498,35,,,2,1,water MultiplIr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\2\METHODS\504_1.M (Chemstation Integrator)
Title : EDB/D8CP by EPA 504.1 or SW846 8011
Last Update : Wed Mar 31 08:26:52 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	1,2-Dibromoethane	0.250	0.263	-5.2	103	0.00	5.23- 5.43
2 S	4-Bromofluorobenzene	2.000	2.108	-5.4	101	0.00	6.69- 6.89
3	1,2,3-Trichloropropane	0.250	0.262	-4.8	102	0.00	6.87- 7.07
4	1,2-Dibromo-3-chloropr	0.250	0.252	-0.8	104	0.00	9.04- 9.24
*****	Signal #2 *****						
1	1,2-Dibromoethane	0.250	0.263	-5.2	106	0.00	5.48- 5.68
2 S	4-Bromofluorobenzene	2.000	2.055	-2.8	102	0.00	6.90- 7.10
3	1,2,3-Trichloropropane	0.250	0.265	-6.0	101	0.00	7.29- 7.49
4	1,2-Dibromo-3-chloropr	0.250	0.249	0.4	102	0.00	9.35- 9.55

(#) = Out of Range SPCC's out = 0 CCC's out = 0
DD15703.D 504_1.M Wed Mar 31 10:29:32 2004 ECD3

Initial Calibration Summary

Job Number: F22900
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GQR920-ICC920
Lab FileID: QR021534.D

Response Factor Report VOA3

Method : C:\HPCHEM\1\METHODS\QR0326.M (Chemstation Integrator)
Title : EPA 601/602 & SWA 5030B/8021B
Last Update : Sat Mar 27 13:56:14 2004
Response via : Initial Calibration

Calibration Files
1 =QR021530.D 2 =QR021531.D 3 =QR021532.D
4 =QR021533.D 5 =QR021534.D 6 =QR021535.D 7 =QR021536.D

Compound	1	2	3	4	5	6	7	Avg	%RSD
1) I Fluorobenzene	ISTD								
2)c VINYL CHLORIDE	0.341	0.277	0.241	0.207	0.180	0.159	0.152	0.223	30.87#
3) 1,1-Dichloroethen		0.322	0.315	0.304	0.279	0.283	0.278	0.297	6.51
4) Methyl tert Butyl	0.568	0.384	0.305	0.308	0.279	0.277	0.272	0.342	31.24
5) trans-1,2-Dichlor		1.209	1.129	1.150	1.048	1.067	1.055	1.110	5.77
6) Di-Isopropyl ethe	0.458	0.435	0.424	0.432	0.395	0.397	0.393	0.419	5.94
7) cis-1,2-Dichloroe	0.698	0.638	0.621	0.640	0.587	0.598	0.592	0.625	6.18
8)S 1,1-Dichloroprope	0.579	0.582	0.582	0.582	0.577	0.578	0.576	0.579	0.44
9) Benzene		1.382	1.274	1.325	1.200	1.201	1.185	1.261	6.34
10) Trichloroethene	1.001	0.886	0.823	0.878	0.783	0.822	0.832	0.861	8.26
11) 2-Chloroethylviny	0.580	0.508	0.549	0.602	0.569	0.592	0.585	0.569	5.59
12) cis-1,3-Dichlorop	0.467	0.407	0.411	0.432	0.406	0.411	0.409	0.420	5.33
13) Toluene	1.666	1.506	1.414	1.482	1.351	1.354	1.349	1.446	8.04
14) trans-1,3-Dichlor	0.565	0.497	0.523	0.565	0.542	0.567	0.563	0.546	4.99
15) Tetrachloroethene	0.815	0.735	0.710	0.739	0.674	0.688	0.684	0.721	6.72
16)S 1-Chloro-4-fluoro	1.013	1.017	1.055	1.077	1.081	1.098	1.095	1.062	3.30
17) Chlorobenzene		1.825	1.702	1.768	1.629	1.641	1.631	1.699	4.82
18) Ethylbenzene	1.573	1.444	1.364	1.432	1.304	1.297	1.284	1.386	7.57
19) m,p-Xylene	1.755	1.618	1.565	1.640	1.499	1.499	1.480	1.579	6.29
20) o-Xylene	1.540	1.425	1.376	1.443	1.311	1.316	1.303	1.388	6.31
21) 1,3-Dichlorobenze	2.186	1.948	2.062	2.259	2.163	2.230	2.238	2.155	5.21
22) 1,4-Dichlorobenze	2.148	1.881	2.047	2.254	2.179	2.264	2.268	2.149	6.62
23) 1,2-Dichlorobenze	2.087	1.797	1.892	2.037	1.937	1.972	1.966	1.955	4.84

Signal #2 Calibration Files
1 =QR021530.D 2 =QR021531.D 3 =QR021532.D
4 =QR021533.D 5 =QR021534.D 6 =QR021535.D 7 =QR021536.D

Compound	1	2	3	4	5	6	7	Avg	%RSD
25) I Bromochloromethane	ISTD								
26)c DICHLORODIFLUOROM	0.167	0.182	0.294	0.303	0.277	0.272	0.268	0.252	21.60#
27)c CHLOROMETHANE	0.573	0.570	0.765	0.762	0.639	0.588	0.527	0.632	15.16
28)c VINYL CHLORIDE #2	0.678	0.671	0.734	0.680	0.574	0.521	0.513	0.624	14.00
29)c BROMOMETHANE	0.372	0.313	0.431	0.445	0.375	0.383	0.362	0.383	11.53
30)c CHLOROETHANE	0.643	0.610	0.753	0.708	0.609	0.587	0.584	0.642	10.10
31)c TRICHLOROFLUOROME	0.651	0.648	0.715	0.684	0.583	0.547	0.539	0.624	10.94
32) 1,1-Dichloroethen	0.553	0.556	0.676	0.693	0.596	0.599	0.568	0.606	9.38
33) Methylene Chlorid	1.062	0.408	0.729	0.734	0.610	0.593	0.568	0.672	30.36
34) trans-1,2-Dichlor	1.068	1.116	1.167	1.207	1.052	0.988	0.918	1.074	9.35
35) 1,1-Dichloroethan	0.915	0.980	1.106	1.130	0.979	0.930	0.831	0.981	10.79
36) cis-1,2-Dichloroe	0.956	1.049	1.235	1.299	1.153	1.103	1.014	1.116	10.97
37) Chloroform	1.684	1.643	1.699	1.671	1.469	1.340	1.250	1.537	11.97
38) 1,1,1-Trichloroet	2.091	1.524	1.133	1.088	0.945	0.860	0.813	1.208	37.71
39)S 1,1-Dichloroprope	1.259	1.234	1.179	1.175	1.151	1.141	1.109	1.178	4.44

5.6

Initial Calibration Summary

Job Number: F22900
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GQR920-ICC920
Lab FileID: QR021534.D

40)	Carbon Tetrachlor	5.033	3.461	1.668	1.468	1.198	1.106	1.031	2.138	71.38
41)	1,2-Dichloroethan	2.266	1.757	1.453	1.444	1.257	1.171	1.091	1.491	27.27
42)	Trichloroethene #	1.340	1.376	1.539	1.633	1.404	1.364	1.278	1.419	8.70
43)	1,2-Dichloropropa	1.372	1.294	1.304	1.315	1.133	1.060	0.984	1.209	12.29
44)	Bromodichlorometh	1.314	1.226	1.309	1.330	1.161	1.126	1.037	1.215	9.18
45)	2-Chloroethylviny	0.331	0.310	0.418	0.482	0.456	0.437	0.440	0.410	15.81
46)	cis-1,3-Dichlorop	1.068	1.090	1.332	1.378	1.240	1.189	1.125	1.203	9.95
47)	trans-1,3-Dichlor	0.767	0.815	1.128	1.245	1.155	1.119	1.070	1.043	17.30
48)	1,1,2-Trichloroet	1.585	1.541	1.712	1.700	1.527	1.385	1.302	1.536	9.86
49)	Tetrachloroethene	1.726	1.776	1.883	1.881	1.636	1.505	1.411	1.688	10.75
50)	Dibromochlorometh	0.868	0.889	1.062	1.105	0.989	0.929	0.863	0.958	10.08
51)s	1-Chloro-4-fluoro	0.763	0.761	0.768	0.772	0.773	0.749	0.726	0.759	2.20
52)	Chlorobenzene #2	1.481	0.900	0.770	0.783	0.717	0.679	0.648	0.854	33.79
53)	Bromoform	0.363	0.392	0.625	0.708	0.667	0.667	0.646	0.581	24.39
54)	1,1,2,2-Tetrachlo	1.169	1.165	1.430	1.471	1.395	1.189	1.130	1.279	11.46
55)	1,3-Dichlorobenze	0.816	0.844	1.325	1.456	1.393	1.291	1.270	1.199	21.66
56)	1,4-Dichlorobenze	1.065	1.075	1.437	1.557	1.472	1.358	1.335	1.328	14.39
57)	1,2-Dichlorobenze	1.121	1.149	1.552	1.667	1.548	1.415	1.398	1.407	14.71

Average % RSD = 13.2

(#) = Out of Range

QR0326.M Mon Mar 29 13:53:40 2004 QRXY

Continuing Calibration Summary

Job Number: F22900
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GQR923-CC920
Lab FileID: QR021575.D

Evaluate Continuing Calibration Report

Signal #1 : X:\HPCHEM\1\DATA\033004\QR021575.D\FID1B.CH Vial: 1
Signal #2 : X:\HPCHEM\1\DATA\033004\QR021575.D\AIB2A.CH
Acq On : 30 Mar 2004 9:13 am Operator: RachidA
Sample : CC920-20 Inst : VOA3
Misc : gc335310,gqr923,,,,, MultiplIr: 1.00
IntFile Signal #1: PID.E IntFile Signal #2: ELCD.E

Method : X:\HPCHEM\1\METHODS\QR0326.M (Chemstation Integrator)
Title : EPA 601/602 & SWA 5030B/8021B
Last Update : Sat Mar 27 13:56:14 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Fluorobenzene	20.000	20.000	0.0	96	-0.02
2	c	VINYL CHLORIDE	20.000	19.075	4.6	93	0.00
3		1,1-Dichloroethene	20.000	18.197	9.0	93	0.00
4		Methyl tert Butyl Ether	40.000	40.813	-2.0	97	-0.02
5		trans-1,2-Dichloroethene	20.000	19.595	2.0	100	-0.02
6		Di-Isopropyl ether	20.000	19.622	1.9	100	-0.02
7		cis-1,2-Dichloroethene	20.000	19.481	2.6	100	-0.02
8	S	1,1-Dichloropropene	20.000	19.713	1.4	95	-0.02
9		Benzene	40.000	39.606	1.0	100	-0.02
10		Trichloroethene	20.000	18.985	5.1	100	-0.02
11		2-Chloroethylvinyl ether	20.000	18.956	5.2	91	-0.01
12		cis-1,3-Dichloropropene	20.000	19.901	0.5	99	-0.01
13		Toluene	40.000	39.227	1.9	101	-0.01
14		trans-1,3-Dichloropropene	20.000	20.153	-0.8	98	-0.01
15		Tetrachloroethene	20.000	19.840	0.8	102	0.00
16	S	1-Chloro-4-fluorobenzene	20.000	20.998	-5.0	99	0.00
17		Chlorobenzene	20.000	19.923	0.4	100	0.00
18		Ethylbenzene	40.000	39.255	1.9	100	0.00
19		m,p-Xylene	80.000	79.329	0.8	101	0.00
20		o-Xylene	40.000	39.437	1.4	101	0.00
21		1,3-Dichlorobenzene	20.000	20.732	-3.7	99	0.00
22		1,4-Dichlorobenzene	20.000	20.722	-3.6	98	0.00
23		1,2-Dichlorobenzene	20.000	20.039	-0.2	97	0.00

Signal #2

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
25	I	Bromochloromethane	20.000	20.000	0.0	100	-0.02
26	c	DICHLORODIFLUOROMETHANE	20.000	19.796	1.0	100	-0.01
27	c	CHLOROMETHANE	20.000	21.584	-7.9	109	0.00
28	c	VINYL CHLORIDE #2	20.000	19.472	2.6	98	0.00
29	c	BROMOMETHANE	20.000	19.685	1.6	104	-0.03
30	c	CHLOROETHANE	20.000	20.075	-0.4	102	0.00
31	c	TRICHLOROFLUOROMETHANE	20.000	21.682	-8.4	109	0.00
32		1,1-Dichloroethene #2	20.000	19.163	4.2	100	0.00
33		Methylene Chloride	20.000	18.147	9.3	94	0.00
34		trans-1,2-Dichloroethene #2	20.000	20.548	-2.7	104	-0.02
35		1,1-Dichloroethane	20.000	20.289	-1.4	104	-0.02

Continuing Calibration Summary

Job Number: F22900
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GQR923-CC920
Lab FileID: QR021575.D

36		cis-1,2-Dichloroethene #2	20.000	20.435	-2.2	104	-0.02
37		Chloroform	20.000	20.409	-2.0	102	-0.02
38		1,1,1-Trichloroethane	20.000	20.637	-3.2	104	-0.02
39	S	1,1-Dichloropropene #2	20.000	19.770	1.2	101	-0.02
40		Carbon Tetrachloride	20.000	20.575	-2.9	106	-0.02
41		1,2-Dichloroethane	20.000	19.963	0.2	101	-0.02
42		Trichloroethene #2	20.000	20.114	-0.6	103	-0.02
43		1,2-Dichloropropane	20.000	20.421	-2.1	104	-0.02
44		Bromodichloromethane	20.000	20.160	-0.8	104	-0.01
45		2-Chloroethylvinyl ether #2	20.000	19.196	4.0	95	-0.02
46		cis-1,3-Dichloropropene #2	20.000	20.562	-2.8	104	-0.01
47		trans-1,3-Dichloropropene #	20.000	20.326	-1.6	102	-0.01
48		1,1,2-Trichloroethane	20.000	20.532	-2.7	102	-0.01
49		Tetrachloroethene #2	20.000	21.099	-5.5	106	-0.01
50		Dibromochloromethane	20.000	19.851	0.7	100	0.00
51	s	1-Chloro-4-fluorobenzene #2	20.000	20.802	-4.0	102	0.00
52		Chlorobenzene #2	20.000	20.363	-1.8	102	0.00
53		Bromoform	20.000	19.201	4.0	97	0.00
54		1,1,2,2-Tetrachloroethane	20.000	19.163	4.2	92	0.00
55		1,3-Dichlorobenzene #2	20.000	21.153	-5.8	103	0.00
56		1,4-Dichlorobenzene #2	20.000	20.313	-1.6	99	0.00
57		1,2-Dichlorobenzene #2	20.000	20.701	-3.5	101	0.00

Average % D = 2.8

(#) = Out of Range SPCC's out = 0 CCC's out = 0
QR021534.D QR0326.M Tue Mar 30 09:25:46 2004

Continuing Calibration Summary

Job Number: F22900 **Sample:** GQR923-CC920
Account: EEINCJX EEI **Lab FileID:** QR021586.D
Project: Camp Lejeune-Campbell St. Fuel Farm

Evaluate Continuing Calibration Report

Signal #1 : X:\HPCHEM\1\DATA\033004\QR021586.D\FID1B.CH Vial: 12
Signal #2 : X:\HPCHEM\1\DATA\033004\QR021586.D\AIB2A.CH
Acq On : 30 Mar 2004 5:05 pm Operator: RachidA
Sample : CC920-20 Inst : V0A3
Misc : gc3349,gqr923,,,,, MultiplR: 1.00
IntFile Signal #1: PID.E IntFile Signal #2: ELCD.E

Method : X:\HPCHEM\1\METHODS\QR0326.M (Chemstation Integrator)
Title : EPA 601/602 & SWA 5030B/8021B
Last Update : Sat Mar 27 13:56:14 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Fluorobenzene	20.000	20.000	0.0	96	0.00
2	c	VINYL CHLORIDE	20.000	21.222	-6.1	102	0.00
3		1,1-Dichloroethene	20.000	18.381	8.1	94	0.02
4		Methyl tert Butyl Ether	40.000	43.280	-8.2	103	0.00
5		trans-1,2-Dichloroethene	20.000	20.486	-2.4	105	0.00
6		Di-Isopropyl ether	20.000	20.695	-3.5	106	0.00
7		cis-1,2-Dichloroethene	20.000	20.409	-2.0	105	0.00
8	S	1,1-Dichloropropene	20.000	19.551	2.2	95	0.00
9		Benzene	40.000	41.061	-2.7	104	0.00
10		Trichloroethene	20.000	19.751	1.2	105	0.00
11		2-Chloroethylvinyl ether	20.000	20.628	-3.1	100	0.00
12		cis-1,3-Dichloropropene	20.000	20.921	-4.6	105	0.00
13		Toluene	40.000	40.420	-1.1	104	0.00
14		trans-1,3-Dichloropropene	20.000	21.490	-7.4	104	0.00
15		Tetrachloroethene	20.000	20.329	-1.6	105	0.00
16	S	1-Chloro-4-fluorobenzene	20.000	20.814	-4.1	99	0.00
17		Chlorobenzene	20.000	20.901	-4.5	105	0.00
18		Ethylbenzene	40.000	40.555	-1.4	104	0.00
19		m,p-Xylene	80.000	81.712	-2.1	104	0.00
20		o-Xylene	40.000	41.071	-2.7	105	0.00
21		1,3-Dichlorobenzene	20.000	21.737	-8.7	104	0.00
22		1,4-Dichlorobenzene	20.000	21.946	-9.7	104	0.00
23		1,2-Dichlorobenzene	20.000	21.249	-6.2	103	0.00

Signal #2

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
25	I	Bromochloromethane	20.000	20.000	0.0	104	0.00
26	c	DICHLORODIFLUOROMETHANE	20.000	22.725	-13.6	119	0.00
27	c	CHLOROMETHANE	20.000	27.975	-39.9#	142	0.00
28	c	VINYL CHLORIDE #2	20.000	21.977	-9.9	114	0.00
29	c	BROMOMETHANE	20.000	33.640	-68.2#	178	0.07
30	c	CHLOROETHANE	20.000	20.606	-3.0	109	0.02
31	c	TRICHLOROFLUOROMETHANE	20.000	22.733	-13.7	119	0.00
32		1,1-Dichloroethene #2	20.000	19.728	1.4	107	0.02
33		Methylene Chloride	20.000	20.040	-0.2	108	0.03
34		trans-1,2-Dichloroethene #2	20.000	21.082	-5.4	111	0.00
35		1,1-Dichloroethane	20.000	21.052	-5.3	112	0.00

Continuing Calibration Summary

Job Number: F22900 **Sample:** GQR923-CC920
Account: EEINCJX EEI **Lab FileID:** QR021586.D
Project: Camp Lejeune-Campbell St. Fuel Farm

36		cis-1,2-Dichloroethene #2	20.000	20.859	-4.3	111	0.00
37		Chloroform	20.000	21.504	-7.5	112	0.00
38		1,1,1-Trichloroethane	20.000	21.175	-5.9	111	0.00
39	S	1,1-Dichloropropene #2	20.000	19.586	2.1	104	0.00
40		Carbon Tetrachloride	20.000	21.301	-6.5	114	0.00
41		1,2-Dichloroethane	20.000	21.203	-6.0	112	0.00
42		Trichloroethene #2	20.000	21.227	-6.1	113	0.00
43		1,2-Dichloropropane	20.000	21.433	-7.2	113	0.00
44		Bromodichloromethane	20.000	21.121	-5.6	113	0.00
45		2-Chloroethylvinyl ether #2	20.000	21.183	-5.9	109	0.00
46		cis-1,3-Dichloropropene #2	20.000	21.359	-6.8	112	0.00
47		trans-1,3-Dichloropropene #	20.000	21.302	-6.5	111	0.00
4B		1,1,2-Trichloroethane	20.000	21.312	-6.6	110	0.00
49		Tetrachloroethene #2	20.000	21.709	-8.5	113	0.00
50		Dibromochloromethane	20.000	20.920	-4.6	110	0.00
51	s	1-Chloro-4-fluorobenzene #2	20.000	20.427	-2.1	104	0.00
52		Chlorobenzene #2	20.000	20.729	-3.6	108	0.00
53		Bromoform	20.000	20.961	-4.8	110	0.00
54		1,1,2,2-Tetrachloroethane	20.000	21.751	-8.8	108	0.00
55		1,3-Dichlorobenzene #2	20.000	22.152	-10.8	112	0.00
56		1,4-Dichlorobenzene #2	20.000	21.540	-7.7	110	0.00
57		1,2-Dichlorobenzene #2	20.000	21.198	-6.0	108	0.00

Average % D = 7.2

(#) = Out of Range SPCC's out = 0 CCC's out = 2
QR021534.D QR0326.M Tue Mar 30 09:25:48 2004

5.6

Continuing Calibration Summary

Job Number: F22900
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GQR923-CC920
Lab FileID: QR021598.D

Evaluate Continuing Calibration Report

Signal #1 : X:\HPCHEM\1\DATA\033004\QR021598.D\FID1B.CH Vial: 23
Signal #2 : X:\HPCHEM\1\DATA\033004\QR021598.D\AIB2A.CH
Acq On : 30 Mar 2004 11:03 pm Operator: RachidA
Sample : cc920-20 Inst : V0A3
Misc : gc3353,gqr923,,,,, Multiplr: 1.00
IntFile Signal #1: PID.E IntFile Signal #2: ELCD.E

Method : X:\HPCHEM\1\METHODS\QR0326.M (Chemstation Integrator)
Title : EPA 601/602 & SWA 5030B/8021B
Last Update : Sat Mar 27 13:56:14 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Fluorobenzene	20.000	20.000	0.0	96	0.00
2	c	VINYL CHLORIDE	20.000	19.314	3.4	94	0.00
3		1,1-Dichloroethene	20.000	16.194	19.0#	83	0.01
4		Methyl tert Butyl Ether	40.000	39.396	1.5	94	-0.01
5		trans-1,2-Dichloroethene	20.000	18.146	9.3	92	0.00
6		Di-Isopropyl ether	20.000	18.662	6.7	95	0.00
7		cis-1,2-Dichloroethene	20.000	18.275	8.6	94	0.00
8	S	1,1-Dichloropropene	20.000	19.374	3.1	94	0.00
9		Benzene	40.000	36.798	8.0	93	0.00
10		Trichloroethene	20.000	17.632	11.8	93	0.00
11		2-Chloroethylvinyl ether	20.000	17.567	12.2	85	0.00
12		cis-1,3-Dichloropropene	20.000	18.057	9.7	90	0.00
13		Toluene	40.000	36.303	9.2	93	0.00
14		trans-1,3-Dichloropropene	20.000	18.304	8.5	89	0.00
15		Tetrachloroethene	20.000	18.106	9.5	93	0.00
16	S	1-Chloro-4-fluorobenzene	20.000	20.715	-3.6	98	0.00
17		Chlorobenzene	20.000	18.771	6.1	94	0.00
18		Ethylbenzene	40.000	36.220	9.5	93	0.00
19		m,p-Xylene	80.000	72.879	8.9	92	0.00
20		o-Xylene	40.000	36.601	8.5	93	0.00
21		1,3-Dichlorobenzene	20.000	19.336	3.3	93	0.00
22		1,4-Dichlorobenzene	20.000	19.479	2.6	92	0.00
23		1,2-Dichlorobenzene	20.000	19.063	4.7	93	0.00

Signal #2

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
25	I	Bromochloromethane	20.000	20.000	0.0	99	0.00
26	c	DICHLORODIFLUOROMETHANE	20.000	19.668	1.7	99	0.00
27	c	CHLOROMETHANE	20.000	19.258	3.7	99	0.00
28	c	VINYL CHLORIDE #2	20.000	19.669	1.7	98	0.00
29	c	BROMOMETHANE	20.000	30.485	-52.4#	155	0.07
30	c	CHLOROETHANE	20.000	18.763	6.2	95	0.01
31	c	TRICHLOROFLUOROMETHANE	20.000	20.456	-2.3	103	0.00
32		1,1-Dichloroethene #2	20.000	17.029	14.9	89	0.00
33		Methylene Chloride	20.000	18.462	7.7	95	0.02
34		trans-1,2-Dichloroethene #2	20.000	19.050	4.7	97	0.00
35		1,1-Dichloroethane	20.000	19.158	4.2	99	0.00

Continuing Calibration Summary

Job Number: F22900 **Sample:** GQR923-CC920
Account: EEINCJX EEI **Lab FileID:** QR021598.D
Project: Camp Lejeune-Campbell St. Fuel Farm

36		cis-1,2-Dichloroethene #2	20.000	19.292	3.5	98	0.00
37		Chloroform	20.000	19.338	3.3	97	0.00
38		1,1,1-Trichloroethane	20.000	18.936	5.3	95	0.00
39	S	1,1-Dichloropropene #2	20.000	19.610	2.0	99	0.00
40		Carbon Tetrachloride	20.000	18.927	5.4	98	0.00
41		1,2-Dichloroethane	20.000	19.236	3.8	97	0.00
42		Trichloroethene #2	20.000	19.052	4.7	98	0.00
43		1,2-Dichloropropane	20.000	19.494	2.5	99	0.00
44		Bromodichloromethane	20.000	18.883	5.6	97	0.00
45		2-Chloroethylvinyl ether #2	20.000	18.217	8.9	89	0.00
46		cis-1,3-Dichloropropene #2	20.000	18.742	6.3	95	0.00
47		trans-1,3-Dichloropropene #	20.000	18.568	7.2	93	0.00
48		1,1,2-Trichloroethane	20.000	19.863	0.7	98	0.00
49		Tetrachloroethene #2	20.000	19.328	3.4	97	0.00
50		Dibromochloromethane	20.000	19.265	3.7	97	0.00
51	s	1-Chloro-4-fluorobenzene #2	20.000	20.871	-4.4	102	0.00
52		Chlorobenzene #2	20.000	19.323	3.4	97	0.00
53		Bromoform	20.000	18.916	5.4	95	0.00
54		1,1,2,2-Tetrachloroethane	20.000	19.895	0.5	95	0.00
55		1,3-Dichlorobenzene #2	20.000	20.054	-0.3	97	0.00
56		1,4-Dichlorobenzene #2	20.000	19.867	0.7	97	0.00
57		1,2-Dichlorobenzene #2	20.000	19.651	1.7	96	0.00

Average % D = 6.5

(#) = Out of Range SPCC's out = 0 CCC's out = 1
QR021534.D QR0326.M Tue Mar 30 09:25:51 2004

5.6

Continuing Calibration Summary

Job Number: F22900 **Sample:** GQR923-ECC920
Account: EEINCJX EEI **Lab FileID:** QR021606.D
Project: Camp Lejeune-Campbell St. Fuel Farm

Evaluate Continuing Calibration Report

Signal #1 : X:\HPCHEM\1\DATA\033004\QR021606.D\FID1B.CH Vial: 31
Signal #2 : X:\HPCHEM\1\DATA\033004\QR021606.D\AIB2A.CH
Acq On : 31 Mar 2004 3:01 am Operator: RachidA
Sample : ECC920-35 Inst : V0A3
Misc : gc3353,gqr923,,,,, Multiplr: 1.00
IntFile Signal #1: PID.E IntFile Signal #2: ELCD.E

Method : X:\HPCHEM\1\METHODS\QR0326.M (Chemstation Integrator)
Title : EPA 601/602 & SWA 5030B/8021B
Last Update : Sat Mar 27 13:56:14 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Fluorobenzene	20.000	20.000	0.0	96	0.00
2	c	VINYL CHLORIDE	35.000	34.124	2.5	98	0.01
3		1,1-Dichloroethene	35.000	29.804	14.8	86	0.01
4		Methyl tert Butyl Ether	70.000	73.077	-4.4	100	0.00
5		trans-1,2-Dichloroethene	35.000	33.810	3.4	97	0.00
6		Di-Isopropyl ether	35.000	34.266	2.1	100	0.00
7		cis-1,2-Dichloroethene	35.000	33.992	2.9	98	0.00
8	S	1,1-Dichloropropene	20.000	19.300	3.5	93	0.00
9		Benzene	70.000	68.124	2.7	98	0.00
10		Trichloroethene	35.000	32.835	6.2	95	0.00
11		2-Chloroethylvinyl ether	35.000	33.688	3.7	89	0.00
12		cis-1,3-Dichloropropene	35.000	33.322	4.8	94	0.00
13		Toluene	70.000	67.027	4.2	99	0.00
14		trans-1,3-Dichloropropene	35.000	34.544	1.3	92	0.00
15		Tetrachloroethene	35.000	33.461	4.4	96	0.00
16	S	1-Chloro-4-fluorobenzene	20.000	20.891	-4.5	97	0.00
17		Chlorobenzene	35.000	34.450	1.6	98	0.00
18		Ethylbenzene	70.000	66.807	4.6	98	0.00
19		m,p-Xylene	140.000	134.332	4.0	97	0.00
20		o-Xylene	70.000	67.291	3.9	98	0.00
21		1,3-Dichlorobenzene	35.000	36.099	-3.1	96	0.00
22		1,4-Dichlorobenzene	35.000	36.577	-4.5	96	0.00
23		1,2-Dichlorobenzene	35.000	34.968	0.1	95	0.00

Signal #2

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
25	I	Bromochloromethane	20.000	20.000	0.0	102	0.00
26	c	DICHLORODIFLUOROMETHANE	35.000	35.406	-1.2	104	0.00
27	c	CHLOROMETHANE	35.000	58.675	-67.6#	142	0.00
28	c	VINYL CHLORIDE #2	35.000	35.000	0.0	106	0.00
29	c	BROMOMETHANE	35.000	58.082	-65.9#	156	0.07
30	c	CHLOROETHANE	35.000	34.146	2.4	102	0.01
31	c	TRICHLOROFLUOROMETHANE	35.000	36.929	-5.5	110	0.00
32		1,1-Dichloroethene #2	35.000	31.781	9.2	93	0.01
33		Methylene Chloride	35.000	31.547	9.9	94	0.02
34		trans-1,2-Dichloroethene #2	35.000	36.158	-3.3	105	0.00
35		1,1-Dichloroethane	35.000	37.011	-5.7	105	0.00

5.6

Continuing Calibration Summary

Job Number: F22900 **Sample:** GQR923-ECC920
Account: EEINCJX EEI **Lab FileID:** QR021606.D
Project: Camp Lejeune-Campbell St. Fuel Farm

36		cis-1,2-Dichloroethene #2	35.000	36.137	-3.2	104	0.00
37		Chloroform	35.000	35.213	-0.6	104	0.00
38		1,1,1-Trichloroethane	35.000	35.437	-1.2	105	0.00
39	S	1,1-Dichloropropene #2	20.000	18.760	6.2	99	0.00
40		Carbon Tetrachloride	35.000	34.374	1.8	103	0.00
41		1,2-Dichloroethane	35.000	34.924	0.2	103	0.00
42		Trichloroethene #2	35.000	32.542	7.0	96	0.00
43		1,2-Dichloropropane	35.000	35.062	-0.2	103	0.00
44		Bromodichloromethane	35.000	33.570	4.1	98	0.00
45		2-Chloroethylvinyl ether #2	35.000	32.809	6.3	97	0.00
46		cis-1,3-Dichloropropene #2	35.000	33.525	4.2	98	0.00
47		trans-1,3-Dichloropropene #	35.000	34.585	1.2	101	0.00
48		1,1,2-Trichloroethane	35.000	35.214	-0.6	104	0.00
49		Tetrachloroethene #2	35.000	35.637	-1.8	105	0.00
50		Dibromochloromethane	35.000	35.154	-0.4	103	0.00
51	s	1-Chloro-4-fluorobenzene #2	20.000	19.759	1.2	102	0.00
52		Chlorobenzene #2	35.000	34.877	0.4	102	0.00
53		Bromoform	35.000	33.906	3.1	98	0.00
54		1,1,2,2-Tetrachloroethane	35.000	34.773	0.6	105	0.00
55		1,3-Dichlorobenzene #2	35.000	33.674	3.8	100	0.00
56		1,4-Dichlorobenzene #2	35.000	34.691	0.9	103	0.00
57		1,2-Dichlorobenzene #2	35.000	34.215	2.2	103	0.00

Average % D = 5.7

(#) = Out of Range SPCC's out = 0 CCC's out = 2
QR021535.D QR0326.M Tue Mar 30 09:26:13 2004

Continuing Calibration Summary

Job Number: F22900
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GQR924-CC920
Lab FileID: QR021608.D

Evaluate Continuing Calibration Report

Signal #1 : X:\HPCHEM\1\DATA\033104\QR021608.D\FID1B.CH Vial: 2
Signal #2 : X:\HPCHEM\1\DATA\033104\QR021608.D\AIB2A.CH
Acq On : 31 Mar 2004 11:35 am Operator: RachidA
Sample : CC920-20 Inst : V0A3
Misc : gc3310,gqr924,,,,, MultiplR: 1.00
IntFile Signal #1: PID.E IntFile Signal #2: ELCD.E

Method : X:\HPCHEM\1\METHODS\QR0326.M (Chemstation Integrator)
Title : EPA 601/602 & SWA 5030B/B021B
Last Update : Sat Mar 27 13:56:14 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Fluorobenzene	20.000	20.000	0.0	97	0.00
2	c	VINYL CHLORIDE	20.000	18.800	6.0	92	0.00
3		1,1-Dichloroethene	20.000	17.427	12.9	89	0.00
4		Methyl tert Butyl Ether	40.000	42.601	-6.5	102	0.00
5		trans-1,2-Dichloroethene	20.000	19.107	4.5	98	0.00
6		Di-Isopropyl ether	20.000	19.717	1.4	101	0.00
7		cis-1,2-Dichloroethene	20.000	19.283	3.6	99	0.00
8	S	1,1-Dichloropropene	20.000	19.345	3.3	94	0.00
9		Benzene	40.000	38.531	3.7	98	0.00
10		Trichloroethene	20.000	18.537	7.3	98	0.00
11		2-Chloroethylvinyl ether	20.000	19.207	4.0	93	0.00
12		cis-1,3-Dichloropropene	20.000	19.965	0.2	100	0.00
13		Toluene	40.000	37.879	5.3	98	0.00
14		trans-1,3-Dichloropropene	20.000	20.482	-2.4	100	0.00
15		Tetrachloroethene	20.000	19.198	4.0	99	0.00
16	S	1-Chloro-4-fluorobenzene	20.000	20.875	-4.4	99	0.00
17		Chlorobenzene	20.000	19.634	1.8	99	0.00
18		Ethylbenzene	40.000	37.919	5.2	97	0.00
19		m,p-Xylene	80.000	76.168	4.8	97	0.00
20		o-Xylene	40.000	38.132	4.7	97	0.00
21		1,3-Dichlorobenzene	20.000	20.388	-1.9	98	0.00
22		1,4-Dichlorobenzene	20.000	20.511	-2.6	98	0.00
23		1,2-Dichlorobenzene	20.000	20.018	-0.1	98	0.00

Signal #2

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
25	I	Bromochloromethane	20.000	20.000	0.0	103	0.00
26	c	DICHLORODIFLUOROMETHANE	20.000	19.557	2.2	102	0.00
27	c	CHLOROMETHANE	20.000	23.506	-17.5	121	0.00
28	c	VINYL CHLORIDE #2	20.000	19.030	4.8	99	0.00
29	c	BROMOMETHANE	20.000	17.833	10.8	97	-0.02
30	c	CHLOROETHANE	20.000	19.475	2.6	102	0.00
31	c	TRICHLOROFLUOROMETHANE	20.000	20.217	-1.1	105	0.00
32		1,1-Dichloroethene #2	20.000	18.208	9.0	98	0.00
33		Methylene Chloride	20.000	18.255	8.7	98	0.01
34		trans-1,2-Dichloroethene #2	20.000	19.396	3.0	102	0.00
35		1,1-Dichloroethane	20.000	19.342	3.3	103	0.00

5.6

Continuing Calibration Summary

Job Number: F22900 **Sample:** GQR924-CC920
Account: EEINCJX EEI **Lab FileID:** QR021608.D
Project: Camp Lejeune-Campbell St. Fuel Farm

36		cis-1,2-Dichloroethene #2	20.000	19.460	2.7	102	0.00
37		Chloroform	20.000	19.738	1.3	102	0.00
38		1,1,1-Trichloroethane	20.000	19.427	2.9	101	0.00
39	S	1,1-Dichloropropene #2	20.000	19.200	4.0	101	0.00
40		Carbon Tetrachloride	20.000	19.463	2.7	104	0.00
41		1,2-Dichloroethane	20.000	19.932	0.3	104	0.00
42		Trichloroethene #2	20.000	19.193	4.0	102	0.00
43		1,2-Dichloropropane	20.000	19.602	2.0	103	0.00
44		Bromodichloromethane	20.000	19.440	2.8	103	0.00
45		2-Chloroethylvinyl ether #2	20.000	19.247	3.8	98	0.00
46		cis-1,3-Dichloropropene #2	20.000	20.029	-0.1	104	0.00
47		trans-1,3-Dichloropropene #	20.000	20.203	-1.0	104	0.00
48		1,1,2-Trichloroethane	20.000	20.437	-2.2	105	0.00
49		Tetrachloroethene #2	20.000	19.981	0.1	104	0.00
50		Dibromochloromethane	20.000	19.420	2.9	101	0.00
51	s	1-Chloro-4-fluorobenzene #2	20.000	20.309	-1.5	102	0.00
52		Chlorobenzene #2	20.000	20.095	-0.5	104	0.00
53		Bromoform	20.000	19.622	1.9	102	0.00
54		1,1,2,2-Tetrachloroethane	20.000	20.506	-2.5	101	0.00
55		1,3-Dichlorobenzene #2	20.000	20.309	-1.5	102	0.00
56		1,4-Dichlorobenzene #2	20.000	20.260	-1.3	102	0.00
57		1,2-Dichlorobenzene #2	20.000	20.023	-0.1	101	0.00

Average % D = 3.6

(#) = Out of Range SPCC's out = 0 CCC's out = 0
QR021534.D QR0326.M Tue Mar 30 13:42:29 2004

ACCUTEST
F22900

Continuing Calibration Summary

Job Number: F22900
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GQR925-CC920
Lab FileID: QR021619.D

Evaluate Continuing Calibration Report

Signal #1 : X:\HPCHEM\1\DATA\033104\QR021619.D\FID1B.CH Vial: 10
Signal #2 : X:\HPCHEM\1\DATA\033104\QR021619.D\AIB2A.CH
Acq On : 31 Mar 2004 6:37 pm Operator: RachidA
Sample : CC920-20 Inst : VOA3
Misc : gc3349,gqr925,,,,,1 Multiplr: 1.00
IntFile Signal #1: PID.E IntFile Signal #2: ELCD.E

Method : X:\HPCHEM\1\METHODS\QR0326.M (Chemstation Integrator)
Title : EPA 601/602 & SWA 5030B/8021B
Last Update : Sat Mar 27 13:56:14 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Fluorobenzene	20.000	20.000	0.0	95	0.00
2	c	VINYL CHLORIDE	20.000	20.220	-1.1	97	0.01
3		1,1-Dichloroethene	20.000	17.804	11.0	90	0.01
4		Methyl tert Butyl Ether	40.000	44.029	-10.1	104	0.00
5		trans-1,2-Dichloroethene	20.000	19.650	1.8	99	0.00
6		Di-Isopropyl ether	20.000	19.999	0.0	101	0.00
7		cis-1,2-Dichloroethene	20.000	19.668	1.7	100	0.00
8	S	1,1-Dichloropropene	20.000	19.391	3.0	93	0.00
9		Benzene	40.000	39.435	1.4	99	0.00
10		Trichloroethene	20.000	18.870	5.6	99	0.00
11		2-Chloroethylvinyl ether	20.000	19.716	1.4	94	0.00
12		cis-1,3-Dichloropropene	20.000	19.915	0.4	99	0.00
13		Toluene	40.000	38.673	3.3	99	0.00
14		trans-1,3-Dichloropropene	20.000	20.399	-2.0	98	0.00
15		Tetrachloroethene	20.000	19.637	1.8	100	0.00
16	S	1-Chloro-4-fluorobenzene	20.000	20.941	-4.7	98	0.00
17		Chlorobenzene	20.000	20.079	-0.4	100	0.00
18		Ethylbenzene	40.000	38.733	3.2	98	0.00
19		m,p-Xylene	80.000	77.782	2.8	98	0.00
20		o-Xylene	40.000	38.884	2.8	98	0.00
21		1,3-Dichlorobenzene	20.000	20.672	-3.4	98	0.00
22		1,4-Dichlorobenzene	20.000	20.841	-4.2	98	0.00
23		1,2-Dichlorobenzene	20.000	20.211	-1.1	97	0.00

Signal #2

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
25	I	Bromochloromethane	20.000	20.000	0.0	99	0.00
26	c	DICHLORODIFLUOROMETHANE	20.000	19.545	2.3	98	0.00
27	c	CHLOROMETHANE	20.000	24.529	-22.6#	122	0.00
28	c	VINYL CHLORIDE #2	20.000	20.772	-3.9	104	0.01
29	c	BROMOMETHANE	20.000	18.810	6.0	99	-0.01
30	c	CHLOROETHANE	20.000	20.161	-0.8	102	0.00
31	c	TRICHLOROFLUOROMETHANE	20.000	20.765	-3.8	105	0.01
32		1,1-Dichloroethene #2	20.000	19.155	4.2	100	0.01
33		Methylene Chloride	20.000	18.696	6.5	97	0.02
34		trans-1,2-Dichloroethene #2	20.000	20.412	-2.1	103	0.00
35		1,1-Dichloroethane	20.000	20.486	-2.4	105	0.00

5.6

Continuing Calibration Summary

Job Number: F22900
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GQR925-CC920
Lab FileID: QR021619.D

36		cis-1,2-Dichloroethene #2	20.000	20.235	-1.2	103	0.00
37		Chloroform	20.000	20.050	-0.3	100	0.00
38		1,1,1-Trichloroethane	20.000	20.629	-3.1	103	0.00
39	S	1,1-Dichloropropene #2	20.000	19.202	4.0	98	0.00
40		Carbon Tetrachloride	20.000	20.427	-2.1	105	0.00
41		1,2-Dichloroethane	20.000	20.819	-4.1	105	0.00
42		Trichloroethene #2	20.000	20.033	-0.2	103	0.00
43		1,2-Dichloropropane	20.000	20.590	-2.9	104	0.00
44		Bromodichloromethane	20.000	20.380	-1.9	104	0.00
45		2-Chloroethylvinyl ether #2	20.000	20.358	-1.8	100	0.00
46		cis-1,3-Dichloropropene #2	20.000	20.716	-3.6	104	0.00
47		trans-1,3-Dichloropropene #	20.000	20.721	-3.6	104	0.00
48		1,1,2-Trichloroethane	20.000	21.058	-5.3	104	0.00
49		Tetrachloroethene #2	20.000	21.119	-5.6	106	0.00
50		Dibromochloromethane	20.000	20.450	-2.2	103	0.00
51	s	1-Chloro-4-fluorobenzene #2	20.000	20.367	-1.8	99	0.00
52		Chlorobenzene #2	20.000	20.928	-4.6	104	0.00
53		Bromoform	20.000	20.559	-2.8	103	0.00
54		1,1,2,2-Tetrachloroethane	20.000	21.568	-7.8	102	0.00
55		1,3-Dichlorobenzene #2	20.000	21.285	-6.4	103	0.00
56		1,4-Dichlorobenzene #2	20.000	20.886	-4.4	102	0.00
57		1,2-Dichlorobenzene #2	20.000	20.731	-3.7	101	0.00

Average % D = 3.6

(#) = Out of Range SPCC's out = 0 CCC's out = 1
QR021534.D QR0326.M Tue Mar 30 13:42:33 2004

Continuing Calibration Summary

Job Number: F22900
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GQR925-CC920
Lab FileID: QR021630.D

Evaluate Continuing Calibration Report

Signal #1 : X:\HPCHEM\1\DATA\033104\QR021630.D\FID1B.CH Vial: 21
Signal #2 : X:\HPCHEM\1\DATA\033104\QR021630.D\AIB2A.CH
Acq On : 1 Apr 2004 12:02 am Operator: RachidA
Sample : cc920-35 Inst : V0A3
Misc : gc3359,gqr925,,,,, Multiplr: 1.00
IntFile Signal #1: PID.E IntFile Signal #2: ELCD.E

Method : X:\HPCHEM\1\METHODS\QR0326.M (Chemstation Integrator)
Title : EPA 601/602 & SWA 5030B/8021B
Last Update : Sat Mar 27 13:56:14 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Fluorobenzene	20.000	20.000	0.0	96	0.00
2	c	VINYL CHLORIDE	35.000	35.451	-1.3	101	0.00
3		1,1-Dichloroethene	35.000	30.169	13.8	87	0.00
4		Methyl tert Butyl Ether	70.000	76.537	-9.3	104	-0.01
5		trans-1,2-Dichloroethene	35.000	33.775	3.5	96	-0.01
6		Di-Isopropyl ether	35.000	34.589	1.2	100	-0.01
7		cis-1,2-Dichloroethene	35.000	34.155	2.4	98	0.00
8	S	1,1-Dichloropropene	20.000	19.122	4.4	92	0.00
9		Benzene	70.000	68.471	2.2	98	0.00
10		Trichloroethene	35.000	32.921	5.9	94	0.00
11		2-Chloroethylvinyl ether	35.000	33.057	5.6	87	0.00
12		cis-1,3-Dichloropropene	35.000	34.251	2.1	96	0.00
13		Toluene	70.000	67.709	3.3	99	0.00
14		trans-1,3-Dichloropropene	35.000	35.634	-1.8	94	0.00
15		Tetrachloroethene	35.000	33.921	3.1	97	0.00
16	S	1-Chloro-4-fluorobenzene	20.000	21.103	-5.5	98	0.00
17		Chlorobenzene	35.000	34.811	0.5	99	0.00
18		Ethylbenzene	70.000	67.390	3.7	99	0.00
19		m,p-Xylene	140.000	135.873	2.9	98	0.00
20		o-Xylene	70.000	67.971	2.9	98	0.00
21		1,3-Dichlorobenzene	35.000	36.499	-4.3	97	0.00
22		1,4-Dichlorobenzene	35.000	36.970	-5.6	96	0.00
23		1,2-Dichlorobenzene	35.000	35.639	-1.8	97	0.00

Signal #2

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
25	I	Bromochloromethane	20.000	20.000	0.0	95	0.00
26	c	DICHLORODIFLUOROMETHANE	35.000	38.929	-11.2	106	-0.01
27	c	CHLOROMETHANE	35.000	51.067	-45.9#	123	0.00
28	c	VINYL CHLORIDE #2	35.000	38.060	-8.7	106	0.00
29	c	BROMOMETHANE	35.000	34.749	0.7	94	-0.03
30	c	CHLOROETHANE	35.000	36.705	-4.9	102	0.00
31	c	TRICHLOROFLUOROMETHANE	35.000	36.609	-4.6	102	0.00
32		1,1-Dichloroethene #2	35.000	33.304	4.8	91	0.00
33		Methylene Chloride	35.000	31.863	9.0	89	0.00
34		trans-1,2-Dichloroethene #2	35.000	36.590	-4.5	99	-0.01
35		1,1-Dichloroethane	35.000	37.642	-7.5	100	-0.01

Continuing Calibration Summary

Job Number: F22900
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GQR925-CC920
Lab FileID: QR021630.D

36		cis-1,2-Dichloroethene #2	35.000	36.512	-4.3	98	-0.01
37		Chloroform	35.000	36.310	-3.7	100	0.00
38		1,1,1-Trichloroethane	35.000	36.364	-3.9	101	0.00
39	S	1,1-Dichloropropene #2	20.000	19.188	4.1	94	0.00
40		Carbon Tetrachloride	35.000	36.501	-4.3	101	0.00
41		1,2-Dichloroethane	35.000	36.211	-3.5	99	0.00
42		Trichloroethene #2	35.000	34.042	2.7	93	0.00
43		1,2-Dichloropropane	35.000	37.856	-8.2	102	0.00
44		Bromodichloromethane	35.000	36.838	-5.3	99	0.00
45		2-Chloroethylvinyl ether #2	35.000	33.376	4.6	92	0.00
46		cis-1,3-Dichloropropene #2	35.000	35.273	-0.8	96	0.00
47		trans-1,3-Dichloropropene #	35.000	35.994	-2.8	98	0.00
48		1,1,2-Trichloroethane	35.000	35.866	-2.5	99	0.00
49		Tetrachloroethene #2	35.000	36.453	-4.2	100	0.00
50		Dibromochloromethane	35.000	36.103	-3.2	98	0.00
51	s	1-Chloro-4-fluorobenzene #2	20.000	20.880	-4.4	101	0.00
52		Chlorobenzene #2	35.000	36.180	-3.4	99	0.00
53		Bromoform	35.000	35.517	-1.5	96	0.00
54		1,1,2,2-Tetrachloroethane	35.000	36.836	-5.2	103	0.00
55		1,3-Dichlorobenzene #2	35.000	35.526	-1.5	98	0.00
56		1,4-Dichlorobenzene #2	35.000	36.257	-3.6	100	0.00
57		1,2-Dichlorobenzene #2	35.000	35.512	-1.5	99	0.00

Average % D = 5.0

(#) = Out of Range SPCC's out = 0 CCC's out = 1

QR021535.D QR0326.M Tue Mar 30 13:43:22 2004

5.6

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: F22900
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP10055-MB	IJ19585.D	1	03/29/04	SD	03/24/04	OP10055	GIJ953

The QC reported here applies to the following samples: **Method:** EPA 610

F22900-6, F22900-7, F22900-8

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.0	2.0	ug/l	
208-96-8	Acenaphthylene	ND	5.0	2.0	ug/l	
120-12-7	Anthracene	ND	5.0	2.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.0	2.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.0	2.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.0	2.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.0	2.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.0	2.0	ug/l	
218-01-9	Chrysene	ND	5.0	2.0	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.0	2.0	ug/l	
206-44-0	Fluoranthene	ND	5.0	2.0	ug/l	
86-73-7	Fluorene	ND	5.0	2.0	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.0	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.0	ug/l	
90-12-0	1-Methylnaphthalene	ND	5.0	2.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.0	2.0	ug/l	
85-01-8	Phenanthrene	ND	5.0	2.0	ug/l	
129-00-0	Pyrene	ND	5.0	2.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
321-60-8	2-Fluorobiphenyl	78%	42-123%
84-15-1	o-Terphenyl	90%	51-123%

Method Blank Summary

Job Number: F22900
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP10055-MB	IJ19595.D	1	03/30/04	SD	03/24/04	OP10055	GIJ954

The QC reported here applies to the following samples: **Method:** EPA 610

F22900-6, F22900-7, F22900-8

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.0	2.0	ug/l	
208-96-8	Acenaphthylene	ND	5.0	2.0	ug/l	
120-12-7	Anthracene	ND	5.0	2.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.0	2.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.0	2.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.0	2.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.0	2.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.0	2.0	ug/l	
218-01-9	Chrysene	ND	5.0	2.0	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.0	2.0	ug/l	
206-44-0	Fluoranthene	ND	5.0	2.0	ug/l	
86-73-7	Fluorene	ND	5.0	2.0	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.0	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.0	ug/l	
90-12-0	1-Methylnaphthalene	ND	5.0	2.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.0	2.0	ug/l	
85-01-8	Phenanthrene	ND	5.0	2.0	ug/l	
129-00-0	Pyrene	ND	5.0	2.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
321-60-8	2-Fluorobiphenyl	58%	42-123%
84-15-1	o-Terphenyl	88%	51-123%

Blank Spike Summary

Job Number: F22900
Account: EEINCJX EEI
Projeet: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP10055-BS	IJ19586.D	1	03/29/04	SD	03/24/04	OP10055	GIJ953

The QC reported here applies to the following samples: **Method:** EPA 610

F22900-6, F22900-7, F22900-8

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
83-32-9	Acenaphthene	25	21.5	86	71-113
208-96-8	Aeenaphthylene	25	21.1	84	63-102
120-12-7	Anthracene	25	23.3	93	71-110
56-55-3	Benzo(a)anthraeene	25	21.8	87	70-114
50-32-8	Benzo(a)pyrene	25	22.9	92	67-114
205-99-2	Benzo(b)fluoranthene	25	22.2	89	69-115
191-24-2	Benzo(g,h,i)perylene	25	21.5	86	61-117
207-08-9	Benzo(k)fluoranthene	25	23.0	92	69-111
218-01-9	Chrysene	25	23.1	92	70-114
53-70-3	Dibenzo(a,h)anthraeene	25	22.2	89	64-114
206-44-0	Fluoranthene	25	23.2	93	71-114
86-73-7	Fluorene	25	22.2	89	69-111
193-39-5	Indeno(1,2,3-ed)pyrene	25	20.1	80	63-112
91-20-3	Naphthalene	25	19.8	79	66-105
90-12-0	1-Methylnaphthalene	25	22.2	89	71-112
91-57-6	2-Methylnaphthalene	25	20.3	81	65-106
85-01-8	Phenanthrene	25	21.9	88	69-112
129-00-0	Pyrene	25	23.5	94	70-114

CAS No.	Surrogate Recoveries	BSP	Limits
321-60-8	2-Fluorobiphenyl	87%	42-123%
84-15-1	o-Terphenyl	93%	51-123%

6.2

6

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F22900
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP10055-MS	IJ19598.D	20	03/30/04	SD	03/24/04	OP10055	GIJ954
OP10055-MSD	IJ19599.D	20	03/30/04	SD	03/24/04	OP10055	GIJ954
F22900-6	IJ19588.D	1	03/29/04	SD	03/24/04	OP10055	GIJ953
F22900-6 [a]	IJ19596.D	5	03/30/04	SD	03/24/04	OP10055	GIJ954

The QC reported here applies to the following samples: **Method:** EPA 610

F22900-6, F22900-7, F22900-8

CAS No.	Compound	F22900-6 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	72.8 [b]		52.1	119	89	130	110	9	59-123/20
208-96-8	Acenaphthylene	ND [b]		52.1	ND	0*	ND	0*	nc	51-114/20
120-12-7	Anthracene	ND		52.1	ND	0*	ND	0*	nc	64-114/17
56-55-3	Benzo(a)anthracene	ND		52.1	ND	0*	ND	0*	nc	66-115/17
50-32-8	Benzo(a)pyrene	ND		52.1	ND	0*	ND	0*	nc	62-118/17
205-99-2	Benzo(b)fluoranthene	ND		52.1	ND	0*	ND	0*	nc	66-117/17
191-24-2	Benzo(g,h,i)perylene	ND		52.1	ND	0*	ND	0*	nc	59-120/17
207-08-9	Benzo(k)fluoranthene	ND		52.1	ND	0*	ND	0*	nc	64-116/16
218-01-9	Chrysene	ND		52.1	ND	0*	ND	0*	nc	66-117/16
53-70-3	Dibenzo(a,h)anthracene	ND		52.1	ND	0*	ND	0*	nc	57-124/18
206-44-0	Fluoranthene	ND		52.1	ND	0*	ND	0*	nc	67-116/17
86-73-7	Fluorene	29.0 [b]		52.1	ND	-56*	83.5	105	200*	58-122/19
193-39-5	Indeno(1,2,3-cd)pyrene	ND		52.1	ND	0*	ND	0*	nc	59-116/18
91-20-3	Naphthalene	1370 [d]		52.1	1580	403* [c]	1710	653* [c]	8	47-114/20
90-12-0	1-Methylnaphthalene	65.4 [b]		52.1	119	103	130	124	9	55-128/21
91-57-6	2-Methylnaphthalene	85.3 [b]		52.1	132	90	144	113	9	51-117/21
85-01-8	Phenanthrene	ND		52.1	ND	0*	ND	0*	nc	63-116/18
129-00-0	Pyrene	ND		52.1	ND	0*	ND	0*	nc	67-116/17

CAS No.	Surrogate Recoveries	MS	MSD	F22900-6	F22900-6	Limits
321-60-8	2-Fluorobiphenyl	71%	79%	111%	94%	42-123%
84-15-1	o-Terphenyl	109%	122%	104%	93%	51-123%

(a) All hits confirmed by dual column analysis.
(b) Result is from Run #2.
(e) Outside control limits due to high level in sample relative to spike amount.
(d) Result is from Run #3.

Semivolatile Surrogate Recovery Summary

Job Number: F22900
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Method: EPA 610 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S2 [a]
F22900-6	IJ19596.D	94.0	93.0
F22900-6	IJ19597.D	0.0* [b]	0.0* [b]
F22900-6	IJ19588.D	111.0	104.0
F22900-7	IJ19600.D	95.0	98.0
F22900-7	IJ19591.D	106.0	105.0
F22900-8	IJ19592.D	88.0	101.0
OP10055-BS	IJ19586.D	87.0	93.0
OP10055-MB	IJ19585.D	78.0	90.0
OP10055-MB	IJ19595.D	58.0	88.0
OP10055-MS	IJ19598.D	71.0	109.0
OP10055-MSD	IJ19599.D	79.0	122.0

Surrogate Compounds	Recovery Limits
S1 = 2-Fluorobiphenyl	42-123%
S2 = o-Terphenyl	51-123%

(a) Recovery from GC signal #1
(b) Outside control limits due to dilution.

6.4

GC Surrogate Retention Time Summary

Job Number: F22900
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GIJ953-CC928	**Injection Date:**	03/29/04
Lab File ID:	IJ19584.D	**Injection Time:**	20:42
Instrument ID:	GCIJ	**Method:**	EPA 610

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	5.71	6.51	10.23	11.64

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
OP10055-MB	IJ19585.D	03/29/04	21:11	5.71		10.24	
OP10055-BS	IJ19586.D	03/29/04	21:40	5.71		10.23	
ZZZZZZ	IJ19587.D	03/29/04	22:08	5.71		10.23	
F22900-6	IJ19588.D	03/29/04	22:37	5.70		10.23	
F22900-7	IJ19591.D	03/30/04	00:03	5.71		10.23	
F22900-8	IJ19592.D	03/30/04	00:32	5.70		10.23	
GIJ953-ECC928	IJ19593.D	03/30/04	01:00	5.71	6.51	10.23	11.64

Surrogate Compounds

S1 = 2-Fluorobiphenyl
S2 = o-Terphenyl

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F22900
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GIJ954-CC928	**Injection Date:**	03/30/04
Lab File ID:	IJ19594.D	**Injection Time:**	09:23
Instrument ID:	GCIJ	**Method:**	EPA 610

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	5.70	6.50	10.23	11.64

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
OP10055-MB	IJ19595.D	03/30/04	10:02	5.70		10.23	
F22900-6	IJ19596.D	03/30/04	10:31	5.70		10.23	
F22900-6	IJ19597.D	03/30/04	11:00	0.00		0.00	
OP10055-MS	IJ19598.D	03/30/04	11:28	5.72		10.24	
OP10055-MSD	IJ19599.D	03/30/04	11:57	5.72		10.25	
F22900-7	IJ19600.D	03/30/04	12:26	5.70		10.23	
GIJ954-ECC928	IJ19601.D	03/30/04	12:55	5.71	6.51	10.23	11.64

Surrogate Componnds

S1 = 2-Fluorobiphenyl
S2 = o-Terphenyl

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

Initial Calibration Summary

Job Number: F22900 **Sample:** GIJ928-ICC928
Account: EEINCJX EEI **Lab FileID:** IJ19184.D
Project: Camp Lejeune-Campbell St. Fuel Farm

Response Factor Report FID 1

Method : C:\HPCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title : PAH's BY EPA 610 OR 8100
Last Update : Wed Jan 14 07:33:44 2004
Response via : Initial Calibration

Calibration Files
5 =IJ19182.D 10 =IJ19183.D 20 =IJ19184.D
30 =IJ19185.D 40 =IJ19186.D 50 =IJ19187.D

		Compound	5	10	20	30	40	50	Avg		%RSD
1)		Naphthalene	1.607	1.598	1.575	1.579	1.577	1.616	1.592	E4	1.09
2)		2-Methyl Naphthalen	1.554	1.537	1.522	1.524	1.527	1.567	1.538	E4	1.19
3)		1-Methyl Naphthalen	1.555	1.518	1.494	1.492	1.499	1.537	1.516	E4	1.71
4)	S	2-Fluorobiphenyl	1.350	1.381	1.324	1.363	1.369	1.411	1.366	E4	2.15
5)		Acenaphthylene	1.620	1.559	1.559	1.561	1.571	1.619	1.582	E4	1.90
6)		Acenaphthene	1.646	1.634	1.607	1.601	1.598	1.650	1.623	E4	1.45
7)		Fluorene	1.585	1.598	1.573	1.573	1.563	1.614	1.585	E4	1.19
8)		Phenanthrene	1.508	1.553	1.554	1.565	1.560	1.612	1.559	E4	2.14
9)		Anthracene	1.724	1.667	1.601	1.594	1.580	1.623	1.631	E4	3.34
10)	S	O-Terphenyl	1.734	1.666	1.624	1.614	1.602	1.647	1.648	E4	2.92
11)		Fluoranthene	1.655	1.637	1.592	1.602	1.573	1.629	1.615	E4	1.90
12)		Pyrene	1.691	1.677	1.582	1.588	1.582	1.624	1.624	E4	3.03
13)		Benzo(a)Anthracene	1.533	1.581	1.568	1.589	1.589	1.627	1.581	E4	1.94
14)		Chrysene	1.776	1.698	1.618	1.612	1.598	1.626	1.654	E4	4.17
15)		Benzo(b)Fluoranthen	1.523	1.557	1.576	1.597	1.597	1.667	1.586	E4	3.07
16)		Benzo(k)Fluoranthen	1.875	1.794	1.675	1.657	1.642	1.643	1.714	E4	5.68
17)		Benzo(a) Pyrene	1.594	1.580	1.533	1.534	1.530	1.566	1.556	E4	1.77
18)		Indeno(1,2,3-cd)pyr	1.531	1.543	1.512	1.519	1.530	1.570	1.534	E4	1.34
19)		Dibenzo(a,h)anthrac	1.704	1.650	1.574	1.563	1.565	1.596	1.609	E4	3.53
20)		Benzo(g,h,i) Peryle	1.695	1.636	1.601	1.568	1.565	1.599	1.611	E4	3.03

Signal #2 Calibration Files
5 =IJ19182.D 10 =IJ19183.D 20 =IJ19184.D
30 =IJ19185.D 40 =IJ19186.D 50 =IJ19187.D

		Compound	5	10	20	30	40	50	Avg		%RSD
1)		Naphthalene	2.282	2.241	2.198	2.201	2.200	2.251	2.229	E4	1.55
2)		2-Methyl Naphthalen	2.158	2.125	2.102	2.112	2.113	2.173	2.130	E4	1.35
3)		1-Methyl Naphthalen	2.126	2.093	2.064	2.069	2.067	2.126	2.091	E4	1.40
4)	S	2-Fluorobiphenyl	1.918	1.924	1.910	1.913	1.913	1.971	1.925	E4	1.19
5)		Acenaphthylene	2.229	2.224	2.198	2.197	2.190	2.260	2.216	E4	1.19
6)		Acenaphthene	2.262	2.254	2.227	2.226	2.214	2.286	2.245	E4	1.20
7)		Fluorene	2.204	2.205	2.172	2.170	2.158	2.230	2.190	E4	1.25
8)		Phenanthrene	2.035	2.098	2.092	2.119	2.133	2.221	2.116	E4	2.89
9)		Anthracene	2.448	2.264	2.200	2.186	2.154	2.230	2.247	E4	4.68
10)	S	O-Terphenyl	2.304	2.281	2.234	2.234	2.220	2.288	2.260	E4	1.55
11)		Fluoranthene	2.265	2.245	2.190	2.198	2.193	2.250	2.223	E4	1.51
12)		Pyrene	2.354	2.274	2.216	2.221	2.220	2.278	2.260	E4	2.38
13)		Benzo(a)Anthracene	2.307	2.283	2.226	2.235	2.229	2.280	2.260	E4	1.52
14)		Chrysene	2.291	2.247	2.206	2.204	2.183	2.228	2.226	E4	1.74
15)		Benzo(b)Fluoranthen	2.238	2.246	2.201	2.211	2.221	2.293	2.235	E4	1.48
16)		Benzo(k)Fluoranthen	2.330	2.308	2.226	2.242	2.237	2.277	2.270	E4	1.86
17)		Benzo(a) Pyrene	2.192	2.172	2.113	2.123	2.121	2.172	2.149	E4	1.56
18)		Indeno(1,2,3-cd)pyr	2.166	2.158	2.122	2.146	2.172	2.256	2.170	E4	2.11
19)		Dibenzo(a,h)anthrac	2.304	2.248	2.132	2.118	2.081	2.093	2.162	E4	4.23
20)		Benzo(g,h,i) Peryle	2.246	2.214	2.140	2.139	2.152	2.202	2.182	E4	2.07

Initial Calibration Summary

Job Number: F22900
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GIJ928-ICC928
Lab FileID: IJ19184.D

Average % RSD = 2.2

(#) = Out of Range

8100_H2.M Wed Jan 14 08:50:40 2004

6.6

Continuing Calibration Summary

Job Number: F22900
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GIJ953-CC928
Lab FileID: IJ19584.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\0329PAH\IJ19584.D\FID1B.CH Vial: 18
Signal #2 : C:\HPCHEM\1\DATA\0329PAH\IJ19584.D\FID2A.CH
Acq On : 29 Mar 2004 8:42 pm Operator: sarahm
Sample : cc928-20 Inst : FID 1
Misc : op9972,gij953,1000,,,1,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : C:\HPCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title : PAH's BY EPA 610 OR 8100
Last Update : Fri Feb 27 08:33:10 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1		Naphthalene	20.000	21.005	-5.0	106	0.00	4.08- 4.28
2		2-Methyl Naphthalene	20.000	20.722	-3.6	105	0.00	4.98- 5.18
3		1-Methyl Naphthalene	20.000	21.302	-6.5	108	0.00	5.12- 5.32
4	S	2-Fluorobiphenyl	20.000	21.303	-6.5	110	0.00	5.61- 5.81
5		Acenaphthylene	20.000	20.999	-5.0	107	0.00	6.32- 6.52
6		Acenaphthene	20.000	21.234	-6.2	107	0.00	6.64- 6.84
7		Fluorene	20.000	21.010	-5.1	106	0.00	7.51- 7.71
8		Phenanthrene	20.000	20.351	-1.8	102	0.00	9.17- 9.37
9		Anthracene	20.000	21.733	-8.7	111	0.00	9.26- 9.46
10	S	O-Terphenyl	20.000	21.376	-6.9	108	0.00	10.14-10.34
11		Fluoranthene	20.000	21.167	-5.8	107	0.00	11.37-11.57
12		Pyrene	20.000	21.623	-8.1	111	0.00	11.74-11.94
13		Benzo(a)Anthracene	20.000	20.127	-0.6	101	0.00	14.04-14.24
14		Chrysene	20.000	21.836	-9.2	112	0.00	14.11-14.31
15		Benzo(b)Fluoranthene	20.000	20.095	-0.5	101	0.00	15.95-16.15
16		Benzo(k)Fluoranthene	20.000	21.932	-9.7	112	0.00	16.00-16.20
17		Benzo(a) Pyrene	20.000	21.157	-5.8	107	0.00	16.44-16.64
18		Indeno(1,2,3-cd)pyrene	20.000	19.597	2.0	99	0.00	18.12-18.32
19		Dibenzo(a,h)anthracene	20.000	20.837	-4.2	106	0.00	18.20-18.40
20		Benzo(g,h,i) Perylene	20.000	20.640	-3.2	104	0.00	18.44-18.64
*****		Signal #2 *****						
1		Naphthalene	20.000	20.804	-4.0	105	0.00	4.76- 4.96
2		2-Methyl Naphthalene	20.000	20.556	-2.8	104	0.00	5.64- 5.84
3		1-Methyl Naphthalene	20.000	21.717	-8.6	110	0.00	5.90- 6.10
4	S	2-Fluorobiphenyl	20.000	20.896	-4.5	105	0.00	6.42- 6.62
5		Acenaphthylene	20.000	21.208	-6.0	107	0.00	7.51- 7.71
6		Acenaphthene	20.000	21.468	-7.3	108	0.00	7.76- 7.96
7		Fluorene	20.000	20.943	-4.7	106	0.00	8.63- 8.83
8		Phenanthrene	20.000	19.865	0.7	100	0.00	10.65-10.85
9		Anthracene	20.000	22.664	-13.3	116	0.00	10.69-10.89
10	S	O-Terphenyl	20.000	21.538	-7.7	109	0.00	11.55-11.75
11		Fluoranthene	20.000	21.331	-6.7	108	0.00	13.02-13.22
12		Pyrene	20.000	21.790	-8.9	111	0.00	13.56-13.76
13		Benzo(a)Anthracene	20.000	20.910	-4.6	106	0.00	15.91-16.11
14		Chrysene	20.000	21.743	-8.7	110	0.00	16.09-16.29
15		Benzo(b)Fluoranthene	20.000	20.283	-1.4	103	0.00	17.97-18.17
16		Benzo(k)Fluoranthene	20.000	22.831	-14.2	116	0.00	18.02-18.22
17		Benzo(a) Pyrene	20.000	21.235	-6.2	108	0.00	18.69-18.89
18		Indeno(1,2,3-cd)pyrene	20.000	20.596	-3.0	105	0.00	20.45-20.65

Continuing Calibration Summary

Job Number: F22900 **Sample:** GIJ953-CC928
Account: EEINCJX EEI **Lab FileID:** IJ19584.D
Project: Camp Lejeune-Campbell St. Fuel Farm

19	Dibenzo(a,h)anthracene	20.000	22.587	-12.9	115	0.00	20.52-20.72
20	Benzo(g,h,i) Perylene	20.000	21.233	-6.2	108	-0.01	21.06-21.26

(#) = Out of Range SPCC's out = 0 CCC's out = 0
IJ19184.D 8100_H2.M Tue Mar 30 08:01:01 2004

6.6

Continuing Calibration Summary

Job Number: F22900
Aecount: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GIJ953-ECC928
Lab FileID: IJ19593.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\0329PAH\IJ19593.D\FID1B.CH Vial: 27
Signal #2 : C:\HPCHEM\1\DATA\0329PAH\IJ19593.D\FID2A.CH
Acq On : 30 Mar 2004 1:00 am Operator: sarahm
Sample : ecc928-20 Inst : FID 1
Misc : op9972,gij953,980,,,1,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : C:\HPCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title : PAH's BY EPA 610 OR 8100
Last Update : Fri Feb 27 08:33:10 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1		Naphthalene	20.000	19.626	1.9	99	0.00	4.08- 4.28
2		2-Methyl Naphthalene	20.000	19.495	2.5	99	0.00	4.98- 5.18
3		1-Methyl Naphthalene	20.000	20.790	-3.9	106	0.00	5.12- 5.32
4	S	2-Fluorobiphenyl	20.000	20.341	-1.7	105	0.00	5.61- 5.81
5		Acenaphthylene	20.000	19.654	1.7	100	0.00	6.32- 6.52
6		Acenaphthene	20.000	19.892	0.5	100	0.00	6.64- 6.84
7		Fluorene	20.000	19.651	1.7	99	0.00	7.51- 7.71
8		Phenanthrene	20.000	18.910	5.4	95	0.00	9.17- 9.37
9		Anthracene	20.000	20.783	-3.9	106	0.00	9.26- 9.46
10	S	O-Terphenyl	20.000	20.043	-0.2	102	0.00	10.14-10.34
11		Fluoranthene	20.000	19.759	1.2	100	0.00	11.37-11.57
12		Pyrene	20.000	20.192	-1.0	104	0.00	11.74-11.94
13		Benzo(a)Anthracene	20.000	18.867	5.7	95	0.00	14.04-14.24
14		Chrysene	20.000	20.516	-2.6	105	0.00	14.11-14.31
15		Benzo(b)Fluoranthene	20.000	18.742	6.3	94	0.00	15.95-16.15
16		Benzo(k)Fluoranthene	20.000	20.597	-3.0	105	0.00	16.00-16.20
17		Benzo(a) Pyrene	20.000	19.778	1.1	100	0.00	16.44-16.64
18		Indeno(1,2,3-cd)pyrene	20.000	18.258	8.7	93	0.00	18.12-18.32
19		Dibenzo(a,h)anthracene	20.000	19.757	1.2	101	0.00	18.20-18.40
20		Benzo(g,h,i) Perylene	20.000	19.238	3.8	97	0.00	18.44-18.64
*****		Signal #2 *****						
1		Naphthalene	20.000	19.654	1.7	100	0.00	4.76- 4.96
2		2-Methyl Naphthalene	20.000	19.352	3.2	98	0.00	5.64- 5.84
3		1-Methyl Naphthalene	20.000	20.843	-4.2	106	0.00	5.90- 6.10
4	S	2-Fluorobiphenyl	20.000	19.938	0.3	100	0.00	6.42- 6.62
5		Acenaphthylene	20.000	19.923	0.4	100	0.00	7.51- 7.71
6		Acenaphthene	20.000	20.119	-0.6	101	0.00	7.76- 7.96
7		Fluorene	20.000	19.588	2.1	99	0.00	8.63- 8.83
8		Phenanthrene	20.000	18.279	8.6	92	0.00	10.65-10.85
9		Anthracene	20.000	21.495	-7.5	110	0.00	10.69-10.89
10	S	O-Terphenyl	20.000	20.296	-1.5	103	0.00	11.55-11.75
11		Fluoranthene	20.000	19.980	0.1	101	0.00	13.02-13.22
12		Pyrene	20.000	20.419	-2.1	104	0.00	13.56-13.76
13		Benzo(a)Anthracene	20.000	19.668	1.7	100	0.00	15.91-16.11
14		Chrysene	20.000	20.404	-2.0	103	0.00	16.09-16.29
15		Benzo(b)Fluoranthene	20.000	18.938	5.3	96	0.00	17.97-18.17
16		Benzo(k)Fluoranthene	20.000	21.322	-6.6	109	0.00	18.02-18.22
17		Benzo(a) Pyrene	20.000	19.819	0.9	101	0.00	18.69-18.89
18		Indeno(1,2,3-cd)pyrene	20.000	18.259	8.7	93	0.00	20.45-20.65

Continuing Calibration Summary

Job Number: F22900
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GIJ953-ECC928
Lab FileID: IJ19593.D

19	Dibenzo(a,h)anthracene	20.000	21.090	-5.4	107	0.00	20.52-20.72
20	Benzo(g,h,i) Perylene	20.000	19.411	2.9	99	-0.01	21.06-21.26

(#) = Out of Range SPCC's out = 0 CCC's out = 0
IJ19184.D 8100_H2.M Tue Mar 30 08:01:03 2004

6.6

Continuing Calibration Summary

Job Number: F22900 **Sample:** GIJ954-CC928
Account: EEINCJX EEI **Lab FileID:** IJ19594.D
Project: Camp Lejeune-Campbell St. Fuel Farm

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\0330PAH\IJ19594.D\FID1B.CH Vial: 1
Signal #2 : C:\HPCHEM\1\DATA\0330PAH\IJ19594.D\FID2A.CH
Acq On : 30 Mar 2004 9:23 am Operator: sarahm
Sample : cc928-20 Inst : FID 1
Misc : op9972,gij954,1000,,,1,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : C:\HPCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title : PAH's BY EPA 610 OR 8100
Last Update : Fri Feb 27 08:33:10 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1		Naphthalene	20.000	19.964	0.2	101	0.00	4.08- 4.28
2		2-Methyl Naphthalene	20.000	19.783	1.1	100	0.00	4.98- 5.18
3		1-Methyl Naphthalene	20.000	21.159	-5.8	107	0.00	5.12- 5.32
4	S	2-Fluorobiphenyl	20.000	20.645	-3.2	107	0.00	5.61- 5.81
5		Acenaphthylene	20.000	20.025	-0.1	102	0.00	6.32- 6.52
6		Acenaphthene	20.000	20.290	-1.4	102	0.00	6.64- 6.84
7		Fluorene	20.000	19.959	0.2	100	0.00	7.51- 7.71
8		Phenanthrene	20.000	19.297	3.5	97	0.00	9.17- 9.37
9		Anthracene	20.000	21.145	-5.7	108	0.00	9.26- 9.46
10	S	O-Terphenyl	20.000	20.508	-2.5	104	0.00	10.14-10.34
11		Fluoranthene	20.000	20.209	-1.0	102	0.00	11.37-11.57
12		Pyrene	20.000	20.665	-3.3	106	0.00	11.74-11.94
13		Benzo(a)Anthracene	20.000	19.253	3.7	97	0.00	14.04-14.24
14		Chrysene	20.000	21.158	-5.8	108	0.00	14.11-14.31
15		Benzo(b)Fluoranthene	20.000	19.086	4.6	96	0.00	15.95-16.15
16		Benzo(k)Fluoranthene	20.000	21.223	-6.1	109	0.00	16.00-16.20
17		Benzo(a) Pyrene	20.000	20.248	-1.2	103	0.00	16.44-16.64
18		Indeno(1,2,3-cd)pyrene	20.000	18.437	7.8	94	0.00	18.12-18.32
19		Dibenzo(a,h)anthracene	20.000	19.894	0.5	102	0.00	18.20-18.40
20		Benzo(g,h,i) Perylene	20.000	19.510	2.4	98	-0.01	18.44-18.64
*****		Signal #2 *****						
1		Naphthalene	20.000	20.026	-0.1	102	-0.01	4.76- 4.96
2		2-Methyl Naphthalene	20.000	19.730	1.3	100	-0.01	5.64- 5.84
3		1-Methyl Naphthalene	20.000	21.291	-6.5	108	-0.01	5.90- 6.10
4	S	2-Fluorobiphenyl	20.000	20.275	-1.4	102	-0.01	6.42- 6.62
5		Acenaphthylene	20.000	20.345	-1.7	103	-0.01	7.51- 7.71
6		Acenaphthene	20.000	20.586	-2.9	104	-0.01	7.76- 7.96
7		Fluorene	20.000	20.024	-0.1	101	-0.01	8.63- 8.83
8		Phenanthrene	20.000	18.680	6.6	94	-0.01	10.65-10.85
9		Anthracene	20.000	21.961	-9.8	112	-0.01	10.69-10.89
10	S	O-Terphenyl	20.000	20.753	-3.8	105	-0.01	11.55-11.75
11		Fluoranthene	20.000	20.243	-1.2	103	-0.01	13.02-13.22
12		Pyrene	20.000	20.860	-4.3	106	-0.01	13.56-13.76
13		Benzo(a)Anthracene	20.000	20.089	-0.4	102	0.00	15.91-16.11
14		Chrysene	20.000	21.001	-5.0	106	0.00	16.09-16.29
15		Benzo(b)Fluoranthene	20.000	19.393	3.0	98	0.00	17.97-18.17
16		Benzo(k)Fluoranthene	20.000	21.972	-9.9	112	0.00	18.02-18.22
17		Benzo(a) Pyrene	20.000	20.371	-1.9	104	0.00	18.69-18.89
18		Indeno(1,2,3-cd)pyrene	20.000	18.829	5.9	96	-0.01	20.45-20.65

6.6

Continuing Calibration Summary

Job Number: F22900 **Sample:** GIJ954-CC928
Account: EEINCJX EEI **Lab FileID:** IJ19594.D
Project: Camp Lejeune-Campbell St. Fuel Farm

19	Dibenzo(a,h)anthracene	20.000	21.741	-8.7	110	-0.01	20.52-20.72
20	Benzo(g,h,i) Perylene	20.000	19.647	1.8	100	-0.02	21.06-21.26

(#) = Out of Range SPCC's out = 0 CCC's out = 0
IJ19184.D 8100_H2.M Tue Mar 30 13:20:02 2004

5.6

Continuing Calibration Summary

Job Number: F22900
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GIJ954-ECC928
Lab FileID: IJ19601.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\0330PAH\IJ19601.D\FID1B.CH Vial: 8
Signal #2 : C:\HPCHEM\1\DATA\0330PAH\IJ19601.D\FID2A.CH
Acq On : 30 Mar 2004 12:55 pm Operator: sarahm
Sample : ecc928-30 Inst : FID 1
Misc : op10055,gij954,990,,,1,5,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : C:\HPCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title : PAH's BY EPA 610 OR 8100
Last Update : Fri Feb 27 08:33:10 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1		Naphthalene	30.000	32.141	-7.1	108	0.00	4.08- 4.28
2		2-Methyl Naphthalene	30.000	31.866	-6.2	107	0.00	4.98- 5.18
3		1-Methyl Naphthalene	30.000	32.432	-8.1	110	0.00	5.12- 5.32
4	S	2-Fluorobiphenyl	30.000	32.805	-9.3	110	0.00	5.61- 5.81
5		Acenaphthylene	30.000	32.186	-7.3	109	0.00	6.32- 6.52
6		Acenaphthene	30.000	32.464	-8.2	110	0.00	6.64- 6.84
7		Fluorene	30.000	32.140	-7.1	108	0.00	7.51- 7.71
8		Phenanthrene	30.000	31.673	-5.6	105	0.00	9.17- 9.37
9		Anthracene	30.000	32.580	-8.6	111	0.00	9.26- 9.46
10	S	O-Terphenyl	30.000	32.226	-7.4	110	0.00	10.14-10.34
11		Fluoranthene	30.000	32.134	-7.1	108	0.00	11.37-11.57
12		Pyrene	30.000	32.746	-9.2	112	0.00	11.74-11.94
13		Benzo(a)Anthracene	30.000	31.411	-4.7	104	0.00	14.04-14.24
14		Chrysene	30.000	32.821	-9.4	112	0.00	14.11-14.31
15		Benzo(b)Fluoranthene	30.000	31.299	-4.3	104	0.00	15.95-16.15
16		Benzo(k)Fluoranthene	30.000	32.689	-9.0	113	0.00	16.00-16.20
17		Benzo(a) Pyrene	30.000	32.226	-7.4	109	0.00	16.44-16.64
18		Indeno(1,2,3-cd)pyrene	30.000	30.328	-1.1	102	0.00	18.12-18.32
19		Dibenzo(a,h)anthracene	30.000	31.629	-5.4	108	0.00	18.20-18.40
20		Benzo(g,h,i) Perylene	30.000	31.053	-3.5	106	0.00	18.44-18.64
*****		Signal #2 *****						
1		Naphthalene	30.000	31.815	-6.1	107	0.00	4.76- 4.96
2		2-Methyl Naphthalene	30.000	31.633	-5.4	106	0.00	5.64- 5.84
3		1-Methyl Naphthalene	30.000	33.005	-10.0	111	0.00	5.90- 6.10
4	S	2-Fluorobiphenyl	30.000	32.042	-6.8	107	0.00	6.42- 6.62
5		Acenaphthylene	30.000	32.406	-8.0	109	0.00	7.51- 7.71
6		Acenaphthene	30.000	32.739	-9.1	110	0.00	7.76- 7.96
7		Fluorene	30.000	32.110	-7.0	108	0.00	8.63- 8.83
8		Phenanthrene	30.000	30.543	-1.8	102	0.00	10.65-10.85
9		Anthracene	30.000	31.431	-4.8	108	0.00	10.69-10.89
10	S	O-Terphenyl	30.000	32.742	-9.1	110	0.00	11.55-11.75
11		Fluoranthene	30.000	32.214	-7.4	109	0.00	13.02-13.22
12		Pyrene	30.000	32.545	-8.5	110	0.00	13.56-13.76
13		Benzo(a)Anthracene	30.000	32.093	-7.0	108	0.00	15.91-16.11
14		Chrysene	30.000	32.831	-9.4	111	0.00	16.09-16.29
15		Benzo(b)Fluoranthene	30.000	31.222	-4.1	105	0.00	17.97-18.17
16		Benzo(k)Fluoranthene	30.000	33.407	-11.4	113	0.00	18.02-18.22
17		Benzo(a) Pyrene	30.000	32.613	-8.7	110	0.00	18.69-18.89
18		Indeno(1,2,3-cd)pyrene	30.000	30.993	-3.3	104	0.00	20.45-20.65

Continuing Calibration Summary

Job Number: F22900 **Sample:** GIJ954-ECC928
Account: EEINCJX EEI **Lab FileID:** IJ19601.D
Project: Camp Lejeune-Campbell St. Fuel Farm

19	Dibenzo(a,h)anthracene	30.000	34.259	-14.2	117	0.00	20.52-20.72
20	Benzo(g,h,i) Perylene	30.000	31.951	-6.5	109	0.00	21.06-21.26

(#) = Out of Range SPCC's out = 0 CCC's out = 0
IJ19185.D 8100_H2.M Tue Mar 30 13:28:39 2004

June 2004 Laboratory Reports

Southeast
ACCUTEST.
Laboratories

12/08/05

Technical Report for

EEI

CSFF MCAS New River

CTO 3

Accutest Job Number: F25003

Sampling Dates: 06/21/04 - 06/23/04

Report to:

EEI

bmorris@eeimail.com

ATTN: Bill Morris

Total number of pages in report: 184

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its eutirety, without the written approval of Accutest Laboratories.

Table of Contents

Sections: 1 2 3 4 5 6 7 8

Section 1: Sample Summary **4**
Section 2: Case Narrative/Conformance Summary **6**
Section 3: Sample Results **8**
3.1: F25003-1: USTCSFF-MW03 8
3.2: F25003-2: USTCSFF-MW16 11
3.3: F25003-3: USTCSFF-MW12 14
3.4: F25003-4: USTCSFF-MW14 17
3.5: F25003-5: USTCSFF-MW11 20
3.6: F25003-6: USTCSFF-DW02 23
3.7: F25003-7: USTCSFF-13DW1 26
3.8: F25003-8: USTCSFF-13DMW1 29
3.9: F25003-9: USTCSFF-122MW8 32
3.10: F25003-10: USTCSFF-122MW4 35
3.11: F25003-11: USTCSFF-122MW9 38
3.12: F25003-12: USTCSFF-DUP 41
3.13: F25003-13: USTCSFF-122MW3 44
3.14: F25003-14: USTCSFF-122MW7 47
3.15: F25003-15: USTCSFF-RWC1 50
3.16: F25003-16: USTCSFF-RWB1 52
3.17: F25003-17: USTCSFF-DWG 54
3.18: F25003-18: USTCSFF-MW21 57
3.19: F25003-19: USTCSFF-RWB4 60
3.20: F25003-20: USTCSFF-MW24 62
3.21: F25003-21: USTCSFF-RWB3 65
3.22: F25003-22: USTCSFF-EFFLUENT 67
3.23: F25003-23: TRIP BLANK 71
Section 4: Misc. Forms **72**
4.1: Chain of Custody 73
Section 5: GC Volatiles - QC Data Summaries **76**
5.1: Method Blank Summary 77
5.2: Blank Spike Summary 81
5.3: Matrix Spike/Matrix Spike Duplicate Summary 87
5.4: Surrogate Recovery Summaries 91
5.5: GC Surrogate Retention Time Summaries 94
5.6: Initial and Continuing Calibration Summaries 105
Section 6: GC Semi-volatiles - QC Data Summaries **123**
6.1: Method Blank Summary 124
6.2: Blank Spike Summary 126
6.3: Matrix Spike/Matrix Spike Duplicate Summary 127
6.4: Surrogate Recovery Summaries 128
6.5: GC Surrogate Retention Time Summaries 129
6.6: Initial and Continuing Calibration Summaries 133

Sections: 1 2 3 4 5 6 7 8

Table of Contents

Section 7: Metals Analysis - QC Data Summaries 147
7.1: Inst QC MA3864: Hg 148
7.2: Inst QC MA3887: As,Ba,Be,Cd,Cr,Fe,Pb,Mg,Se 155
7.3: Prep QC MP6828: Hg 173
7.4: Prep QC MP6889: As,Ba,Be,Cd,Cr,Fe,Pb,Mg,Se 177
Section 8: General Chemistry - QC Data Summaries 182
8.1: Method Blank and Spike Results Summary 183
8.2: Duplicate Results Summary 184

Sample Summary

EEI

Job No: F25003

CSFF MCAS New River
Project No: CTO 3

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
F25003-1	06/21/04	12:45	BS	06/24/04	AQ	Ground Water	USTCSFF-MW03
F25003-2	06/21/04	13:15	BS	06/24/04	AQ	Ground Water	USTCSFF-MW16
F25003-3	06/21/04	14:10	BS	06/24/04	AQ	Ground Water	USTCSFF-MW12
F25003-4	06/21/04	15:02	BS	06/24/04	AQ	Ground Water	USTCSFF-MW14
F25003-5	06/21/04	15:40	BS	06/24/04	AQ	Ground Water	USTCSFF-MW11
F25003-6	06/21/04	16:25	BS	06/24/04	AQ	Ground Water	USTCSFF-DW02
F25003-7	06/22/04	11:10	BS	06/24/04	AQ	Ground Water	USTCSFF-13DW1
F25003-8	06/22/04	11:40	BS	06/24/04	AQ	Ground Water	USTCSFF-13DMW1
F25003-9	06/22/04	12:15	BS	06/24/04	AQ	Ground Water	USTCSFF-122MW8
F25003-10	06/22/04	13:05	BS	06/24/04	AQ	Ground Water	USTCSFF-122MW4
F25003-11	06/22/04	14:00	BS	06/24/04	AQ	Ground Water	USTCSFF-122MW9
F25003-12	06/22/04	00:00	BS	06/24/04	AQ	Ground Water	USTCSFF-DUP
F25003-13	06/22/04	14:35	BS	06/24/04	AQ	Ground Water	USTCSFF-122MW3

1

Sample Summary
(continued)

EEI

Job No: F25003

CSFF MCAS New River
Project No: CTO 3

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
F25003-14	06/22/04	15:40	BS	06/24/04	AQ	Ground Water	USTCSFF-122MW7
F25003-15	06/23/04	09:25	BS	06/24/04	AQ	Ground Water	USTCSFF-RWC1
F25003-16	06/23/04	10:03	BS	06/24/04	AQ	Ground Water	USTCSFF-RWB1
F25003-17	06/23/04	10:35	BS	06/24/04	AQ	Ground Water	USTCSFF-DWG
F25003-18	06/23/04	11:30	BS	06/24/04	AQ	Ground Water	USTCSFF-MW21
F25003-19	06/23/04	11:40	BS	06/24/04	AQ	Ground Water	USTCSFF-RWB4
F25003-20	06/23/04	12:10	BS	06/24/04	AQ	Ground Water	USTCSFF-MW24
F25003-21	06/23/04	12:00	BS	06/24/04	AQ	Ground Water	USTCSFF-RWB3
F25003-22	06/23/04	12:45	BS	06/24/04	AQ	Ground Water	USTCSFF-EFFLUENT
F25003-23	06/23/04	14:45	BS	06/24/04	AQ	Trip Blank Water	TRIP BLANK

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: EEI **Job No:** F25003

Site: CSFF MCAS New River **Report Date** 7/16/04 11:10:22 AM

22 Samples, 1 Trip Blank were collected on between 06/21/2004 and 06/23/2004 and were reeeived at Accutest on 06/24/2004 properly preserved, at 4.2 Deg. C and intact. These Samples received an Accutest job number of F25003. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GC By Method EPA 504.1

Matrix: AQ **Batch ID:** OP10813

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

Sample(s) F25059-1MS, F25059-1MSD were used as the QC samples indicated.

All method blanks for this batch meet method specific criteria.

Sample(s) OP10813-MS, OP10813-MSD have surrogates outside control limits due to dilution. Dilution eaused by high concentration of EDB in the sample. MSD recovery is also outside of control limits. Sample spiked is not part of F2503 job. Blank Spike passed, method performance in clean matrix not affected.

Matrix: AQ **Batch ID:** OPI0815

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

Sample(s) F25003-17MS, F25003-17MSD were used as the QC samples indicated.

All method blanks for this batch meet method specific criteria.

Volatiles by GC By Method EPA 601/602

Matrix: AQ **Batch ID:** GEF3230

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) F25003-6MS, F25003-6MSD were used as the QC samples indieated.

F25003-2: Confirmed by GC/MS

Matrix: AQ **Batch ID:** GEF3235

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method speeifie criteria.

Sample(s) F25042-11MS, F25042-11MSD were used as the QC samples indicated.

F25003-20: Sample vial(s) contained significant headspace; reported results are considered minimum values.

F25003-19: Sample vial(s) contained signifieant headspace; reported results are considered minimum values.

Extractables by GC By Method EPA 610

Matrix: AQ **Batch ID:** OP10778

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specifie criteria.

Sample(s) F25003-13MS, F25003-13MSD were used as the QC samples indicated.

Sample F25003-7 have surrogates outside control limits due to dilution. Surrogated in control in the straight run. Data not adversely affected.

Metals By Method SW846 6010B

Matrix: AQ **Batch ID:** MP6889

All samples were digested within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this bateh meet method specific eriteria.

Sample(s) F25151-1DUP, F25151-1MS, F25151-1MSD, F25151-1SDL were used as the QC samples for metals.

RPD(s) for Duplicate for Arsenic, Iron, Lead are outside control limits. RPD acceptable due to low duplieate and sample concentrations.

RPD(s) for Serial Dilution for Arsenic, Barium, Iron, Lead are outside control limits. Percent differenee aceeptable due to low initial sample eoncentration (< 50 times IDL).

Metals By Method SW846 7470A

Matrix: AQ **Batch ID:** MP6828

All samples were digested within the rccommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch mcct method specifie criteria.

Sample(s) F25024-1MS, F25024-1MSD, F25024-1DUP were used as the QC samples for metals.

RPD(s) for Duplieatc for Mercury are outside control limits. RPD acceptable duc to low duplicate and sample concentrations.

Wet Chemistry By Method EPA 160.1

Matrix: AQ **Batch ID:** GN14896

All samples were analyzed within the reeommended method holding time.

All method hlanks for this batch meet method specific criteria.

Sample(s) F24907-1DUP were used as the QC samples for Solids, Total Dissolvcd.

Wet Chemistry By Method EPA 160.2

Matrix: AQ **Batch ID:** GN14895

All samples were analyzed within thc recommended method holding time.

All mcthod blanks for this batch meet method specific criteria.

Sample(s) F24907-1DUP werc used as the QC samples for Solids, Total Suspended.

Accutest Laboratories Southeast (ALSE) eertifies that this report meets the project requirements for analytical data produced for the samples as received at ALSE and as stated on the COC. ALSE certifies that the data meets the Data Quality Objeetives for precision, accuracy and completeness as specified in the ALSE Quality Manual except as noted abovc. This report is to be used in its entirety. ALSE is not responsible for any assumptions of data quality if partial data packages are used

Narrative prepared by:

Svctlana Izosimova, QAO (signature on file)

Date: July 16, 2004

Report of Analysis

Client Sample ID:	USTCSFF-MW03		
Lab Sample ID:	F25003-1	**Date Sampled:**	06/21/04
Matrix:	AQ - Ground Water	**Date Received:**	06/24/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF040875.D	1	07/01/04	CV	n/a	n/a	GEF3230
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	89%		70-123%
98-08-8	aaa-Trifluorotoluene	98%		73-122%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW03		
Lab Sample ID:	F25003-1	**Date Sampled:**	06/21/04
Matrix:	AQ - Ground Water	**Date Received:**	06/24/04
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD16973.D	1	07/01/04	AA	07/01/04	OP10813	GDD532
Run #2							

	Initial Volume	Final Volume
Run #1	36.8 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0095	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	71%		60-139%

ND = Not detected MDL - Method Deteetion Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW03		
Lab Sample ID:	F25003-1	**Date Sampled:**	06/21/04
Matrix:	AQ - Ground Water	**Date Received:**	06/24/04
Method:	EPA 610 EPA 610	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IJ20179.D	1	06/29/04	SD	06/28/04	OP10778	GIJ988
Run #2							

	Initial Volume	Final Volume
Run #1	990 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.1	2.0	ug/l	
208-96-8	Acenaphthylene	ND	5.1	2.0	ug/l	
120-12-7	Anthracene	ND	5.1	2.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.1	2.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.1	2.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.1	2.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.1	2.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.1	2.0	ug/l	
218-01-9	Chrysene	ND	5.1	2.0	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.1	2.0	ug/l	
206-44-0	Fluoranthene	ND	5.1	2.0	ug/l	
86-73-7	Fluorene	ND	5.1	2.0	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.1	2.0	ug/l	
91-20-3	Naphthalene	ND	5.1	2.0	ug/l	
90-12-0	1-Methylnaphthalene	ND	5.1	2.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.1	2.0	ug/l	
85-01-8	Phenanthrene	ND	5.1	2.0	ug/l	
129-00-0	Pyrene	ND	5.1	2.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	83%		42-123%
84-15-1	o-Terphenyl	94%		51-123%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidenee of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW16		
Lab Sample ID:	F25003-2	**Date Sampled:**	06/21/04
Matrix:	AQ - Ground Water	**Date Received:**	06/24/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	EF040876.D	1	07/01/04	CV	n/a	n/a	GEF3230
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	58.3	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene [b]	ND	50	50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	7.2	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	16.7	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	93%		70-123%
98-08-8	aaa-Trifluorotoluene	94%		73-122%

(a) Confirmed by GC/MS
(b) Elevated reporting limits due to matrix interference.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW16		
Lab Sample ID:	F25003-2	**Date Sampled:**	06/21/04
Matrix:	AQ - Ground Water	**Date Received:**	06/24/04
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD16975.D	1	07/01/04	AA	07/01/04	OP10813	GDD532
Run #2							

	Initial Volume	Final Volume
Run #1	38.5 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.018	0.0091	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	69%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW16		
Lab Sample ID:	F25003-2	**Date Sampled:**	06/21/04
Matrix:	AQ - Ground Water	**Date Received:**	06/24/04
Method:	EPA 610 EPA 610	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IJ20180.D	1	06/29/04	SD	06/28/04	OP10778	GIJ988
Run #2 [a]	IJ20204.D	4	06/30/04	SD	06/28/04	OP10778	GIJ989

	Initial Volume	Final Volume
Run #1	960 ml	1.0 ml
Run #2	960 ml	1.0 ml

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.2	2.1	ug/l	
208-96-8	Acenaphthylene	ND	5.2	2.1	ug/l	
120-12-7	Anthracene	ND	5.2	2.1	ug/l	
56-55-3	Benzo(a)anthraeene	ND	5.2	2.1	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.2	2.1	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.2	2.1	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.2	2.1	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.2	2.1	ug/l	
218-01-9	Chrysene	ND	5.2	2.1	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.2	2.1	ug/l	
206-44-0	Fluoranthene	ND	5.2	2.1	ug/l	
86-73-7	Fluorene	ND	5.2	2.1	ug/l	
193-39-5	Indeno(1,2,3-ed)pyrene	ND	5.2	2.1	ug/l	
91-20-3	Naphthalene	94.5 [b]	21	8.3	ug/l	
90-12-0	1-MethyInaphthalene	54.2 [b]	21	8.3	ug/l	
91-57-6	2-MethyInaphthalene	73.4 [b]	21	8.3	ug/l	
85-01-8	Phenanthrene	ND	5.2	2.1	ug/l	
129-00-0	Pyrene	ND	5.2	2.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	123%	118%	42-123%
84-15-1	o-Terphenyl	77%	72%	51-123%

(a) All hits confirmed by dual eolumn analysis.
(b) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds ealibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW12		
Lab Sample ID:	F25003-3	**Date Sampled:**	06/21/04
Matrix:	AQ - Ground Water	**Date Received:**	06/24/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	EF040877.D	1	07/02/04	CV	n/a	n/a	GEF3230
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene [b]	ND	20	20	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	0.56	1.0	0.50	ug/l	J
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	94%		70-123%
98-08-8	aaa-Trifluorotoluene	97%		73-122%

(a) All hits confirmed by dual column analysis.
(b) Elevated reporting limits due to matrix interference.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW12		
Lab Sample ID:	F25003-3	**Date Sampled:**	06/21/04
Matrix:	AQ - Ground Water	**Date Received:**	06/24/04
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD16976.D	1	07/02/04	AA	07/01/04	OP10813	GDD532
Run #2							

	Initial Volume	Final Volume
Run #1	37.9 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.018	0.0092	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	75%		60-139%

ND = Not deteeted MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidenee of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW12		
Lab Sample ID:	F25003-3	**Date Sampled:**	06/21/04
Matrix:	AQ - Ground Water	**Date Received:**	06/24/04
Method:	EPA 610 EPA 610	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	IJ20181.D	1	06/29/04	SD	06/28/04	OP10778	GIJ988
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.0	2.0	ug/l	
208-96-8	Acenaphthylene	ND	5.0	2.0	ug/l	
120-12-7	Anthracene	ND	5.0	2.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.0	2.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.0	2.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.0	2.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.0	2.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.0	2.0	ug/l	
218-01-9	Chrysene	ND	5.0	2.0	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.0	2.0	ug/l	
206-44-0	Fluoranthene	ND	5.0	2.0	ug/l	
86-73-7	Fluorene	ND	5.0	2.0	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.0	2.0	ug/l	
91-20-3	Naphthalene	16.7	5.0	2.0	ug/l	
90-12-0	1-Methylnaphthalene	8.4	5.0	2.0	ug/l	
91-57-6	2-Methylnaphthalene	7.4	5.0	2.0	ug/l	
85-01-8	Phenanthrene	ND	5.0	2.0	ug/l	
129-00-0	Pyrene	ND	5.0	2.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	98%		42-123%
84-15-1	o-Terphenyl	110%		51-123%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exeeeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indieates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW14		
Lab Sample ID:	F25003-4	**Date Sampled:**	06/21/04
Matrix:	AQ - Ground Water	**Date Received:**	06/24/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF040878.D	1	07/02/04	CV	n/a	n/a	GEF3230
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene [a]	ND	5.0	5.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	91%		70-123%
98-08-8	aaa-Trifluorotoluene	96%		73-122%

(a) Elevated reporting limits due to matrix interference.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW14		
Lab Sample ID:	F25003-4	**Date Sampled:**	06/21/04
Matrix:	AQ - Ground Water	**Date Received:**	06/24/04
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD16977.D	1	07/02/04	AA	07/01/04	OP10813	GDD532
Run #2							

	Initial Volume	Final Volume
Run #1	37.8 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0093	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	67%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW14		
Lab Sample ID:	F25003-4	**Date Sampled:**	06/21/04
Matrix:	AQ - Ground Water	**Date Received:**	06/24/04
Method:	EPA 610 EPA 610	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IJ20182.D	1	06/29/04	SD	06/28/04	OP10778	GIJ988
Run #2							

	Initial Volume	Final Volume
Run #1	970 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.2	2.1	ug/l	
208-96-8	Acenaphthylene	ND	5.2	2.1	ug/l	
120-12-7	Anthracene	ND	5.2	2.1	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.2	2.1	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.2	2.1	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.2	2.1	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.2	2.1	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.2	2.1	ug/l	
218-01-9	Chrysene	ND	5.2	2.1	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.2	2.1	ug/l	
206-44-0	Fluoranthene	ND	5.2	2.1	ug/l	
86-73-7	Fluorene	ND	5.2	2.1	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.2	2.1	ug/l	
91-20-3	Naphthalene	ND	5.2	2.1	ug/l	
90-12-0	1-Methylnaphthalene	ND	5.2	2.1	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.2	2.1	ug/l	
85-01-8	Phenanthrene	ND	5.2	2.1	ug/l	
129-00-0	Pyrene	ND	5.2	2.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	96%		42-123%
84-15-1	o-Terphenyl	108%		51-123%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW11		
Lab Sample ID:	F25003-5	**Date Sampled:**	06/21/04
Matrix:	AQ - Ground Water	**Date Received:**	06/24/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF040873.D	1	07/01/04	CV	n/a	n/a	GEF3230
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	91%		70-123%
98-08-8	aaa-Trifluorotoluene	94%		73-122%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW11		
Lab Sample ID:	F25003-5	**Date Sampled:**	06/21/04
Matrix:	AQ - Ground Water	**Date Received:**	06/24/04
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD16978.D	1	07/02/04	AA	07/01/04	OP10813	GDD532
Run #2							

	Initial Volume	Final Volume
Run #1	37.3 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0094	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	77%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a componnd

Report of Analysis

Client Sample ID:	USTCSFF-MW11		
Lab Sample ID:	F25003-5	**Date Sampled:**	06/21/04
Matrix:	AQ - Ground Water	**Date Received:**	06/24/04
Method:	EPA 610 EPA 610	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IJ20183.D	1	06/29/04	SD	06/28/04	OP10778	GIJ988
Run #2							

	Initial Volume	Final Volume
Run #1	980 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.1	2.0	ug/l	
208-96-8	Acenaphthylene	ND	5.1	2.0	ug/l	
120-12-7	Anthracene	ND	5.1	2.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.1	2.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.1	2.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.1	2.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.1	2.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.1	2.0	ug/l	
218-01-9	Chrysene	ND	5.1	2.0	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.1	2.0	ug/l	
206-44-0	Fluoranthene	ND	5.1	2.0	ug/l	
86-73-7	Fluorene	ND	5.1	2.0	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.1	2.0	ug/l	
91-20-3	Naphthalene	ND	5.1	2.0	ug/l	
90-12-0	1-Methylnaphthalene	ND	5.1	2.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.1	2.0	ug/l	
85-01-8	Phenanthrene	ND	5.1	2.0	ug/l	
129-00-0	Pyrene	ND	5.1	2.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	69%		42-123%
84-15-1	o-Terphenyl	80%		51-123%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indieates an estimated value
B = Indicates analyte found in associated method blank
N = Indieates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-DW02		
Lab Sample ID:	F25003-6	**Date Sampled:**	06/21/04
Matrix:	AQ - Ground Water	**Date Received:**	06/24/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF040870.D	1	07/01/04	CV	n/a	n/a	GEF3230
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	90%		70-123%
98-08-8	aaa-Trifluorotoluene	94%		73-122%

ND = Not deteeted MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-DW02		
Lab Sample ID:	F25003-6	**Date Sampled:**	06/21/04
Matrix:	AQ - Ground Water	**Date Received:**	06/24/04
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD16979.D	1	07/02/04	AA	07/01/04	OP10813	GDD532
Run #2							

	Initial Volume	Final Volume
Run #1	37.4 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0094	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	92%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-DW02		
Lab Sample ID:	F25003-6	**Date Sampled:**	06/21/04
Matrix:	AQ - Ground Water	**Date Received:**	06/24/04
Method:	EPA 610 EPA 610	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	IJ20184.D	1	06/29/04	SD	06/28/04	OP10778	GIJ988
Run #2							

	Initial Volume	Final Volume
Run #1	980 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	26.5	5.1	2.0	ug/l	
208-96-8	Acenaphthylene	ND	5.1	2.0	ug/l	
120-12-7	Anthracene	ND	5.1	2.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.1	2.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.1	2.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.1	2.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.1	2.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.1	2.0	ug/l	
218-01-9	Chrysene	ND	5.1	2.0	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.1	2.0	ug/l	
206-44-0	Fluoranthene	ND	5.1	2.0	ug/l	
86-73-7	Fluorene	20.1	5.1	2.0	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.1	2.0	ug/l	
91-20-3	Naphthalene	12.6	5.1	2.0	ug/l	
90-12-0	1-Methylnaphthalene	ND	5.1	2.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.1	2.0	ug/l	
85-01-8	Phenanthrene	ND	5.1	2.0	ug/l	
129-00-0	Pyrene	ND	5.1	2.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	101%		42-123%
84-15-1	o-Terphenyl	110%		51-123%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-13DW1		
Lab Sample ID:	F25003-7	**Date Sampled:**	06/22/04
Matrix:	AQ - Ground Water	**Date Received:**	06/24/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	EF040879.D	1	07/02/04	CV	n/a	n/a	GEF3230
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	8.7	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	7.7	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	1.8	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	12.9	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	95%		70-123%
98-08-8	aaa-Trifluorotoluene	96%		73-122%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-13DW1		
Lab Sample ID:	F25003-7	**Date Sampled:**	06/22/04
Matrix:	AQ - Ground Water	**Date Received:**	06/24/04
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD16980.D	1	07/02/04	AA	07/01/04	OP10813	GDD532
Run #2							

	Initial Volume	Final Volume
Run #1	37.4 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0094	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	88%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidenee of a compound

Report of Analysis

Client Sample ID:	USTCSFF-13DW1		
Lab Sample ID:	F25003-7	**Date Sampled:**	06/22/04
Matrix:	AQ - Ground Water	**Date Received:**	06/24/04
Mcthod:	EPA 610 EPA 610	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	IJ20185.D	1	06/29/04	SD	06/28/04	OP10778	GIJ988
Run #2 [a]	IJ20206.D	4	06/30/04	SD	06/28/04	OP10778	GIJ989
Run #3 [a]	IJ20205.D	40	06/30/04	SD	06/28/04	OP10778	GIJ989

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2	1000 ml	1.0 ml
Run #3	1000 ml	1.0 ml

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	76.2 [b]	20	8.0	ug/l	
208-96-8	Acenaphthylene	ND [b]	20	8.0	ug/l	
120-12-7	Anthracene	ND	5.0	2.0	ug/l	
56-55-3	Benzo(a)anthraeene	ND	5.0	2.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.0	2.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.0	2.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.0	2.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.0	2.0	ug/l	
218-01-9	Chrysene	ND	5.0	2.0	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.0	2.0	ug/l	
206-44-0	Fluoranthene	ND	5.0	2.0	ug/l	
86-73-7	Fluorene	30.9	5.0	2.0	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.0	2.0	ug/l	
91-20-3	Naphthalene	1140 [c]	200	80	ug/l	
90-12-0	1-Methylnaphthalene	78.9 [b]	20	8.0	ug/l	
91-57-6	2-Methylnaphthalene	128 [b]	20	8.0	ug/l	
85-01-8	Phenanthrene	2.5	5.0	2.0	ug/l	J
129-00-0	Pyrene	ND	5.0	2.0	ug/l	

CAS No.	Surrogatc Recoveries	Run# 1	Rnn# 2	Run# 3	Limits
321-60-8	2-Fluorobiphenyl	113%	117%	0% [d]	42-123%
84-15-1	o-Terphenyl	120%	105%	0% [d]	51-123%

(a) All hits confirmed by dual column analysis.
(b) Result is from Run# 2
(e) Result is from Run# 3
(d) Outside control limits due to dilution.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indieates analyte found in associated method blank
N = Indicates presumptive evidenee of a compound

Report of Analysis

Client Sample ID:	USTCSFF-13DMW1		
Lab Sample ID:	F25003-8	**Date Sampled:**	06/22/04
Matrix:	AQ - Ground Water	**Date Received:**	06/24/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	EF040880.D	1	07/02/04	CV	n/a	n/a	GEF3230
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Uuits	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene [b]	ND	50	50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	0.67	1.0	0.50	ug/l	J
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	3.9	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	94%		70-123%
98-08-8	aaa-Trifluorotoluene	96%		73-122%

(a) All hits confirmed by dual column analysis.
(b) Elevated reporting limits due to matrix interference.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indieates value exceeds calibration range
J = Indieates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-13DMW1		
Lab Sample ID:	F25003-8	**Date Sampled:**	06/22/04
Matrix:	AQ - Ground Water	**Date Received:**	06/24/04
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD16981.D	1	07/02/04	AA	07/01/04	OP10813	GDD532
Run #2							

	Initial Volume	Final Volnme
Run #1	38.6 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.018	0.0091	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	72%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-13DMW1		
Lab Sample ID:	F25003-8	**Date Sampled:**	06/22/04
Matrix:	AQ - Ground Water	**Date Received:**	06/24/04
Method:	EPA 610 EPA 610	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IJ20186.D	1	06/29/04	SD	06/28/04	OP10778	GIJ988
Run #2 [a]	IJ20207.D	5	06/30/04	SD	06/28/04	OP10778	GIJ989

	Initial Volume	Final Volume
Run #1	910 ml	1.0 ml
Run #2	910 ml	1.0 ml

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.5	2.2	ug/l	
208-96-8	Acenaphthylene	ND	5.5	2.2	ug/l	
120-12-7	Anthracene	ND	5.5	2.2	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.5	2.2	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.5	2.2	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.5	2.2	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.5	2.2	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.5	2.2	ug/l	
218-01-9	Chrysene	ND	5.5	2.2	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.5	2.2	ug/l	
206-44-0	Fluoranthene	ND	5.5	2.2	ug/l	
86-73-7	Fluorene	ND	5.5	2.2	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.5	2.2	ug/l	
91-20-3	Naphthalene	132 [b]	27	11	ug/l	
90-12-0	1-Methylnaphthalene	71.7 [b]	27	11	ug/l	
91-57-6	2-Methylnaphthalene	89.0 [b]	27	11	ug/l	
85-01-8	Phenanthrene	ND	5.5	2.2	ug/l	
129-00-0	Pyrene	ND	5.5	2.2	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	106%	88%	42-123%
84-15-1	o-Terphenyl	107%	103%	51-123%

(a) All hits confirmed by dual column analysis.
(b) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-122MW8		
Lab Sample ID:	F25003-9	**Date Sampled:**	06/22/04
Matrix:	AQ - Ground Water	**Date Received:**	06/24/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF040881.D	1	07/02/04	CV	n/a	n/a	GEF3230
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene [a]	ND	5.0	5.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	91%		70-123%
98-08-8	aaa-Trifluorotoluene	95%		73-122%

(a) Elevated reporting limits due to matrix interference.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-122MW8		
Lab Sample ID:	F25003-9	**Date Sampled:**	06/22/04
Matrix:	AQ - Ground Water	**Date Received:**	06/24/04
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD16982.D	1	07/02/04	AA	07/01/04	OP10813	GDD532
Run #2							

	Initial Volume	Final Volume
Run #1	37.8 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0093	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	65%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in assoeiated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-122MW8		
Lab Sample ID:	F25003-9	**Date Sampled:**	06/22/04
Matrix:	AQ - Ground Water	**Date Received:**	06/24/04
Method:	EPA 610 EPA 610	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	IJ20188.D	1	06/29/04	SD	06/28/04	OP10778	GIJ988
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	3.2	5.0	2.0	ug/l	J
208-96-8	Acenaphthylene	ND	5.0	2.0	ug/l	
120-12-7	Anthracene	ND	5.0	2.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.0	2.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.0	2.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.0	2.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.0	2.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.0	2.0	ug/l	
218-01-9	Chrysene	ND	5.0	2.0	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.0	2.0	ug/l	
206-44-0	Fluoranthene	ND	5.0	2.0	ug/l	
86-73-7	Fluorene	ND	5.0	2.0	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.0	2.0	ug/l	
91-20-3	Naphthalene	3.6	5.0	2.0	ug/l	J
90-12-0	1-Methylnaphthalene	ND	5.0	2.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.0	2.0	ug/l	
85-01-8	Phenanthrene	ND	5.0	2.0	ug/l	
129-00-0	Pyrene	ND	5.0	2.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	93%		42-123%
84-15-1	o-Terphenyl	105%		51-123%

(a) All hits eonfirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-122MW4		
Lab Sample ID:	F25003-10	**Date Sampled:**	06/22/04
Matrix:	AQ - Ground Water	**Date Received:**	06/24/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF040882.D	1	07/02/04	CV	n/a	n/a	GEF3230
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	90%		70-123%
98-08-8	aaa-Trifluorotoluene	93%		73-122%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds ealibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-122MW4		
Lab Sample ID:	F25003-10	**Date Sampled:**	06/22/04
Matrix:	AQ - Ground Water	**Date Received:**	06/24/04
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD16983.D	1	07/02/04	AA	07/01/04	OP10813	GDD532
Run #2							

	Initial Volume	Fiual Volume
Run #1	37.8 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0093	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	72%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidenee of a compound

Report of Analysis

Client Sample ID:	USTCSFF-122MW4		
Lab Sample ID:	F25003-10	**Date Sampled:**	06/22/04
Matrix:	AQ - Ground Water	**Date Received:**	06/24/04
Method:	EPA 610 EPA 610	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IJ20189.D	1	06/29/04	SD	06/28/04	OP10778	GIJ988
Run #2							

	Initial Volume	Final Volnme
Run #1	980 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.1	2.0	ug/l	
208-96-8	Acenaphthylene	ND	5.1	2.0	ug/l	
120-12-7	Anthracene	ND	5.1	2.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.1	2.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.1	2.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.1	2.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.1	2.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.1	2.0	ug/l	
218-01-9	Chrysene	ND	5.1	2.0	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.1	2.0	ug/l	
206-44-0	Fluoranthene	ND	5.1	2.0	ug/l	
86-73-7	Fluorene	ND	5.1	2.0	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.1	2.0	ug/l	
91-20-3	Naphthalene	17.7	5.1	2.0	ug/l	
90-12-0	1-Methylnaphthalene	ND	5.1	2.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.1	2.0	ug/l	
85-01-8	Phenanthrene	ND	5.1	2.0	ug/l	
129-00-0	Pyrene	ND	5.1	2.0	ug/l	

CAS No.	Surrogate Recovcrics	Rnn# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	87%		42-123%
84-15-1	o-Terphenyl	98%		51-123%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-122MW9		
Lab Sample ID:	F25003-11	**Date Sampled:**	06/22/04
Matrix:	AQ - Ground Water	**Date Received:**	06/24/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	EF041009.D	1	07/06/04	CV	n/a	n/a	GEF3235
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene [b]	ND	20	20	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene [b]	ND	5.0	5.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	1.5	3.0	1.0	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	91%		70-123%
98-08-8	aaa-Trifluorotoluene	96%		73-122%

(a) All hits confirmed by dual column analysis.
(b) Elevated reporting limits due to matrix interference.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-122MW9		
Lab Sample ID:	F25003-11	**Date Sampled:**	06/22/04
Matrix:	AQ - Ground Water	**Date Received:**	06/24/04
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD16984.D	1	07/02/04	AA	07/01/04	OP10813	GDD532
Run #2							

	Initial Volnme	Final Volume
Run #1	37.6 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0093	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	72%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-122MW9		
Lab Sample ID:	F25003-11	**Date Sampled:**	06/22/04
Matrix:	AQ - Ground Water	**Date Received:**	06/24/04
Method:	EPA 610 EPA 610	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	IJ20190.D	1	06/29/04	SD	06/28/04	OP10778	GIJ988
Run #2							

	Initial Volume	Final Volume
Run #1	970 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.2	2.1	ug/l	
208-96-8	Acenaphthylene	ND	5.2	2.1	ug/l	
120-12-7	Anthracene	ND	5.2	2.1	ug/l	
56-55-3	Benzo(a)anthraeene	ND	5.2	2.1	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.2	2.1	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.2	2.1	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.2	2.1	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.2	2.1	ug/l	
218-01-9	Chrysene	ND	5.2	2.1	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.2	2.1	ug/l	
206-44-0	Fluoranthene	ND	5.2	2.1	ug/l	
86-73-7	Fluorene	ND	5.2	2.1	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.2	2.1	ug/l	
91-20-3	Naphthaleue	22.2	5.2	2.1	ug/l	
90-12-0	1-Methylnaphthalene	16.2	5.2	2.1	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.2	2.1	ug/l	
85-01-8	Phenanthrene	ND	5.2	2.1	ug/l	
129-00-0	Pyrene	ND	5.2	2.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	119%		42-123%
84-15-1	o-Terphenyl	101%		51-123%

(a) All hits eonfirmed by dual column analysis.

ND = Not deteeted MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in assoeiated method blank
N = Indicates presumptive evidenee of a compound

Report of Analysis

Client Sample ID:	USTCSFF-DUP		
Lab Sample ID:	F25003-12	**Date Sampled:**	06/22/04
Matrix:	AQ - Ground Water	**Date Received:**	06/24/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	EF040886.D	1	07/02/04	CV	n/a	n/a	GEF3230
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compouud	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene [b]	ND	50	50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	0.70	1.0	0.50	ug/l	J
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	4.2	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	97%		70-123%
98-08-8	aaa-Trifluorotoluene	98%		73-122%

(a) All hits confirmed by dual eolumn analysis.
(b) Elevated reporting limits due to matrix interference.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exeeeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-DUP		
Lab Sample ID:	F25003-12	**Date Sampled:**	06/22/04
Matrix:	AQ - Ground Water	**Date Received:**	06/24/04
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD16986.D	1	07/02/04	AA	07/01/04	OP10813	GDD532
Run #2							

	Initial Volume	Final Volume
Run #1	38.0 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.018	0.0092	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	85%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-DUP		
Lab Sample ID:	F25003-12	**Date Sampled:**	06/22/04
Matrix:	AQ - Ground Water	**Date Received:**	06/24/04
Method:	EPA 610 EPA 610	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IJ20191.D	1	06/29/04	SD	06/28/04	OP10778	GIJ988
Run #2 [a]	IJ20208.D	4	06/30/04	SD	06/28/04	OP10778	GIJ989

	Initial Volume	Final Volume
Run #1	990 ml	1.0 ml
Run #2	990 ml	1.0 ml

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.1	2.0	ug/l	
208-96-8	Acenaphthylene	ND	5.1	2.0	ug/l	
120-12-7	Anthracene	ND	5.1	2.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.1	2.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.1	2.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.1	2.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.1	2.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.1	2.0	ug/l	
218-01-9	Chrysene	ND	5.1	2.0	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.1	2.0	ug/l	
206-44-0	Fluoranthene	ND	5.1	2.0	ug/l	
86-73-7	Fluorene	ND	5.1	2.0	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.1	2.0	ug/l	
91-20-3	Naphthalene	139 [b]	20	8.1	ug/l	
90-12-0	1-Methylnaphthalene	77.4 [b]	20	8.1	ug/l	
91-57-6	2-Methylnaphthalene	97.4 [b]	20	8.1	ug/l	
85-01-8	Phenanthrene	ND	5.1	2.0	ug/l	
129-00-0	Pyrene	ND	5.1	2.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	88%	87%	42-123%
84-15-1	o-Terphenyl	101%	96%	51-123%

(a) All hits confirmed by dual column analysis.
(b) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-122MW3		
Lab Sample ID:	F25003-13	**Date Sampled:**	06/22/04
Matrix:	AQ - Ground Water	**Date Received:**	06/24/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytieal Batch
Run #1	EF040884.D	1	07/02/04	CV	n/a	n/a	GEF3230
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	89%		70-123%
98-08-8	aaa-Trifluorotoluene	93%		73-122%

ND = Not deteeted MDL - Method Deteetion Limit
RL = Reporting Limit
E = Indicatcs value exceeds calibration rangc

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-122MW3		
Lab Sample ID:	F25003-13	**Date Sampled:**	06/22/04
Matrix:	AQ - Ground Water	**Date Received:**	06/24/04
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD16987.D	1	07/02/04	AA	07/01/04	OP10813	GDD532
Run #2							

	Initial Volume	Final Volume
Run #1	38.0 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.018	0.0092	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	80%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-122MW3		
Lab Sample ID:	F25003-13	**Date Sampled:**	06/22/04
Matrix:	AQ - Ground Water	**Date Received:**	06/24/04
Method:	EPA 610 EPA 610	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IJ20192.D	1	06/29/04	SD	06/28/04	OP10778	GIJ988
Run #2							

	Initial Volume	Final Volume
Run #1	990 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Accnaphthene	ND	5.1	2.0	ug/l	
208-96-8	Acenaphthylene	ND	5.1	2.0	ug/l	
120-12-7	Anthracene	ND	5.1	2.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.1	2.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.1	2.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.1	2.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.1	2.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.1	2.0	ug/l	
218-01-9	Chrysene	ND	5.1	2.0	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.1	2.0	ug/l	
206-44-0	Fluoranthene	ND	5.1	2.0	ug/l	
86-73-7	Fluorene	ND	5.1	2.0	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.1	2.0	ug/l	
91-20-3	Naphthalene	ND	5.1	2.0	ug/l	
90-12-0	1-Methylnaphthalene	ND	5.1	2.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.1	2.0	ug/l	
85-01-8	Phenanthrene	ND	5.1	2.0	ug/l	
129-00-0	Pyrene	ND	5.1	2.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	103%		42-123%
84-15-1	o-Terphenyl	113%		51-123%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-122MW7		
Lab Sample ID:	F25003-14	**Date Sampled:**	06/22/04
Matrix:	AQ - Ground Water	**Date Received:**	06/24/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF040887.D	1	07/02/04	CV	n/a	n/a	GEF3230
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compouud	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene [a]	ND	10	10	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	91%		70-123%
98-08-8	aaa-Trifluorotoluene	95%		73-122%

(a) Elevated reporting limits due to matrix interference.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-122MW7		
Lab Sample ID:	F25003-14	**Date Sampled:**	06/22/04
Matrix:	AQ - Ground Water	**Date Received:**	06/24/04
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD16988.D	1	07/02/04	AA	07/01/04	OP10813	GDD532
Run #2							

	Initial Volume	Final Volume
Run #1	37.4 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0094	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	81%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indieates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-122MW7		
Lab Sample ID:	F25003-14	**Date Sampled:**	06/22/04
Matrix:	AQ - Ground Water	**Date Received:**	06/24/04
Method:	EPA 610 EPA 610	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	IJ20195.D	1	06/29/04	SD	06/28/04	OP10778	GIJ988
Run #2							

	Initial Volume	Final Volume
Run #1	960 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.2	2.1	ug/l	
208-96-8	Acenaphthylene	ND	5.2	2.1	ug/l	
120-12-7	Anthraeene	ND	5.2	2.1	ug/l	
56-55-3	Benzo(a)anthraeene	ND	5.2	2.1	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.2	2.1	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.2	2.1	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.2	2.1	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.2	2.1	ug/l	
218-01-9	Chrysene	ND	5.2	2.1	ug/l	
53-70-3	Dibenzo(a,h)anthraeene	ND	5.2	2.1	ug/l	
206-44-0	Fluoranthene	ND	5.2	2.1	ug/l	
86-73-7	Fluorene	ND	5.2	2.1	ug/l	
193-39-5	Indeno(1,2,3-ed)pyrene	ND	5.2	2.1	ug/l	
91-20-3	Naphthalene	4.5	5.2	2.1	ug/l	J
90-12-0	1-Methylnaphthalene	2.7	5.2	2.1	ug/l	J
91-57-6	2-Methylnaphthalene	ND	5.2	2.1	ug/l	
85-01-8	Phenanthrene	ND	5.2	2.1	ug/l	
129-00-0	Pyrene	ND	5.2	2.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	73%		42-123%
84-15-1	o-Terphenyl	91%		51-123%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicatcs value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-RWC1		
Lab Sample ID:	F25003-15	**Date Sampled:**	06/23/04
Matrix:	AQ - Ground Water	**Date Received:**	06/24/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF040888.D	1	07/02/04	CV	n/a	n/a	GEF3230
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	90%		70-123%
98-08-8	aaa-Trifluorotoluene	93%		73-122%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indieates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-RWC1		
Lab Sample ID:	F25003-15	**Date Sampled:**	06/23/04
Matrix:	AQ - Ground Water	**Date Received:**	06/24/04
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD16989.D	1	07/02/04	AA	07/01/04	OP10813	GDD532
Run #2							

	Initial Volume	Final Volume
Run #1	37.6 ml	2.0 ml
Run #2		

CAS No.	Componnd	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0093	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	74%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-RWB1		
Lab Sample ID:	F25003-16	**Date Sampled:**	06/23/04
Matrix:	AQ - Ground Water	**Date Received:**	06/24/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	EF040889.D	1	07/02/04	CV	n/a	n/a	GEF3230
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Diehlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	6.6	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	93%		70-123%
98-08-8	aaa-Trifluorotoluene	98%		73-122%

(a) All hits eonfirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-RWB1		
Lab Sample ID:	F25003-16	**Date Sampled:**	06/23/04
Matrix:	AQ - Ground Water	**Date Received:**	06/24/04
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD17016.D	1	07/02/04	AA	07/01/04	OP10815	GDD532
Run #2							

	Initial Volume	Final Volume
Run #1	37.6 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0093	ug/l	

CAS No.	Surrogate Recoverics	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	80%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indieates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-DWG		
Lab Sample ID:	F25003-17	**Date Sampled:**	06/23/04
Matrix:	AQ - Ground Water	**Date Reeeived:**	06/24/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF040883.D	1	07/02/04	CV	n/a	n/a	GEF3230
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	89%		70-123%
98-08-8	aaa-Trifluorotoluene	92%		73-122%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-DWG		
Lab Sample ID:	F25003-17	**Date Sampled:**	06/23/04
Matrix:	AQ - Ground Water	**Date Received:**	06/24/04
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD17018.D	1	07/02/04	AA	07/01/04	OP10815	GDD532
Run #2							

	Initial Volume	Final Volume
Run #1	37.7 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0093	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	66%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-DWG		
Lab Sample ID:	F25003-17	**Date Sampled:**	06/23/04
Matrix:	AQ - Ground Water	**Date Received:**	06/24/04
Method:	EPA 610 EPA 610	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IJ20196.D	1	06/29/04	SD	06/28/04	OP10778	GIJ988
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Aeenaphthene	ND	5.0	2.0	ug/l	
208-96-8	Aeenaphthylene	ND	5.0	2.0	ug/l	
120-12-7	Anthracene	ND	5.0	2.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.0	2.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.0	2.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.0	2.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.0	2.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.0	2.0	ug/l	
218-01-9	Chrysene	ND	5.0	2.0	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.0	2.0	ug/l	
206-44-0	Fluoranthene	ND	5.0	2.0	ug/l	
86-73-7	Fluorene	ND	5.0	2.0	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.0	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.0	ug/l	
90-12-0	1-Methylnaphthalene	ND	5.0	2.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.0	2.0	ug/l	
85-01-8	Phenanthrene	ND	5.0	2.0	ug/l	
129-00-0	Pyrene	ND	5.0	2.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	93%		42-123%
84-15-1	o-Terphenyl	103%		51-123%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an cstimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW21		
Lab Sample ID:	F25003-18	**Date Sampled:**	06/23/04
Matrix:	AQ - Ground Water	**Date Received:**	06/24/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	EF040893.D	5	07/02/04	CV	n/a	n/a	GEF3230
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	193	5.0	2.5	ug/l	
108-90-7	Chlorobenzene	ND	5.0	2.5	ug/l	
95-50-1	1,2-Dichlorobenzene [b]	ND	50	50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	2.5	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	2.5	ug/l	
100-41-4	Ethylbenzene	140	5.0	2.5	ug/l	
1634-04-4	Methyl Tert Butyl Ether	132	5.0	2.5	ug/l	
108-88-3	Toluene	41.9	5.0	2.5	ug/l	
1330-20-7	Xylenes (total)	429	15	5.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	93%		70-123%
98-08-8	aaa-Trifluorotoluene	96%		73-122%

(a) All hits confirmed by dual column analysis.
(b) Elevated reporting limits due to matrix interference.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW21		
Lab Sample ID:	F25003-18	**Date Sampled:**	06/23/04
Matrix:	AQ - Ground Water	**Date Received:**	06/24/04
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD17021.D	1	07/02/04	AA	07/01/04	OP10815	GDD532
Run #2							

	Initial Volume	Final Volume
Run #1	37.2 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0094	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	86%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indieates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW21		
Lab Sample ID:	F25003-18	**Date Sampled:**	06/23/04
Matrix:	AQ - Ground Water	**Date Received:**	06/24/04
Method:	EPA 610 EPA 610	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	IJ20197.D	1	06/30/04	SD	06/28/04	OP10778	GIJ988
Run #2 [a]	IJ20209.D	2	06/30/04	SD	06/28/04	OP10778	GIJ989

	Initial Volume	Final Volume
Run #1	990 ml	1.0 ml
Run #2	990 ml	1.0 ml

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.1	2.0	ug/l	
208-96-8	Acenaphthylene	ND	5.1	2.0	ug/l	
120-12-7	Anthracene	ND	5.1	2.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.1	2.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.1	2.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.1	2.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.1	2.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.1	2.0	ug/l	
218-01-9	Chrysene	ND	5.1	2.0	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.1	2.0	ug/l	
206-44-0	Fluoranthene	ND	5.1	2.0	ug/l	
86-73-7	Fluorene	ND	5.1	2.0	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.1	2.0	ug/l	
91-20-3	Naphthalene	57.5 [b]	10	4.0	ug/l	
90-12-0	1-Methylnaphthalene	9.3	5.1	2.0	ug/l	
91-57-6	2-Methylnaphthalene	15.1	5.1	2.0	ug/l	
85-01-8	Phenanthrene	ND	5.1	2.0	ug/l	
129-00-0	Pyrene	ND	5.1	2.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	89%	87%	42-123%
84-15-1	o-Terphenyl	96%	95%	51-123%

(a) All hits confirmed by dual column analysis.
(b) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-RWB4		
Lab Sample ID:	F25003-19	**Date Sampled:**	06/23/04
Matrix:	AQ - Ground Water	**Date Received:**	06/24/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	EF040890.D	1	07/02/04	CV	n/a	n/a	GEF3230
Run #2 [b]	EF041013.D	5	07/06/04	CV	n/a	n/a	GEF3235

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	386 [c]	5.0	2.5	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene [d]	ND	50	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Diehlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	312 [c]	5.0	2.5	ug/l	
1634-04-4	Methyl Tert Butyl Ether	66.6	1.0	0.50	ug/l	
108-88-3	Toluene	366 [c]	5.0	2.5	ug/l	
1330-20-7	Xylenes (total)	911 [c]	15	5.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	91%	98%	70-123%
98-08-8	aaa-Trifluorotoluene	99%	104%	73-122%

(a) All hits confirmed by dual column analysis.
(b) Sample vial(s) contained significant headspace; reported results are considered minimum values.
(c) Result is from Run# 2
(d) Elevated reporting limits due to matrix interference.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-RWB4		
Lab Sample ID:	F25003-19	**Date Sampled:**	06/23/04
Matrix:	AQ - Ground Water	**Date Received:**	06/24/04
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD17022.D	1	07/02/04	AA	07/01/04	OP10815	GDD532
Run #2							

	Initial Volume	Final Volume
Run #1	37.5 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0093	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	98%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW24		
Lab Sample ID:	F25003-20	**Date Sampled:**	06/23/04
Matrix:	AQ - Ground Water	**Date Received:**	06/24/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	EF040891.D	1	07/02/04	CV	n/a	n/a	GEF3230
Run #2 [b]	EF041014.D	5	07/06/04	CV	n/a	n/a	GEF3235

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	198 [c]	5.0	2.5	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene [d]	ND	20	20	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	54.6 [c]	5.0	2.5	ug/l	
1634-04-4	Methyl Tert Butyl Ether	48.1	1.0	0.50	ug/l	
108-88-3	Toluene	20.1	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	114 [c]	15	5.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Rnn# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	97%	93%	70-123%
98-08-8	aaa-Trifluorotoluene	107%	101%	73-122%

(a) All hits confirmed by dual column analysis.
(b) Sample vial(s) contained significant headspace; reported results are considered minimum values.
(c) Result is from Run# 2
(d) Elevated reporting limits due to matrix interference.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indieates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW24		
Lab Sample ID:	F25003-20	**Date Sampled:**	06/23/04
Matrix:	AQ - Ground Water	**Date Received:**	06/24/04
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD17023.D	1	07/02/04	AA	07/01/04	OP10815	GDD532
Run #2							

	Initial Volume	Final Volume
Run #1	36.8 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0095	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	85%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW24		
Lab Sample ID:	F25003-20	**Date Sampled:**	06/23/04
Matrix:	AQ - Ground Water	**Date Received:**	06/24/04
Method:	EPA 610 EPA 610	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	IJ20199.D	1	06/30/04	SD	06/28/04	OP10778	GIJ988
Run #2							

	Initial Volume	Final Volume
Run #1	990 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Uuits	Q
83-32-9	Acenaphthene	ND	5.1	2.0	ug/l	
208-96-8	Acenaphthylene	ND	5.1	2.0	ug/l	
120-12-7	Anthracene	ND	5.1	2.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.1	2.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.1	2.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.1	2.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.1	2.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.1	2.0	ug/l	
218-01-9	Chrysene	ND	5.1	2.0	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.1	2.0	ug/l	
206-44-0	Fluoranthene	ND	5.1	2.0	ug/l	
86-73-7	Fluorene	ND	5.1	2.0	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.1	2.0	ug/l	
91-20-3	Naphthalene	37.8	5.1	2.0	ug/l	
90-12-0	1-Methylnaphthalene	6.9	5.1	2.0	ug/l	
91-57-6	2-Methylnaphthalene	9.0	5.1	2.0	ug/l	
85-01-8	Phenanthrene	ND	5.1	2.0	ug/l	
129-00-0	Pyrene	ND	5.1	2.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	89%		42-123%
84-15-1	o-Terphenyl	99%		51-123%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-RWB3		
Lab Sample ID:	F25003-21	**Date Sampled:**	06/23/04
Matrix:	AQ - Ground Water	**Date Received:**	06/24/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	EF041012.D	2	07/06/04	CV	n/a	n/a	GEF3235
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	79.0	2.0	1.0	ug/l	
108-90-7	Chlorobenzene	ND	2.0	1.0	ug/l	
95-50-1	1,2-Diehlorobenzene [b]	ND	5.0	5.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	2.0	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	2.0	1.0	ug/l	
100-41-4	Ethylbenzene	9.9	2.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	29.4	2.0	1.0	ug/l	
108-88-3	Tolucne	2.1	2.0	1.0	ug/l	
1330-20-7	Xylenes (total)	17.5	6.0	2.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	90%		70-123%
98-08-8	aaa-Trifluorotoluene	100%		73-122%

(a) All hits confirmed by dual column analysis.
(b) Elevated reporting limits due to matrix interference.

ND = Not detected MDL - Method Dcteetion Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indieates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-RWB3		
Lab Sample ID:	F25003-21	**Date Sampled:**	06/23/04
Matrix:	AQ - Ground Water	**Date Received:**	06/24/04
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD17024.D	1	07/02/04	AA	07/01/04	OP10815	GDD532
Run #2							

	Initial Volume	Final Volume
Run #1	37.2 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0094	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	84%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indieates an estimated value
B = Indicates analyte found in assoeiated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-EFFLUENT		
Lab Sample ID:	F25003-22	**Date Sampled:**	06/23/04
Matrix:	AQ - Ground Water	**Date Received:**	06/24/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF041010.D	1	07/06/04	CV	n/a	n/a	GEF3235
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	87%		70-123%
98-08-8	aaa-Trifluorotoluene	97%		73-122%

ND = Not deteeted MDL - Method Detection Limit
RL = Reporting Limit
E = Indieates value exceeds calibration range
J = Indicates an estimated value
B = Indieates analyte found in associated method blank
N = Indicates presumptive evidence of a eompound

Report of Analysis

Client Sample ID:	USTCSFF-EFFLUENT		
Lab Sample ID:	F25003-22	**Date Sampled:**	06/23/04
Matrix:	AQ - Ground Water	**Date Received:**	06/24/04
Method:	EPA 610 EPA 610	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IJ20200.D	1	06/30/04	SD	06/28/04	OP10778	GIJ988
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.0	2.0	ug/l	
208-96-8	Acenaphthylene	ND	5.0	2.0	ug/l	
120-12-7	Anthraeene	ND	5.0	2.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.0	2.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.0	2.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.0	2.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.0	2.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.0	2.0	ug/l	
218-01-9	Chrysene	ND	5.0	2.0	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.0	2.0	ug/l	
206-44-0	Fluoranthene	ND	5.0	2.0	ug/l	
86-73-7	Fluorene	ND	5.0	2.0	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.0	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.0	ug/l	
90-12-0	1-Methylnaphthalene	ND	5.0	2.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.0	2.0	ug/l	
85-01-8	Phenanthrene	ND	5.0	2.0	ug/l	
129-00-0	Pyrene	ND	5.0	2.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	99%		42-123%
84-15-1	o-Terphenyl	109%		51-123%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-EFFLUENT		
Lab Sample ID:	F25003-22	**Date Sampled:**	06/23/04
Matrix:	AQ - Ground Water	**Date Received:**	06/24/04
		Percent Solids:	n/a
Project:	CSFF MCAS New River		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	< 10	10	ug/l	1	07/13/04	07/14/04	DM	SW846 6010B [2]	SW846 3010A [4]
Barium	< 200	200	ug/l	1	07/13/04	07/14/04	DM	SW846 6010B [2]	SW846 3010A [4]
Beryllium	< 4.0	4.0	ug/l	1	07/13/04	07/14/04	DM	SW846 6010B [2]	SW846 3010A [4]
Cadmium	< 5.0	5.0	ug/l	1	07/13/04	07/14/04	DM	SW846 6010B [2]	SW846 3010A [4]
Chromium	< 10	10	ug/l	1	07/13/04	07/14/04	DM	SW846 6010B [2]	SW846 3010A [4]
Iron	< 300	300	ug/l	1	07/13/04	07/14/04	DM	SW846 6010B [2]	SW846 3010A [4]
Lead	< 5.0	5.0	ug/l	1	07/13/04	07/14/04	DM	SW846 6010B [2]	SW846 3010A [4]
Magnesium	5170	5000	ug/l	1	07/13/04	07/14/04	DM	SW846 6010B [2]	SW846 3010A [4]
Mercury	< 1.0	1.0	ug/l	1	06/28/04	06/29/04	SM	SW846 7470A [1]	SW846 7470A [3]
Selenium	< 10	10	ug/l	1	07/13/04	07/14/04	DM	SW846 6010B [2]	SW846 3010A [4]

(1) Instrument QC Batch: MA3864
(2) Instrument QC Batch: MA3887
(3) Prep QC Batch: MP6828
(4) Prep QC Batch: MP6889

RL = Reporting Limit

Report of Analysis

Client Sample ID:	USTCSFF-EFFLUENT		
Lab Sample ID:	F25003-22	**Date Sampled:**	06/23/04
Matrix:	AQ - Ground Water	**Date Received:**	06/24/04
		Percent Solids:	n/a
Project:	CSFF MCAS New River		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Hardness, Total as CaCO3	298	4.0	mg/l	1	07/15/04	DM	SW846 6010B/SM 2340B
Solids, Total Dissolved	352	10	mg/l	1	06/25/04	SJL	EPA 160.1
Solids, Total Suspended	< 4.0	4.0	mg/l	1	06/25/04	SJL	EPA 160.2

RL = Reporting Limit

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	F25003-23	**Date Sampled:**	06/23/04
Matrix:	AQ - Trip Blank Water	**Date Received:**	06/24/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF041011.D	1	07/06/04	CV	n/a	n/a	GEF3235
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	86%		70-123%
98-08-8	aaa-Trifluorotoluene	95%		73-122%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

CHAIN OF CUSTODY

ACCUTEST Laboratories

4405 VINELAND ROAD • SUITE C-15
ORLANDO, FL 32811
TEL: 407-425-6700 • FAX: 407-425-0707

ACCUTEST JOB #: F25003
ACCUTEST QUOTE #:

CLIENT INFORMATION

Engineering & Environment Inc
NAME
824 Gumbranch rd Suite 5
ADDRESS
Jacksonville NC 28540
CITY, STATE ZIP
SEND REPORT TO:
PHONE # 910-989-3214

FACILITY INFORMATION

CSFF
PROJECT NAME
LOCATION
PROJECT NO.
FAX # 910-989-3341

ANALYTICAL INFORMATION

MATRIX CODES

DW - DRINKING WATER
GW - GROUND WATER
WW - WASTE WATER
SO - SOIL
SL - SLUDGE
OL - OIL
LIQ - OTHER LIQUID
SOL - OTHER SOLID

ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION DATE	COLLECTION TIME	SAMPLED BY:	MATRIX	# OF BOTTLES	PRESERVATION HCl	PRESERVATION HNO3	PRESERVATION ENCORE	PRESERVATION NONE	PRESERVATION H2SO4	602	610	504.1	LAB USE ONLY
1	HSTCSFF-MW03	6-21-04	12:45	BS	GW	5	X			X		3	2		
2	HSTCSFF-MW16	6-21-04	13:15	BS	GW	5	X			X		3	2		
3	HSTCSFF-MW12	6-21-04	14:10	BS	GW	5	X			X		3	2		
4	HSTCSFF-MW14	6-21-04	15:02	BS	GW	5	X			X		3	2		
5	HSTCSFF-MW11	6-21-04	15:40	BS	GW	5	X			X		3	2		
6	HSTCSFF-DW02	6-21-04	16:25	BS	GW	8	X			X	X	3	2	3	
7	HSTCSFF-13DW1	6-22-04	11:10	BS	GW	8	X			X	X	3	2	3	
8	HSTCSFF-13MW1	6-22-04	11:40	BS	GW	5	X			X		3	2		
9	HSTCSFF-122MW8	6-22-04	12:15	BS	GW	5	X			X		3	2		
10	HSTCSFF-122MW4	6-22-04	13:05	BS	GW	5	X			X		3	2		
11	HSTCSFF-122MW9	6-22-04	14:00	BS	GW	8	X			X	X	3	2	3	

DATA TURNAROUND INFORMATION

- ☑ STANDARD
- ☐ 48 HOUR RUSH
- ☐ 24 HOUR EMERGENCY
- ☐ OTHER

APPROVED BY:

EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED

DATA DELIVERABLE INFORMATION

- ☐ STANDARD
- ☐ COMMERCIAL "B"
- ☐ DISK DELIVERABLE
- ☐ STATE FORMS
- ☑ OTHER (SPECIFY) Nacgo 4

COMMENTS/REMARKS

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY

RELINQUISHED BY: SAMPLER	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
1. Bob Sellers	6-23-04 14:45	1. FX	2. FX	6/24/04 9:00	2. Carlos R
RELINQUISHED BY:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
3.		3.	4.		4.
RELINQUISHED BY:	DATE TIME:	RECEIVED BY:	SEAL #	PRESERVE WHERE APPLICABLE ☐	ON ICE ☐	TEMPERATURE
5.		5. 3.2	2.8 2.6 4.2			C

F25003: Chain of Custody
Page 1 of 3

CHAIN OF CUSTODY

ACCUTEST Laboratories

4405 VINELAND ROAD • SUITE C-15
ORLANDO, FL 32811
TEL: 407-425-6700 • FAX: 407-425-0707

ACCUTEST JOB #:
ACCUTEST QUOTE #: F25003

CLIENT INFORMATION

NAME: Engineering & Environment
ADDRESS: 824 Cambridge rd. Suite S
CITY: Jacksonville STATE: NC ZIP: 28540
SEND REPORT TO:
PHONE #: 910-989-3214

FACILITY INFORMATION

PROJECT NAME: CSFF
LOCATION:
PROJECT NO.:
FAX #: 910-989-2341

ANALYTICAL INFORMATION

MATRIX CODE

DW - DRINKING WATER
GW - GROUND WATER
WW - WASTE WATER
SO - SOIL
SL - SLUDGE
OL - OIL
LIQ - OTHER LIQUID
SOL - OTHER SOLID

ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION DATE	TIME	SAMPLED BY:	MATRIX	# OF BOTTLES	PRESERVATION HCl	HNO3	NaOH	H2SO4	NONE	MeOH EnCore	602	610	504.1	Total Metals & Hardness	TDS, TSS	LAB USE ONLY
12	USTCSFF-DUP	6-22-04	—	BS	GW	5	X				X		3	2				
13	USTCSFF-122MW3	6-22-04	14:35	BS	GW	5	X				X		3	2				
14	USTCSFF-122MW7	6-22-04	15:40	BS	GW	5	X				X		3	2				
15	USTCSFF-RWC1	6-23-04	9:25	BS	GW	3	X						3					
16	USTCSFF-RWB1	6-23-04	10:03	BS	GW	3	X						3					
17	USTCSFF-DW6	6-23-04	10:35	BS	DW	8	X				X	X	3	2	3			
18	USTCSFF-MW21	6-23-04	11:30	BS	GW	5	X				X		3	2				
19	USTCSFF-RWB4	6-23-04	11:40	BS	GW	3	X						3					
20	USTCSFF-MW24	6-23-04	12:10	BS	GW	5	X				X		3	2				
21	USTCSFF-RWB8	6-23-04	12:00	BS	GW	3	X						3					
22	USTCSFF-EFFluent	6-23-04	12:45	BS	Syst.	7	X	X		X			3	2		1	1	

DATA TURNAROUND INFORMATION

- [x] STANDARD
- [ ] 48 HOUR RUSH
- [ ] 24 HOUR EMERGENCY
- [ ] OTHER

APPROVED BY:

EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED

DATA DELIVERABLE INFORMATION

- [ ] STANDARD
- [ ] COMMERCIAL "B"
- [ ] DISK DELIVERABLE
- [ ] STATE FORMS
- [x] OTHER (SPECIFY) Excel 4

COMMENTS/REMARKS

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESION, INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
1.	6-23-04 14:45	1. FX	2. FX	6/24/04 09:00	2.
RELINQUISHED BY:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
3.		3.	4.		4.
RELINQUISHED BY:	DATE TIME:	RECEIVED BY:	SEAL #	PRESERVE WHERE APPLICABLE	ON ICE
5.		5.			

F25003: Chain of Custody
Page 2 of 3

ACCUTEST LABORATORIES SOUTHEAST SAMPLE RECEIPT CONFIRMATION

Accutest's Job Number: F25003

Client: ENGINEERING ENVIRONMENTAL Project: CSFF

Date Received: 6/24/04 Time Received: 09:00

of Coolers Received: 5 Cooler Temperatures: 3.2 3.2 2.8 2.6 4.2

Delivery Method: (FedEx) UPS Accutest Courier Greyhound Delivery Other

Air Bill Number: # 841812131742

Cooler Custody Seals Intact ?	(Yes)	No	
Chain of Custody Provided ?	(Yes)	No	
COC Match Bottle Label ID's ?	(Yes)	No	
Sample Labels Present on all bottles ?	(Yes)	No	
All Analyses Marked On COC ?	(Yes)	No	
Are All Bottles Intact ?	(Yes)	No	
Samples Preserved Correctly ?	(Yes)	No	
Correct Number of Containers Used ?	(Yes)	No	
Sufficient Sample Volume ?	(Yes)	No	
Trip Blank Provided ?	(Yes)	No	
Trip Blank on COC ?	(Yes)	No	
Trip Blank Intact ?	(Yes)	No	N/A
Trip Blank Matrix ?	Soil	(Water)	N/A
Number of Encores ?	Ø		
Number of Soil Field Kits ?	Ø		

Summary of Comments:

Signature: Carlos Rz Date: 6/24/04

Review Signature:

ASBD 12/30/03

F25003: Chain of Custody
Page 3 of 3

GC Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: F25003
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GEF3230-MB	EF040869.D	1	07/01/04	CV	n/a	n/a	GEF3230

The QC reported here applies to the following samples: **Method:** EPA 601/602

F25003-1, F25003-2, F25003-3, F25003-4, F25003-5, F25003-6, F25003-7, F25003-8, F25003-9, F25003-10, F25003-12, F25003-13, F25003-14, F25003-15, F25003-16, F25003-17, F25003-18, F25003-19, F25003-20

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
352-33-0	1-Chloro-4-fluorobenzene	92%	70-123%
98-08-8	aaa-Trifluorotoluene	98%	73-122%

Method Blank Summary

Job Number: F25003
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batcb
GEF3235-MB	EF041008.D	1	07/06/04	CV	n/a	n/a	GEF3235

The QC reported here applies to the following samples: **Method:** EPA 601/602

F25003-11, F25003-19, F25003-20, F25003-21, F25003-22, F25003-23

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
352-33-0	1-Chloro-4-fluorobenzene	84%	70-123%
98-08-8	aaa-Trifluorotoluene	92%	73-122%

Method Blank Summary

Job Number: F25003
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP10813-MB	DD16964.D	1	07/01/04	AA	07/01/04	OP10813	GDD532

The QC reported here applies to the following samples: **Method:** EPA 504.1

F25003-1, F25003-2, F25003-3, F25003-4, F25003-5, F25003-6, F25003-7, F25003-8, F25003-9, F25003-10, F25003-11, F25003-12, F25003-13, F25003-14, F25003-15

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.020	0.010	ug/l	

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	98%	60-139%

Method Blank Summary

Job Number: F25003
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP10815-MB	DD17013.D	1	07/02/04	AA	07/02/04	OP10815	GDD532

The QC reported here applies to the following samples: **Method:** EPA 504.1

F25003-16, F25003-17, F25003-18, F25003-19, F25003-20, F25003-21

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.020	0.010	ug/l	

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	87%	60-139%

Blank Spike Summary

Job Number: F25003
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GEF3230-BS	EF040868.D	1	07/01/04	CV	n/a	n/a	GEF3230

Tbe QC reported here applies to the following samples: **Method:** EPA 601/602

F25003-1, F25003-2, F25003-3, F25003-4, F25003-5, F25003-6, F25003-7, F25003-8, F25003-9, F25003-10, F25003-12, F25003-13, F25003-14, F25003-15, F25003-16, F25003-17, F25003-18, F25003-19, F25003-20

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	20	20.5	103	86-121
108-90-7	Chlorobenzene	20	19.6	98	81-119
95-50-1	1,2-Dichlorobenzene	20	17.0	85	75-120
541-73-1	1,3-Dichlorobenzene	20	19.9	100	77-121
106-46-7	1,4-Dichlorobenzene	20	19.2	96	75-122
100-41-4	Ethylbenzene	20	20.4	102	81-126
1634-04-4	Methyl Tert Butyl Ether	20	20.2	101	76-117
108-88-3	Toluene	20	19.9	100	82-123
1330-20-7	Xylenes (total)	60	58.9	98	82-125

CAS No.	Surrogate Recoveries	BSP	Limits
352-33-0	1-Chloro-4-fluorobenzene	98%	70-123%
98-08-8	aaa-Trifluorotoluene	100%	73-122%

Blank Spike Summary

Job Number: F25003
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GEF3235-BS	EF041007.D	1	07/06/04	CV	n/a	n/a	GEF3235

5.2

The QC reported here applies to the following samples: **Method:** EPA 601/602

F25003-11, F25003-19, F25003-20, F25003-21, F25003-22, F25003-23

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	20	19.2	96	86-121
108-90-7	Chlorobenzene	20	18.7	94	81-119
95-50-1	1,2-Dichlorobenzene	20	18.2	91	75-120
541-73-1	1,3-Dichlorobenzene	20	18.6	93	77-121
106-46-7	1,4-Dichlorobenzene	20	18.2	91	75-122
100-41-4	Ethylbenzene	20	18.9	95	81-126
1634-04-4	Methyl Tert Butyl Ether	20	18.2	91	76-117
108-88-3	Toluene	20	19.0	95	82-123
1330-20-7	Xylenes (total)	60	56.3	94	82-125

CAS No.	Surrogate Recoveries	BSP	Limits
352-33-0	1-Chloro-4-fluorobenzene	96%	70-123%
98-08-8	aaa-Trifluorotoluene	99%	73-122%

Blank Spike Summary

Job Number: F25003
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP10813-BS	DD16965.D	1	07/01/04	AA	07/01/04	OP10813	GDD532

The QC reported here applies to the following samples: **Method:** EPA 504.1

F25003-1, F25003-2, F25003-3, F25003-4, F25003-5, F25003-6, F25003-7, F25003-8, F25003-9, F25003-10, F25003-11, F25003-12, F25003-13, F25003-14, F25003-15

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
106-93-4	1,2-Dibromoethane	0.25	0.24	96	70-130

CAS No.	Snrrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	99%	60-139%

Blank Spike Summary

Job Number: F25003
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Bateh	Analytical Bateh
OP10813-BS2	DD16966.D	1	07/01/04	AA	07/01/04	OP10813	GDD532

5.2

The QC reported here applies to the following samples: **Method:** EPA 504.1

F25003-1, F25003-2, F25003-3, F25003-4, F25003-5, F25003-6, F25003-7, F25003-8, F25003-9, F25003-10, F25003-11, F25003-12, F25003-13, F25003-14, F25003-15

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
106-93-4	1,2-Dibromoethane	0.25	0.25	100	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	100%	60-139%

Blank Spike Summary

Job Number: F25003
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP10815-BS	DD17014.D	1	07/02/04	AA	07/02/04	OP10815	GDD532

The QC reported here applies to the following samples: **Method:** EPA 504.1

F25003-16, F25003-17, F25003-18, F25003-19, F25003-20, F25003-21

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
106-93-4	1,2-Dibromoethane	0.25	0.21	84	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	90%	60-139%

Blank Spike Summary

Job Number: F25003
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP10815-BS2	DD17015.D	1	07/02/04	AA	07/02/04	OP10815	GDD532

5.2

The QC reported here applies to the following samples: **Method:** EPA 504.1

F25003-16, F25003-17, F25003-18, F25003-19, F25003-20, F25003-21

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
106-93-4	1,2-Dibromoethane	0.25	0.22	88	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	91%	60-139%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F25003
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F25003-6MS	EF040871.D	1	07/01/04	CV	n/a	n/a	GEF3230
F25003-6MSD	EF040872.D	1	07/01/04	CV	n/a	n/a	GEF3230
F25003-6	EF040870.D	1	07/01/04	CV	n/a	n/a	GEF3230

The QC reported here applies to the following samples: **Method:** EPA 601/602

F25003-1, F25003-2, F25003-3, F25003-4, F25003-5, F25003-6, F25003-7, F25003-8, F25003-9, F25003-10, F25003-12, F25003-13, F25003-14, F25003-15, F25003-16, F25003-17, F25003-18, F25003-19, F25003-20

CAS No.	Compound	F25003-6 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND		20	19.9	100	20.0	100	1	77-125/6
108-90-7	Chlorobenzene	ND		20	18.8	94	18.9	95	1	78-120/8
95-50-1	1,2-Dichlorobenzene	ND		20	16.3	82	17.4	87	7	69-125/7
541-73-1	1,3-Dichlorobenzene	ND		20	19.1	96	19.2	96	1	71-126/7
106-46-7	1,4-Dichlorobenzene	ND		20	18.6	93	18.9	95	2	67-129/7
100-41-4	Ethylbenzene	ND		20	19.5	98	19.6	98	1	74-127/6
1634-04-4	Methyl Tert Butyl Ether	ND		20	19.6	98	19.7	99	1	66-127/9
108-88-3	Toluene	ND		20	19.1	96	19.5	98	2	77-124/5
1330-20-7	Xylenes (total)	ND		60	56.8	95	57.1	95	1	76-125/5

CAS No.	Surrogate Recoveries	MS	MSD	F25003-6	Limits
352-33-0	1-Chloro-4-fluorobenzene	98%	97%	90%	70-123%
98-08-8	aaa-Trifluorotoluene	96%	96%	94%	73-122%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F25003
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F25042-11MS	EF041019.D	50	07/06/04	CV	n/a	n/a	GEF3235
F25042-11MSD	EF041020.D	50	07/06/04	CV	n/a	n/a	GEF3235
F25042-11 [a]	EF041018.D	50	07/06/04	CV	n/a	n/a	GEF3235

The QC reported here applies to the following samples: **Method:** EPA 601/602

F25003-11, F25003-19, F25003-20, F25003-21, F25003-22, F25003-23

CAS No.	Compound	F25042-11 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND		1000	993	99	998	100	1	77-125/6
108-90-7	Chlorobenzene	ND		1000	950	95	953	95	0	78-120/8
95-50-1	1,2-Dichlorobenzene	ND		1000	922	92	948	95	3	69-125/7
541-73-1	1,3-Dichlorobenzene	ND		1000	949	95	957	96	1	71-126/7
106-46-7	1,4-Dichlorobenzene	ND		1000	929	93	926	93	0	67-129/7
100-41-4	Ethylbenzene	ND		1000	961	96	959	96	0	74-127/6
1634-04-4	Methyl Tert Butyl Ether	2280		1000	3220	94	3240	96	1	66-127/9
108-88-3	Toluene	ND		1000	969	97	974	97	1	77-124/5
1330-20-7	Xylenes (total)	ND		3000	2840	95	2840	95	0	76-125/5

CAS No.	Surrogate Recoveries	MS	MSD	F25042-11	Limits
352-33-0	1-Chloro-4-fluorobenzene	96%	96%	86%	70-123%
98-08-8	aaa-Trifluorotoluene	99%	99%	96%	73-122%

(a) All hits confirmed by dual column analysis.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F25003
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Bateh	Analytical Batch
OP10813-MS	DD17029.D	10	07/02/04	AA	07/01/04	OP10813	GDD532
OP10813-MSD	DD17030.D	10	07/02/04	AA	07/01/04	OP10813	GDD532
F25059-1 [a]	DD17028.D	10	07/02/04	AA	07/01/04	OP10813	GDD532

The QC reported here applies to the following samples: **Method:** EPA 504.1

F25003-1, F25003-2, F25003-3, F25003-4, F25003-5, F25003-6, F25003-7, F25003-8, F25003-9, F25003-10, F25003-11, F25003-12, F25003-13, F25003-14, F25003-15

CAS No.	Compound	F25059-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
106-93-4	1,2-Dibromoethane	7.1		0.236	7.4	127	7.5	171* [b]	1	65-135/25

CAS No.	Surrogate Recoveries	MS	MSD	F25059-1	Limits
460-00-4	4-Bromofluorobenzene	0%* [c]	0%* [c]	0%* [c]	60-139%

(a) All hits confirmed by dual column analysis.
(b) Outside control limits due to high level in sample relative to spike amount.
(c) Outside control limits due to dilution.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F25003
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP10815-MS	DD17019.D	1	07/02/04	AA	07/02/04	OP10815	GDD532
OP10815-MSD	DD17020.D	1	07/02/04	AA	07/02/04	OP10815	GDD532
F25003-17	DD17018.D	1	07/02/04	AA	07/01/04	OP10815	GDD532

The QC reported here applies to the following samples: **Method:** EPA 504.1

F25003-16, F25003-17, F25003-18, F25003-19, F25003-20, F25003-21

CAS No.	Compound	F25003-17 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
106-93-4	1,2-Dibromoethane	ND		0.233	0.18	77	0.21	90	15	65-135/25

CAS No.	Surrogate Recoveries	MS	MSD	F25003-17	Limits
460-00-4	4-Bromofluorobenzene	75%	82%	66%	60-139%

Volatile Surrogate Recovery Summary

Job Number: F25003
Account: EEINCJX EEI
Project: CSFF MCAS New River

Method: EPA 601/602 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S2 [a]
F25003-1	EF040875.D	89.0	98.0
F25003-2	EF040876.D	93.0	94.0
F25003-3	EF040877.D	94.0	97.0
F25003-4	EF040878.D	91.0	96.0
F25003-5	EF040873.D	91.0	94.0
F25003-6	EF040870.D	90.0	94.0
F25003-7	EF040879.D	95.0	96.0
F25003-8	EF040880.D	94.0	96.0
F25003-9	EF040881.D	91.0	95.0
F25003-10	EF040882.D	90.0	93.0
F25003-11	EF041009.D	91.0	96.0
F25003-12	EF040886.D	97.0	98.0
F25003-13	EF040884.D	89.0	93.0
F25003-14	EF040887.D	91.0	95.0
F25003-15	EF040888.D	90.0	93.0
F25003-16	EF040889.D	93.0	98.0
F25003-17	EF040883.D	89.0	92.0
F25003-18	EF040893.D	93.0	96.0
F25003-19	EF041013.D	98.0	104.0
F25003-19	EF040890.D	91.0	99.0
F25003-20	EF041014.D	93.0	101.0
F25003-20	EF040891.D	97.0	107.0
F25003-21	EF041012.D	90.0	100.0
F25003-22	EF041010.D	87.0	97.0
F25003-23	EF041011.D	86.0	95.0
F25003-6MS	EF040871.D	98.0	96.0
F25003-6MSD	EF040872.D	97.0	96.0
F25042-11MS	EF041019.D	96.0	99.0
F25042-11MSD	EF041020.D	96.0	99.0
GEF3230-BS	EF040868.D	98.0	100.0
GEF3230-MB	EF040869.D	92.0	98.0
GEF3235-BS	EF041007.D	96.0	99.0
GEF3235-MB	EF041008.D	84.0	92.0

Surrogate Compounds	Recovery Limits
S1 = 1-Chloro-4-fluorobenzene	70-123%
S2 = aaa-Trifluorotoluene	73-122%

5.4

Volatile Surrogate Recovery Summary

Job Number: F25003
Account: EEINCJX EEI
Project: CSFF MCAS New River

Method: EPA 601/602	**Matrix:** AQ

Samples and QC shown here apply to the above method

Surrogate Compounds	**Recovery Limits**

(a) Recovery from GC signal #2

Volatile Surrogate Recovery Summary

Job Number: F25003
Account: EEINCJX EEI
Project: CSFF MCAS New River

Method: EPA 504.1	**Matrix:** AQ

Samples and QC shown here apply to the above method

Lah Sample ID	Lab File ID	S1 [a]
F25003-1	DD16973.D	71.0
F25003-2	DD16975.D	69.0
F25003-3	DD16976.D	75.0
F25003-4	DD16977.D	67.0
F25003-5	DD16978.D	77.0
F25003-6	DD16979.D	92.0
F25003-7	DD16980.D	88.0
F25003-8	DD16981.D	72.0
F25003-9	DD16982.D	65.0
F25003-10	DD16983.D	72.0
F25003-11	DD16984.D	72.0
F25003-12	DD16986.D	85.0
F25003-13	DD16987.D	80.0
F25003-14	DD16988.D	81.0
F25003-15	DD16989.D	74.0
F25003-16	DD17016.D	80.0
F25003-17	DD17018.D	66.0
F25003-18	DD17021.D	86.0
F25003-19	DD17022.D	98.0
F25003-20	DD17023.D	85.0
F25003-21	DD17024.D	84.0
OP10813-BS	DD16965.D	99.0
OP10813-BS2	DD16966.D	100.0
OP10813-MB	DD16964.D	98.0
OP10813-MS	DD17029.D	0.0* [b]
OP10813-MSD	DD17030.D	0.0* [b]
OP10815-BS	DD17014.D	90.0
OP10815-BS2	DD17015.D	91.0
OP10815-MB	DD17013.D	87.0
OP10815-MS	DD17019.D	75.0
OP10815-MSD	DD17020.D	82.0

Surrogate Compounds	Recovery Limits
S1 = 4-Bromofluorobenzene	60-139%

(a) Recovery from GC signal #2
(b) Outside control limits due to dilution.

GC Surrogate Retention Time Summary

Job Number: F25003
Account: EEINCJX EEI
Project: CSFF MCAS New River

Check Std:	GEF3230-CC3177	**Injection Date:**	07/01/04
Lab File ID:	EF040874.D	**Injection Time:**	22:58
Instrument ID:	GCEF	**Method:**	EPA 601/602

	S1 [a] RT	S2 [a] RT
Check Std	8.83	5.75

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
F25003-1	EF040875.D	07/01/04	23:23	8.83	5.75
F25003-2	EF040876.D	07/01/04	23:47	8.83	5.75
F25003-3	EF040877.D	07/02/04	00:11	8.83	5.75
F25003-4	EF040878.D	07/02/04	00:36	8.83	5.75
F25003-7	EF040879.D	07/02/04	01:01	8.83	5.75
F25003-8	EF040880.D	07/02/04	01:26	8.83	5.75
F25003-9	EF040881.D	07/02/04	01:50	8.83	5.75
F25003-10	EF040882.D	07/02/04	02:14	8.83	5.75
F25003-17	EF040883.D	07/02/04	02:39	8.83	5.75
F25003-13	EF040884.D	07/02/04	03:04	8.83	5.75

Surrogate Compounds

S1 = 1-Chloro-4-fluorobenzene
S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F25003
Account: EEINCJX EEI
Project: CSFF MCAS New River

Check Std:	GEF3230-CC3177	**Injection Date:**	07/02/04
Lab File ID:	EF040885.D	**Injection Time:**	03:28
Instrument ID:	GCEF	**Method:**	EPA 601/602

	S1 [a] RT	S2 [a] RT
Cheek Std	8.82	5.75

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
F25003-12	EF040886.D	07/02/04	03:53	8.83	5.75
F25003-14	EF040887.D	07/02/04	04:17	8.82	5.75
F25003-15	EF040888.D	07/02/04	04:42	8.83	5.75
F25003-16	EF040889.D	07/02/04	05:06	8.83	5.75
F25003-19	EF040890.D	07/02/04	05:30	8.83	5.75
F25003-20	EF040891.D	07/02/04	05:55	8.83	5.75
F25003-18	EF040893.D	07/02/04	06:48	8.82	5.75

Surrogate Compounds

S1 = 1-Chloro-4-fluorobenzene
S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F25003
Account: EEINCJX EEI
Project: CSFF MCAS New River

Check Std:	GEF3235-ICC3235	**Injection Date:**	07/06/04
Lab File ID:	EF041002.D	**Injection Time:**	09:39
Instrument ID:	GCEF	**Method:**	EPA 601/602

	S1 [a] RT	S2 [a] RT
Check Std	8.82	5.75

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
GEF3235-BS	EF041007.D	07/06/04	11:40	8.82	5.75
GEF3235-MB	EF041008.D	07/06/04	12:04	8.83	5.75
F25003-11	EF041009.D	07/06/04	12:28	8.82	5.75
F25003-22	EF041010.D	07/06/04	12:52	8.82	5.75
F25003-23	EF041011.D	07/06/04	13:16	8.82	5.75
F25003-21	EF041012.D	07/06/04	13:41	8.82	5.75
F25003-19	EF041013.D	07/06/04	14:08	8.82	5.75
F25003-20	EF041014.D	07/06/04	14:34	8.82	5.75
ZZZZZZ	EF041015.D	07/06/04	15:01	8.82	5.75
ZZZZZZ	EF041016.D	07/06/04	15:28	8.82	5.75

Surrogate Compounds

S1 = 1-Chloro-4-fluorobenzene
S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F25003
Account: EEINCJX EEI
Project: CSFF MCAS New River

Check Std:	GEF3235-CC3235	**Injection Date:**	07/06/04
Lab File ID:	EF041017.D	**Injection Time:**	15:52
Instrument ID:	GCEF	**Method:**	EPA 601/602

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	9.03	8.82	5.97	5.75

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
F25042-11	EF041018.D	07/06/04	16:16		8.82		5.75
F25042-11MS	EF041019.D	07/06/04	16:41		8.82		5.75
F25042-11MSD	EF041020.D	07/06/04	17:05		8.82		5.75
ZZZZZZ	EF041021.D	07/06/04	17:29		8.82		5.75
ZZZZZZ	EF041022.D	07/06/04	17:54		8.82		5.75
ZZZZZZ	EF041023.D	07/06/04	18:20		8.82		5.75
ZZZZZZ	EF041024.D	07/06/04	18:47		8.82		5.75
GEF3235-ECC323	EF041025.D	07/06/04	19:11	9.03	8.82	5.97	5.75

Surrogate Compounds

S1 = 1-Chloro-4-fluorobenzene
S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F25003
Account: EEINCJX EEI
Project: CSFF MCAS New River

Check Std:	GDD532-CC532	**Injection Date:**	07/01/04
Lab File ID:	DD16974.D	**Injection Time:**	23:21
Instrument ID:	GCDD	**Method:**	EPA 504.1

	S1 [a] RT
Check Std	6.96

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT
F25003-2	DD16975.D	07/01/04	23:41	6.96
F25003-3	DD16976.D	07/02/04	00:00	6.96
F25003-4	DD16977.D	07/02/04	00:20	6.96
F25003-5	DD16978.D	07/02/04	00:40	6.96
F25003-6	DD16979.D	07/02/04	01:00	6.96
F25003-7	DD16980.D	07/02/04	01:19	6.96
F25003-8	DD16981.D	07/02/04	01:39	6.96
F25003-9	DD16982.D	07/02/04	01:59	6.96
F25003-10	DD16983.D	07/02/04	02:18	6.96
F25003-11	DD16984.D	07/02/04	02:38	6.96

Surrogate Compounds

S1 = 4-Bromofluorobenzene

(a) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F25003
Account: EEINCJX EEI
Projcct: CSFF MCAS New River

Check Std:	GDD532-CC532	**Injection Date:**	07/02/04
Lab File ID:	DD16985.D	**Injection Time:**	02:58
Instrument ID:	GCDD	**Method:**	EPA 504.1

	SI [a] RT
Check Std	6.96

Lab Sample ID	**Lab File ID**	**Date Analyzed**	**Time Analyzed**	**S1 [a] RT**
F25003-12	DD16986.D	07/02/04	03:17	6.96
F25003-13	DD16987.D	07/02/04	03:37	6.96
F25003-14	DD16988.D	07/02/04	03:57	6.96
F25003-15	DD16989.D	07/02/04	04:16	6.96
OP10814-MB	DD16990.D	07/02/04	04:36	6.96
OP10814-BS	DD16991.D	07/02/04	04:56	6.96
OP10814-BS2	DD16992.D	07/02/04	05:15	6.96
ZZZZZZ	DD16993.D	07/02/04	05:35	6.96
F25061-2	DD16994.D	07/02/04	05:54	6.96

Surrogate Compounds

S1 = 4-Bromofluorobenzene

(a) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F25003
Account: EEINCJX EEI
Project: CSFF MCAS New River

Check Std:	GDD532-CC532	**Injection Date:**	07/02/04
Lab File ID:	DD17017.D	**Injection Time:**	13:28
Instrument ID:	GCDD	**Method:**	EPA 504.1

	S1 [a] RT
Check Std	6.96

Lab Sample ID	Lab File ID	Date Aualyzed	Time Analyzed	S1 [a] RT
F25003-17	DD17018.D	07/02/04	13:48	6.96
OP10815-MS	DD17019.D	07/02/04	14:08	6.96
OP10815-MSD	DD17020.D	07/02/04	14:28	6.96
F25003-18	DD17021.D	07/02/04	14:47	6.95
F25003-19	DD17022.D	07/02/04	15:07	6.95
F25003-20	DD17023.D	07/02/04	15:27	6.96
F25003-21	DD17024.D	07/02/04	15:47	6.96
ZZZZZZ	DD17025.D	07/02/04	16:07	6.96
ZZZZZZ	DD17026.D	07/02/04	16:27	0.00

Surrogate Compounds

S1 = 4-Bromofluorobenzene

(a) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F25003
Account: EEINCJX EEI
Project: CSFF MCAS New River

Check Std:	GDD532-CC532	**Injection Date:**	07/02/04
Lab File ID:	DD17027.D	**Injection Time:**	16:47
Instrument ID:	GCDD	**Method:**	EPA 504.1

	S1 [a] RT	S1 [b] RT
Check Std	6.75	6.96

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
F25059-1	DD17028.D	07/02/04	17:07		0.00
OP10813-MS	DD17029.D	07/02/04	17:27		0.00
OP10813-MSD	DD17030.D	07/02/04	17:46		0.00
ZZZZZZ	DD17031.D	07/02/04	18:06		0.00
ZZZZZZ	DD17032.D	07/02/04	18:26		6.95
ZZZZZZ	DD17033.D	07/02/04	18:46		6.96
GDD532-ECC532	DD17034.D	07/02/04	19:05	6.75	6.96

Surrogate Compounds

S1 = 4-Bromofluorobenzene

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F25003
Account: EEINCJX EEI
Project: CSFF MCAS New River

Check Std:	GDD532-CC532	**Injection Date:**	07/01/04
Lab File ID:	DD16963.D	**Injection Time:**	19:44
Instrument ID:	GCDD	**Method:**	EPA 504.1

	S1 [a] RT
Check Std	6.96

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT
OP10813-MB	DD16964.D	07/01/04	20:03	6.96
OP10813-BS	DD16965.D	07/01/04	20:23	6.96
OP10813-BS2	DD16966.D	07/01/04	20:43	6.96
F25003-1	DD16973.D	07/01/04	23:01	6.96

Surrogate Compounds

S1 = 4-Bromofluorobenzene

(a) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F25003
Account: EEINCJX EEI
Project: CSFF MCAS New River

Check Std:	GDD532-CC532	**Injection Date:**	07/02/04
Lab File ID:	DD17006.D	**Injection Time:**	09:50
Instrument ID:	GCDD	**Method:**	EPA 504.1

	S1 [a] RT
Check Std	6.96

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT
ZZZZZZ	DD17007.D	07/02/04	10:10	6.96
ZZZZZZ	DD17008.D	07/02/04	10:29	6.96
ZZZZZZ	DD17009.D	07/02/04	10:49	6.96
ZZZZZZ	DD17010.D	07/02/04	11:09	6.96
ZZZZZZ	DD17011.D	07/02/04	11:29	6.96
ZZZZZZ	DD17012.D	07/02/04	11:49	6.96
OP10815-MB	DD17013.D	07/02/04	12:08	6.96
OP10815-BS	DD17014.D	07/02/04	12:28	6.96
OP10815-BS2	DD17015.D	07/02/04	12:48	6.96
F25003-16	DD17016.D	07/02/04	13:08	6.96

Surrogate Compounds

S1 = 4-Bromofluorobenzene

(a) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F25003
Aecount: EEINCJX EEI
Project: CSFF MCAS New River

Check Std:	GEF3229-CC3177	**Injection Date:**	07/01/04
Lab File ID:	EF040863.D	**Injection Time:**	18:15
Instrument ID:	GCEF	**Method:**	EPA 601/602

	S1 [a] RT	S2 [a] RT
Check Std	8.83	5.75

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
F24981-1	EF040864.D	07/01/04	18:39	8.82	5.75
F24981-1MS	EF040865.D	07/01/04	19:04	8.82	5.75
GEF3230-BS	EF040868.D	07/01/04	20:31	8.83	5.75
GEF3230-MB	EF040869.D	07/01/04	20:56	8.83	5.75
F25003-6	EF040870.D	07/01/04	21:20	8.83	5.75
F25003-6MS	EF040871.D	07/01/04	21:44	8.83	5.75
F25003-6MSD	EF040872.D	07/01/04	22:09	8.83	5.75
F25003-5	EF040873.D	07/01/04	22:34	8.83	5.75

Surrogate Compounds

S1 = 1-Chloro-4-fluorobenzene
S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #2

Initial Calibration Summary

Job Number: F25003
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GDD532-ICC532
Lab FileID: DD16954.D

Response Factor Report ECD 4

Method : C:\HPCHEM\2\METHODS\504_1.M (Chemstation Integrator)
Title : EDB/DBCP by EPA 504.1 or SW846 8011
Last Update : Tue Jul 06 08:42:48 2004
Response via : Initial Calibration

Calibration Files
.125=DD16953.D .250=DD16954.D .500=DD16955.D 0.75=DD16956.D
1.0 =DD16957.D 0.1 =DD16959.D

	Compound	.125	.250	.500	0.75	1.0	0.1	Avg	%RSD
1)	1,2-Dibromoethane	4.054	3.713	3.532	3.356	3.459		3.623 E5	7.56
2) S	4-Bromofluorobenzen	3.662	3.404	3.232	3.119	3.140		3.311 E4	6.82
3)	1,2,3-Trichloroprop	7.838	7.619	7.264	7.115	7.205		7.408 E4	4.14
4)	1,2-Dibromo-3-chlor	6.248	5.849	5.909	6.011	6.096		6.023 E5	2.62

Signal #2

1)	1,2-Dibromoethane	2.208	2.029	1.926	1.884	1.979		2.005 E5	6.27
2) S	4-Bromofluorobenzen	1.664	1.527	1.456	1.427	1.462		1.507 E4	6.30
3)	1,2,3-Trichloroprop	4.056	3.772	3.522	3.420	3.413		3.637 E4	7.58
4)	1,2-Dibromo-3-chlor	2.300	2.184	2.257	2.299	2.417		2.291 E5	3.69

(#) = Out of Range

504_1.M Tue Jul 06 08:43:43 2004 ECD3

5.6

Initial Calibration Verification

Job Number: F25003
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GDD532-ICV532
Lab FileID: DD16959.D

Evaluate Continuing Calibration Report

```
Signal #1 : C:\HPCHEM\2\DATA\0701EDB\DD16959.D\ECD1A.CH  Vial: 8
Signal #2 : C:\HPCHEM\2\DATA\0701EDB\DD16959.D\ECD2B.CH
Acq On    : 1 Jul 0204   6:24 pm                    Operator: aubreya
Sample    : ICV532-0.10                             Inst    : ECD 4
Misc      : op10795,gdd532,35.0,,,2,1,water         MultiplIr: 1.00
IntFile Signal #1: EVENTS.E     IntFile Signal #2: EVENTS2.E

Method       : C:\HPCHEM\2\METHODS\504_1.M (Chemstation Integrator)
Title        : EDB/DBCP by EPA 504.1 or SW846 8011
Last Update  : Tue Jul 06 08:42:48 2004
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	1,2-Dibromoethane	0.100	0.102	-2.0	0	0.00	5.14- 5.34
2 S	4-Bromofluorobenzene	2.000	2.038	-1.9	0	0.00	6.65- 6.85
3	1,2,3-Trichloropropane		----------NA----------				
4	1,2-Dibromo-3-chloropr	0.100	0.090	10.0	0	0.00	9.01- 9.21
*****	Signal #2 *****						
1	1,2-Dibromoethane	0.100	0.100	0.0	0	0.00	5.40- 5.60
2 S	4-Bromofluorobenzene	2.000	2.002	-0.1	0	0.00	6.86- 7.06
3	1,2,3-Trichloropropane		----------NA----------				
4	1,2-Dibromo-3-chloropr	0.100	0.087	13.0	0	0.00	9.31- 9.51

```
(#) = Out of Range              SPCC's out = 0  CCC's out = 0
 DD16959.D  504_1.M          Tue Jul 06 08:43:53 2004   ECD3
```

Continuing Calibration Summary

Job Number: F25003
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GDD532-CC532
Lab FileID: DD16963.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\0701EDB\DD16963.D\ECD1A.CH Vial: 4
Signal #2 : C:\HPCHEM\2\DATA\0701EDB\DD16963.D\ECD2B.CH
Acq On : 1 Jul 0204 7:44 pm Operator: aubreya
Sample : CC532-0.50 Inst : ECD 4
Misc : op10795,gdd532,35.0,,,2,4,water MultiplIr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\2\METHODS\504_1.M (Chemstation Integrator)
Title : EDB/DBCP by EPA 504.1 or SW846 8011
Last Update : Fri Jul 02 09:01:50 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	1,2-Dibromoethane	0.500	0.485	3.0	100	0.00	5.14- 5.34
2 S	4-Bromofluorobenzene	4.000	3.861	3.5	99	0.00	6.65- 6.85
3	1,2,3-Trichloropropane	0.500	0.484	3.2	99	0.00	6.84- 7.04
4	1,2-Dibromo-3-chloropr	0.500	0.478	4.4	97	0.00	9.01- 9.21
*****	Signal #2 *****						
1	1,2-Dibromoethane	0.500	0.477	4.6	99	0.00	5.40- 5.60
2 S	4-Bromofluorobenzene	4.000	3.798	5.0	98	0.00	6.86- 7.06
3	1,2,3-Trichloropropane	0.500	0.488	2.4	101	0.00	7.25- 7.45
4	1,2-Dibromo-3-chloropr	0.500	0.476	4.8	97	0.00	9.31- 9.51

(#) = Out of Range SPCC's out = 0 CCC's out = 0
DD16955.D 504_1.M Tue Jul 06 08:42:25 2004 ECD3

5.6

Continuing Calibration Summary

Job Number: F25003
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GDD532-CC532
Lab FileID: DD16974.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\0701EDB\DD16974.D\ECD1A.CH Vial: 3
Signal #2 : C:\HPCHEM\2\DATA\0701EDB\DD16974.D\ECD2B.CH
Acq On : 1 Jul 0204 11:21 pm Operator: aubreya
Sample : CC532-0.25 Inst : ECD 4
Misc : op10813,gdd532,35.0,,,2,4,water MultiplIr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\2\METHODS\504_1.M (Chemstation Integrator)
Title : EDB/DBCP by EPA 504.1 or SW846 8011
Last Update : Fri Jul 02 09:01:50 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	1,2-Dibromoethane	0.250	0.254	-1.6	99	0.00	5.14- 5.34
2 S	4-Bromofluorobenzene	2.000	1.992	0.4	97	0.00	6.65- 6.85
3	1,2,3-Trichloropropane	0.250	0.247	1.2	96	0.00	6.84- 7.04
4	1,2-Dibromo-3-chloropr	0.250	0.228	8.8	94	0.00	9.01- 9.21
*****	Signal #2 *****						
1	1,2-Dibromoethane	0.250	0.252	-0.8	100	0.00	5.40- 5.60
2 S	4-Bromofluorobenzene	2.000	1.973	1.3	97	0.00	6.86- 7.06
3	1,2,3-Trichloropropane	0.250	0.260	-4.0	100	0.00	7.25- 7.45
4	1,2-Dibromo-3-chloropr	0.250	0.222	11.2	93	0.00	9.31- 9.51

(#) = Out of Range SPCC's out = 0 CCC's out = 0
DD16954.D 504_1.M Tue Jul 06 08:41:58 2004 ECD3

Continuing Calibration Summary

Job Number: F25003
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GDD532-CC532
Lab FileID: DD16985.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\0701EDB\DD16985.D\ECD1A.CH Vial: 4
Signal #2 : C:\HPCHEM\2\DATA\0701EDB\DD16985.D\ECD2B.CH
Acq On : 2 Jul 0204 2:58 am Operator: aubreya
Sample : CC532-0.50 Inst : ECD 4
Misc : op10813,gdd532,35.0,,,2,4,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\2\METHODS\504_1.M (Chemstation Integrator)
Title : EDB/DBCP by EPA 504.1 or SW846 8011
Last Update : Fri Jul 02 09:01:50 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	1,2-Dibromoethane	0.500	0.471	5.8	97	0.00	5.14- 5.34
2 S	4-Bromofluorobenzene	4.000	3.774	5.6	97	0.00	6.65- 6.85
3	1,2,3-Trichloropropane	0.500	0.483	3.4	99	0.00	6.84- 7.04
4	1,2-Dibromo-3-chloropr	0.500	0.453	9.4	92	0.00	9.01- 9.21
*****	Signal #2 *****						
1	1,2-Dibromoethane	0.500	0.463	7.4	96	0.00	5.40- 5.60
2 S	4-Bromofluorobenzene	4.000	3.749	6.3	97	0.00	6.86- 7.06
3	1,2,3-Trichloropropane	0.500	0.479	4.2	99	0.00	7.25- 7.45
4	1,2-Dibromo-3-chloropr	0.500	0.457	8.6	93	0.00	9.31- 9.51

(#) = Out of Range SPCC's out = 0 CCC's out = 0
DD16955.D 504_1.M Tue Jul 06 08:42:25 2004 ECD3

5.6

Continuing Calibration Summary

Job Number: F25003
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GDD532-CC532
Lab FileID: DD16995.D

5.6

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\0701EDB\DD16995.D\ECD1A.CH Vial: 4
Signal #2 : C:\HPCHEM\2\DATA\0701EDB\DD16995.D\ECD2B.CH
Acq On : 2 Jul 0204 6:14 am Operator: aubreya
Sample : CC532-0.50 Inst : ECD 4
Misc : op10814,gdd532,35.0,,,2,4,water MultiplIr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\2\METHODS\504_1.M (Chemstation Integrator)
Title : EDB/DBCP by EPA 504.1 or SW846 8011
Last Update : Fri Jul 02 09:01:50 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	1,2-Dibromoethane	0.500	0.468	6.4	96	0.00	5.14- 5.34
2 S	4-Bromofluorobenzene	4.000	3.748	6.3	96	0.00	6.65- 6.85
3	1,2,3-Trichloropropane	0.500	0.485	3.0	99	0.00	6.84- 7.04
4	1,2-Dibromo-3-chloropr	0.500	0.443	11.4	90	0.00	9.01- 9.21
*****	Signal #2 *****						
1	1,2-Dibromoethane	0.500	0.467	6.6	97	0.00	5.40- 5.60
2 S	4-Bromofluorobenzene	4.000	3.700	7.5	96	0.00	6.86- 7.06
3	1,2,3-Trichloropropane	0.500	0.473	5.4	98	0.00	7.25- 7.45
4	1,2-Dibromo-3-chloropr	0.500	0.434	13.2	88	0.00	9.31- 9.51

(#) = Out of Range SPCC's out = 0 CCC's out = 0
DD16955.D 504_1.M Tue Jul 06 08:42:26 2004 ECD3

Continuing Calibration Summary

Job Number: F25003
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GDD532-CC532
Lab FileID: DD17006.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\0701EDB\DD17006.D\ECD1A.CH Vial: 3
Signal #2 : C:\HPCHEM\2\DATA\0701EDB\DD17006.D\ECD2B.CH
Acq On : 2 Jul 0204 9:50 am Operator: aubreya
Sample : CC532-0.25 Inst : ECD 4
Misc : op10814,gdd532,35.0,,,2,4,water MultiplR: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\2\METHODS\504_1.M (Chemstation Integrator)
Title : EDB/DBCP by EPA 504.1 or SW846 8011
Last Update : Fri Jul 02 09:01:50 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	1,2-Dibromoethane	0.250	0.238	4.8	93	0.00	5.14- 5.34
2 S	4-Bromofluorobenzene	2.000	1.938	3.1	94	0.00	6.65- 6.85
3	1,2,3-Trichloropropane	0.250	0.235	6.0	91	0.00	6.84- 7.04
4	1,2-Dibromo-3-chloropr	0.250	0.219	12.4	90	0.00	9.01- 9.21
*****	Signal #2 *****						
1	1,2-Dibromoethane	0.250	0.236	5.6	93	0.00	5.40- 5.60
2 S	4-Bromofluorobenzene	2.000	1.902	4.9	94	0.00	6.86- 7.06
3	1,2,3-Trichloropropane	0.250	0.243	2.8	94	0.00	7.25- 7.45
4	1,2-Dibromo-3-chloropr	0.250	0.216	13.6	91	0.00	9.31- 9.51

(#) = Out of Range SPCC's out = 0 CCC's out = 0
DD16954.D 504_1.M Tue Jul 06 08:41:59 2004 ECD3

Continuing Calibration Summary

Job Number: F25003 **Sample:** GDD532-CC532
Account: EEINCJX EEI **Lab FileID:** DD17017.D
Project: CSFF MCAS New River

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\0701EDB\DD17017.D\ECD1A.CH Vial: 4
Signal #2 : C:\HPCHEM\2\DATA\0701EDB\DD17017.D\ECD2B.CH
Acq On : 2 Jul 0204 1:28 pm Operator: aubreya
Sample : CC532-0.50 Inst : ECD 4
Misc : op10815,gdd532,35.0,,,2,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\2\METHODS\504_1.M (Chemstation Integrator)
Title : EDB/DBCP by EPA 504.1 or SW846 8011
Last Update : Fri Jul 02 09:01:50 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	1,2-Dibromoethane	0.500	0.472	5.6	97	0.00	5.14- 5.34
2 S	4-Bromofluorobenzene	4.000	3.604	9.9	92	0.00	6.65- 6.85
3	1,2,3-Trichloropropane	0.500	0.464	7.2	95	0.00	6.84- 7.04
4	1,2-Dibromo-3-chloropr	0.500	0.416	16.8	85	0.00	9.01- 9.21
*****	Signal #2 *****						
1	1,2-Dibromoethane	0.500	0.470	6.0	98	0.00	5.40- 5.60
2 S	4-Bromofluorobenzene	4.000	3.660	8.5	95	0.00	6.86- 7.06
3	1,2,3-Trichloropropane	0.500	0.446	10.8	92	0.00	7.25- 7.45
4	1,2-Dibromo-3-chloropr	0.500	0.422	15.6	86	0.00	9.31- 9.51

(#) = Out of Range SPCC's out = 0 CCC's out = 0
DD16955.D 504_1.M Tue Jul 06 08:42:27 2004 ECD3

Continuing Calibration Summary

Job Number: F25003
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GDD532-CC532
Lab FileID: DD17027.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\0701EDB\DD17027.D\ECD1A.CH Vial: 3
Signal #2 : C:\HPCHEM\2\DATA\0701EDB\DD17027.D\ECD2B.CH
Acq On : 2 Jul 0204 4:47 pm Operator: aubreya
Sample : CC532-0.25 Inst : ECD 4
Misc : op10815,gdd532,35.0,,,2,1,water MultiplIr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\2\METHODS\504_1.M (Chemstation Integrator)
Title : EDB/DBCP by EPA 504.1 or SW846 8011
Last Update : Fri Jul 02 09:01:50 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	1,2-Dibromoethane	0.250	0.240	4.0	94	0.00	5.14- 5.34
2 S	4-Bromofluorobenzene	2.000	1.920	4.0	93	0.00	6.65- 6.85
3	1,2,3-Trichloropropane	0.250	0.241	3.6	94	0.00	6.84- 7.04
4	1,2-Dibromo-3-chloropr	0.250	0.220	12.0	91	0.00	9.01- 9.21
*****	Signal #2 *****						
1	1,2-Dibromoethane	0.250	0.235	6.0	93	0.00	5.40- 5.60
2 S	4-Bromofluorobenzene	2.000	1.945	2.7	96	0.00	6.86- 7.06
3	1,2,3-Trichloropropane	0.250	0.238	4.8	92	0.00	7.25- 7.45
4	1,2-Dibromo-3-chloropr	0.250	0.219	12.4	92	0.00	9.31- 9.51

(#) = Out of Range SPCC's out = 0 CCC's out = 0
DD16954.D 504_1.M Tue Jul 06 08:41:59 2004 ECD3

Continuing Calibration Summary

Job Number: F25003
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GDD532-ECC532
Lab FileID: DD17034.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\0701EDB\DD17034.D\ECD1A.CH Vial: 3
Signal #2 : C:\HPCHEM\2\DATA\0701EDB\DD17034.D\ECD2B.CH
Acq On : 2 Jul 0204 7:05 pm Operator: aubreya
Sample : ECC532-0.25 Inst : ECD 4
Misc : op10813,gdd532,35.0,,,2,5,water MultiplIr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\2\METHODS\504_1.M (Chemstation Integrator)
Title : EDB/DBCP by EPA 504.1 or SW846 8011
Last Update : Fri Jul 02 09:01:50 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	1,2-Dibromoethane	0.250	0.242	3.2	94	0.00	5.14- 5.34
2 S	4-Bromofluorobenzene	2.000	2.009	-0.4	98	0.00	6.65- 6.85
3	1,2,3-Trichloropropane	0.250	0.246	1.6	96	0.00	6.84- 7.04
4	1,2-Dibromo-3-chloropr	0.250	0.234	6.4	96	0.00	9.01- 9.21
*****	Signal #2 *****						
1	1,2-Dibromoethane	0.250	0.235	6.0	93	0.00	5.40- 5.60
2 S	4-Bromofluorobenzene	2.000	1.992	0.4	98	0.00	6.86- 7.06
3	1,2,3-Trichloropropane	0.250	0.261	-4.4	101	0.00	7.25- 7.45
4	1,2-Dibromo-3-chloropr	0.250	0.229	8.4	96	0.00	9.31- 9.51

(#) = Out of Range SPCC's out = 0 CCC's out = 0
DD16954.D 504_1.M Tue Jul 06 08:42:00 2004 ECD3

Initial Calibration Summary

Job Number: F25003
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GEF3177-ICC3177
Lab FileID: EF039601.D

Response Factor Report VOA1

Method : C:\HPCHEM\1\METHODS\DUAL0603.M (Chemstation Integrator)
Title : EPA 602 & 5030B/8021B
Last Update : Thu May 13 10:43:45 2004
Response via : Initial Calibration

Calibration Files
1 =EF039599.D 2 =EF039600.D 3 =EF039601.D
4 =EF039602.D 5 =EF039603.D 6 =EF039604.D

		Compound	1	2	3	4	5	6	Avg	%RSD
1)		Methyl tert Butyl E		1.962	1.959	2.049	1.994	2.152	2.023 E3	3.97
2)		Di-Isopropyl ether	2.791	2.951	2.972	3.041	3.068	3.170	2.999 E3	4.27
3)		Benzene	6.799	6.242	6.233	6.388	6.501	6.676	6.473 E3	3.57
4)	S	a,a,a-TFT(S)	1.892	1.858	1.900	2.035	2.123	2.148	1.993 E3	6.32
5)		Toluene	6.339	5.343	5.402	5.536	5.642	5.820	5.681 E3	6.43
6)	S	1-Chloro-4-Fluorobe	2.946	2.875	2.950	3.229	3.362	3.373	3.122 E3	7.22
7)		Chlorobenzene		5.528	5.329	5.434	5.552	5.691	5.507 E3	2.46
8)		Ethylbenzene		4.764	4.546	4.601	4.659	4.742	4.662 E3	1.98
9)		m,p-Xylene		4.960	5.019	5.111	5.209	5.326	5.125 E3	2.87
10)		o-Xylene	5.253	4.449	4.546	4.554	4.652	4.742	4.699 E3	6.15
11)		1,3-Dichlorobenzene	3.529	3.433	3.822	3.930	4.101	4.223	3.840 E3	8.11
12)		1,4-Dichlorobenzene	3.641	3.679	4.081	4.247	4.404	4.564	4.103 E3	9.23
13)		1,2-Dichlorobenzene		2.499	2.679	2.822	2.931	2.999	2.786 E3	7.21
Signal #2										
1)		Methyl tert Butyl E		1.561	1.659	1.693	1.616	1.714	1.648 E3	3.72
2)		Di-Isopropyl ether	2.338	2.302	2.349	2.424	2.393	2.453	2.376 E3	2.39
3)		Benzene	5.264	5.010	5.092	5.157	5.228	5.368	5.187 E3	2.47
4)	S	a,a,a-TFT(S)	1.454	1.442	1.488	1.596	1.638	1.651	1.545 E3	6.11
5)		Toluene	4.826	4.222	4.360	4.442	4.462	4.608	4.487 E3	4.66
6)	S	1-Chloro-4-Fluorobe	2.145	2.122	2.244	2.477	2.539	2.546	2.346 E3	8.43
7)		Chlorobenzene		4.867	4.465	4.500	4.477	4.580	4.578 E3	3.66
8)		Ethylbenzene		3.809	3.819	3.823	3.874	3.930	3.851 E3	1.32
9)		m,p-Xylene		4.189	4.227	4.233	4.274	4.362	4.257 E3	1.55
10)		o-Xylene	3.887	3.472	3.625	3.622	3.627	3.699	3.656 E3	3.71
11)		1,3-Dichlorobenzene		2.680	2.981	3.102	3.167	3.261	3.038 E3	7.40
12)		1,4-Dichlorobenzene		2.727	3.059	3.173	3.240	3.341	3.108 E3	7.61
13)		1,2-Dichlorobenzene	1.975	2.005	2.189	2.283	2.351	2.410	2.202 E3	8.19

(#) = Out of Range

DUAL0603.M Fri Jun 04 08:31:14 2004 EF

5.6

Continuing Calibration Summary

Job Number: F25003
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GEF3229-CC3177
Lab FileID: EF040863.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\070104\EF040863.D\FID1A.CH Vial: 23
Signal #2 : C:\HPCHEM\1\DATA\070104\EF040863.D\FID2B.CH
Acq On : 1 Jul 2004 6:15 pm Operator: ClaireV
Sample : cc3177-20 Inst : V0A1
Misc : gc3664,gef3229,,,,,1 MultiplIr: 1.00
IntFile Signal #1: AUTOINT1.E IntFile Signal #2: autoint2.e

Method : C:\HPCHEM\1\METHODS\DUAL0603.M (Chemstation Integrator)
Title : EPA 602 & 5030B/8021B
Last Update : Wed Jun 30 10:39:12 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	20.000	20.418	-2.1	105	0.00
2		Di-Isopropyl ether	20.000	19.445	2.8	98	0.00
3		Benzene	20.000	19.537	2.3	101	0.00
4	S	a,a,a-TFT(S)	20.000	18.898	5.5	99	0.00
5		Toluene	20.000	19.123	4.4	101	0.00
6	S	1-Chloro-4-Fluorobenzene	20.000	18.766	6.2	99	0.00
7		Chlorobenzene	20.000	19.276	3.6	100	0.00
8		Ethylbenzene	20.000	19.429	2.9	100	0.00
9		m,p-Xylene	40.000	39.303	1.7	100	0.00
10		o-Xylene	20.000	19.181	4.1	99	0.00
11		1,3-Dichlorobenzene	20.000	20.377	-1.9	102	0.00
12		1,4-Dichlorobenzene	20.000	20.678	-3.4	104	0.00
13		1,2-Dichlorobenzene	20.000	17.507	12.5	91	0.00

Signal #2

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	20.000	20.516	-2.6	102	0.00
2		Di-Isopropyl ether	20.000	19.354	3.2	98	0.00
3		Benzene	20.000	19.939	0.3	102	0.00
4	S	a,a,a-TFT(S)	20.000	19.137	4.3	99	0.00
5		Toluene	20.000	19.486	2.6	100	0.00
6	S	1-Chloro-4-Fluorobenzene	20.000	19.018	4.9	99	0.00
7		Chlorobenzene	20.000	19.505	2.5	100	0.00
8		Ethylbenzene	20.000	19.861	0.7	100	0.00
9		m,p-Xylene	40.000	39.084	2.3	98	0.00
10		o-Xylene	20.000	19.618	1.9	99	0.00
11		1,3-Dichlorobenzene	20.000	20.368	-1.8	104	0.00
12		1,4-Dichlorobenzene	20.000	20.289	-1.4	103	0.00
13		1,2-Dichlorobenzene	20.000	17.833	10.8	90	0.00

Average % D = 3.6

(#) = Out of Range SPCC's out = 0 CCC's out = 0
EF039601.D DUAL0603.M Fri Jul 02 09:43:21 2004 EF

Continuing Calibration Summary

Job Number: F25003
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GEF3230-CC3177
Lab FileID: EF040874.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\070104\EF040874.D\FID1A.CH Vial: 32
Signal #2 : C:\HPCHEM\1\DATA\070104\EF040874.D\FID2B.CH
Acq On : 1 Jul 2004 10:58 pm Operator: ClaireV
Sample : cc3177-20 Inst : VOA1
Misc : gc3668,gef3230,,,,,1 MultiplR: 1.00
IntFile Signal #1: AUTOINT1.E IntFile Signal #2: autoint2.e

Method : C:\HPCHEM\1\METHODS\DUAL0603.M (Chemstation Integrator)
Title : EPA 602 & 5030B/8021B
Last Update : Wed Jun 30 10:39:12 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	Methyl tert Butyl Ether	20.000	21.268	-6.3	110	0.00
2	Di-Isopropyl ether	20.000	20.290	-1.4	102	0.00
3	Benzene	20.000	20.348	-1.7	106	0.00
4 S	a,a,a-TFT(S)	20.000	19.191	4.0	101	0.00
5	Toluene	20.000	20.073	-0.4	106	0.00
6 S	1-Chloro-4-Fluorobenzene	20.000	19.287	3.6	102	0.00
7	Chlorobenzene	20.000	20.495	-2.5	106	0.00
8	Ethylbenzene	20.000	20.703	-3.5	106	0.00
9	m,p-Xylene	40.000	41.715	-4.3	106	0.00
10	o-Xylene	20.000	20.303	-1.5	105	0.00
11	1,3-Dichlorobenzene	20.000	22.191	-11.0	111	0.00
12	1,4-Dichlorobenzene	20.000	22.412	-12.1	113	0.00
13	1,2-Dichlorobenzene	20.000	19.266	3.7	100	0.00

Signal #2

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	Methyl tert Butyl Ether	20.000	21.149	-5.7	105	0.00
2	Di-Isopropyl ether	20.000	20.004	-0.0	101	0.00
3	Benzene	20.000	20.694	-3.5	105	0.00
4 S	a,a,a-TFT(S)	20.000	19.176	4.1	100	0.00
5	Toluene	20.000	20.283	-1.4	104	0.00
6 S	1-Chloro-4-Fluorobenzene	20.000	19.320	3.4	101	0.00
7	Chlorobenzene	20.000	20.410	-2.1	105	0.00
8	Ethylbenzene	20.000	20.941	-4.7	106	0.00
9	m,p-Xylene	40.000	41.130	-2.8	104	0.00
10	o-Xylene	20.000	20.548	-2.7	104	0.00
11	1,3-Dichlorobenzene	20.000	22.021	-10.1	112	0.00
12	1,4-Dichlorobenzene	20.000	22.074	-10.4	112	0.00
13	1,2-Dichlorobenzene	20.000	19.831	0.8	100	0.00

Average % D = 4.1

(#) = Out of Range SPCC's out = 0 CCC's out = 0
EF039601.D DUAL0603.M Fri Jul 02 09:43:22 2004 EF

5.6

Continuing Calibration Summary

Job Number: F25003
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GEF3230-CC3177
Lab FileID: EF040885.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\070104\EF040885.D\FID1A.CH Vial: 43
Signal #2 : C:\HPCHEM\1\DATA\070104\EF040885.D\FID2B.CH
Acq On : 2 Jul 2004 3:28 am Operator: ClaireV
Sample : cc3177-20 Inst : VOA1
Misc : gc3668,gef3230,,,,,1 MultiplR: 1.00
IntFile Signal #1: AUTOINT1.E IntFile Signal #2: autoint2.e

Method : C:\HPCHEM\1\METHODS\DUAL0603.M (Chemstation Integrator)
Title : EPA 602 & 5030B/8021B
Last Update : Wed Jun 30 10:39:12 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert 8utyl Ether	20.000	21.208	-6.0	110	0.00
2		Di-Isopropyl ether	20.000	20.141	-0.7	102	D.00
3		Benzene	20.000	20.697	-3.5	107	0.00
4	S	a,a,a-TFT(S)	20.000	19.839	0.8	104	0.00
5		Toluene	20.000	20.291	-1.5	107	0.00
6	S	1-Chloro-4-Fluorobenzene	20.000	19.771	1.1	105	0.00
7		Chlorobenzene	20.000	20.469	-2.3	106	0.00
8		Ethylbenzene	20.000	20.864	-4.3	107	0.00
9		m,p-Xylene	40.000	41.832	-4.6	107	0.00
10		o-Xylene	20.000	20.223	-1.1	105	0.00
11		1,3-Dichlorobenzene	20.000	21.966	-9.8	110	0.00
12		1,4-Dichlorobenzene	20.000	22.099	-10.5	111	0.00
13		1,2-Dichlorobenzene	20.000	19.285	3.6	100	0.00

Signal #2

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	20.000	21.191	-6.0	105	0.00
2		Di-Isopropyl ether	20.000	20.066	-0.3	101	0.00
3		Benzene	20.000	21.011	-5.1	107	0.00
4	S	a,a,a-TFT(S)	20.000	20.093	-0.5	104	0.00
5		Toluene	20.000	20.673	-3.4	106	0.00
6	S	1-Chloro-4-Fluorobenzene	20.000	19.978	0.1	104	0.00
7		Chlorobenzene	20.000	20.545	-2.7	105	0.00
8		Ethylbenzene	20.000	20.964	-4.8	106	0.00
9		m,p-Xylene	40.000	41.432	-3.6	104	0.00
10		o-Xylene	20.000	20.721	-3.6	104	0.00
11		1,3-Dichlorobenzene	20.000	22.100	-10.5	113	0.00
12		1,4-Dichlorobenzene	20.000	21.867	-9.3	111	0.00
13		1,2-Dichlorobenzene	20.000	19.850	0.7	100	0.00

Average % D = 3.9

(#) = Out of Range SPCC's out = 0 CCC's out = 0
EF039601.D DUAL0603.M Fri Jul 02 09:43:23 2004 EF

Continuing Calibration Summary

Job Number: F25003
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GEF3230-CC3177
Lab FileID: EF040895.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\070104\EF040895.D\FID1A.CH Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\070104\EF040895.D\FID2B.CH
Acq On : 2 Jul 2004 7:37 am Operator: ClaireV
Sample : cc3177-20 Inst : VOA1
Misc : gc3668,gef3230,,,,,1 MultiplR: 1.00
IntFile Signal #1: AUTOINT1.E IntFile Signal #2: autoint2.e

Method : C:\HPCHEM\1\METHODS\DUAL0603.M (Chemstation Integrator)
Title : EPA 602 & 5030B/8021B
Last Update : Wed Jun 30 10:39:12 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	20.000	20.959	-4.8	108	0.00
2		Di-Isopropyl ether	20.000	20.017	-0.1	101	0.00
3		Benzene	20.000	19.135	4.3	99	0.00
4	S	a,a,a-TFT(S)	20.000	19.371	3.1	102	0.00
5		Toluene	20.000	18.647	6.8	98	0.00
6	S	1-Chloro-4-Fluorobenzene	20.000	19.248	3.8	102	0.00
7		Chlorobenzene	20.000	19.509	2.5	101	0.00
8		Ethylbenzene	20.000	20.119	-0.6	103	0.00
9		m,p-Xylene	40.000	40.958	-2.4	105	0.00
10		o-Xylene	20.000	19.744	1.3	102	0.00
11		1,3-Dichlorobenzene	20.000	21.308	-6.5	107	0.00
12		1,4-Dichlorobenzene	20.000	21.154	-5.8	106	0.00
13		1,2-Dichlorobenzene	20.000	18.199	9.0	95	0.00

Signal #2

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	20.000	21.067	-5.3	105	0.00
2		Di-Isopropyl ether	20.000	19.756	1.2	100	0.00
3		Benzene	20.000	19.526	2.4	99	0.00
4	S	a,a,a-TFT(S)	20.000	19.527	2.4	101	0.00
5		Toluene	20.000	19.192	4.0	99	0.00
6	S	1-Chloro-4-Fluorobenzene	20.000	19.506	2.5	102	0.00
7		Chlorobenzene	20.000	19.793	1.0	101	0.00
8		Ethylbenzene	20.000	20.255	-1.3	102	0.00
9		m,p-Xylene	40.000	40.338	-0.8	102	0.01
10		o-Xylene	20.000	20.175	-0.9	102	0.01
11		1,3-Dichlorobenzene	20.000	21.233	-6.2	108	0.00
12		1,4-Dichlorobenzene	20.000	21.199	-6.0	108	0.00
13		1,2-Dichlorobenzene	20.000	18.750	6.3	94	0.00

Average % D = 3.5

(#) = Out of Range SPCC's out = 0 CCC's out = 0
EF039601.D DUAL0603.M Fri Jul 02 09:43:24 2004 EF

Initial Calibration Summary

Job Number: F25003
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GEF3235-ICC3235
Lab FileID: EF041002.D

Response Factor Report VOA1

Method : C:\HPCHEM\1\METHODS\DUAL0706.M (Chemstation Integrator)
Title : EPA 602 & 5030B/8021B
Last Update : Tue Jul 06 12:09:31 2004
Response via : Initial Calibration

Calibration Files
1 =EF041000.D 2 =EF041001.D 3 =EF041002.D
4 =EF041003.D 5 =EF041004.D 6 =EF041005.D

		Compound	1	2	3	4	5	6	Avg		%RSD
1)		Methyl tert Butyl E	2.037	2.298	2.164	2.133	2.121	2.087	2.140	E3	4.15
2)		Di-Isopropyl ether		3.214	3.037	2.926	2.930	2.903	3.002	E3	4.31
3)		Benzene	7.322	7.088	6.739	6.537	6.574	6.521	6.797	E3	4.91
4)	S	a,a,a-TFT(S)	2.232	1.895	1.982	1.938	2.036	2.079	2.027	E3	5.93
5)		Toluene	6.284	5.985	5.744	5.615	5.698	5.646	5.829	E3	4.44
6)	S	1-Chloro-4-Fluorobe	3.489	2.896	3.044	2.954	3.092	3.066	3.090	E3	6.76
7)		Chlorobenzene		6.158	5.521	5.354	5.439	5.405	5.576	E3	5.94
8)		Ethylbenzene		5.240	4.763	4.576	4.665	4.567	4.762	E3	5.85
9)		m,p-Xylene	5.797	5.468	5.216	5.116	5.172	5.119	5.315	E3	5.08
10)		o-Xylene	5.208	4.911	4.674	4.548	4.624	4.550	4.753	E3	5.47
11)		1,3-Dichlorobenzene	4.030	3.547	3.619	3.683	3.779	3.812	3.745	E3	4.56
12)		1,4-Dichlorobenzene	4.407	3.742	3.824	3.878	4.068	4.108	4.004	E3	6.06
13)		1,2-Dichlorobenzene		2.028	2.076	2.208	2.313	2.335	2.192	E3	6.28
Signal #2											
1)		Methyl tert Butyl E		1.816	1.719	1.718	1.711	1.685	1.730	E3	2.90
2)		Di-Isopropyl ether	2.186	2.459	2.362	2.304	2.292	2.259	2.310	E3	4.03
3)		Benzene	5.486	5.655	5.426	5.242	5.292	5.291	5.399	E3	2.89
4)	S	a,a,a-TFT(S)	1.733	1.473	1.524	1.493	1.602	1.617	1.574	E3	6.17
5)		Toluene	4.805	4.721	4.542	4.436	4.520	4.477	4.583	E3	3.19
6)	S	1-Chloro-4-Fluorobe	2.516	2.135	2.274	2.224	2.346	2.350	2.308	E3	5.64
7)		Chlorobenzene		5.338	4.544	4.382	4.395	4.390	4.610	E3	8.95
8)		Ethylbenzene	4.545	4.227	3.967	3.804	3.895	3.856	4.049	E3	7.03
9)		m,p-Xylene	4.698	4.473	4.272	4.208	4.287	4.267	4.368	E3	4.24
10)		o-Xylene	3.714	3.821	3.661	3.585	3.625	3.578	3.664	E3	2.51
11)		1,3-Dichlorobenzene	3.026	2.736	2.833	2.889	2.991	2.998	2.912	E3	3.90
12)		1,4-Dichlorobenzene	3.189	2.725	2.850	2.916	3.024	3.035	2.956	E3	5.48
13)		1,2-Dichlorobenzene	2.000	1.603	1.678	1.795	1.905	1.899	1.813	E3	8.31

(#) = Out of Range

DUAL0706.M Wed Jul 07 08:48:42 2004 EF

Continuing Calibration Summary

Job Number: F25003
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GEF3235-CC3235
Lab FileID: EF041017.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\070604\EF041017.D\FID1A.CH Vial: 18
Signal #2 : C:\HPCHEM\1\DATA\070604\EF041017.D\FID2B.CH
Acq On : 6 Jul 2004 3:52 pm Operator: ClaireV
Sample : cc3235-20 Inst : VOA1
Misc : gc3672,gef3235,,,,,1 MultiplR: 1.00
IntFile Signal #1: AUTOINT1.E IntFile Signal #2: autoint2.e

Method : C:\HPCHEM\1\METHODS\DUAL0706.M (Chemstation Integrator)
Title : EPA 602 & 5030B/8021B
Last Update : Tue Jul 06 12:09:31 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	20.000	20.189	-0.9	100	0.00
2		Di-Isopropyl ether	20.000	19.748	1.3	98	0.00
3		Benzene	20.000	19.204	4.0	97	0.00
4	S	a,a,a-TFT(S)	20.000	19.264	3.7	98	0.00
5		Toluene	20.000	18.715	6.4	95	0.00
6	S	1-Chloro-4-Fluorobenzene	20.000	18.630	6.9	95	0.00
7		Chlorobenzene	20.000	19.090	4.6	96	0.00
8		Ethylbenzene	20.000	19.399	3.0	97	0.00
9		m,p-Xylene	40.000	38.163	4.6	97	0.00
10		o-Xylene	20.000	18.984	5.1	97	0.00
11		1,3-Dichlorobenzene	20.000	19.321	3.4	100	0.00
12		1,4-Dichlorobenzene	20.000	19.149	4.3	100	0.00
13		1,2-Dichlorobenzene	20.000	19.986	0.1	106	0.00

Signal #2

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	20.000	20.191	-1.0	102	0.00
2		Di-Isopropyl ether	20.000	20.280	-1.4	99	0.00
3		Benzene	20.000	19.804	1.0	99	0.00
4	S	a,a,a-TFT(S)	20.000	19.387	3.1	100	0.00
5		Toluene	20.000	19.270	3.7	97	0.00
6	S	1-Chloro-4-Fluorobenzene	20.000	18.857	5.7	96	0.00
7		Chlorobenzene	20.000	19.433	2.8	99	0.00
8		Ethylbenzene	20.000	19.446	2.8	99	0.00
9		m,p-Xylene	40.000	38.390	4.0	98	0.00
10		o-Xylene	20.000	19.632	1.8	98	0.00
11		1,3-Dichlorobenzene	20.000	19.705	1.5	101	0.00
12		1,4-Dichlorobenzene	20.000	19.271	3.6	100	0.00
13		1,2-Dichlorobenzene	20.000	19.650	1.8	106	0.00

Average % D = 3.2

(#) = Out of Range SPCC's out = 0 CCC's out = 0
EF041002.D DUAL0706.M Wed Jul 07 08:46:34 2004 EF

Continuing Calibration Summary

Job Number: F25003
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GEF3235-ECC3235
Lab FileID: EF041025.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\070604\EF041025.D\FID1A.CH Vial: 25
Signal #2 : C:\HPCHEM\1\DATA\070604\EF041025.D\FID2B.CH
Acq On : 6 Jul 2004 7:11 pm Operator: ClaireV
Sample : ecc3235-20 Inst : VOA1
Misc : gc3672,gef3235,,,,,1 MultiplR: 1.00
IntFile Signal #1: AUTOINT1.E IntFile Signal #2: autoint2.e

Method : C:\HPCHEM\1\METHODS\DUAL0706.M (Chemstation Integrator)
Title : EPA 602 & 5030B/8021B
Last Update : Tue Jul 06 12:09:31 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	Methyl tert Butyl Ether	20.000	19.482	2.6	96	0.00
2	Di-Isopropyl ether	20.000	19.303	3.5	95	0.00
3	Benzene	20.000	17.093	14.5	86	0.00
4 S	a,a,a-TFT(S)	20.000	18.670	6.6	95	0.00
5	Toluene	20.000	16.939	15.3#	86	0.00
6 S	1-Chloro-4-Fluorobenzene	20.000	17.987	10.1	91	0.00
7	Chlorobenzene	20.000	18.066	9.7	91	0.00
8	Ethylbenzene	20.000	18.303	8.5	92	0.00
9	m,p-Xylene	40.000	36.546	8.6	93	0.00
10	o-Xylene	20.000	18.304	8.5	93	0.00
11	1,3-Dichlorobenzene	20.000	18.549	7.3	96	0.00
12	1,4-Dichlorobenzene	20.000	18.343	8.3	96	0.00
13	1,2-Dichlorobenzene	20.000	18.757	6.2	99	0.00

Signal #2

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	Methyl tert Butyl Ether	20.000	19.437	2.8	98	0.00
2	Di-Isopropyl ether	20.000	19.678	1.6	96	0.00
3	Benzene	20.000	17.506	12.5	87	0.00
4 S	a,a,a-TFT(S)	20.000	18.711	6.4	97	0.00
5	Toluene	20.000	17.282	13.6	87	0.00
6 S	1-Chloro-4-Fluorobenzene	20.000	18.020	9.9	91	0.00
7	Chlorobenzene	20.000	18.157	9.2	92	0.00
8	Ethylbenzene	20.000	18.055	9.7	92	0.00
9	m,p-Xylene	40.000	36.579	8.6	93	0.00
10	o-Xylene	20.000	18.778	6.1	94	0.00
11	1,3-Dichlorobenzene	20.000	18.662	6.7	96	0.00
12	1,4-Dichlorobenzene	20.000	18.324	8.4	95	0.00
13	1,2-Dichlorobenzene	20.000	18.274	8.6	99	0.00

Average % D = 8.2

(#) = Out of Range SPCC's out = 0 CCC's out = 0
EF041002.D DUAL0706.M Wed Jul 07 08:46:35 2004 EF

GC Semi-volatiles

9

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: F25003
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP10778-MB	IJ20178.D	1	06/29/04	SD	06/28/04	OP10778	GIJ988

The QC reported here applies to the following samples: **Method:** EPA 610

F25003-1, F25003-2, F25003-3, F25003-4, F25003-5, F25003-6, F25003-7, F25003-8, F25003-9, F25003-10, F25003-11, F25003-12, F25003-13, F25003-14, F25003-17, F25003-18, F25003-20, F25003-22

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.0	2.0	ug/l	
208-96-8	Acenaphthylene	ND	5.0	2.0	ug/l	
120-12-7	Anthracene	ND	5.0	2.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.0	2.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.0	2.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.0	2.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.0	2.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.0	2.0	ug/l	
218-01-9	Chrysene	ND	5.0	2.0	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.0	2.0	ug/l	
206-44-0	Fluoranthene	ND	5.0	2.0	ug/l	
86-73-7	Fluorene	ND	5.0	2.0	ug/l	
193-39-5	Indeno(1,2,3-ed)pyrene	ND	5.0	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.0	ug/l	
90-12-0	1-Methylnaphthalene	ND	5.0	2.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.0	2.0	ug/l	
85-01-8	Phenanthrene	ND	5.0	2.0	ug/l	
129-00-0	Pyrene	ND	5.0	2.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
321-60-8	2-Fluorobiphenyl	87%	42-123%
84-15-1	o-Terphenyl	97%	51-123%

Method Blank Summary

Job Number: F25003
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP10778-MB	IJ20203.D	1	06/30/04	SD	06/28/04	OP10778	GIJ989

The QC reported here applies to the following samples: **Method:** EPA 610

F25003-1, F25003-2, F25003-3, F25003-4, F25003-5, F25003-6, F25003-7, F25003-8, F25003-9, F25003-10, F25003-11, F25003-12, F25003-13, F25003-14, F25003-17, F25003-18, F25003-20, F25003-22

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.0	2.0	ug/l	
208-96-8	Acenaphthylene	ND	5.0	2.0	ug/l	
120-12-7	Anthraeene	ND	5.0	2.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.0	2.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.0	2.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.0	2.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.0	2.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.0	2.0	ug/l	
218-01-9	Chrysene	ND	5.0	2.0	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.0	2.0	ug/l	
206-44-0	Fluoranthene	ND	5.0	2.0	ug/l	
86-73-7	Fluorene	ND	5.0	2.0	ug/l	
193-39-5	Indeno(1,2,3-ed)pyrene	ND	5.0	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.0	ug/l	
90-12-0	1-Methylnaphthalene	ND	5.0	2.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.0	2.0	ug/l	
85-01-8	Phenanthrene	ND	5.0	2.0	ug/l	
129-00-0	Pyrene	ND	5.0	2.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
321-60-8	2-Fluorobiphenyl	92%	42-123%
84-15-1	o-Terphenyl	101%	51-123%

Blank Spike Summary

Job Number: F25003
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP10778-BS	IJ20177.D	1	06/29/04	SD	06/28/04	OP10778	GIJ988

The QC reported here applies to the following samples: **Method:** EPA 610

F25003-1, F25003-2, F25003-3, F25003-4, F25003-5, F25003-6, F25003-7, F25003-8, F25003-9, F25003-10, F25003-11, F25003-12, F25003-13, F25003-14, F25003-17, F25003-18, F25003-20, F25003-22

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
83-32-9	Acenaphthene	25	24.6	98	71-113
208-96-8	Acenaphthylene	25	24.8	99	63-102
120-12-7	Anthracene	25	25.2	101	71-110
56-55-3	Benzo(a)anthracene	25	25.4	102	70-114
50-32-8	Benzo(a)pyrene	25	25.6	102	67-114
205-99-2	Benzo(b)fluoranthene	25	25.4	102	69-115
191-24-2	Benzo(g,h,i)perylene	25	25.7	103	61-117
207-08-9	Benzo(k)fluoranthene	25	25.2	101	69-111
218-01-9	Chrysene	25	25.8	103	70-114
53-70-3	Dibenzo(a,h)anthracene	25	25.7	103	64-114
206-44-0	Fluoranthene	25	25.8	103	71-114
86-73-7	Fluorene	25	26.0	104	69-111
193-39-5	Indeno(1,2,3-cd)pyrene	25	25.5	102	63-112
91-20-3	Naphthalene	25	24.1	96	66-105
90-12-0	1-Methylnaphthalene	25	25.8	103	71-112
91-57-6	2-Methylnaphthalene	25	24.5	98	65-106
85-01-8	Phenanthrene	25	25.5	102	69-112
129-00-0	Pyrene	25	25.7	103	70-114

CAS No.	Surrogate Recoveries	BSP	Limits
321-60-8	2-Fluorobiphenyl	100%	42-123%
84-15-1	o-Terphenyl	106%	51-123%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F25003
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP10778-MS	IJ20193.D	1	06/29/04	SD	06/28/04	OP10778	GIJ988
OP10778-MSD	IJ20194.D	1	06/29/04	SD	06/28/04	OP10778	GIJ988
F25003-13	IJ20192.D	1	06/29/04	SD	06/28/04	OP10778	GIJ988

The QC reported here applies to the following samples: **Method:** EPA 610

F25003-1, F25003-2, F25003-3, F25003-4, F25003-5, F25003-6, F25003-7, F25003-8, F25003-9, F25003-10, F25003-11, F25003-12, F25003-13, F25003-14, F25003-17, F25003-18, F25003-20, F25003-22

CAS No.	Compound	F25003-13 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	ND		50	52.1	104	53.5	107	3	59-123/20
208-96-8	Acenaphthylene	ND		50	52.4	105	53.7	107	2	51-114/20
120-12-7	Anthracene	ND		50	50.7	101	52.6	105	4	64-114/17
56-55-3	Benzo(a)anthracene	ND		50	54.2	108	56.4	113	4	66-115/17
50-32-8	Benzo(a)pyrene	ND		50	52.8	106	55.1	110	4	62-118/17
205-99-2	Benzo(b)fluoranthene	ND		50	55.5	111	58.3	117	5	66-117/17
191-24-2	Benzo(g,h,i)perylene	ND		50	53.0	106	54.5	109	3	59-120/17
207-08-9	Benzo(k)fluoranthene	ND		50	47.7	95	49.3	99	3	64-116/16
218-01-9	Chrysene	ND		50	48.9	98	51.0	102	4	66-117/16
53-70-3	Dibenzo(a,h)anthracene	ND		50	52.7	105	53.8	108	2	57-124/18
206-44-0	Fluoranthene	ND		50	53.6	107	55.8	112	4	67-116/17
86-73-7	Fluorene	ND		50	53.8	108	55.2	110	3	58-122/19
193-39-5	Indeno(1,2,3-ed)pyrene	ND		50	55.5	111	57.4	115	3	59-116/18
91-20-3	Naphthalene	ND		50	49.9	100	51.4	103	3	47-114/20
90-12-0	1-Methylnaphthalene	ND		50	55.2	110	56.6	113	3	55-128/21
91-57-6	2-Methylnaphthalene	ND		50	51.5	103	53.0	106	3	51-117/21
85-01-8	Phenanthrene	ND		50	55.2	110	57.1	114	3	63-116/18
129-00-0	Pyrene	ND		50	55.0	110	57.1	114	4	67-116/17

CAS No.	Surrogate Recoveries	MS	MSD	F25003-13	Limits
321-60-8	2-Fluorobiphenyl	103%	105%	103%	42-123%
84-15-1	o-Terphenyl	110%	114%	113%	51-123%

Semivolatile Surrogate Recovery Summary

Job Number: F25003
Account: EEINCJX EEI
Project: CSFF MCAS New River

Method: EPA 610 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S2 [a]
F25003-1	IJ20179.D	83.0	94.0
F25003-2	IJ20204.D	118.0	72.0
F25003-2	IJ20180.D	123.0	77.0
F25003-3	IJ20181.D	98.0	110.0
F25003-4	IJ20182.D	96.0	108.0
F25003-5	IJ20183.D	69.0	80.0
F25003-6	IJ20184.D	101.0	110.0
F25003-7	IJ20205.D	0.0* [b]	0.0* [b]
F25003-7	IJ20206.D	117.0	105.0
F25003-7	IJ20185.D	113.0	120.0
F25003-8	IJ20207.D	88.0	103.0
F25003-8	IJ20186.D	106.0	107.0
F25003-9	IJ20188.D	93.0	105.0
F25003-10	IJ20189.D	87.0	98.0
F25003-11	IJ20190.D	119.0	101.0
F25003-12	IJ20208.D	87.0	96.0
F25003-12	IJ20191.D	88.0	101.0
F25003-13	IJ20192.D	103.0	113.0
F25003-14	IJ20195.D	73.0	91.0
F25003-17	IJ20196.D	93.0	103.0
F25003-18	IJ20209.D	87.0	95.0
F25003-18	IJ20197.D	89.0	96.0
F25003-20	IJ20199.D	89.0	99.0
F25003-22	IJ20200.D	99.0	109.0
OP10778-BS	IJ20177.D	100.0	106.0
OP10778-MB	IJ20178.D	87.0	97.0
OP10778-MB	IJ20203.D	92.0	101.0
OP10778-MS	IJ20193.D	103.0	110.0
OP10778-MSD	IJ20194.D	105.0	114.0

Surrogate Compounds	Recovery Limits
S1 = 2-Fluorobiphenyl	42-123%
S2 = o-Terphenyl	51-123%

(a) Recovery from GC signal #1
(b) Outside control limits due to dilution.

6.4

GC Surrogate Retention Time Summary

Job Number: F25003
Account: EEINCJX EEI
Project: CSFF MCAS New River

Check Std:	GIJ988-ICC988	**Injection Date:**	06/29/04
Lab File ID:	IJ20171.D	**Injection Time:**	11:33
Instrument ID:	GCIJ	**Method:**	EPA 610

	S1 [a] RT	S2 [a] RT
Check Std	5.85	10.41

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
OP10778-BS	IJ20177.D	06/29/04	14:26	5.86	10.41
OP10778-MB	IJ20178.D	06/29/04	14:55	5.86	10.41
F25003-1	IJ20179.D	06/29/04	15:24	5.86	10.41
F25003-2	IJ20180.D	06/29/04	15:53	5.87	10.42
F25003-3	IJ20181.D	06/29/04	16:22	5.86	10.41
F25003-4	IJ20182.D	06/29/04	16:51	5.86	10.41
F25003-5	IJ20183.D	06/29/04	17:20	5.86	10.41
F25003-6	IJ20184.D	06/29/04	17:49	5.86	10.41
F25003-7	IJ20185.D	06/29/04	18:18	5.86	10.41
F25003-8	IJ20186.D	06/29/04	18:47	5.86	10.41

Surrogate Compounds

S1 = 2-Fluorobiphenyl
S2 = o-Terphenyl

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: F25003
Account: EEINCJX EEI
Project: CSFF MCAS New River

Check Std:	GIJ988-CC988	**Injection Date:**	06/29/04
Lab File ID:	IJ20187.D	**Injection Time:**	19:16
Instrument ID:	GCIJ	**Method:**	EPA 610

	S1 [a] RT	S2 [a] RT
Check Std	5.86	10.41

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
F25003-9	IJ20188.D	06/29/04	19:45	5.86	10.42
F25003-10	IJ20189.D	06/29/04	20:14	5.86	10.41
F25003-11	IJ20190.D	06/29/04	20:42	5.86	10.41
F25003-12	IJ20191.D	06/29/04	21:11	5.85	10.41
F25003-13	IJ20192.D	06/29/04	21:40	5.85	10.41
OP10778-MS	IJ20193.D	06/29/04	22:09	5.85	10.40
OP10778-MSD	IJ20194.D	06/29/04	22:37	5.85	10.40
F25003-14	IJ20195.D	06/29/04	23:06	5.84	10.40
F25003-17	IJ20196.D	06/29/04	23:34	5.84	10.40
F25003-18	IJ20197.D	06/30/04	00:03	5.84	10.40

Surrogate Compounds

S1 = 2-Fluorobiphenyl
S2 = o-Terphenyl

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: F25003
Account: EEINCJX EEI
Project: CSFF MCAS New River

Check Std:	GIJ988-CC988	**Injection Date:**	06/30/04
Lab File ID:	IJ20198.D	**Injection Time:**	00:31
Instrument ID:	GCIJ	**Method:**	EPA 610

	S1 [a] RT	SI [b] RT	S2 [a] RT	S2 [b] RT
Check Std	5.84	6.62	10.40	11.78

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
F25003-20	IJ20199.D	06/30/04	01:00	5.84		10.39	
F25003-22	IJ20200.D	06/30/04	01:28	5.84		10.39	
GIJ988-ECC988	IJ20201.D	06/30/04	01:57	5.84	6.62	10.39	11.78

Surrogate Compounds

S1 = 2-Fluorobiphenyl
S2 = o-Terphenyl

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

6.5 6

GC Surrogate Retention Time Summary

Job Number: F25003
Account: EEINCJX EEI
Project: CSFF MCAS New River

Check Std:	GIJ989-CC988	**Injection Date:**	06/30/04
Lab File ID:	IJ20202.D	**Injection Time:**	10:51
Instrument ID:	GCIJ	**Method:**	EPA 610

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	5.85	6.63	10.41	11.79

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
OP10778-MB	IJ20203.D	06/30/04	11:20	5.85		10.40	
F25003-2	IJ20204.D	06/30/04	11:49	5.84		10.40	
F25003-7	IJ20205.D	06/30/04	12:18	0.00		0.00	
F25003-7	IJ20206.D	06/30/04	12:46	5.84		10.40	
F25003-8	IJ20207.D	06/30/04	13:15	5.84		10.40	
F25003-12	IJ20208.D	06/30/04	13:44	5.85		10.40	
F25003-18	IJ20209.D	06/30/04	14:13	5.85		10.40	
GIJ989-ECC988	IJ20210.D	06/30/04	14:42	5.85	6.64	10.41	11.79

Surrogate Compounds

S1 = 2-Fluorobiphenyl
S2 = o-Terphenyl

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

Initial Calibration Summary

Job Number: F25003
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GIJ988-ICC988
Lab FileID: IJ20171.D

Response Factor Report FID 1

Method : C:\HPCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title : PAH's BY EPA 610 OR 8100
Last Update : Wed Jun 30 09:53:31 2004
Response via : Initial Calibration

Calibration Files
5 =IJ20169.D 10 =IJ20170.D 20 =IJ20171.D 30 =IJ20172.D
40 =IJ20173.D 50 =IJ20174.D

		Compound	5	10	20	30	40	50	Avg		%RSD
1)		Naphthalene	1.192	1.218	1.223	1.238	1.225	1.258	1.226	E4	1.77
2)		2-Methyl Naphthalen	1.123	1.180	1.177	1.192	1.182	1.214	1.178	E4	2.56
3)		1-Methyl Naphthalen	1.110	1.163	1.163	1.176	1.166	1.196	1.162	E4	2.46
4)	S	2-Fluorobiphenyl	0.982	1.036	1.039	1.069	1.063	1.094	1.047	E4	3.67
5)		Acenaphthylene	1.156	1.193	1.202	1.221	1.211	1.246	1.205	E4	2.48
6)		Acenaphthene	1.169	1.222	1.220	1.243	1.228	1.263	1.224	E4	2.56
7)		Fluorene	1.125	1.180	1.197	1.219	1.185	1.218	1.187	E4	2.89
8)		Phenanthrene	1.070	1.142	1.158	1.181	1.176	1.209	1.156	E4	4.13
9)		Anthracene	1.180	1.256	1.256	1.270	1.254	1.282	1.250	E4	2.85
10)	S	O-Terphenyl	1.148	1.180	1.180	1.198	1.192	1.221	1.187	E4	2.04
11)		Fluoranthene	1.172	1.233	1.231	1.237	1.227	1.257	1.226	E4	2.33
12)		Pyrene	1.156	1.192	1.199	1.214	1.206	1.239	1.201	E4	2.28
13)		Benzo(a)Anthracene	1.087	1.160	1.181	1.202	1.198	1.233	1.177	E4	4.26
14)		Chrysene	1.314	1.326	1.323	1.326	1.308	1.343	1.323	E4	0.90
15)		Benzo(b)Fluoranthen	1.118	1.182	1.205	1.229	1.225	1.265	1.204	E4	4.19
16)		Benzo(k)Fluoranthen	1.324	1.374	1.367	1.368	1.355	1.381	1.361	E4	1.50
17)		Benzo(a) Pyrene	1.126	1.202	1.208	1.223	1.223	1.256	1.206	E4	3.62
18)		Indeno(1,2,3-cd)pyr	0.934	1.068	1.124	1.165	1.169	1.209	1.111	E4	8.91
19)		Dibenzo(a,h)anthrac	0.943	1.120	1.185	1.237	1.248	1.295	1.171	E4	10.82
		---- Quadratic regression ---- Coefficient = 0.9998									
		Response Ratio = -11423.03700 + 11938.15566 *A + 23.92630 *A^2									
20)		Benzo(g,h,i) Peryle	1.108	1.199	1.230	1.256	1.256	1.291	1.223	E4	5.25

Signal #2

1)		Naphthalene	1.819	1.862	1.851	1.875	1.857	1.902	1.861	E4	1.48
2)		2-Methyl Naphthalen	1.735	1.776	1.771	1.795	1.778	1.824	1.780	E4	1.65
3)		1-Methyl Naphthalen	1.706	1.746	1.738	1.760	1.747	1.791	1.748	E4	1.58
4)	S	2-Fluorobiphenyl	1.555	1.603	1.601	1.626	1.613	1.655	1.609	E4	2.06
5)		Acenaphthylene	1.792	1.839	1.835	1.859	1.841	1.886	1.842	E4	1.68
6)		Acenaphthene	1.835	1.865	1.860	1.882	1.863	1.909	1.869	E4	1.31
7)		Fluorene	1.775	1.824	1.818	1.840	1.822	1.866	1.824	E4	1.64
8)		Phenanthrene	1.744	1.819	1.815	1.842	1.838	1.876	1.822	E4	2.41
9)		Anthracene	1.757	1.797	1.809	1.826	1.795	1.842	1.804	E4	1.62
10)	S	O-Terphenyl	1.796	1.828	1.815	1.830	1.813	1.854	1.823	E4	1.08
11)		Fluoranthene	1.844	1.878	1.864	1.883	1.864	1.909	1.874	E4	1.18
12)		Pyrene	1.860	1.892	1.877	1.895	1.876	1.921	1.887	E4	1.11
13)		Benzo(a)Anthracene	1.825	1.908	1.898	1.921	1.903	1.949	1.901	E4	2.17
14)		Chrysene	1.828	1.884	1.871	1.890	1.876	1.916	1.877	E4	1.54
15)		Benzo(b)Fluoranthen	1.845	1.921	1.947	1.957	1.947	1.994	1.935	E4	2.59
16)		Benzo(k)Fluoranthen	1.882	1.947	1.926	1.954	1.927	1.973	1.935	E4	1.63
17)		Benzo(a) Pyrene	1.760	1.828	1.825	1.845	1.832	1.877	1.828	E4	2.09
18)		Indeno(1,2,3-cd)pyr	1.685	1.747	1.819	1.886	1.907	1.971	1.836	E4	5.82
19)		Dibenzo(a,h)anthrac	1.408	1.632	1.723	1.784	1.776	1.828	1.692	E4	9.12
20)		Benzo(g,h,i) Peryle	1.639	1.779	1.821	1.868	1.861	1.916	1.814	E4	5.36

Initial Calibration Summary

Job Number: F25003
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GIJ988-ICC988
Lab FileID: IJ20171.D

(#) = Out of Range

8100_H2.M Wed Jun 30 09:58:07 2004

6.6

Initial Calibration Verification

Job Number: F25003
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GIJ988-ICV988
Lab FileID: IJ20175.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\0629PAH\IJ20175.D\FID1B.CH Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\0629PAH\IJ20175.D\FID2A.CH
Acq On : 29 Jun 2004 1:29 pm Operator: sarahm
Sample : icv988-20 Inst : FID 1
Misc : op10778,gij988,1000,,,1,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : C:\HPCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title : PAH's BY EPA 610 OR 8100
Last Update : Wed Jun 30 09:53:31 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1		Naphthalene	20.000	20.257	-1.3	101	0.00	4.20- 4.40
2		2-Methyl Naphthalene	20.000	20.663	-3.3	103	0.00	5.12- 5.32
3		1-Methyl Naphthalene	20.000	21.680	-8.4	108	0.00	5.26- 5.46
4	S	2-Fluorobiphenyl		----------NA----------				
5		Acenaphthylene	20.000	20.671	-3.4	104	0.00	6.47- 6.67
6		Acenaphthene	20.000	20.486	-2.4	103	0.00	6.79- 6.99
7		Fluorene	20.000	21.224	-6.1	105	0.00	7.67- 7.87
8		Phenanthrene	20.000	20.609	-3.0	103	0.00	9.35- 9.55
9		Anthracene	20.000	21.466	-7.3	107	0.00	9.43- 9.63
10	S	O-Terphenyl		----------NA----------				
11		Fluoranthene	20.000	20.766	-3.8	103	0.00	11.55-11.75
12		Pyrene	20.000	20.657	-3.3	103	0.00	11.92-12.12
13		Benzo(a)Anthracene	20.000	19.955	0.2	99	0.00	14.23-14.43
14		Chrysene	20.000	19.596	2.0	98	0.00	14.30-14.50
15		Benzo(b)Fluoranthene	20.000	20.409	-2.0	102	0.00	16.14-16.34
16		Benzo(k)Fluoranthene	20.000	20.370	-1.9	101	0.01	16.18-16.38
17		Benzo(a) Pyrene	20.000	20.742	-3.7	104	0.00	16.63-16.83
18		Indeno(1,2,3-cd)pyrene	20.000	20.382	-1.9	101	0.02	18.29-18.49
		----------	Amount	Calc.	%Drift	----------		
19		Dibenzo(a,h)anthracene	20.000	20.862	-4.3	105	0.00	18.38-18.58
		----------	Amount	Calc.	%Drift	----------		
20		Benzo(g,h,i) Perylene	20.000	20.697	-3.5	103	0.02	18.61-18.81
*****		Signal #2 *****						
1		Naphthalene	20.000	20.306	-1.5	102	0.00	4.86- 5.06
2		2-Methyl Naphthalene	20.000	20.709	-3.5	104	0.00	5.75- 5.95
3		1-Methyl Naphthalene	20.000	21.512	-7.6	108	0.00	6.02- 6.22
4	S	2-Fluorobiphenyl		----------NA----------				
5		Acenaphthylene	20.000	20.434	-2.2	103	0.00	7.64- 7.84
6		Acenaphthene	20.000	20.165	-0.8	101	0.00	7.89- 8.09
7		Fluorene	20.000	20.800	-4.0	104	0.00	8.76- 8.96
8		Phenanthrene	20.000	20.347	-1.7	102	0.00	10.79-10.99
9		Anthracene	20.000	21.278	-6.4	106	0.00	10.83-11.03
10	S	O-Terphenyl		----------NA----------				
11		Fluoranthene	20.000	20.459	-2.3	103	0.00	13.16-13.36
12		Pyrene	20.000	20.508	-2.5	103	0.00	13.71-13.91
13		Benzo(a)Anthracene	20.000	20.251	-1.3	101	0.00	16.07-16.27
14		Chrysene	20.000	20.537	-2.7	103	0.00	16.24-16.44

Initial Calibration Verification

Job Number: F25003
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GIJ988-ICV988
Lab FileID: IJ20175.D

15	Benzo(b)Fluoranthene	20.000	20.224	-1.1	101	0.01	18.13-18.33
16	Benzo(k)Fluoranthene	20.000	20.169	-0.8	101	0.01	18.17-18.37
17	Benzo(a) Pyrene	20.000	21.087	-5.4	106	0.00	18.85-19.05
18	Indeno(1,2,3-cd)pyrene	20.000	19.868	0.7	100	0.01	20.63-20.83
19	Dibenzo(a,h)anthracene	20.000	21.233	-6.2	104	0.01	20.70-20.90
20	Benzo(g,h,i) Perylene	20.000	20.495	-2.5	102	0.02	21.26-21.46

(#) = Out of Range SPCC's out = 0 CCC's out = 0
IJ20171.D 8100_H2.M Wed Jun 30 09:58:25 2004

Continuing Calibration Summary

Job Number: F25003 **Sample:** GIJ988-CC988
Account: EEINCJX EEI **Lab FileID:** IJ20187.D
Project: CSFF MCAS New River

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\0629PAH\IJ20187.D\FID1B.CH Vial: 19
Signal #2 : C:\HPCHEM\1\DATA\0629PAH\IJ20187.D\FID2A.CH
Acq On : 29 Jun 2004 7:16 pm Operator: sarahm
Sample : cc988-20 Inst : FID 1
Misc : op10778,gij988,910,,,1,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : C:\HPCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title : PAH's BY EPA 610 OR 8100
Last Update : Wed Jun 30 09:53:31 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1		Naphthalene	20.000	21.365	-6.8	107	0.00	4.20- 4.40
2		2-Methyl Naphthalene	20.000	21.488	-7.4	108	0.00	5.12- 5.32
3		1-Methyl Naphthalene	20.000	21.549	-7.7	108	0.00	5.26- 5.46
4	S	2-Fluorobiphenyl	20.000	21.620	-8.1	109	0.00	5.75- 5.95
5		Acenaphthylene	20.000	21.771	-8.9	109	0.00	6.47- 6.67
6		Acenaphthene	20.000	21.781	-8.9	109	0.00	6.79- 6.99
7		Fluorene	20.000	21.390	-7.0	106	0.00	7.67- 7.87
8		Phenanthrene	20.000	21.882	-9.4	109	0.00	9.35- 9.55
9		Anthracene	20.000	19.819	0.9	99	0.00	9.43- 9.63
10	S	O-Terphenyl	20.000	21.974	-9.9	110	0.00	10.31-10.51
11		Fluoranthene	20.000	21.294	-6.5	106	0.00	11.55-11.75
12		Pyrene	20.000	21.800	-9.0	109	0.00	11.92-12.12
13		Benzo(a)Anthracene	20.000	21.574	-7.9	108	0.00	14.23-14.43
14		Chrysene	20.000	19.265	3.7	96	0.01	14.30-14.50
15		Benzo(b)Fluoranthene	20.000	22.049	-10.2	110	0.01	16.14-16.34
16		Benzo(k)Fluoranthene	20.000	20.180	-0.9	100	0.02	16.18-16.38
17		Benzo(a) Pyrene	20.000	21.065	-5.3	105	0.01	16.63-16.83
18		Indeno(1,2,3-cd)pyrene	20.000	22.721	-13.6	112	0.02	18.29-18.49
		----------	Amount	Calc.	%Drift	----------		
19		Dibenzo(a,h)anthracene	20.000	21.739	-8.7	109	0.02	18.38-18.58
		----------	Amount	Calc.	%Drift	----------		
20		Benzo(g,h,i) Perylene	20.000	21.376	-6.9	106	0.03	18.61-18.81
*****		Signal #2 *****						
1		Naphthalene	20.000	20.912	-4.6	105	0.00	4.86- 5.06
2		2-Methyl Naphthalene	20.000	20.942	-4.7	105	0.00	5.75- 5.95
3		1-Methyl Naphthalene	20.000	21.087	-5.4	106	0.00	6.02- 6.22
4	S	2-Fluorobiphenyl	20.000	20.986	-4.9	105	0.00	6.53- 6.73
5		Acenaphthylene	20.000	21.078	-5.4	106	0.00	7.64- 7.84
6		Acenaphthene	20.000	21.107	-5.5	106	0.00	7.89- 8.09
7		Fluorene	20.000	20.892	-4.5	105	0.00	8.76- 8.96
8		Phenanthrene	20.000	20.847	-4.2	105	0.00	10.79-10.99
9		Anthracene	20.000	20.898	-4.5	104	0.00	10.83-11.03
10	S	O-Terphenyl	20.000	21.222	-6.1	107	0.00	11.69-11.89
11		Fluoranthene	20.000	20.833	-4.2	105	0.00	13.16-13.36
12		Pyrene	20.000	20.895	-4.5	105	0.00	13.71-13.91
13		Benzo(a)Anthracene	20.000	20.724	-3.6	104	0.00	16.07-16.27
14		Chrysene	20.000	20.735	-3.7	104	0.00	16.24-16.44

Continuing Calibration Summary

Job Number: F25003
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GIJ988-CC988
Lab FileID: IJ20187.D

15	Benzo(b)Fluoranthene	20.000	20.559	-2.8	102	0.01	18.13-18.33
16	Benzo(k)Fluoranthene	20.000	20.764	-3.8	104	0.02	18.17-18.37
17	Benzo(a) Pyrene	20.000	20.789	-3.9	104	0.01	18.85-19.05
18	Indeno(1,2,3-cd)pyrene	20.000	21.179	-5.9	107	0.02	20.63-20.83
19	Dibenzo(a,h)anthracene	20.000	22.254	-11.3	109	0.02	20.70-20.90
20	Benzo(g,h,i) Perylene	20.000	21.332	-6.7	106	0.03	21.26-21.46

(#) = Out of Range SPCC's out = 0 CCC's out = 0
IJ20171.D 8100_H2.M Wed Jun 30 10:22:46 2004

Continuing Calibration Summary

Job Number: F25003 **Sample:** GIJ988-CC988
Account: EEINCJX EEI **Lab FileID:** IJ20198.D
Project: CSFF MCAS New River

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\0629PAH\IJ20198.D\FID1B.CH Vial: 30
Signal #2 : C:\HPCHEM\1\DATA\0629PAH\IJ20198.D\FID2A.CH
Acq On : 30 Jun 2004 12:31 am Operator: sarahm
Sample : cc988-30 Inst : FID 1
Misc : op10778,gij988,990,,,1,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : C:\HPCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title : PAH's BY EPA 610 OR 8100
Last Update : Wed Jun 30 09:53:31 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1		Naphthalene	30.000	31.760	-5.9	105	0.00	4.20- 4.40
2		2-Methyl Naphthalene	30.000	31.989	-6.6	105	-0.01	5.12- 5.32
3		1-Methyl Naphthalene	30.000	32.028	-6.8	106	-0.01	5.26- 5.46
4	S	2-Fluorobiphenyl	30.000	32.424	-8.1	106	-0.01	5.75- 5.95
5		Acenaphthylene	30.000	32.446	-8.2	107	-0.01	6.47- 6.67
6		Acenaphthene	30.000	32.416	-8.1	106	-0.01	6.79- 6.99
7		Fluorene	30.000	31.982	-6.6	104	-0.01	7.67- 7.87
8		Phenanthrene	30.000	32.818	-9.4	107	-0.01	9.35- 9.55
9		Anthracene	30.000	29.562	1.5	97	-0.01	9.43- 9.63
10	S	O-Terphenyl	30.000	32.481	-8.3	107	-0.01	10.31-10.51
11		Fluoranthene	30.000	31.873	-6.2	105	-0.01	11.55-11.75
12		Pyrene	30.000	32.509	-8.4	107	-0.01	11.92-12.12
13		Benzo(a)Anthracene	30.000	32.399	-8.0	106	0.00	14.23-14.43
14		Chrysene	30.000	28.683	4.4	95	0.00	14.30-14.50
15		Benzo(b)Fluoranthene	30.000	32.901	-9.7	107	0.00	16.14-16.34
16		Benzo(k)Fluoranthene	30.000	29.419	1.9	98	0.00	16.18-16.38
17		Benzo(a) Pyrene	30.000	31.158	-3.9	102	0.00	16.63-16.83
18		Indeno(1,2,3-cd)pyrene	30.000	33.763	-12.5	107	0.01	18.29-18.49
		----------	Amount	Calc.	%Drift	----------		
19		Dibenzo(a,h)anthracene	30.000	31.021	-3.4	103	0.00	18.38-18.58
		----------	Amount	Calc.	%Drift	----------		
20		Benzo(g,h,i) Perylene	30.000	31.429	-4.8	102	0.02	18.61-18.81
*****		Signal #2 *****						
1		Naphthalene	30.000	31.757	-5.9	105	-0.01	4.86- 5.06
2		2-Methyl Naphthalene	30.000	31.866	-6.2	105	-0.01	5.75- 5.95
3		1-Methyl Naphthalene	30.000	32.063	-6.9	106	-0.01	6.02- 6.22
4	S	2-Fluorobiphenyl	30.000	32.007	-6.7	106	-0.01	6.53- 6.73
5		Acenaphthylene	30.000	32.121	-7.1	106	-0.01	7.64- 7.84
6		Acenaphthene	30.000	32.122	-7.1	106	-0.01	7.89- 8.09
7		Fluorene	30.000	31.800	-6.0	105	-0.01	8.76- 8.96
8		Phenanthrene	30.000	31.826	-6.1	105	-0.01	10.79-10.99
9		Anthracene	30.000	31.558	-5.2	104	0.00	10.83-11.03
10	S	O-Terphenyl	30.000	32.114	-7.0	107	-0.01	11.69-11.89
11		Fluoranthene	30.000	31.750	-5.8	105	-0.01	13.16-13.36
12		Pyrene	30.000	31.836	-6.1	106	-0.01	13.71-13.91
13		Benzo(a)Anthracene	30.000	31.417	-4.7	104	0.00	16.07-16.27
14		Chrysene	30.000	31.597	-5.3	105	0.00	16.24-16.44

Continuing Calibration Summary

Job Number: F25003
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GIJ988-CC988
Lab FileID: IJ20198.D

15	Benzo(b)Fluoranthene	30.000	31.407	-4.7	104	0.00	18.13-18.33
16	Benzo(k)Fluoranthene	30.000	31.333	-4.4	103	0.00	18.17-18.37
17	Benzo(a) Pyrene	30.000	31.442	-4.8	104	0.00	18.85-19.05
18	Indeno(1,2,3-cd)pyrene	30.000	32.181	-7.3	104	0.00	20.63-20.83
19	Dibenzo(a,h)anthracene	30.000	33.622	-12.1	106	0.00	20.70-20.90
20	Benzo(g,h,i) Perylene	30.000	32.015	-6.7	104	0.00	21.26-21.46

(#) = Out of Range SPCC's out = 0 CCC's out = 0
IJ20172.D 8100_H2.M Wed Jun 30 10:23:07 2004

Continuing Calibration Summary

Job Number: F25003 **Sample:** GIJ988-ECC988
Account: EEINCJX EEI **Lab FileID:** IJ20201.D
Project: CSFF MCAS New River

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\0629PAH\IJ20201.D\FID1B.CH Vial: 30
Signal #2 : C:\HPCHEM\1\DATA\0629PAH\IJ20201.D\FID2A.CH
Acq On : 30 Jun 2004 1:57 am Operator: sarahm
Sample : ecc988-30 Inst : FID 1
Misc : op10778,gij988,1000,,,1,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : C:\HPCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title : PAH's BY EPA 610 OR 8100
Last Update : Wed Jun 30 09:53:31 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1		Naphthalene	30.000	31.739	-5.8	105	-0.01	4.20- 4.40
2		2-Methyl Naphthalene	30.000	32.030	-6.8	105	-0.01	5.12- 5.32
3		1-Methyl Naphthalene	30.000	32.087	-7.0	106	-0.01	5.26- 5.46
4	S	2-Fluorobiphenyl	30.000	32.491	-8.3	106	-0.01	5.75- 5.95
5		Acenaphthylene	30.000	32.425	-8.1	107	-0.01	6.47- 6.67
6		Acenaphthene	30.000	32.531	-8.4	107	-0.01	6.79- 6.99
7		Fluorene	30.000	32.172	-7.2	104	-0.02	7.67- 7.87
8		Phenanthrene	30.000	32.837	-9.5	107	-0.02	9.35- 9.55
9		Anthracene	30.000	29.581	1.4	97	-0.02	9.43- 9.63
10	S	O-Terphenyl	30.000	32.549	-8.5	107	-0.02	10.31-10.51
11		Fluoranthene	30.000	31.862	-6.2	105	-0.01	11.55-11.75
12		Pyrene	30.000	32.488	-8.3	107	-0.01	11.92-12.12
13		Benzo(a)Anthracene	30.000	32.409	-8.0	106	0.00	14.23-14.43
14		Chrysene	30.000	29.140	2.9	97	0.00	14.30-14.50
15		Benzo(b)Fluoranthene	30.000	32.715	-9.1	107	0.00	16.14-16.34
16		Benzo(k)Fluoranthene	30.000	29.497	1.7	98	0.00	16.18-16.38
17		Benzo(a) Pyrene	30.000	31.080	-3.6	102	0.00	16.63-16.83
18		Indeno(1,2,3-cd)pyrene	30.000	33.535	-11.8	107	0.00	18.29-18.49
		----------	Amount	Calc.	%Drift	----------		
19		Dibenzo(a,h)anthracene	30.000	30.875	-2.9	102	0.00	18.38-18.58
		----------	Amount	Calc.	%Drift	----------		
20		Benzo(g,h,i) Perylene	30.000	31.468	-4.9	102	0.02	18.61-18.81
*****		Signal #2 *****						
1		Naphthalene	30.000	31.881	-6.3	105	-0.01	4.86- 5.06
2		2-Methyl Naphthalene	30.000	32.028	-6.8	106	-0.01	5.75- 5.95
3		1-Methyl Naphthalene	30.000	32.206	-7.4	107	-0.01	6.02- 6.22
4	S	2-Fluorobiphenyl	30.000	32.152	-7.2	106	-0.01	6.53- 6.73
5		Acenaphthylene	30.000	32.297	-7.7	107	-0.01	7.64- 7.84
6		Acenaphthene	30.000	32.338	-7.8	107	-0.01	7.89- 8.09
7		Fluorene	30.000	32.002	-6.7	106	-0.02	8.76- 8.96
8		Phenanthrene	30.000	31.998	-6.7	106	-0.01	10.79-10.99
9		Anthracene	30.000	31.802	-6.0	105	-0.01	10.83-11.03
10	S	O-Terphenyl	30.000	32.292	-7.6	107	-0.01	11.69-11.89
11		Fluoranthene	30.000	31.846	-6.2	106	-0.01	13.16-13.36
12		Pyrene	30.000	31.979	-6.6	106	-0.01	13.71-13.91
13		Benzo(a)Anthracene	30.000	31.554	-5.2	104	0.00	16.07-16.27
14		Chrysene	30.000	31.802	-6.0	105	0.00	16.24-16.44

Continuing Calibration Summary

Job Number: F25003
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GIJ988-ECC988
Lab FileID: IJ20201.D

15	Benzo(b)Fluoranthene	30.000	31.371	-4.6	103	0.00	18.13-18.33
16	Benzo(k)Fluoranthene	30.000	31.176	-3.9	103	0.00	18.17-18.37
17	Benzo(a) Pyrene	30.000	31.493	-5.0	104	0.00	18.85-19.05
18	Indeno(1,2,3-cd)pyrene	30.000	32.256	-7.5	105	0.00	20.63-20.83
19	Dibenzo(a,h)anthracene	30.000	33.352	-11.2	105	0.00	20.70-20.90
20	Benzo(g,h,i) Perylene	30.000	32.076	-6.9	104	0.00	21.26-21.46

(#) = Out of Range SPCC's out = 0 CCC's out = 0
IJ20172.D 8100_H2.M Wed Jun 30 10:23:09 2004

Continuing Calibration Summary

Job Number: F25003
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GIJ989-CC988
Lab FileID: IJ20202.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\0630PAH\IJ20202.D\FID1B.CH Vial: 1
Signal #2 : C:\HPCHEM\1\DATA\0630PAH\IJ20202.D\FID2A.CH
Acq On : 30 Jun 2004 10:51 am Operator: sarahm
Sample : cc988-20 Inst : FID 1
Misc : op10778,gij989,1000,,,1,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : C:\HPCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title : PAH's BY EPA 610 OR 8100
Last Update : Wed Jun 30 09:53:31 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1		Naphthalene	20.000	20.457	-2.3	103	0.00	4.20- 4.40
2		2-Methyl Naphthalene	20.000	20.655	-3.3	103	0.00	5.12- 5.32
3		1-Methyl Naphthalene	20.000	20.717	-3.6	104	0.00	5.26- 5.46
4	S	2-Fluorobiphenyl	20.000	20.700	-3.5	104	0.00	5.75- 5.95
5		Acenaphthylene	20.000	20.919	-4.6	105	0.00	6.47- 6.67
6		Acenaphthene	20.000	21.067	-5.3	106	0.00	6.79- 6.99
7		Fluorene	20.000	20.433	-2.2	101	0.00	7.67- 7.87
8		Phenanthrene	20.000	20.924	-4.6	104	0.00	9.35- 9.55
9		Anthracene	20.000	19.775	1.1	98	0.00	9.43- 9.63
10	S	O-Terphenyl	20.000	21.250	-6.3	107	0.00	10.31-10.51
11		Fluoranthene	20.000	20.456	-2.3	102	0.00	11.55-11.75
12		Pyrene	20.000	20.926	-4.6	105	0.00	11.92-12.12
13		Benzo(a)Anthracene	20.000	20.553	-2.8	102	0.00	14.23-14.43
14		Chrysene	20.000	19.821	0.9	99	0.00	14.30-14.50
15		Benzo(b)Fluoranthene	20.000	20.876	-4.4	104	0.00	16.14-16.34
16		Benzo(k)Fluoranthene	20.000	19.647	1.8	98	0.00	16.18-16.38
17		Benzo(a) Pyrene	20.000	20.132	-0.7	101	0.00	16.63-16.83
18		Indeno(1,2,3-cd)pyrene	20.000	20.521	-2.6	101	0.00	18.29-18.49
		----------	Amount	Calc.	%Drift	----------		
19		Dibenzo(a,h)anthracene	20.000	19.356	3.2	96	0.00	18.38-18.58
		----------	Amount	Calc.	%Drift	----------		
20		Benzo(g,h,i) Perylene	20.000	19.703	1.5	98	0.01	18.61-18.81
*****		Signal #2 *****						
1		Naphthalene	20.000	20.464	-2.3	103	0.00	4.86- 5.06
2		2-Methyl Naphthalene	20.000	20.542	-2.7	103	0.00	5.75- 5.95
3		1-Methyl Naphthalene	20.000	20.695	-3.5	104	0.00	6.02- 6.22
4	S	2-Fluorobiphenyl	20.000	20.563	-2.8	103	0.00	6.53- 6.73
5		Acenaphthylene	20.000	20.702	-3.5	104	0.00	7.64- 7.84
6		Acenaphthene	20.000	20.823	-4.1	105	0.00	7.89- 8.09
7		Fluorene	20.000	20.509	-2.5	103	0.00	8.76- 8.96
8		Phenanthrene	20.000	20.656	-3.3	104	0.00	10.79-10.99
9		Anthracene	20.000	20.508	-2.5	102	0.00	10.83-11.03
10	S	O-Terphenyl	20.000	20.936	-4.7	105	0.00	11.69-11.89
11		Fluoranthene	20.000	20.660	-3.3	104	0.00	13.16-13.36
12		Pyrene	20.000	21.605	-8.0	109	0.00	13.71-13.91
13		Benzo(a)Anthracene	20.000	21.065	-5.3	105	0.00	16.07-16.27
14		Chrysene	20.000	20.580	-2.9	103	0.00	16.24-16.44

Continuing Calibration Summary

Job Number: F25003
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GIJ989-CC988
Lab FileID: IJ20202.D

15	Benzo(b)Fluoranthene	20.000	20.613	-3.1	102	0.00	18.13-18.33
16	Benzo(k)Fluoranthene	20.000	20.412	-2.1	103	0.00	18.17-18.37
17	Benzo(a) Pyrene	20.000	21.275	-6.4	107	0.00	18.85-19.05
18	Indeno(1,2,3-cd)pyrene	20.000	20.401	-2.0	103	0.00	20.63-20.83
19	Dibenzo(a,h)anthracene	20.000	20.767	-3.8	102	0.00	20.70-20.90
20	Benzo(g,h,i) Perylene	20.000	20.184	-0.9	101	0.00	21.26-21.46

(#) = Out of Range SPCC's out = 0 CCC's out = 0
IJ20171.D 8100_E2.M Wed Jun 30 14:50:02 2004

6.6

Continuing Calibration Summary

Job Number: F25003 **Sample:** GIJ989-ECC988
Account: EEINCJX EEI **Lab FileID:** IJ20210.D
Project: CSFF MCAS New River

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\0630PAH\IJ20210.D\FID1B.CH Vial: 9
Signal #2 : C:\HPCHEM\1\DATA\0630PAH\IJ20210.D\FID2A.CH
Acq On : 30 Jun 2004 2:42 pm Operator: sarahm
Sample : ecc988-30 Inst : FID 1
Misc : op10778,gij989,990,,,1,2,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : C:\HPCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title : PAH's BY EPA 610 OR 8100
Last Update : Wed Jun 30 09:53:31 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1		Naphthalene	30.000	32.353	-7.8	107	0.00	4.20- 4.40
2		2-Methyl Naphthalene	30.000	32.665	-8.9	108	0.00	5.12- 5.32
3		1-Methyl Naphthalene	30.000	32.708	-9.0	108	0.00	5.26- 5.46
4	S	2-Fluorobiphenyl	30.000	33.107	-10.4	108	0.00	5.75- 5.95
5		Acenaphthylene	30.000	33.068	-10.2	109	0.00	6.47- 6.67
6		Acenaphthene	30.000	33.103	-10.3	109	0.00	6.79- 6.99
7		Fluorene	30.000	32.662	-8.9	106	0.00	7.67- 7.87
8		Phenanthrene	30.000	33.407	-11.4	109	0.00	9.35- 9.55
9		Anthracene	30.000	30.229	-0.8	99	0.00	9.43- 9.63
10	S	O-Terphenyl	30.000	33.222	-10.7	110	0.00	10.31-10.51
11		Fluoranthene	30.000	32.506	-8.4	107	0.00	11.55-11.75
12		Pyrene	30.000	33.124	-10.4	109	0.00	11.92-12.12
13		Benzo(a)Anthracene	30.000	32.730	-9.1	107	0.00	14.23-14.43
14		Chrysene	30.000	29.188	2.7	97	0.01	14.30-14.50
15		Benzo(b)Fluoranthene	30.000	33.563	-11.9	110	0.01	16.14-16.34
16		Benzo(k)Fluoranthene	30.000	30.398	-1.3	101	0.02	16.18-16.38
17		Benzo(a) Pyrene	30.000	31.934	-6.4	105	0.01	16.63-16.83
18		Indeno(1,2,3-cd)pyrene	30.000	34.246	-14.2	109	0.02	18.29-18.49

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
19		Dibenzo(a,h)anthracene	30.000	31.454	-4.8	104	0.02	18.38-18.58

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
20		Benzo(g,h,i) Perylene	30.000	32.164	-7.2	104	0.03	18.61-18.81

***** Signal #2 *****

1		Naphthalene	30.000	31.823	-6.1	105	0.00	4.86- 5.06
2		2-Methyl Naphthalene	30.000	32.017	-6.7	106	0.00	5.75- 5.95
3		1-Methyl Naphthalene	30.000	32.171	-7.2	107	0.00	6.02- 6.22
4	S	2-Fluorobiphenyl	30.000	32.158	-7.2	106	0.00	6.53- 6.73
5		Acenaphthylene	30.000	32.250	-7.5	107	0.00	7.64- 7.84
6		Acenaphthene	30.000	32.305	-7.7	107	0.00	7.89- 8.09
7		Fluorene	30.000	32.011	-6.7	106	0.00	8.76- 8.96
8		Phenanthrene	30.000	31.977	-6.6	105	0.00	10.79-10.99
9		Anthracene	30.000	31.869	-6.2	105	0.00	10.83-11.03
10	S	O-Terphenyl	30.000	32.248	-7.5	107	0.00	11.69-11.89
11		Fluoranthene	30.000	31.830	-6.1	106	0.00	13.16-13.36
12		Pyrene	30.000	31.935	-6.4	106	0.00	13.71-13.91
13		Benzo(a)Anthracene	30.000	31.552	-5.2	104	0.00	16.07-16.27
14		Chrysene	30.000	31.473	-4.9	104	0.00	16.24-16.44

Continuing Calibration Summary

Job Number: F25003
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GIJ989-ECC988
Lab FileID: IJ20210.D

15	Benzo(b)Fluoranthene	30.000	31.598	-5.3	104	0.01	18.13-18.33
16	Benzo(k)Fluoranthene	30.000	31.478	-4.9	104	0.01	18.17-18.37
17	Benzo(a) Pyrene	30.000	31.509	-5.0	104	0.00	18.85-19.05
18	Indeno(1,2,3-cd)pyrene	30.000	32.607	-8.7	106	0.02	20.63-20.83
19	Dibenzo(a,h)anthracene	30.000	33.505	-11.7	106	0.01	20.70-20.90
20	Benzo(g,h,i) Perylene	30.000	32.098	-7.0	104	0.02	21.26-21.46

(#) = Out of Range SPCC's out = 0 CCC's out = 0
IJ20172.D 8100_H2.M Wed Jun 30 15:10:48 2004

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Instrument Runlogs
- Initial and Continuing Calibration Blanks
- Initial and Continuing Calibration Checks
- High and Low Check Standards
- Interfering Element Check Standards
- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: F25003
Account: EEINCCX - EEI
Project: CSFF MCAS New River

File ID: H20629W1.PRN Date Analyzed: 06/29/04 Methods: SW846 7470A
Analyst: SM Run ID: MA3864
Parameters: Hg

Time	Sample Description	Dilution Factor	PS Recov	Comments
12:55	MA3864-ICV1	1		
12:57	MA3864-ICB1	1		
12:59	MA3864-CRI1	1		
13:01	MA3864-CCV1	1		
13:03	MA3864-CCB1	1		
13:04	MP6827-MB1	1		
13:06	MP6827-B1	1		
13:08	F25064-7	1		(sample used for QC only; not part of login F25003)
13:10	MP6827-D1	1		
13:11	MP6827-S1	1		
13:13	MP6827-S2	1		
13:16	ZZZZZZ	1		
13:18	ZZZZZZ	1		
13:20	ZZZZZZ	1		
13:23	ZZZZZZ	1		
13:25	MA3864-CCV2	1		
13:27	MA3864-CCB2	1		
13:29	ZZZZZZ	1		
13:31	ZZZZZZ	1		
13:33	ZZZZZZ	1		
13:35	ZZZZZZ	1		
13:37	ZZZZZZ	1		
13:39	ZZZZZZ	1		
13:41	ZZZZZZ	1		
13:42	ZZZZZZ	1		
13:44	ZZZZZZ	1		
13:47	ZZZZZZ	1		
13:49	MA3864-CCV3	1		
13:51	MA3864-CCB3	1		
13:54	ZZZZZZ	1		
13:56	ZZZZZZ	1		
13:58	ZZZZZZ	1		
14:00	ZZZZZZ	1		

7.1.7

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: F25003
Account: EEINCJX - EEI
Project: CSFF MCAS New River

File ID: H20629W1.PRN Date Analyzed: 06/29/04 Methods: SW846 7470A
Analyst: SM Run ID: MA3864
Parameters: Hg

Time	Sample Description	Dilution Factor	PS Recov	Comments
14:02	ZZZZZZ	1		
14:05	MP6828-MB1	1		
14:08	MP6828-B1	1		
14:10	F25024-1	1		(sample used for QC only; not part of login F25003)
14:12	MP6828-D1	1		
14:13	MP6828-S1	1		
14:16	MA3864-CCV4	1		
14:18	MA3864-CCB4	1		
14:21	MP6828-S2	1		
14:23	ZZZZZZ	1		
14:25	ZZZZZZ	1		
14:27	ZZZZZZ	1		
14:30	ZZZZZZ	1		
14:32	F25003-22	1		
---------->	Last reportable sample/prep for job F25003			
14:33	MA3864-CCV5	1		
14:35	MA3864-CCB5	1		
---------->	Last reportable CCB for job F25003			

Refer to raw data for calibration curve and standards.

7.1

7

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: F25003
Account: EEINCJX - EEI
Project: CSFF MCAS New River

File ID: H20629W1.PRN Date Analyzed: 06/29/04 Methods: SW846 7470A
QC Limits: result < RL Run ID: MA3864 Units: ug/l

Time:			12:57		13:03		13:27		13:51	
Sample ID:			ICB1		CCB1		CCB2		CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Mercury	1.0	.022	0.051	<1.0	-0.017	<1.0	-0.011	<1.0	0.055	<1.0

(*) Outside of QC limits
(anr) Analyte not requested

7.1.1 7

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: F25003
Account: EEINCJX - EEI
Project: CSFF MCAS New River

File ID: H20629W1.PRN Date Analyzed: 06/29/04 Methods: SW846 7470A
QC Limits: result < RL Run ID: MA3864 Units: ug/l

Time:			14:18		14:35	
Sample ID:			CCB4		CCB5	
Metal	RL	IDL	raw	final	raw	final
Mercury	1.0	.022	-0.0030	<1.0	-0.014	<1.0

(*) Outside of QC limits
(anr) Analyte not requested

7.1.1

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: F25003
Account: EEINCOX - EEI
Project: CSFF MCAS New River

File ID: H20629W1.PRN Date Analyzed: 06/29/04 Methods: SW846 7470A
QC Limits: 90 to 110 % Recovery Run ID: MA3864 Units: ug/l

Time:		12:55			13:01			13:25	
Sample ID:	ICV	ICV1		CCV	CCV1		CCV	CCV2	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Mercury	3.0	3.0	100.0	3	3.1	103.3	3	3.1	103.3

(*) Outside of QC limits
(anr) Analyte not requested

7.1.2

7

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: F25003
Account: EEINCJX - EEI
Project: CSFF MCAS New River

File ID: H20629W1.PRN Date Analyzed: 06/29/04 Methods: SW846 7470A
QC Limits: 90 to 110 % Recovery Run ID: MA3864 Units: ug/l

Time:		13:49			14:16			14:33	
Sample ID:	CCV	CCV3		CCV	CCV4		CCV	CCV5	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Mercury	3	3.2	106.7	3	3.2	106.7	3	3.1	103.3

(*) Outside of QC limits
(anr) Analyte not requested

7.1.2
7

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: F25003
Account: EEINCJX - EEI
Project: CSFF MCAS New River

File ID: H20629W1.PRN Date Analyzed: 06/29/04 Methods: SW846 7470A
QC Limits: 80 to 120 % Recovery Run ID: MA3864 Units: ug/l

Time:			12:59	
Sample ID:	CRI	CRIA	CR11	
Metal	True	True	Results	% Rec
Mercury	0.20		0.22	110.0

(*) Outside of QC limits
(anr) Analyte not requested

7.1.3

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: F25003
Account: EEINCJX - EEI
Project: CSFF MCAS New River

File ID: IR071404.ASC Date Analyzed: 07/14/04 Methods: SW846 6010B
Analyst: DM Run ID: MA3887
Parameters: As,Ba,Be,Cd,Cr,Fe,Pb,Mg,Se

Time	Sample Description	Dilution Factor	PS Recov	Comments
09:08	MA3887-ICV1	1		
09:11	MA3887-ICB1	1		
09:14	MA3887-CRI1	1		
09:21	MA3887-ICSA1	1		
09:22	MA3887-ICSAB1	1		
09:25	MA3887-CCV1	1		
09:29	MA3887-CCB1	1		
09:33	MP6883-MB1	1		
09:37	MP6883-B1	1		
09:41	F25262-3	1		(sample used for QC only; not part of login F25003)
09:45	MP6883-D1	1		
09:48	MP6883-SD1	5		
09:52	MP6883-S1	1		
09:56	MP6883-S2	1		
10:00	ZZZZZZ	1		
10:07	MA3887-CCV2	1		
10:12	MA3887-CCB2	1		
10:27	MP6885-MB1	1		
10:31	MP6885-B1	1		
10:37	F25121-14	1		(sample used for QC only; not part of login F25003)
10:40	MP6885-D1	1		
10:44	MP6885-SD1	5		
10:48	MP6885-S1	1		
10:51	MP6885-S2	1		
10:57	ZZZZZZ	1		
11:00	ZZZZZZ	1		
11:04	ZZZZZZ	1		
11:08	MA3887-CCV3	1		
11:12	MA3887-CCB3	1		
11:16	ZZZZZZ	1		
11:19	ZZZZZZ	1		
11:23	ZZZZZZ	1		
11:27	ZZZZZZ	1		

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: F25003
Account: EEINCJX - EEI
Project: CSFF MCAS New River

File ID: IR071404.ASC Date Analyzed: 07/14/04 Methods: SW846 6010B
Analyst: DM Run ID: MA3887
Parameters: As,Ba,Be,Cd,Cr,Fe,Pb,Mg,Se

Time	Sample Description	Dilution Factor	PS Recov	Comments
11:30	ZZZZZZ	1		
11:34	ZZZZZZ	1		
11:38	ZZZZZZ	1		
11:41	ZZZZZZ	1		
11:45	ZZZZZZ	1		
11:48	ZZZZZZ	1		
11:52	MA3887-CCV4	1		
11:57	MA3887-CCB4	1		
12:00	ZZZZZZ	1		
12:04	ZZZZZZ	1		
12:08	ZZZZZZ	1		
12:11	ZZZZZZ	1		
12:15	ZZZZZZ	1		
12:18	ZZZZZZ	1		
12:22	MP6886-MB1	1		
12:26	MP6886-B1	1		
12:31	F25316-1	1		(sample used for QC only; not part of login F25003)
12:35	MP6886-D1	1		
12:38	MA3887-CCV5	1		
12:43	MA3887-CCB5	1		
12:47	MP6886-SD1	5		
12:50	MP6886-S1	1		
12:54	MP6886-S2	1		
13:00	ZZZZZZ	1		
13:03	ZZZZZZ	1		
13:07	ZZZZZZ	1		
13:10	ZZZZZZ	1		
13:14	ZZZZZZ	1		
13:18	ZZZZZZ	1		
13:21	ZZZZZZ	1		
13:25	MA3887-CCV6	1		
13:30	MA3887-CCB6	1		
13:33	ZZZZZZ	1		

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: F25003
Account: EEINCJX - EEI
Project: CSFF MCAS New River

File ID: IR071404.ASC Date Analyzed: 07/14/04 Methods: SW846 6010B
Analyst: DM Run ID: MA3887
Parameters: As,Ba,Be,Cd,Cr,Fe,Pb,Mg,Se

Time	Sample Description	Dilution Factor	PS Recov	Comments
13:37	ZZZZZZ	1		
13:40	ZZZZZZ	1		
13:44	ZZZZZZ	1		
13:55	MP6889-MB1	1		
13:58	MP6889-B1	1		
14:04	F25151-1	1		(sample used for QC only; not part of login F25003)
14:08	MP6889-D1	1		
14:11	MP6889-SD1	5		
14:15	MP6889-S1	1		
14:19	MA3887-CCV7	1		
14:24	MA3887-CCB7	1		
14:28	MP6889-S2	1		
14:33	ZZZZZZ	1		
14:37	ZZZZZZ	1		
14:40	ZZZZZZ	1		
14:44	ZZZZZZ	1		
14:48	ZZZZZZ	1		
14:51	ZZZZZZ	1		
14:55	ZZZZZZ	1		
14:59	ZZZZZZ	1		
15:02	F25003-22	1		
---------->	Last reportable sample/prep for job F25003			
15:06	MA3887-CCV8	1		
15:10	MA3887-CCB8	1		
---------->	Last reportable CCB for job F25003			
15:16	ZZZZZZ	1		
15:20	ZZZZZZ	1		
15:24	ZZZZZZ	1		
15:27	ZZZZZZ	1		
15:31	ZZZZZZ	1		
15:34	ZZZZZZ	1		
15:38	ZZZZZZ	1		
15:42	ZZZZZZ	1		
15:45	ZZZZZZ	1		
15:49	ZZZZZZ	1		

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: F25003
Account: EEINCJX - EEI
Project: CSFF MCAS New River

File ID: IR071404.ASC Date Analyzed: 07/14/04 Methods: SW846 6010B
Analyst: DM Run ID: MA3887
Parameters: As,Ba,Be,Cd,Cr,Fe,Pb,Mg,Se

Time	Sample Description	Dilution Factor	PS Recov	Comments
15:52	MA3887-CCV9	1		
15:57	MA3887-CCB9	1		
16:01	ZZZZZZ	10		
16:04	ZZZZZZ	25		
16:08	ZZZZZZ	1		
16:12	ZZZZZZ	1		
16:15	ZZZZZZ	1		
16:26	ZZZZZZ	1		
16:30	ZZZZZZ	1		
16:33	ZZZZZZ	1		
16:37	MA3887-CCV10	1		
16:42	MA3887-CCB10	1		
16:45	MP6863-MB2	1		
16:49	MP6863-MB3	1		
16:52	MP6863-B2	1		
16:56	MP6863-B3	1		
17:01	ZZZZZZ	1		
17:05	MA3887-CRI2	1		
17:09	MA3887-CCV11	1		
17:13	MA3887-CCB11	1		
17:17	MP6892-MB1	1		
17:21	MP6892-B1	1		
17:25	F25250-1	1		(sample used for QC only; not part of login F25003)
17:29	MP6892-D1	1		
17:33	MP6892-SD1	5		
17:36	MP6892-S1	1		
17:40	MP6892-S2	1		
17:44	ZZZZZZ	1		
17:48	ZZZZZZ	1		
17:52	ZZZZZZ	1		
17:55	MA3887-CCV12	1		
18:00	MA3887-CCB12	1		
18:04	ZZZZZZ	1		

7.2.7

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: F25003
Account: EEINCJX - EEI
Project: CSFF MCAS New River

File ID: IR071404.ASC Date Analyzed: 07/14/04 Methods: SW846 6010B
Analyst: DM Run ID: MA3887
Parameters: As,Ba,Be,Cd,Cr,Fe,Pb,Mg,Se

Time	Sample Description	Dilution Factor	PS Recov	Comments
18:07	ZZZZZZ	1		
18:11	ZZZZZZ	1		
18:14	MP6892-MB2	1		
18:18	MP6892-B2	1		
18:30	MP6892-MB3	1		
18:34	MP6892-B3	1		
18:38	ZZZZZZ	1		
18:42	MA3887-CCV13	1		
18:46	MA3887-CCB13	1		

Refer to raw data for calibration curve and standards.

7.2
7

INTERNAL STANDARD SUMMARY

Login Number: F25003
Account: EEINCJX - EEI
Project: CSFF MCAS New River

File ID: IR071404.ASC Date Analyzed: 07/14/04 Methods: SW846 6010B
Analyst: DM Run ID: MA3887
Parameters: As,Ba,Be,Cd,Cr,Fe,Pb,Mg,Se

Time	Sample Description	Istd#1
09:08	MA3887-ICV1	5321
09:11	MA3887-ICB1	5640 R
09:14	MA3887-CRI1	5629
09:21	MA3887-ICSA1	4900
09:22	MA3887-ICSAB1	4908
09:25	MA3887-CCV1	5424
09:29	MA3887-CCB1	5605
09:33	MP6883-MB1	5650
09:37	MP6883-B1	5463
09:41	F25262-3	5350
09:45	MP6883-D1	5415
09:48	MP6883-SD1	5544
09:52	MP6883-S1	5200
09:56	MP6883-S2	5289
10:00	ZZZZZZ	5560
10:07	MA3887-CCV2	5427
10:12	MA3887-CCB2	5624
10:27	MP6885-MB1	5704
10:31	MP6885-B1	5500
10:37	F25121-14	42495 !
10:40	MP6885-D1	38535 !
10:44	MP6885-SD1	13506 !
10:48	MP6885-S1	43562 !
10:51	MP6885-S2	41631 !
10:57	ZZZZZZ	5802
11:00	ZZZZZZ	7377 !
11:04	ZZZZZZ	6123
11:08	MA3887-CCV3	5486
11:12	MA3887-CCB3	5732
11:16	ZZZZZZ	8619 !
11:19	ZZZZZZ	5793
11:23	ZZZZZZ	5657
11:27	ZZZZZZ	5595

INTERNAL STANDARD SUMMARY

Login Number: F25003
Account: EEINCJX - EEI
Project: CSFF MCAS New River

File ID: IR071404.ASC Date Analyzed: 07/14/04 Methods: SW846 6010B
Analyst: DM Run ID: MA3887
Parameters: As,Ba,Be,Cd,Cr,Fe,Pb,Mg,Se

Time	Sample Description	Istd#1
11:30	ZZZZZZ	5722
11:34	ZZZZZZ	5587
11:38	ZZZZZZ	5408
11:41	ZZZZZZ	5459
11:45	ZZZZZZ	5134
11:48	ZZZZZZ	4743
11:52	MA3887-CCV4	5373
11:57	MA3887-CCB4	5664
12:00	ZZZZZZ	4871
12:04	ZZZZZZ	5316
12:08	ZZZZZZ	5326
12:11	ZZZZZZ	5398
12:15	ZZZZZZ	5282
12:18	ZZZZZZ	5318
12:22	MP6886-MB1	5688
12:26	MP6886-B1	5447
12:31	F25316-1	5767
12:35	MP6886-D1	5704
12:38	MA3887-CCV5	5365
12:43	MA3887-CCB5	5710
12:47	MP6886-SD1	5690
12:50	MP6886-S1	5694
12:54	MP6886-S2	5656
13:00	ZZZZZZ	5624
13:03	ZZZZZZ	5683
13:07	ZZZZZZ	5668
13:10	ZZZZZZ	5750
13:14	ZZZZZZ	5675
13:18	ZZZZZZ	5196
13:21	ZZZZZZ	5285
13:25	MA3887-CCV6	5539
13:30	MA3887-CCB6	5799
13:33	ZZZZZZ	5279

INTERNAL STANDARD SUMMARY

Login Number: F25003
Account: EEINCJX - EEI
Project: CSFF MCAS New River

File ID: IR071404.ASC Date Analyzed: 07/14/04 Methods: SW846 6010B
Analyst: DM Run ID: MA3887
Parameters: As,Ba,Be,Cd,Cr,Fe,Pb,Mg,Se

Time	Sample Description	Istd#1
13:37	ZZZZZZ	5473
13:40	ZZZZZZ	5382
13:44	ZZZZZZ	8314 !
13:55	MP6889-MB1	5838
13:58	MP6889-B1	5539
14:04	F25151-1	5669
14:08	MP6889-D1	5624
14:11	MP6889-SD1	5644
14:15	MP6889-S1	5552
14:19	MA3887-CCV7	5563
14:24	MA3887-CCB7	5789
14:28	MP6889-S2	5602
14:33	ZZZZZZ	5726
14:37	ZZZZZZ	5632
14:40	ZZZZZZ	5138
14:44	ZZZZZZ	5402
14:48	ZZZZZZ	5472
14:51	ZZZZZZ	5168
14:55	ZZZZZZ	5221
14:59	ZZZZZZ	5209
15:02	F25003-22	5616
15:06	MA3887-CCV8	5625
15:10	MA3887-CCB8	5658
15:16	ZZZZZZ	5643
15:20	ZZZZZZ	5842
15:24	ZZZZZZ	5987
15:27	ZZZZZZ	6484
15:31	ZZZZZZ	5468
15:34	ZZZZZZ	5464
15:38	ZZZZZZ	5687
15:42	ZZZZZZ	5625
15:45	ZZZZZZ	5629
15:49	ZZZZZZ	5520

7.2.1

7

INTERNAL STANDARD SUMMARY

Login Number: F25003
Account: EEINCJX - EEI
Project: CSFF MCAS New River

File ID: IR071404.ASC Date Analyzed: 07/14/04 Methods: SW846 6010B
Analyst: DM Run ID: MA3887
Parameters: As,Ba,Be,Cd,Cr,Fe,Pb,Mg,Se

Time	Sample Description	Istd#1
15:52	MA3887-CCV9	5446
15:57	MA3887-CCB9	5752
16:01	ZZZZZZ	5444
16:04	ZZZZZZ	5597
16:08	ZZZZZZ	4836
16:12	ZZZZZZ	4685
16:15	ZZZZZZ	4794
16:26	ZZZZZZ	4967
16:30	ZZZZZZ	5041
16:33	ZZZZZZ	4943
16:37	MA3887-CCV10	5543
16:42	MA3887-CCB10	5754
16:45	MP6863-MB2	5042
16:49	MP6863-MB3	4963
16:52	MP6863-B2	4935
16:56	MP6863-B3	5054
17:01	ZZZZZZ	5039
17:05	MA3887-CRI2	5712
17:09	MA3887-CCV11	5533
17:13	MA3887-CCB11	5741
17:17	MP6892-MB1	5788
17:21	MP6892-B1	5570
17:25	F25250-1	4939
17:29	MP6892-D1	4942
17:33	MP6892-SD1	5471
17:36	MP6892-S1	5024
17:40	MP6892-S2	4963
17:44	ZZZZZZ	4864
17:48	ZZZZZZ	4916
17:52	ZZZZZZ	4869
17:55	MA3887-CCV12	5455
18:00	MA3887-CCB12	5778
18:04	ZZZZZZ	4896

INTERNAL STANDARD SUMMARY

Login Number: F25003
Account: EEINCJX - EEI
Project: CSFF MCAS New River

File ID: IR071404.ASC Date Analyzed: 07/14/04 Methods: SW846 6010B
Analyst: DM Run ID: MA3887
Parameters: As,Ba,Be,Cd,Cr,Fe,Pb,Mg,Se

Time	Sample Description	Istd#1
18:07	ZZZZZZ	4798
18:11	ZZZZZZ	4962
18:14	MP6892-MB2	5130
18:18	MP6892-B2	5159
18:30	MP6892-MB3	5102
18:34	MP6892-B3	5150
18:38	ZZZZZZ	5106
18:42	MA3887-CCV13	5694
18:46	MA3887-CCB13	5815

R = Reference for ISTD limits. ! = Outside limits.

LEGEND:

Istd#	Parameter	Limits
Istd#1	Yttrium	60-125 %

7.2.1

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: F25003
Account: EEINCJX - EEI
Project: CSFF MCAS New River

File ID: IR071404.ASC Date Analyzed: 07/14/04 Methods: SW846 6010B
QC Limits: result < RL Run ID: MA3887 Units: ug/l

Time: / Sample ID: / Metal	RL	IDL	09:11 ICB1 raw	final	09:29 CCB1 raw	final	10:12 CCB2 raw	final	11:12 CCB3 raw	final
Aluminum	200	6.6	anr							
Antimony	5.0	1.5								
Arsenic	10	2.8	-1.3	<10	-1.7	<10	1.4	<10	-0.21	<10
Barium	200	.5	-0.060	<200	-0.28	<200	-0.22	<200	-0.33	<200
Beryllium	4.0	.3	0.040	<4.0	-0.19	<4.0	0.010	<4.0	0.16	<4.0
Cadmium	5.0	.3	-0.28	<5.0	-0.49	<5.0	-0.65	<5.0	-0.54	<5.0
Calcium	1000	3.8	anr							
Chromium	10	.4	-0.22	<10	-0.23	<10	-0.27	<10	-0.41	<10
Cobalt	50	.5								
Copper	25	.44	anr							
Iron	300	7.1	-5.2	<300	32.2	<300	38.6	<300	19.0	<300
Lead	5.0	1.2	1.1	<5.0	1.0	<5.0	1.3	<5.0	0.89	<5.0
Magnesium	5000	9.9	0.40	<5000	7.7	<5000	-6.0	<5000	-6.1	<5000
Manganese	15	.16	anr							
Molybdenum	50	.75	anr							
Nickel	40	1.1	anr							
Potassium	5000	14	anr							
Selenium	10	2	2.6	<10	2.4	<10	1.8	<10	4.2	<10
Silver	10	.6	anr							
Sodium	5000	150	anr							
Thallium	10	1.5								
Tin	50	1.5								
Vanadium	50	.47								
Zinc	20	.59	anr							

(*) Outside of QC limits
(anr) Analyte not requested

7.2.2

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: F25003
Account: EEINCJX - EEI
Project: CSFF MCAS New River

File ID: IR071404.ASC Date Analyzed: 07/14/04 Methods: SW846 6010B
QC Limits: result < RL Run ID: MA3887 Units: ug/l

Time: / Sample ID: / Metal	RL	IDL	11:57 CCB4 raw	final	12:43 CCB5 raw	final	13:30 CCB6 raw	final	14:24 CCB7 raw	final
Aluminum	200	6.6	anr							
Antimony	5.0	1.5								
Arsenic	10	2.8	-0.11	<10	1.2	<10	-3.1	<10	0.38	<10
Barium	200	.5	-0.32	<200	-0.29	<200	-0.33	<200	-0.19	<200
Beryllium	4.0	.3	0.36	<4.0	0.45	<4.0	-0.31	<4.0	-0.28	<4.0
Cadmium	5.0	.3	-0.69	<5.0	-0.42	<5.0	-0.57	<5.0	-0.47	<5.0
Calcium	1000	3.8	anr							
Chromium	10	.4	-0.31	<10	0.010	<10	-0.22	<10	-0.26	<10
Cobalt	50	.5								
Copper	25	.44	anr							
Iron	300	7.1	20.7	<300	25.4	<300	17.2	<300	27.6	<300
Lead	5.0	1.2	0.050	<5.0	0.52	<5.0	0.77	<5.0	2.5	<5.0
Magnesium	5000	9.9	0.89	<5000	-5.0	<5000	-6.9	<5000	-7.1	<5000
Manganese	15	.16	anr							
Molybdenum	50	.75	anr							
Nickel	40	1.1	anr							
Potassium	5000	14	anr							
Selenium	10	2	3.2	<10	1.3	<10	1.3	<10	2.5	<10
Silver	10	.6	anr							
Sodium	5000	150	anr							
Thallium	10	1.5								
Tin	50	1.5								
Vanadium	50	.47								
Zinc	20	.59	anr							

(*) Outside of QC limits
(anr) Analyte not requested

7.2.2

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: F25003
Account: EEINCJX - EEI
Project: CSFF MCAS New River

File ID: IR071404.ASC Date Analyzed: 07/14/04 Methods: SW846 6010B
QC Limits: result < RL Run ID: MA3887 Units: ug/l

Time:			15:10	
Sample ID:			CCB8	
Metal	RL	IDL	raw	final
Aluminum	200	6.6	anr	
Antimony	5.0	1.5		
Arsenic	10	2.8	-0.97	<10
Barium	200	.5	-0.31	<200
Beryllium	4.0	.3	-0.14	<4.0
Cadmium	5.0	.3	-0.66	<5.0
Calcium	1000	3.8	anr	
Chromium	10	.4	-0.080	<10
Cobalt	50	.5		
Copper	25	.44	anr	
Iron	300	7.1	26.0	<300
Lead	5.0	1.2	0.72	<5.0
Magnesium	5000	9.9	-3.3	<5000
Manganese	15	.16	anr	
Molybdenum	50	.75	anr	
Nickel	40	1.1	anr	
Potassium	5000	14	anr	
Selenium	10	2	-0.72	<10
Silver	10	.6	anr	
Sodium	5000	150	anr	
Thallium	10	1.5		
Tin	50	1.5		
Vanadium	50	.47		
Zinc	20	.59	anr	

(*) Outside of QC limits
(anr) Analyte not requested

7.2.2

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: F25003
Account: EEINCJX - EEI
Project: CSFF MCAS New River

File ID: 1R071404.ASC Date Analyzed: 07/14/04 Methods: SW846 6010B
QC Limits: 90 to 110 % Recovery Run ID: MA3887 Units: ug/l

Time:		09:08			09:25			10:07	
Sample ID:	ICV	ICV1		CCV	CCV1		CCV	CCV2	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony									
Arsenic	2000	1910	95.5	2000	1900	95.0	2000	1960	98.0
Barium	2000	2060	103.0	2000	2020	101.0	2000	2020	101.0
Beryllium	2000	2010	100.5	2000	2000	100.0	2000	2040	102.0
Cadmium	2000	2030	101.5	2000	2020	101.0	2000	2070	103.5
Calcium	anr								
Chromium	2000	1850	92.5	2000	1840	92.0	2000	1880	94.0
Cobalt									
Copper	anr								
Iron	40000	40400	101.0	40000	40300	100.8	40000	41200	103.0
Lead	2000	1970	98.5	2000	1970	98.5	2000	2010	100.5
Magnesium	40000	40700	101.8	40000	40300	100.8	40000	40900	102.3
Manganese	anr								
Molybdenum	anr								
Nickel	anr								
Potassium	anr								
Selenium	2000	1970	98.5	2000	1970	98.5	2000	2000	100.0
Silver	anr								
Sodium	anr								
Thallium									
Tin									
Vanadium									
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

7.2.3

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: F25003
Account: EEINCJX - EEI
Project: CSFF MCAS New River

File ID: IR071404.ASC Date Analyzed: 07/14/04 Methods: SW846 6010B
QC Limits: 90 to 110 % Recovery Run ID: MA3887 Units: ug/l

Time:		11:08			11:52			12:38	
Sample ID:	CCV	CCV3		CCV	CCV4		CCV	CCV5	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony									
Arsenic	2000	1990	99.5	2000	2010	100.5	2000	2050	102.5
Barium	2000	2000	100.0	2000	2020	101.0	2000	2030	101.5
Beryllium	2000	2060	103.0	2000	2050	102.5	2000	2070	103.5
Cadmium	2000	2090	104.5	2000	2080	104.0	2000	2100	105.0
Calcium	anr								
Chromium	2000	1900	95.0	2000	1900	95.0	2000	1910	95.5
Cobalt									
Copper	anr								
Iron	40000	41400	103.5	40000	41400	103.5	40000	42000	105.0
Lead	2000	2020	101.0	2000	2020	101.0	2000	2030	101.5
Magnesium	40000	41000	102.5	40000	41300	103.3	40000	41800	104.5
Manganese	anr								
Molybdenum	anr								
Nickel	anr								
Potassium	anr								
Selenium	2000	2030	101.5	2000	2040	102.0	2000	2090	104.5
Silver	anr								
Sodium	anr								
Thallium									
Tin									
Vanadium									
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

7.2.3

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: F25003
Account: EEINCOX - EEI
Project: CSFF MCAS New River

File ID: IR071404.ASC Date Analyzed: 07/14/04 Methods: SW846 6010B
QC Limits: 90 to 110 % Recovery Run ID: MA3887 Units: ug/l

Time:		13:25			14:19			15:06	
Sample ID:	CCV	CCV6		CCV	CCV7		CCV	CCV8	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony									
Arsenic	2000	1980	99.0	2000	2000	100.0	2000	1950	97.5
Barium	2000	1990	99.5	2000	2010	100.5	2000	1970	98.5
Beryllium	2000	2070	103.5	2000	2090	104.5	2000	2040	102.0
Cadmium	2000	2080	104.0	2000	2110	105.5	2000	2060	103.0
Calcium	anr								
Chromium	2000	1920	96.0	2000	1940	97.0	2000	1890	94.5
Cobalt									
Copper	anr								
Iron	40000	41600	104.0	40000	41900	104.8	40000	40900	102.3
Lead	2000	2010	100.5	2000	2020	101.0	2000	1990	99.5
Magnesium	40000	41100	102.8	40000	41400	103.5	40000	40500	101.3
Manganese	anr								
Molybdenum	anr								
Nickel	anr								
Potassium	anr								
Selenium	2000	2010	100.5	2000	2030	101.5	2000	2000	100.0
Silver	anr								
Sodium	anr								
Thallium									
Tin									
Vanadium									
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

7.2.3

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: F25003
Account: EEINCJX - EEI
Project: CSFF MCAS New River

File ID: IR071404.ASC Date Analyzed: 07/14/04 Methods: SW846 6010B
QC Limits: 70 to 130 % Recovery Run ID: MA3887 Units: ug/L

Time:			09:14	
Sample ID: Metal	CRI True	CRIA True	CRI1 Results	% Rec
Aluminum	400		anr	
Antimony	10			
Arsenic	20		18.2	91.0
Barium	400		408	102.0
Beryllium	10		10.6	106.0
Cadmium	10		9.8	98.0
Calcium	2000		anr	
Chromium	20		19.5	97.5
Cobalt	100			
Copper	50		anr	
Iron	600		529	88.2
Lead	10		11.0	110.0
Magnesium	10000		10200	102.0
Manganese	30		anr	
Molybdenum	100		anr	
Nickel	80		anr	
Potassium	10000		anr	
Selenium	10		10.6	106.0
Silver	20		anr	
Sodium	10000		anr	
Thallium	20			
Tin	100			
Vanadium	100			
Zinc	40		anr	

(*) Outside of QC limits
(anr) Analyte not requested

7.2.4

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: F25003
Account: EEINCOX - EEI
Project: CSFF MCAS New River

File ID: IR071404.ASC Date Analyzed: 07/14/04 Methods: SW846 6010B
QC Limits: 80 to 120 % Recovery Run ID: MA3887 Units: ug/L

Time:			09:21		09:22	
Sample ID:	ICSA	ICSAB	ICSA1		ICSAB1	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	500000	500000	473000	94.6	474000	94.8
Antimony		1000	0.060		1000	100.0
Arsenic		1000	2.8		986	98.6
Barium		500	2.1		515	103.0
Beryllium		500	-0.50		503	100.6
Cadmium		1000	1.9		966	96.6
Calcium	500000	500000	456000	91.2	460000	92.0
Chromium		500	-0.27		458	91.6
Cobalt		500	0.080		466	93.2
Copper		500	-9.4		495	99.0
Iron	200000	200000	185000	92.5	199000	99.5
Lead		1000	3.6		939	93.9
Magnesium	500000	500000	508000	101.6	504000	100.8
Manganese		500	-2.1		472	94.4
Molybdenum		1000	-3.5		975	97.5
Nickel		1000	1.9		933	93.3
Potassium			35.4		-310	
Selenium		1000	4.5		994	99.4
Silver		1000	-0.19		1060	106.0
Sodium			162		257	
Thallium		1000	-0.060		885	88.5
Tin		1000	-0.90		964	96.4
Vanadium		500	14.1		505	101.0
Zinc		1000	-9.0		913	91.3

(*) Outside of QC limits
(anr) Analyte not requested

7.2.5 7

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: F25003
Account: EEINCJX - EEI
Project: CSFF MCAS New River

QC Batch ID: MP6828
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 06/28/04

Metal	RL	IDL	MB raw	final
Mercury	1.0	.022	0.049	<1.0

Associated samples MP6828: F25003-22

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

7.3.1

7

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: F25003
Account: EEINCJX - EEI
Project: CSFF MCAS New River

QC Batch ID: MP6828
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 06/28/04 06/28/04

Metal	F25024-1 Original	DUP	RPD	QC Limits	F25024-1 Original	MS	Spikelot HGFLWS1	% Rec	QC Limits
Mercury	0.052	0.11	71.6 (a)	0-20	0.052	3.4	3	111.6	62-131

Associated samples MP6828: F25003-22

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) RPD acceptable due to low duplicate and sample concentrations.

7.3.2

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: F25003
Account: EEINCJX - EEI
Project: CSFF MCAS New River

QC Batch ID: MP6828
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 06/28/04

Metal	F25024-1 Original	MSD	Spikelot HGFLWS1	% Rec	MSD RPD	QC Limit
Mercury	0.052	3.4	3	111.6	0.0	15

Associated samples MP6828: F25003-22

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

7.3.2

7

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: F25003
Account: EEINCJX - EEI
Project: CSFF MCAS New River

QC Batch ID: MP6828
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 06/28/04

Metal	BSP Result	Spikelot HGFLWS1	% Rec	QC Limits
Mercury	3.2	3	106.7	80-120

Associated samples MP6828: F25003-22

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

7.3.3

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: F25003
Account: EEINCJX - EEI
Project: CSFF MCAS New River

QC Batch ID: MP6889
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date: 07/13/04

Metal	RL	IDL	MB raw	final
Aluminum	200	6.6	anr	
Antimony	5.0	1.5		
Arsenic	10	2.8	-3.2	<10
Barium	200	.3	-0.77	<200
Beryllium	4.0	.3	-0.93	<4.0
Cadmium	5.0	.3	-1.0	<5.0
Calcium	1000	3.8	anr	
Chromium	10	.4	-0.99	<10
Cobalt	50	.5		
Copper	25	.44	anr	
Iron	300	7.1	102	<300
Lead	5.0	1.2	0.53	<5.0
Magnesium	5000	9.9	-18	<5000
Manganese	15	.16	anr	
Molybdenum	50	.75		
Nickel	40	1.1	anr	
Potassium	5000	14		
Selenium	10	2	-1.2	<10
Silver	10	.6	anr	
Sodium	5000	150	anr	
Thallium	10	1.5		
Tin	50	1.5		
Vanadium	50	.47		
Zinc	20	.59	anr	

Associated samples MP6889: F25003-22

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: F25003
Account: EEINCJX - EEI
Project: CSFF MCAS New River

QC Batch ID: MP6889
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date: 07/13/04 07/13/04

Metal	F25151-1 Original	DUP	RPD	QC Limits	F25151-1 Original	MS	Spikelot MPELICP	% Rec	QC Limits
Aluminum	anr								
Antimony									
Arsenic	5.2	0.0	200.0(a)	0-12	5.2	3980	4000	99.4	83-116
Barium	7.6	6.9	9.7	0-13	7.6	3870	4000	96.6	82-116
Beryllium	0.0	0.0	NC	0-12	0.0	109	100	109.0	86-119
Cadmium	0.0	0.0	NC	0-13	0.0	102	100	102.0	80-115
Calcium	anr								
Chromium	0.0	0.0	NC	0-12	0.0	393	400	98.3	82-120
Cobalt									
Copper	anr								
Iron	44.8	12.5	112.7(a)	0-14	44.8	27200	27000	100.6	76-125
Lead	1.6	1.2	28.6 (a)	0-10	1.6	1020	1000	101.8	84-118
Magnesium	2770	2750	0.7	0-15	2770	27500	25000	98.9	75-125
Manganese	anr								
Molybdenum									
Nickel	anr								
Potassium									
Selenium	0.0	0.0	NC	0-15	0.0	4070	4000	101.8	84-121
Silver	anr								
Sodium	anr								
Thallium									
Tin									
Vanadium									
Zinc	anr								

Associated samples MP6889: F25003-22

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) RPD acceptable due to low duplicate and sample concentrations.

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: F25003
Account: EEINCJX - EEI
Project: CSFF MCAS New River

QC Batch ID: MP6889
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date: 07/13/04

Metal	F25151-1 Original	MSD	Spikelot MPFLICP	% Rec	MSD RPD	QC Limit
Aluminum	anr					
Antimony						
Arsenic	3.2	3920	4000	97.9	1.5	20
Barium	7.6	3820	4000	95.3	1.3	20
Beryllium	0.0	106	100	106.0	2.8	20
Cadmium	0.0	101	100	101.0	1.0	20
Calcium	anr					
Chromium	0.0	387	400	96.8	1.5	20
Cobalt						
Copper	anr					
Iron	44.8	27000	27000	99.8	0.7	20
Lead	1.6	1010	1000	100.8	1.0	20
Magnesium	2770	27400	25000	98.5	0.4	20
Manganese	anr					
Molybdenum						
Nickel	anr					
Potassium						
Selenium	0.0	4050	4000	101.3	0.5	20
Silver	anr					
Sodium	anr					
Thallium						
Tin						
Vanadium						
Zinc	anr					

Associated samples MP6889: F25003-22

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: F25003
Account: EEINCJX - EEI
Project: CSFF MCAS New River

QC Batch ID: MP6889
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date: 07/13/04

Metal	BSP Result	Spikelot MPFLICP	% Rec	QC Limits
Aluminum	anr			
Antimony				
Arsenic	3860	4000	96.5	80-120
Barium	3890	4000	97.3	80-120
Beryllium	108	100	108.0	80-120
Cadmium	102	100	102.0	80-120
Calcium	anr			
Chromium	394	400	98.5	80-120
Cobalt				
Copper	anr			
Iron	27800	27000	103.0	80-120
Lead	1020	1000	102.0	80-120
Magnesium	25000	25000	100.0	80-120
Manganese	anr			
Molybdenum				
Nickel	anr			
Potassium				
Selenium	4050	4000	101.3	80-120
Silver	anr			
Sodium	anr			
Thallium				
Tin				
Vanadium				
Zinc	anr			

Associated samples MP6889: F25003-22

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

7.4.3

SERIAL DILUTION RESULTS SUMMARY

Login Number: F25003
Account: EEINCJX - EEI
Project: CSFF MCAS New River

QC Batch ID: MP6889
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date: 07/13/04

Metal	F25151-1 Original	SDL 1:5	RPD	QC Limits
Aluminum	anr			
Antimony				
Arsenic	5.19	0.00	100.0(a)	0-10
Barium	7.60	3.89	48.8 (a)	0-10
Beryllium	0.00	0.00	NC	0-10
Cadmium	0.00	0.00	NC	0-10
Calcium	anr			
Chromium	0.00	0.00	NC	0-10
Cobalt				
Copper	anr			
Iron	44.8	0.00	100.0(a)	0-10
Lead	1.60	0.00	100.0(a)	0-10
Magnesium	2770	2690	3.2	0-10
Manganese	anr			
Molybdennm				
Nickel	anr			
Potassium				
Selenium	0.00	0.00	NC	0-10
Silver	anr			
Sodium	anr			
Thallium				
Tin				
Vanadium				
Zinc	anr			

Associated samples MP6889: F25003-22

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: F25003
Account: EEINCJX - EEI
Project: CSFF MCAS New River

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Solids, Total Dissolved	GN14896	10	<10	mg/l				
Solids, Total Suspended	GN14895	4.0	<4.0	mg/l				

Associated Samples:
Batch GN14895: F25003-22
Batch GN14896: F25003-22

8.1
8

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: F25003
Account: EEINCOX - EEI
Project: CSFF MCAS New River

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Solids, Total Dissolved	GN14896	F24907-1	mg/L	188	188	0.0	0-29%
Solids, Total Suspended	GN14895	F24907-1	mg/L	12.0	14.0	15.4	0-33%

Associated Samples:
Batch GN14895: F25003-22
Batch GN14896: F25003-22

8.2

ANNUAL GROUNDWATER MONITORING REPORT 2003-2005
CAMPBELL STREET FUEL FARM SITE
MARINE CORPS AIR STATION NEW RIVER
NORTH CAROLINA

VOLUME IIB
Revision 0

Prepared for:

DEPARTMENT OF THE NAVY
Contract No. N62470-03-D-4000

Atlantic Division
Naval Facilities Engineering Command
6506 Hampton Boulevard
Building C, Room 311
Norfolk, Virginia 23508

Prepared by:

Engineering and Environment, Inc.
824 Gum Branch Road, Suite S
Jacksonville, North Carolina, Virginia 28540

19 December 2005

APPENDIX B

LABORATORY ANALYTICAL REPORTS
(Continued)

September 2004 Laboratory Reports

Southeast
ACCUTEST.
Laboratories

12/08/05

Technical Report for

EEI

Camp Lejeune-Campbell St. Fuel Farm

844271

Accutest Job Number: F26833

Sampling Dates: 09/16/04 - 09/17/04

Report to:

EEI

bmorris@eeimail.com

ATTN: Bill Morris

Total number of pages in report: 97

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Sections: 1 2 3 4 5 6

Table of Contents

Section 1: Sample Summary **3**
Section 2: Case Narrative/Conformance Summary **4**
Section 3: Sample Results **6**
3.1: F26833-1: USTCSFF-122MW09 6
3.2: F26833-2: USTCSFF-122-13DW01 8
3.3: F26833-3: USTCSFF-122-19MW01 11
3.4: F26833-4: USTCSFF-122MW08 14
3.5: F26833-5: USTCSFF-122MW04 16
3.6: F26833-6: USTCSFF-DW06 18
3.7: F26833-7: USTCSFF-122MW03 21
3.8: F26833-8: USTCSFF-122MW07 23
3.9: F26833-9: USTCSFF-MW21 25
3.10: F26833-10: USTCSFF-MW03 27
3.11: F26833-11: TRIP BLANK 29
Section 4: Misc. Forms **30**
4.1: Chain of Custody 31
Section 5: GC Volatiles - QC Data Summaries **33**
5.1: Method Blank Summary 34
5.2: Blank Spike Summary 39
5.3: Matrix Spike/Matrix Spike Duplicate Summary 46
5.4: Surrogate Recovery Summaries 51
5.5: GC Surrogate Retention Time Summaries 53
5.6: Initial and Continuing Calibration Summaries 63
Section 6: GC Semi-volatiles - QC Data Summaries **82**
6.1: Method Blank Summary 83
6.2: Blank Spike Summary 84
6.3: Matrix Spike/Matrix Spike Duplicate Summary 85
6.4: Surrogate Recovery Summaries 86
6.5: GC Surrogate Retention Time Summaries 87
6.6: Initial and Continuing Calibration Summaries 89

Sample Summary

EEI

Job No: F26833

Camp Lejeune-Campbell St. Fuel Farm
Project No: 844271

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
F26833-1	09/16/04	09:05	BS	09/18/04	AQ	Ground Water	USTCSFF-122MW09
F26833-2	09/16/04	09:40	BS	09/18/04	AQ	Ground Water	USTCSFF-122-13DW01
F26833-3	09/16/04	10:15	BS	09/18/04	AQ	Ground Water	USTCSFF-122-19MW01
F26833-4	09/16/04	11:05	BS	09/18/04	AQ	Ground Water	USTCSFF-122MW08
F26833-5	09/16/04	11:55	BS	09/18/04	AQ	Ground Water	USTCSFF-122MW04
F26833-6	09/16/04	14:35	BS	09/18/04	AQ	Ground Water	USTCSFF-DW06
F26833-7	09/16/04	13:10	BS	09/18/04	AQ	Ground Water	USTCSFF-122MW03
F26833-8	09/16/04	12:25	BS	09/18/04	AQ	Ground Water	USTCSFF-122MW07
F26833-9	09/16/04	15:25	BS	09/18/04	AQ	Ground Water	USTCSFF-MW21
F26833-10	09/17/04	11:25	BS	09/18/04	AQ	Ground Water	USTCSFF-MW03
F26833-11	09/17/04	12:30	BS	09/18/04	AQ	Trip Blank Water	TRIP BLANK

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: EEI **Job No:** F26833

Site: Camp Lejeune-Campbell St. Fuel Farm **Report Date:** 10/6/2004 12:06:38

10 Samples and 1 Trip Blank were collected on between 09/16/2004 and 09/17/2004 and were received at Accutest on 09/18/2004 properly preserved, at 2 Deg. C and intact. These Samples received an Accutest job number of F26833. A listing of the Laboratory

Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GC by Method EPA 504.1

Matrix: AQ **Batch ID:** OP11362

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

Samples F26855-7MS, F26855-7MSD were used as the QC samples indicated.

All method blanks for this batch meet method specific criteria.

Matrix: AQ **Batch ID:** OP11393

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

Samples F26871-3MS, F26871-3MSD were used as the QC samples indicated.

All method blanks for this bateh meet method specific criteria.

Volatiles by GC by Method EPA 601/602

Matrix: AQ **Batch ID:** GEF3364

All samples were analyzed within the recommended method holding time.

Samples F26810-9MS, F26810-9MSD were used as the QC samples indicated.

All method blanks for this batch meet method specific criteria.

F26833-8: All hits confirmed by dual column analysis.

F26833-4: All hits confirmed by dual column analysis.

F26833-7: All hits confirmed by dual column analysis.

F26833-11: All hits confirmed by dual column analysis.

F26833-5: All hits confirmed by dual column analysis.

F26833-3: All hits confirmed by dual column analysis.

F26833-10: All hits confirmed by dual column analysis.

Matrix: AQ **Batch ID:** GEF3365

All samples were analyzed within the recommended method holding time.

Samples F26810-2MS, F26810-2MSD were used as the QC samples indicated.

All method blanks for this batch meet method specific criteria.

F26833-1: All hits confirmed by dual column analysis.

F26833-9: All hits confirmed by dual column analysis.

F26833-2: All hits confirmed by dual column analysis.

Matrix: AQ **Batch ID:** GEF3367

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Samples F26810-10MS, F26810-10MSD were used as the QC samples indicated.

F26833-9: Sample vials contained significant headspace; reported results are considered minimum values.

Extractables by GC by Method EPA 610

Matrix: AQ **Batch ID:** OP11357

All samples were extracted within the recommended method holding time.
All samples were analyzed within the recommended method holding time.
Samples F26833-6MS, F26833-6MSD were used as the QC samples indicated.
All method blanks for this batch meet method speeific criteria.
Sample F26833-2 has surrogates outside control limits.
F26833-2 for o-Terphenyl: Outside control limits due to dilution.
F26833-2 for 2-Fluorobiphenyl: Outside control limits due to dilution.
F26833-2: All hits confirmed by dual column analysis.
F26833-3: All hits confirmed by dual column analysis.
F26833-2: All hits confirmed by dual column analysis.

Accutest Laboratories Southeast (ALSE) certifies that this report meets the project requirements for analytical data produced for the samples as received at ALSE and as stated on the COC. ALSE certifies that the data meets the Data Quality Objectives for precision, accuraey and completeness as specified in the ALSE Quality Manual except as noted above. This report is to be used in its entirety. ALSE is not responsible for any assumptions of data quality if partial data packages are used.

Narrative prepared by:

Date: Oct. 6, 2004

Ellen Pampel, Inorganic QA (signature on file)

Wednesday, October 06, 2004

Report of Analysis

Client Sample ID:	USTCSFF-122MW09		
Lab Sample ID:	F26833-1	**Date Sampled:**	09/16/04
Matrix:	AQ - Ground Water	**Date Received:**	09/18/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	EF044268.D	1	09/24/04	CV	n/a	n/a	GEF3365
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	0.59	1.0	0.50	ug/l	J
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	0.56	1.0	0.50	ug/l	J
1330-20-7	Xylenes (total)	2.1	3.0	1.0	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	97%		70-123%
98-08-8	aaa-Trifluorotoluene	102%		73-122%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-122MW09		
Lab Sample ID:	F26833-1	**Date Sampled:**	09/16/04
Matrix:	AQ - Ground Water	**Date Received:**	09/18/04
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD18715.D	1	09/25/04	SKW	09/24/04	OP11393	GDD576
Run #2							

	Initial Volume	Final Volume
Run #1	36.7 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0095	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	104%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-122-13DW01		
Lab Sample ID:	F26833-2	**Date Sampled:**	09/16/04
Matrix:	AQ - Ground Water	**Date Received:**	09/18/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	EF044269.D	1	09/24/04	CV	n/a	n/a	GEF3365
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	9.4	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	8.9	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	2.3	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	15.5	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	100%		70-123%
98-08-8	aaa-Trifluorotoluene	101%		73-122%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-122-13DW01		
Lab Sample ID:	F26833-2	**Date Sampled:**	09/16/04
Matrix:	AQ - Ground Water	**Date Received:**	09/18/04
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD18589.D	1	09/23/04	SKW	09/22/04	OP11362	GDD573
Run #2							

	Initial Volume	Final Volume
Run #1	37.5 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0093	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	93%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indieates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a eompound

Report of Analysis

Client Sample ID:	USTCSFF-122-13DW01		
Lab Sample ID:	F26833-2	**Date Sampled:**	09/16/04
Matrix:	AQ - Ground Water	**Date Received:**	09/18/04
Method:	EPA 610 EPA 610	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	IJ20894.D	4	09/22/04	AA	09/21/04	OP11357	GIJ1024
Run #2 [a]	IJ20891.D	40	09/22/04	AA	09/21/04	OP11357	GIJ1024

	Initial Volume	Final Volume
Run #1	1050 ml	1.0 ml
Run #2	1050 ml	1.0 ml

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	79.7	19	7.6	ug/l	
208-96-8	Acenaphthylene	ND	19	7.6	ug/l	
120-12-7	Anthracene	ND	19	7.6	ug/l	
56-55-3	Benzo(a)anthracene	ND	19	7.6	ug/l	
50-32-8	Benzo(a)pyrene	ND	19	7.6	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	19	7.6	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	19	7.6	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	19	7.6	ug/l	
218-01-9	Chrysene	ND	19	7.6	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	19	7.6	ug/l	
206-44-0	Fluoranthene	ND	19	7.6	ug/l	
86-73-7	Fluorene	31.6	19	7.6	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	19	7.6	ug/l	
91-20-3	Naphthalene	1530 [b]	190	76	ug/l	
90-12-0	1-Methylnaphthalene	81.7	19	7.6	ug/l	
91-57-6	2-Methylnaphthalene	144	19	7.6	ug/l	
85-01-8	Phenanthrene	ND	19	7.6	ug/l	
129-00-0	Pyrene	ND	19	7.6	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	122%	0% [c]	42-123%
84-15-1	o-Terphenyl	112%	0% [c]	51-123%

(a) All hits confirmed by dual column analysis.
(b) Result is from Run# 2
(c) Outside control limits due to dilution.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-122-19MW01		
Lab Sample ID:	F26833-3	**Date Sampled:**	09/16/04
Matrix:	AQ - Ground Water	**Date Received:**	09/18/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	EF044237.D	1	09/24/04	CV	n/a	n/a	GEF3364
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Diehlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	1.1	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	0.83	1.0	0.50	ug/l	J
1330-20-7	Xylenes (total)	4.3	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	98%		70-123%
98-08-8	aaa-Trifluorotoluene	102%		73-122%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-122-19MW01		
Lab Sample ID:	F26833-3	**Date Sampled:**	09/16/04
Matrix:	AQ - Ground Water	**Date Received:**	09/18/04
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD18590.D	1	09/23/04	SKW	09/22/04	OP11362	GDD573
Run #2							

	Initial Volume	Final Volume
Run #1	37.1 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0094	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	134%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-122-19MW01		
Lab Sample ID:	F26833-3	**Date Sampled:**	09/16/04
Matrix:	AQ - Ground Water	**Date Received:**	09/18/04
Method:	EPA 610 EPA 610	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	IJ20893.D	4	09/22/04	AA	09/21/04	OP11357	GIJ1024
Run #2							

	Initial Volume	Final Volume
Run #1	1050 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	19	7.6	ug/l	
208-96-8	Acenaphthylene	ND	19	7.6	ug/l	
120-12-7	Anthracene	ND	19	7.6	ug/l	
56-55-3	Benzo(a)anthracene	ND	19	7.6	ug/l	
50-32-8	Benzo(a)pyrene	ND	19	7.6	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	19	7.6	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	19	7.6	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	19	7.6	ug/l	
218-01-9	Chrysene	ND	19	7.6	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	19	7.6	ug/l	
206-44-0	Fluoranthene	ND	19	7.6	ug/l	
86-73-7	Fluorene	ND	19	7.6	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	19	7.6	ug/l	
91-20-3	Naphthalene	137	19	7.6	ug/l	
90-12-0	1-Methylnaphthalene	74.5	19	7.6	ug/l	
91-57-6	2-Methylnaphthalene	97.6	19	7.6	ug/l	
85-01-8	Phenanthrene	ND	19	7.6	ug/l	
129-00-0	Pyrene	ND	19	7.6	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	88%		42-123%
84-15-1	o-Terphenyl	88%		51-123%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-122MW08		
Lab Sample ID:	F26833-4	**Date Sampled:**	09/16/04
Matrix:	AQ - Ground Water	**Date Received:**	09/18/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	EF044238.D	1	09/24/04	CV	n/a	n/a	GEF3364
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Componnd	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzenc	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	1.3	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	1.2	3.0	1.0	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	93%		70-123%
98-08-8	aaa-Trifluorotoluene	100%		73-122%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Mcthod Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptivc evidcnce of a compound

Report of Analysis

Client Sample ID:	USTCSFF-122MW08		
Lab Sample ID:	F26833-4	**Date Sampled:**	09/16/04
Matrix:	AQ - Ground Water	**Date Received:**	09/18/04
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD18716.D	1	09/25/04	SKW	09/24/04	OP11393	GDD576
Run #2							

	Initial Volume	Final Volume
Run #1	37.5 ml	2.0 ml
Run #2		

CAS No.	Componnd	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0093	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobcnzene	90%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-122MW04		
Lab Sample ID:	F26833-5	**Date Sampled:**	09/16/04
Matrix:	AQ - Ground Water	**Date Received:**	09/18/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	EF044239.D	1	09/24/04	CV	n/a	n/a	GEF3364
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	0.74	1.0	0.50	ug/l	J
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	93%		70-123%
98-08-8	aaa-Trifluorotoluene	98%		73-122%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-122MW04		
Lab Sample ID:	F26833-5	**Date Sampled:**	09/16/04
Matrix:	AQ - Ground Water	**Date Received:**	09/18/04
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD18717.D	1	09/25/04	SKW	09/24/04	OP11393	GDD576
Run #2							

	Initial Volume	Final Volume
Run #1	36.4 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0096	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	96%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds ealibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a eompound

Report of Analysis

Client Sample ID:	USTCSFF-DW06		
Lab Sample ID:	F26833-6	**Date Sampled:**	09/16/04
Matrix:	AQ - Ground Water	**Date Received:**	09/18/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF044240.D	1	09/24/04	CV	n/a	n/a	GEF3364
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	92%		70-123%
98-08-8	aaa-Trifluorotoluene	97%		73-122%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidenee of a eompound

Report of Analysis

Client Sample ID:	USTCSFF-DW06		
Lab Sample ID:	F26833-6	**Date Sampled:**	09/16/04
Matrix:	AQ - Ground Water	**Date Received:**	09/18/04
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD18591.D	1	09/23/04	SKW	09/22/04	OP11362	GDD573
Run #2							

	Initial Volume	Final Volume
Run #1	37.3 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0094	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	95%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-DW06		
Lab Sample ID:	F26833-6	**Date Sampled:**	09/16/04
Matrix:	AQ - Ground Water	**Date Received:**	09/18/04
Method:	EPA 610 EPA 610	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IJ20887.D	1	09/22/04	AA	09/21/04	OP11357	GIJ1024
Run #2							

	Initial Volume	Final Volume
Run #1	1030 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	4.9	1.9	ug/l	
208-96-8	Acenaphthylene	ND	4.9	1.9	ug/l	
120-12-7	Anthracene	ND	4.9	1.9	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.9	1.9	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.9	1.9	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.9	1.9	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.9	1.9	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.9	1.9	ug/l	
218-01-9	Chrysene	ND	4.9	1.9	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.9	1.9	ug/l	
206-44-0	Fluoranthene	ND	4.9	1.9	ug/l	
86-73-7	Fluorene	ND	4.9	1.9	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.9	1.9	ug/l	
91-20-3	Naphthalene	ND	4.9	1.9	ug/l	
90-12-0	1-Methylnaphthalene	ND	4.9	1.9	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.9	1.9	ug/l	
85-01-8	Phenanthrene	ND	4.9	1.9	ug/l	
129-00-0	Pyrene	ND	4.9	1.9	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	84%		42-123%
84-15-1	o-Terphenyl	95%		51-123%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-122MW03		
Lab Sample ID:	F26833-7	**Date Sampled:**	09/16/04
Matrix:	AQ - Ground Water	**Date Received:**	09/18/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	EF044241.D	1	09/24/04	CV	n/a	n/a	GEF3364
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	1.5	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	91%		70-123%
98-08-8	aaa-Trifluorotoluene	97%		73-122%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-122MW03		
Lab Sample ID:	F26833-7	**Date Sampled:**	09/16/04
Matrix:	AQ - Ground Water	**Date Received:**	09/18/04
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD18718.D	1	09/25/04	SKW	09/24/04	OP11393	GDD576
Run #2							

	Initial Volume	Final Volume
Run #1	36.2 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0097	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	91%		60-139%

ND = Not deteeted MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-122MW07		
Lab Sample ID:	F26833-8	**Date Sampled:**	09/16/04
Matrix:	AQ - Ground Water	**Date Received:**	09/18/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	EF044242.D	1	09/24/04	CV	n/a	n/a	GEF3364
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	0.52	1.0	0.50	ug/l	J
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	92%		70-123%
98-08-8	aaa-Trifluorotoluene	97%		73-122%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-122MW07		
Lab Sample ID:	F26833-8	**Date Sampled:**	09/16/04
Matrix:	AQ - Ground Water	**Date Received:**	09/18/04
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD18719.D	1	09/25/04	SKW	09/24/04	OP11393	GDD576
Run #2							

	Initial Volume	Final Volume
Run #1	36.4 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0096	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	93%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW21		
Lab Sample ID:	F26833-9	**Date Sampled:**	09/16/04
Matrix:	AQ - Ground Water	**Date Received:**	09/18/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	EF044272.D	5	09/24/04	CV	n/a	n/a	GEF3365
Run #2 [b]	EF044330.D	5	09/28/04	CV	n/a	n/a	GEF3367

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	250	5.0	2.5	ug/l	
108-90-7	Chlorobenzene	ND	5.0	2.5	ug/l	
95-50-1	1,2-Dichlorobenzene	ND [c]	5.0	2.5	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	2.5	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	2.5	ug/l	
100-41-4	Ethylbenzene	236	5.0	2.5	ug/l	
1634-04-4	Methyl Tert Butyl Ether	133	5.0	2.5	ug/l	
108-88-3	Toluene	55.4	5.0	2.5	ug/l	
1330-20-7	Xylenes (total)	887	15	5.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	107%	100%	70-123%
98-08-8	aaa-Trifluorotoluene	114%	103%	73-122%

(a) All hits confirmed by dual column analysis.
(b) Sample vial(s) contained significant headspace; reported results are considered minimum values.
(c) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW21		
Lab Sample ID:	F26833-9	**Date Sampled:**	09/16/04
Matrix:	AQ - Ground Water	**Date Received:**	09/18/04
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD18720.D	1	09/25/04	SKW	09/24/04	OP11393	GDD576
Run #2							

	Initial Volume	Final Volume
Run #1	34.2 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.020	0.010	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	91%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indieates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a eompound

Report of Analysis

Client Sample ID:	USTCSFF-MW03		
Lab Sample ID:	F26833-10	**Date Sampled:**	09/17/04
Matrix:	AQ - Ground Water	**Date Received:**	09/18/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	EF044244.D	1	09/24/04	CV	n/a	n/a	GEF3364
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	0.59	1.0	0.50	ug/l	J
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	1.2	3.0	1.0	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	90%		70-123%
98-08-8	aaa-Trifluorotoluene	98%		73-122%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indieates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW03		
Lab Sample ID:	F26833-10	**Date Sampled:**	09/17/04
Matrix:	AQ - Ground Water	**Date Received:**	09/18/04
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fucl Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD18721.D	1	09/25/04	SKW	09/24/04	OP11393	GDD576
Run #2							

	Initial Volume	Final Volume
Run #1	37.2 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0094	ug/l	

CAS No.	Surrogate Rccoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	84%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in assoeiated mcthod blank
N = Indicates presumptive evidenee of a eompound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	F26833-11	**Date Sampled:**	09/17/04
Matrix:	AQ - Trip Blank Water	**Date Received:**	09/18/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	EF044235.D	1	09/23/04	CV	n/a	n/a	GEF3364
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	0.58	1.0	0.50	ug/l	J
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Diehlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	0.98	1.0	0.50	ug/l	J
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	7.9	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	4.9	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	92%		70-123%
98-08-8	aaa-Trifluorotoluene	98%		73-122%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indieates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

CHAIN OF CUSTODY

ACCUTEST Laboratories
4405 VINELAND ROAD • SUITE C-15
ORLANDO, FL 32811
TEL: 407-425-6700 • FAX: 407-425-0707

ACCUTEST JOB #: F26833
ACCUTEST QUOTE #:

CLIENT INFORMATION

NAME: Engineering + Environment
ADDRESS: 824 Cumberland Ave Suite 5
CITY: Jacksonville STATE: NC ZIP: 28540
SEND REPORT TO:
PHONE #: 910-989-3214

FACILITY INFORMATION

PROJECT NAME: [redacted] Campbell St. Fuel Farm
LOCATION:
PROJECT NO.:
FAX #: 910-989-3341

ANALYTICAL INFORMATION

MATRIX CODES

DW - DRINKING WATER
GW - GROUND WATER
WW - WASTE WATER
SO - SOIL
SL - SLUDGE
OI - OIL
LIQ - OTHER LIQUID
SOL - OTHER SOLID

ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION DATE	COLLECTION TIME	SAMPLED BY:	MATRIX	# OF BOTTLES	PRESERVATION HCl	NaOH	HNO3	H2SO4	NONE	MeOH	602	610	504.1	LAB USE ONLY
1	USTCSFF-122MW09	9-16-04	9:05	BS	GW	3	X						3			
2	USTCSFF-122-130WE1	9-16-04	9:40	BS	GW	8	X				X	X	3	2	3	
3	USTCSFF-122-139MW01	9-16-04	10:15	BS	GW	8	X				X	X	3	2	3	
4	USTCSFF-122MW04	9-16-04	11:00	BS	GW	3	X						3			
5	USTCSFF-122MW01	9-16-04	11:55	BS	GW	3	X						3			
6	USTCSFF-DW06	9-16-04	14:35	BS	GW	8	X				X	X	3	2	3	
7	USTCSFF-122MW03	9-16-04	13:10	BS	GW	3	X						3			
8	USTCSFF-122MW07	9-16-04	12:25	BS	GW	3	X						3			
9	USTCSFF-MW21	9-16-04	15:25	BS	GW	3	X						3			
10	USTCSFF-MW09	9-17-04	11:25	BS	GW	3	X						3			
11	Trip Blank	9-17-04	12:30													

DATA TURNAROUND INFORMATION

- ☑ STANDARD
- ☐ 48 HOUR RUSH
- ☐ 24 HOUR EMERGENCY
- ☐ OTHER

APPROVED BY:

EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED

DATA DELIVERABLE INFORMATION

- ☐ STANDARD
- ☐ COMMERCIAL "B"
- ☐ DISK DELIVERABLE
- ☐ STATE FORMS
- ☐ OTHER (SPECIFY)

COMMENTS/REMARKS

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESION, INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
1.	12:30 9-17-04	1. FX	2. FX	9:00 9/18/04	2.
RELINQUISHED BY:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
3.		3.	4.		4.
RELINQUISHED BY:	DATE TIME:	RECEIVED BY:	SEAL #	PRESERVE WHERE APPLICABLE ☐	ON ICE ☐	TEMPERATURE 20 °C
5.		5.				

F26833: Chain of Custody
Page 1 of 2

ACCUTEST LABORATORIES SOUTHEAST SAMPLE RECEIPT CONFIRMATION

Accutest's Job Number: F26833

Client: Engineering & Environmental Project: Cambell St. Fuel Farm

Date Received: 9/18/04 Time Received: 9:00

of Coolers Received: 1 Cooler Temperatures: 20

Delivery Method: (FedEx) UPS Accutest Courier Greyhound Delivery Other

Air Bill Number:

Cooler Custody Seals Intact ?	(Yes)	No	
Chain of Custody Provided ?	(Yes)	No	
COC Match Bottle Label ID's ?	(Yes)	No	
Sample Labels Present on all bottles ?	(Yes)	No	
All Analyses Marked On COC ?	(Yes)	No	
Are All Bottles Intact ?	(Yes)	No	
Samples Preserved Correctly ?	(Yes)	No	
Correct Number of Containers Used ?	(Yes)	No	
Sufficient Sample Volume ?	(Yes)	No	
Trip Blank Provided ?	(Yes)	No	
Trip Blank on COC ?	(Yes)	No	
Trip Blank Intact ?	(Yes)	No	N/A
Trip Blank Matrix ?	Soil	(Water)	N/A
Number of Encores ?	Ø		
Number of Soil Field Kits ?	Ø		

Summary of Comments:

Signature: Date: 9/18/04

Review Signature:

ASBD/HW 05/11/03

4.1

F26833: Chain of Custody
Page 2 of 2

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: F26833
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GEF3364-MB	EF044231.D	1	09/23/04	CV	n/a	n/a	GEF3364

The QC reported here applies to the following samples: **Method:** EPA 601/602

F26833-3, F26833-4, F26833-5, F26833-6, F26833-7, F26833-8, F26833-10, F26833-11

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
352-33-0	1-Chloro-4-fluorobenzene	87%	70-123%
98-08-8	aaa-Trifluorotoluene	96%	73-122%

Method Blank Summary

Job Number: F26833
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GEF3365-MB	EF044262.D	1	09/24/04	CV	n/a	n/a	GEF3365

The QC reported here applies to the following samples: **Method:** EPA 601/602

F26833-1, F26833-2, F26833-9

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
352-33-0	1-Chloro-4-fluorobenzene	93%	70-123%
98-08-8	aaa-Trifluorotoluene	99%	73-122%

Method Blank Summary

Job Number: F26833
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GEF3367-MB	EF044328.D	1	09/28/04	CV	n/a	n/a	GEF3367

The QC reported here applies to the following samples: **Method:** EPA 601/602

F26833-9

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries		Limits
352-33-0	1-Chloro-4-fluorobenzene	87%	70-123%
98-08-8	aaa-Trifluorotoluene	95%	73-122%

Method Blank Summary

Job Number: F26833
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP11362-MB	DD18574.D	1	09/22/04	SKW	09/22/04	OP11362	GDD573

5.1

The QC reported here applies to the following samples: **Method:** EPA 504.1

F26833-2, F26833-3, F26833-6

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.020	0.010	ug/l	

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	102%	60-139%

Method Blank Summary

Job Number: F26833
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP11393-MB	DD18705.D	1	09/25/04	SKW	09/24/04	OP11393	GDD576

5.1

The QC reported here applies to the following samples: **Method:** EPA 504.1

F26833-1, F26833-4, F26833-5, F26833-7, F26833-8, F26833-9, F26833-10

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.020	0.010	ug/l	

CAS No.	Surrogate Reeoveries		Limits
460-00-4	4-Bromofluorobenzene	98%	60-139%

Blank Spike Summary

Job Number: F26833
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GEF3364-BS	EF044230.D	1	09/23/04	CV	n/a	n/a	GEF3364

5.2

The QC reported here applies to the following samples: **Method:** EPA 601/602

F26833-3, F26833-4, F26833-5, F26833-6, F26833-7, F26833-8, F26833-10, F26833-11

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	20	20.8	104	86-121
108-90-7	Chlorobenzene	20	19.9	100	81-119
95-50-1	1,2-Dichlorobenzene	20	17.0	85	75-120
541-73-1	1,3-Dichlorobenzene	20	19.5	98	77-121
106-46-7	1,4-Dichlorobenzene	20	18.8	94	75-122
100-41-4	Ethylbenzene	20	21.4	107	81-126
1634-04-4	Methyl Tert Butyl Ether	20	18.9	95	76-117
108-88-3	Toluene	20	20.5	103	82-123
1330-20-7	Xylenes (total)	60	63.5	106	82-125

CAS No.	Surrogate Recoveries	BSP	Limits
352-33-0	1-Chloro-4-fluorobenzene	100%	70-123%
98-08-8	aaa-Trifluorotoluene	100%	73-122%

Blank Spike Summary

Job Number: F26833
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GEF3365-BS	EF044261.D	1	09/24/04	CV	n/a	n/a	GEF3365

5.2

The QC reported here applies to the following samples: **Method:** EPA 601/602

F26833-1, F26833-2, F26833-9

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	20	21.5	108	86-121
108-90-7	Chlorobenzene	20	21.0	105	81-119
95-50-1	1,2-Dichlorobenzene	20	19.6	98	75-120
541-73-1	1,3-Dichlorobenzene	20	21.1	106	77-121
106-46-7	1,4-Dichlorobenzene	20	20.8	104	75-122
100-41-4	Ethylbenzene	20	22.3	112	81-126
1634-04-4	Methyl Tert Butyl Ether	20	20.3	102	76-117
108-88-3	Toluene	20	21.9	110	82-123
1330-20-7	Xylenes (total)	60	65.8	110	82-125

CAS No.	Surrogate Recoveries	BSP	Limits
352-33-0	1-Chloro-4-fluorobenzene	103%	70-123%
98-08-8	aaa-Trifluorotoluene	103%	73-122%

Blank Spike Summary

Job Number: F26833
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GEF3367-BS	EF044327.D	1	09/28/04	CV	n/a	n/a	GEF3367

The QC reported here applies to the following samples: **Method:** EPA 601/602

F26833-9

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
95-50-1	1,2-Dichlorobenzene	20	21.8	109	75-120

CAS No.	Surrogate Recoveries	BSP	Limits
352-33-0	1-Chloro-4-fluorobenzene	99%	70-123%
98-08-8	aaa-Trifluorotoluene	99%	73-122%

Blank Spike Summary

Job Number: F26833
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP11362-BS	DD18575.D	1	09/22/04	SKW	09/22/04	OP11362	GDD573

The QC reported here applies to the following samples: **Method:** EPA 504.1

F26833-2, F26833-3, F26833-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
106-93-4	1,2-Dibromoethane	0.25	0.21	84	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	102%	60-139%

Blank Spike Summary

Job Number: F26833
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP11362-BS2	DD18576.D	1	09/22/04	SKW	09/22/04	OP11362	GDD573

5.2

The QC reported here applies to the following samples: **Method:** EPA 504.1

F26833-2, F26833-3, F26833-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
106-93-4	1,2-Dibromoethane	0.25	0.23	92	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	108%	60-139%

Blank Spike Summary

Job Number: F26833
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP11393-BS	DD18706.D	1	09/25/04	SKW	09/24/04	OP11393	GDD576

The QC reported here applies to the following samples: **Method:** EPA 504.1

F26833-1, F26833-4, F26833-5, F26833-7, F26833-8, F26833-9, F26833-10

CAS No.	Compouud	Spike ug/l	BSP ug/l	BSP %	Limits
106-93-4	1,2-Dibromoethane	0.25	0.24	96	70-130

CAS No.	Surrogate Rccoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	100%	60-139%

Blank Spike Summary

Job Number: F26833
Aecount: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP11393-BS2	DD18707.D	1	09/25/04	SKW	09/24/04	OP11393	GDD576

5.2

The QC reported here applies to the following samples: **Method:** EPA 504.1

F26833-1, F26833-4, F26833-5, F26833-7, F26833-8, F26833-9, F26833-10

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
106-93-4	1,2-Dibromoethane	0.25	0.22	88	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	98%	60-139%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F26833
Account: EEINCJX EE1
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F26810-9MS	EF044233.D	1	09/23/04	CV	n/a	n/a	GEF3364
F26810-9MSD	EF044234.D	1	09/23/04	CV	n/a	n/a	GEF3364
F26810-9	EF044232.D	1	09/23/04	CV	n/a	n/a	GEF3364

The QC reported here applies to the following samples: **Method:** EPA 601/602

F26833-3, F26833-4, F26833-5, F26833-6, F26833-7, F26833-8, F26833-10, F26833-11

CAS No.	Compound	F26810-9 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND		20	20.6	103	21.1	106	2	77-125/6
108-90-7	Chlorobenzene	ND		20	20.4	102	20.7	104	1	78-120/8
95-50-1	1,2-Dichlorobenzene	ND		20	18.0	90	18.8	94	4	69-125/7
541-73-1	1,3-Dichlorobenzene	ND		20	20.0	100	21.1	106	5	71-126/7
106-46-7	1,4-Dichlorobenzene	ND		20	19.5	98	20.2	101	4	67-129/7
100-41-4	Ethylbenzene	ND		20	21.5	108	22.2	111	3	74-127/6
1634-04-4	Methyl Tert Butyl Ether	ND		20	19.4	97	19.6	98	1	66-127/9
108-88-3	Toluene	ND		20	21.0	105	21.6	108	3	77-124/5
1330-20-7	Xylenes (total)	ND		60	64.3	107	64.0	107	0	76-125/5

CAS No.	Surrogate Recoveries	MS	MSD	F26810-9	Limits
352-33-0	1-Chloro-4-fluorobenzene	100%	102%	83%	70-123%
98-08-8	aaa-Trifluorotoluene	99%	101%	88%	73-122%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F26833
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F26810-2MS	EF044280.D	100	09/24/04	CV	n/a	n/a	GEF3365
F26810-2MSD	EF044281.D	100	09/24/04	CV	n/a	n/a	GEF3365
F26810-2	EF044276.D	10	09/24/04	CV	n/a	n/a	GEF3365
F26810-2 [a]	EF044279.D	100	09/24/04	CV	n/a	n/a	GEF3365

The QC reported here applies to the following samples: **Method:** EPA 601/602

F26833-1, F26833-2, F26833-9

CAS No.	Compound	F26810-2 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	3340 [b]		2000	5310	99	5240	95	1	77-125/6
108-90-7	Chlorobenzene	ND		2000	2070	104	2010	101	3	78-120/8
95-50-1	1,2-Dichlorobenzene	113		2000	1840	86	1800	84	2	69-125/7
541-73-1	1,3-Dichlorobenzene	ND		2000	2000	100	2000	100	0	71-126/7
106-46-7	1,4-Dichlorobenzene	ND		2000	1960	98	1920	96	2	67-129/7
100-41-4	Ethylbenzene	ND		2000	2170	109	2120	106	2	74-127/6
1634-04-4	Methyl Tert Butyl Ether	1990 [b]		2000	3930	97	3840	93	2	66-127/9
108-88-3	Toluene	467		2000	2520	103	2440	99	3	77-124/5
1330-20-7	Xylenes (total)	1960		6000	7870	99	7620	94	3	76-125/5

CAS No.	Surrogate Recoveries	MS	MSD	F26810-2	F26810-2	Limits
352-33-0	1-Chloro-4-fluorobenzene	103%	100%	106%	93%	70-123%
98-08-8	aaa-Trifluorotoluene	103%	104%	113%	100%	73-122%

(a) All hits confirmed by dual column analysis.
(b) Result is from Run #2.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F26833
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F26810-10MS	EF044334.D	50	09/28/04	CV	n/a	n/a	GEF3367
F26810-10MSD	EF044335.D	50	09/28/04	CV	n/a	n/a	GEF3367
F26810-10 [a]	EF044333.D	50	09/28/04	CV	n/a	n/a	GEF3367

The QC reported here applies to the following samples: **Method:** EPA 601/602

F26833-9

CAS No.	Compound	F26810-10 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
95-50-1	1,2-Dichlorobenzene	ND		1000	1110	111	1090	109	2	69-125/7

CAS No.	Surrogate Recoveries	MS	MSD	F26810-10	Limits
352-33-0	1-Chloro-4-fluorobenzene	99%	99%	77%	70-123%
98-08-8	aaa-Trifluorotoluene	101%	101%	82%	73-122%

(a) All hits confirmed by dual column analysis.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F26833
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP11362-MS	DD18586.D	1	09/23/04	SKW	09/22/04	OP11362	GDD573
OP11362-MSD	DD18587.D	1	09/23/04	SKW	09/22/04	OP11362	GDD573
F26855-7	DD18585.D	1	09/23/04	SKW	09/22/04	OP11362	GDD573

5.3

5

The QC reported here applies to tbe following samples: **Method:** EPA 504.1

F26833-2, F26833-3, F26833-6

CAS No.	Compound	F26855-7 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
106-93-4	1,2-Dibromoethane	ND		0.239	0.19	79	0.20	85	5	65-135/25

CAS No.	Surrogate Recoveries	MS	MSD	F26855-7	Limits
460-00-4	4-Bromofluorobenzene	117%	138%	120%	60-139%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F26833
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP11393-MS	DD18729.D	1	09/25/04	SKW	09/24/04	OP11393	GDD576
OP11393-MSD	DD18730.D	1	09/25/04	SKW	09/24/04	OP11393	GDD576
F26871-3	DD18711.D	1	09/25/04	SKW	09/24/04	OP11393	GDD576

5.3

The QC reported here applies to the following samples: **Method:** EPA 504.1

F26833-1, F26833-4, F26833-5, F26833-7, F26833-8, F26833-9, F26833-10

CAS No.	Compound	F26871-3 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
106-93-4	1,2-Dibromoethane	ND		0.26	0.23	89	0.23	91	0	65-135/25

CAS No.	Surrogate Recoveries	MS	MSD	F26871-3	Limits
460-00-4	4-Bromofluorobenzene	109%	104%	96%	60-139%

Volatile Surrogate Recovery Summary

Job Number: F26833
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Method: EPA 601/602 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S2 [a]
F26833-1	EF044268.D	97.0	102.0
F26833-2	EF044269.D	100.0	101.0
F26833-3	EF044237.D	98.0	102.0
F26833-4	EF044238.D	93.0	100.0
F26833-5	EF044239.D	93.0	98.0
F26833-6	EF044240.D	92.0	97.0
F26833-7	EF044241.D	91.0	97.0
F26833-8	EF044242.D	92.0	97.0
F26833-9	EF044330.D	100.0	103.0
F26833-9	EF044272.D	107.0	114.0
F26833-10	EF044244.D	90.0	98.0
F26833-11	EF044235.D	92.0	98.0
F26810-10MS	EF044334.D	99.0	101.0
F26810-10MSD	EF044335.D	99.0	101.0
F26810-2MS	EF044280.D	103.0	103.0
F26810-2MSD	EF044281.D	100.0	104.0
F26810-9MS	EF044233.D	100.0	99.0
F26810-9MSD	EF044234.D	102.0	101.0
GEF3364-BS	EF044230.D	100.0	100.0
GEF3364-MB	EF044231.D	87.0	96.0
GEF3365-BS	EF044261.D	103.0	103.0
GEF3365-MB	EF044262.D	93.0	99.0
GEF3367-BS	EF044327.D	99.0	99.0
GEF3367-MB	EF044328.D	87.0	95.0

Surrogate Compounds	Recovery Limits
S1 = 1-Chloro-4-fluorobenzene	70-123%
S2 = aaa-Trifluorotoluene	73-122%

(a) Recovery from GC signal #2

Volatile Surrogate Recovery Summary

Job Number: F26833
Account: EEINCJX EEI
Projeet: Camp Lejeune-Campbell St. Fuel Farm

Method: EPA 504.1 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S1 [b]
F26833-1	DD18715.D		104.0
F26833-2	DD18589.D		93.0
F26833-3	DD18590.D		134.0
F26833-4	DD18716.D		90.0
F26833-5	DD18717.D		96.0
F26833-6	DD18591.D		95.0
F26833-7	DD18718.D		91.0
F26833-8	DD18719.D		93.0
F26833-9	DD18720.D	91.0	
F26833-10	DD18721.D		84.0
OP11362-BS	DD18575.D		102.0
OP11362-BS2	DD18576.D		108.0
OP11362-MB	DD18574.D		102.0
OP11362-MS	DD18586.D		117.0
OP11362-MSD	DD18587.D		138.0
OP11393-BS	DD18706.D		100.0
OP11393-BS2	DD18707.D		98.0
OP11393-MB	DD18705.D		98.0
OP11393-MS	DD18729.D		109.0
OP11393-MSD	DD18730.D		104.0

Surrogate Compounds	Recovery Limits
S1 = 4-Bromofluorobenzene	60-139%

(a) Reeovery from GC signal #1
(b) Recovery from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F26833
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GEF3363-CC3348	**Injection Date:**	09/23/04
Lab File ID:	EF044225.D	**Injection Time:**	19:13
Instrument ID:	GCEF	**Method:**	EPA 601/602

	S1 [a] RT	S2 [a] RT
Check Std	8.85	5.77

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
ZZZZZZ	EF044228.D	09/23/04	20:26	8.85	5.77
ZZZZZZ	EF044229.D	09/23/04	20:51	8.85	5.77
GEF3364-BS	EF044230.D	09/23/04	21:15	8.85	5.77
GEF3364-MB	EF044231.D	09/23/04	21:39	8.85	5.77
F26810-9	EF044232.D	09/23/04	22:04	8.85	5.77
F26810-9MS	EF044233.D	09/23/04	22:29	8.85	5.77
F26810-9MSD	EF044234.D	09/23/04	22:53	8.85	5.77
F26833-11	EF044235.D	09/23/04	23:17	8.85	5.77

Surrogate Compounds

S1 = 1-Chloro-4-fluorobenzene
S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F26833
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GEF3364-CC3348	**Injection Date:**	09/23/04
Lab File ID:	EF044236.D	**Injection Time:**	23:42
Instrument ID:	GCEF	**Method:**	EPA 601/602

	S1 [a] RT	S2 [a] RT
Check Std	8.85	5.77

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
F26833-3	EF044237.D	09/24/04	00:07	8.85	5.77
F26833-4	EF044238.D	09/24/04	00:31	8.85	5.77
F26833-5	EF044239.D	09/24/04	00:56	8.85	5.77
F26833-6	EF044240.D	09/24/04	01:20	8.85	5.77
F26833-7	EF044241.D	09/24/04	01:44	8.85	5.77
F26833-8	EF044242.D	09/24/04	02:09	8.85	5.77
F26833-10	EF044244.D	09/24/04	02:58	8.85	5.77
ZZZZZZ	EF044245.D	09/24/04	03:22	8.85	5.77
ZZZZZZ	EF044246.D	09/24/04	03:47	8.85	5.77

Surrogate Compounds

S1 = 1-Chloro-4-fluorobenzene
S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F26833
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GEF3365-CC3348	**Injection Date:**	09/24/04
Lab File ID:	EF044260.D	**Injection Time:**	09:46
Instrument ID:	GCEF	**Method:**	EPA 601/602

	S1 [a] RT	S2 [a] RT
Check Std	8.85	5.77

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
GEF3365-BS	EF044261.D	09/24/04	10:10	8.85	5.77
GEF3365-MB	EF044262.D	09/24/04	10:35	8.85	5.77
ZZZZZZ	EF044263.D	09/24/04	10:59	8.85	5.77
ZZZZZZ	EF044265.D	09/24/04	11:51	8.85	5.77
ZZZZZZ	EF044266.D	09/24/04	12:15	8.85	5.77
ZZZZZZ	EF044267.D	09/24/04	12:39	8.85	5.77
F26833-1	EF044268.D	09/24/04	13:04	8.85	5.77
F26833-2	EF044269.D	09/24/04	13:28	8.85	5.77
ZZZZZZ	EF044270.D	09/24/04	13:53	8.84	5.77

Surrogate Compounds

S1 = 1-Chloro-4-fluorobenzene
S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F26833
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GEF3365-CC3348	**Injection Date:**	09/24/04
Lab File ID:	EF044271.D	**Injection Time:**	14:17
Instrument ID:	GCEF	**Method:**	EPA 601/602

	S1 [a] RT	S2 [a] RT
Check Std	8.84	5.77

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
F26833-9	EF044272.D	09/24/04	14:44	8.84	5.76
ZZZZZZ	EF044273.D	09/24/04	15:11	8.84	5.77
ZZZZZZ	EF044274.D	09/24/04	15:38	8.84	5.77
ZZZZZZ	EF044275.D	09/24/04	16:05	8.84	5.77
F26810-2	EF044276.D	09/24/04	16:31	8.84	5.77
ZZZZZZ	EF044278.D	09/24/04	17:25	8.85	5.77
F26810-2	EF044279.D	09/24/04	17:49	8.85	5.77
F26810-2MS	EF044280.D	09/24/04	18:14	8.85	5.77
F26810-2MSD	EF044281.D	09/24/04	18:38	8.85	5.77

Surrogate Compounds

S1 = 1-Chloro-4-fluorobenzene
S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F26833
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GEF3367-ICC3367	**Injection Date:**	09/28/04
Lab File ID:	EF044322.D	**Injection Time:**	13:03
Instrument ID:	GCEF	**Method:**	EPA 601/602

	S1 [a] RT	S2 [a] RT
Check Std	8.82	5.75

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
GEF3367-BS	EF044327.D	09/28/04	15:05	8.83	5.75
GEF3368-BS	EF044327.D	09/28/04	15:05	8.83	5.75
GEF3367-MB	EF044328.D	09/28/04	15:30	8.83	5.75
GEF3368-MB	EF044328.D	09/28/04	15:30	8.83	5.75
ZZZZZZ	EF044329.D	09/28/04	15:54	8.83	5.75
F26833-9	EF044330.D	09/28/04	16:21	8.83	5.75
ZZZZZZ	EF044331.D	09/28/04	16:48	8.83	5.75
ZZZZZZ	EF044332.D	09/28/04	17:15	8.83	5.75
F26810-10	EF044333.D	09/28/04	17:39	8.83	5.75
F26810-10MS	EF044334.D	09/28/04	18:04	8.83	5.75
F26810-10MSD	EF044335.D	09/28/04	18:28	8.83	5.75

Surrogate Compounds

S1 = 1-Chloro-4-fluorobenzene
S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F26833
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GDD576-ICC576	**Injection Date:**	09/25/04
Lab File ID:	DD18699.D	**Injection Time:**	11:21
Instrument ID:	GCDD	**Method:**	EPA 504.1

	S1 [a] RT
Check Std	6.84

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT
OP11393-MB	DD18705.D	09/25/04	13:21	6.84
OP11393-BS	DD18706.D	09/25/04	13:41	6.84
OP11393-BS2	DD18707.D	09/25/04	14:01	6.84
ZZZZZZ	DD18708.D	09/25/04	14:21	6.84
ZZZZZZ	DD18709.D	09/25/04	14:41	6.84
ZZZZZZ	DD18710.D	09/25/04	15:01	6.84
F26871-3	DD18711.D	09/25/04	15:21	6.84
ZZZZZZ	DD18712.D	09/25/04	15:41	6.84

Surrogate Compounds

S1 = 4-Bromofluorobenzene

(a) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F26833
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GDD576-CC576	**Injectiou Date:**	09/25/04
Lab Filc ID:	DD18713.D	**Injection Time:**	16:01
Instrument ID:	GCDD	**Mcthod:**	EPA 504.1

	S1 [a] RT	SI [b] RT
Check Std	7.08	6.84

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
ZZZZZZ	DD18714.D	09/25/04	16:21		6.84
F26833-1	DD18715.D	09/25/04	16:41		6.84
F26833-4	DD18716.D	09/25/04	17:01		6.84
F26833-5	DD18717.D	09/25/04	17:21		6.84
F26833-7	DD18718.D	09/25/04	17:41		6.84
F26833-8	DD18719.D	09/25/04	18:01		6.84
F26833-9	DD18720.D	09/25/04	18:21	7.07	
F26833-10	DD18721.D	09/25/04	18:41		6.84

Surrogate Compounds

S1 = 4-Bromofluorobenzene

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F26833
Account: EEINCJX EEI
Projeet: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GDD576-CC576	**Injection Date:**	09/25/04
Lab File ID:	DD18722.D	**Injection Time:**	19:01
Instrument ID:	GCDD	**Method:**	EPA 504.1

	S1 [a] RT	S1 [b] RT
Check Std	7.08	6.84

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
ZZZZZZ	DD18723.D	09/25/04	19:21		6.84
ZZZZZZ	DD18724.D	09/25/04	19:41		6.84
ZZZZZZ	DD18725.D	09/25/04	20:01		6.84
ZZZZZZ	DD18726.D	09/25/04	20:21		6.84
ZZZZZZ	DD18727.D	09/25/04	20:41	7.08	
ZZZZZZ	DD18728.D	09/25/04	21:01		6.84
OP11393-MS	DD18729.D	09/25/04	21:21		6.84
OP11393-MSD	DD18730.D	09/25/04	21:41		6.84

Surrogate Compounds

S1 = 4-Bromofluorobenzene

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F26833
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GDD573-CC573	**Injection Date:**	09/22/04
Lab File ID:	DD18573.D	**Injection Time:**	22:19
Instrument ID:	GCDD	**Method:**	EPA 504.1

	S1 [a] RT
Check Std	6.84

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT
OP11362-MB	DD18574.D	09/22/04	22:39	6.84
OP11362-BS	DD18575.D	09/22/04	22:59	6.84
OP11362-BS2	DD18576.D	09/22/04	23:18	6.84
ZZZZZZ	DD18577.D	09/22/04	23:38	6.84
ZZZZZZ	DD18578.D	09/22/04	23:58	6.84
ZZZZZZ	DD18579.D	09/23/04	00:18	6.84
ZZZZZZ	DD18580.D	09/23/04	00:38	6.84
ZZZZZZ	DD18581.D	09/23/04	00:58	6.84
ZZZZZZ	DD18582.D	09/23/04	01:18	6.84
ZZZZZZ	DD18583.D	09/23/04	01:38	6.84

Surrogate Compounds

S1 = 4-Bromofluorobenzene

(a) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F26833
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GDD573-CC573	**Injection Date:**	09/23/04
Lab File ID:	DD18584.D	**Injection Time:**	01:57
Instrument ID:	GCDD	**Method:**	EPA 504.1

	S1 [a] RT	S1 [b] RT
Check Std	7.08	6.84

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
F26855-7	DD18585.D	09/23/04	02:17		6.84
OP11362-MS	DD18586.D	09/23/04	02:37		6.84
OP11362-MSD	DD18587.D	09/23/04	02:57		6.84
ZZZZZZ	DD18588.D	09/23/04	03:17		6.84
F26833-2	DD18589.D	09/23/04	03:37		6.84
F26833-3	DD18590.D	09/23/04	03:57		6.84
F26833-6	DD18591.D	09/23/04	04:17		6.84
ZZZZZZ	DD18592.D	09/23/04	04:36		6.84
GDD573-ECC573	DD18593.D	09/23/04	04:56	7.08	6.84

Surrogate Compounds

S1 = 4-Bromofluorobenzene

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

Initial Calibration Summary

Job Number: F26833
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GDD573-ICC573
Lab FileID: DD18557.D

5.6

Response Factor Report ECD 4

Method : C:\HPCHEM\2\METHODS\504_1.M (Chemstation Integrator)
Title : EDB/DBCP by EPA 504.1 or SW846 8011
Last Update : Thu Sep 23 15:28:40 2004
Response via : Initial Calibration

Calibration Files
.125=DD18556.D .250=DD18557.D .500=DD18558.D 0.75=DD18559.D
1.0 =DD18560.D 0.1 =DD18562.D

	Compound	.125	.250	.500	0.75	1.0	0.1	Avg	%RSD
1)	1,2-Dibromoethane	6.471	5.794	5.679	5.452	5.585		5.796 E5	6.86
2) S	4-Bromofluorobenzen	5.711	5.179	4.755	4.643	4.706		4.999 E4	9.01
3)	1,2,3-Trichloroprop	1.176	1.090	1.018	0.967	0.991		1.048 E5	8.09
4)	1,2-Dibromo-3-chlor	1.287	1.226	1.222	1.231	1.291		1.252 E6	2.76

Signal #2

1)	1,2-Dibromoethane	1.377	1.244	1.231	1.195	1.240		1.257 E5	5.55
2) S	4-Bromofluorobenzen	8.574	8.199	7.961	7.987	8.306		8.205 E3	3.07
3)	1,2,3-Trichloroprop	2.313	2.077	2.092	2.089	2.135		2.141 E4	4.61
4)	1,2-Dibromo-3-chlor	1.745	1.720	1.703	1.779	1.884		1.766 E5	4.07

(#) = Out of Range

504_1.M Thu Sep 23 15:30:24 2004

Initial Calibration Verification

Job Number: F26833
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GDD573-ICV573
Lab FileID: DD18562.D

Evaluate Continuing Calibration Report

```
Signal #1 : C:\HPCHEM\2\DATA\0922ED8\DD18562.D\ECD1A.CH  Vial: 8
Signal #2 : C:\HPCHEM\2\DATA\0922EDB\DD18562.D\ECD2B.CH
Acq On    : 22 Sep 2004    6:40 pm                    Operator: stephw
Sample    : icv573-0.10                               Inst    : ECD 4
Misc      : op11363,gdd573,35.0,,,2,1,,,water         MultiplR: 1.00
IntFile Signal #1: EVENTS.E     IntFile Signal #2: EVENTS2.E

Method        : C:\HPCHEM\2\METHODS\504_1.M (Chemstation Integrator)
Title         : EDB/DBCP by EPA 504.1 or SW846 8011
Last Update   : Thu Sep 23 15:28:40 2004
Response via  : Multiple Level Calibration

Min. RRF      :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev  :  20%     Max. Rel. Area : 150%
```

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	1,2-Dibromoethane	0.100	0.097	3.0	0	-0.05	5.69- 5.89
2 S	4-Bromofluorobenzene	2.000	2.052	-2.6	0	-0.03	7.01- 7.21
3	1,2,3-Trichloropropane	0.100	0.103	-3.0	0	-0.02	7.39- 7.59
4	1,2-Dibromo-3-chloropr	0.100	0.099	1.0	0	-0.02	9.42- 9.62
*****	Signal #2 *****						
1	1,2-Dibromoethane	0.100	0.094	6.0	0	-0.04	5.42- 5.62
2 S	4-Bromofluorobenzene	2.000	2.042	-2.1	0	-0.02	6.76- 6.96
3	1,2,3-Trichloropropane	0.100	0.095	5.0	0	-0.02	6.94- 7.14
4	1,2-Dibromo-3-chloropr	0.100	0.099	1.0	0	-0.02	9.06- 9.26

```
(#) = Out of Range              SPCC's out = 0  CCC's out = 0
 DD18562.D  504_1.M          Thu Sep 23 15:30:39 2004
```

Continuing Calibration Summary

Job Number: F26833 **Sample:** GDD573-CC573
Account: EEINCJX EEI **Lab FileID:** DD18573.D
Project: Camp Lejeune-Campbell St. Fuel Farm

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\0922EDB\DD18573.D\ECD1A.CH Vial: 3
Signal #2 : C:\HPCHEM\2\DATA\0922EDB\DD18573.D\ECD2B.CH
Acq On : 22 Sep 2004 10:19 pm Operator: stephw
Sample : cc573-0.25 Inst : ECD 4
Misc : op11363,gdd573,35.0,,,2,1,,,water MultiplIr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\2\METHODS\504_1.M (Chemstation Integrator)
Title : EDB/DBCP by EPA 504.1 or SW846 8011
Last Update : Thu Sep 23 08:16:11 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	1,2-Dibromoethane	0.250	0.236	5.6	94	-0.05	5.69- 5.89
2 S	4-Bromofluorobenzene	2.000	2.010	-0.5	97	-0.03	7.01- 7.21
3	1,2,3-Trichloropropane	0.250	0.259	-3.6	100	-0.02	7.39- 7.59
4	1,2-Dibromo-3-chloropr	0.250	0.241	3.6	98	-0.02	9.42- 9.62
*****	Signal #2 *****						
1	1,2-Dibromoethane	0.250	0.247	1.2	100	-0.04	5.42- 5.62
2 S	4-Bromofluorobenzene	2.000	2.048	-2.4	102	-0.02	6.76- 6.96
3	1,2,3-Trichloropropane	0.250	0.249	0.4	103	-0.02	6.94- 7.14
4	1,2-Dibromo-3-chloropr	0.250	0.252	-0.8	103	-0.02	9.06- 9.26

(#) = Out of Range SPCC's out = 0 CCC's out = 0
DD18557.D 504_1.M Thu Sep 23 14:28:19 2004

Continuing Calibration Summary

Job Number: F26833
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GDD573-CC573
Lab FileID: DD18584.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\0922EDB\DD18584.D\ECD1A.CH Vial: 4
Signal #2 : C:\HPCHEM\2\DATA\0922ED8\DD18584.D\ECD2B.CH
Acq On : 23 Sep 2004 1:57 am Operator: stephw
Sample : cc573-0.50 Inst : ECD 4
Misc : op11363,gdd573,35.0,,,2,1,,,water MultiplIr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\2\METHODS\504_1.M (Chemstation Integrator)
Title : ED8/DBCP by EPA 504.1 or SW846 8011
Last Update : Thu Sep 23 08:16:11 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	1,2-Dibromoethane	0.500	0.486	2.8	99	-0.05	5.69- 5.89
2 S	4-Bromofluorobenzene	4.000	3.807	4.8	100	-0.03	7.01- 7.21
3	1,2,3-Trichloropropane	0.500	0.486	2.8	100	-0.02	7.39- 7.59
4	1,2-Dibromo-3-chloropr	0.500	0.486	2.8	100	-0.02	9.42- 9.62
*****	Signal #2 *****						
1	1,2-Dibromoethane	0.500	0.501	-0.2	102	-0.04	5.42- 5.62
2 S	4-Bromofluorobenzene	4.000	4.003	-0.1	103	-0.02	6.76- 6.96
3	1,2,3-Trichloropropane	0.500	0.504	-0.8	103	-0.02	6.94- 7.14
4	1,2-Dibromo-3-chloropr	0.500	0.498	0.4	103	-0.02	9.06- 9.26

(#) = Out of Range SPCC's out = 0 CCC's out = 0
DD18558.D 504_1.M Thu Sep 23 14:28:49 2004

Continuing Calibration Summary

Job Number: F26833
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GDD573-ECC573
Lab FileID: DD18593.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\0922EDB\DD18593.D\ECD1A.CH Vial: 3
Signal #2 : C:\HPCHEM\2\DATA\0922EDB\DD18593.D\ECD2B.CH
Acq On : 23 Sep 2004 4:56 am Operator: stephw
Sample : ecc573-0.25 Inst : ECD 4
Misc : op11363,gdd573,35.0,,,2,1,,,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\2\METHODS\504_1.M (Chemstation Integrator)
Title : EDB/DBCP by EPA 504.1 or SW846 8011
Last Update : Thu Sep 23 08:16:11 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	1,2-Dibromoethane	0.250	0.243	2.8	97	-0.05	5.69- 5.89
2 S	4-Bromofluorobenzene	2.000	2.029	-1.4	98	-0.03	7.01- 7.21
3	1,2,3-Trichloropropane	0.250	0.259	-3.6	99	-0.02	7.39- 7.59
4	1,2-Dibromo-3-chloropr	0.250	0.240	4.0	98	-0.02	9.42- 9.62
*****	Signal #2 *****						
1	1,2-Dibromoethane	0.250	0.252	-0.8	102	-0.04	5.42- 5.62
2 S	4-Bromofluorobenzene	2.000	2.035	-1.8	102	-0.02	6.76- 6.96
3	1,2,3-Trichloropropane	0.250	0.246	1.6	101	-0.02	6.94- 7.14
4	1,2-Dibromo-3-chloropr	0.250	0.249	0.4	102	-0.02	9.06- 9.26

(#) = Out of Range SPCC's out = 0 CCC's out = 0
DD18557.D 504_1.M Thu Sep 23 14:28:20 2004

Initial Calibration Summary

Job Number: F26833
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GDD576-ICC576
Lab FileID: DD18699.D

Response Factor Report ECD 4

Method : C:\HPCHEM\2\METHODS\504_1.M (Chemstation Integrator)
Title : EDB/DBCP by EPA 504.1 or SW846 8011
Last Update : Thu Sep 30 11:25:45 2004
Response via : Initial Calibration

Calibration Files
.125=DD18698.D .250=DD18699.D .500=DD18700.D 0.75=DD18701.D
0.75 =DD1B701.D 1.0 =DD18702.D

	Compound	.125	.250	.500	0.75	1.0	Avg		%RSD
1)	1,2-Dibromoethane	7.448	6.972	6.585	6.452	6.829	6.857	E5	5.65
2) S	4-8romofluorobenzene	5.691	5.358	5.056	4.800	4.972	5.175	E4	6.80
3)	1,2,3-Trichloropropan	1.266	1.209	1.131	1.031	1.079	1.143	E5	8.33
4)	1,2-Dibromo-3-chlorop	1.253	1.264	1.237	1.255	1.344	1.271	E6	3.31

Signal #2

1)	1,2-Dibromoethane	1.487	1.422	1.401	1.351	1.392	1.411	E5	3.54
2) S	4-Bromofluorobenzene	8.442	8.616	8.164	8.120	8.493	8.367	E3	2.58
3)	1,2,3-Trichloropropan	2.286	2.210	2.285	2.216	2.279	2.255	E4	1.71
4)	1,2-Dibromo-3-chlorop	1.735	1.755	1.769	1.844	2.028	1.826	E5	6.57

(#) = Out of Range

504_1.M Thu Sep 30 11:26:19 2004

Initial Calibration Verification

Job Number: F26833
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GDD576-ICV576
Lab FileID: DD18704.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\0925EDB\DD1B704.D\ECD1A.CH Vial: 8
Signal #2 : C:\HPCHEM\2\DATA\0925EDB\DD18704.D\ECD2B.CH
Acq On : 25 Sep 2004 1:01 pm Operator: stephw
Sample : ICV576-0.25 Inst : ECD 4
Misc : op11393,gdd576,35,,,2,1,,,water MultiplR: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\2\METHODS\504_1.M (Chemstation Integrator)
Title : EDB/DBCP by EPA 504.1 or SW846 8011
Last Update : Tue Sep 28 16:23:30 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	1,2-Dibromoethane	0.250	0.245	2.0	100	-0.06	5.69- 5.89
2 S	4-Bromofluorobenzene	2.000	2.027	-1.4	106	-0.03	7.01- 7.21
3	1,2,3-Trichloropropane	0.250	0.258	-3.2	107	-0.03	7.39- 7.59
4	1,2-Dibromo-3-chloropr	0.250	0.241	3.6	109	-0.03	9.42- 9.62
*****	Signal #2 *****						
1	1,2-Dibromoethane	0.250	0.238	4.8	90	-0.06	5.42- 5.62
2 S	4-Bromofluorobenzene	2.000	2.001	-0.0	102	-0.02	6.76- 6.96
3	1,2,3-Trichloropropane	0.250	0.237	5.2	89	-0.02	6.94- 7.14
4	1,2-Dibromo-3-chloropr	0.250	0.232	7.2	99	-0.02	9.06- 9.26

(#) = Out of Range SPCC's out = 0 CCC's out = 0
DD18753.D 504_1.M Wed Sep 29 14:44:57 2004

Continuing Calibration Summary

Job Number: F26833
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GDD576-CC576
Lab FileID: DD18713.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\0925EDB\DD18713.D\ECD1A.CH Vial: 4
Signal #2 : C:\HPCHEM\2\DATA\0925EDB\DD18713.D\ECD2B.CH
Acq On : 25 Sep 2004 4:01 pm Operator: stephw
Sample : CC576-0.50 Inst : ECD 4
Misc : op11393,gdd576,35,,,2,1,,,water MultiplIr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\2\METHODS\504_1.M (Chemstation Integrator)
Title : EDB/DBCP by EPA 504.1 or SW846 8011
Last Update : Tue Sep 28 16:23:30 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	1,2-Dibromoethane	0.500	0.473	5.4	99	-0.06	5.69- 5.89
2 S	4-Bromofluorobenzene	4.000	3.854	3.6	108	-0.03	7.01- 7.21
3	1,2,3-Trichloropropane	0.500	0.477	4.6	107	-0.03	7.39- 7.59
4	1,2-Dibromo-3-chloropr	0.500	0.496	0.8	109	-D.03	9.42- 9.62
*****	Signal #2 *****						
1	1,2-Dibromoethane	0.500	0.493	1.4	95	-0.06	5.42- 5.62
2 S	4-Bromofluorobenzene	4.000	3.984	0.4	100	-0.03	6.76- 6.96
3	1,2,3-Trichloropropane	0.500	0.503	-0.6	99	-0.02	6.94- 7.14
4	1,2-Dibromo-3-chloropr	0.500	0.498	0.4	102	-0.02	9.06- 9.26

(#) = Out of Range SPCC's out = 0 CCC's out = 0
DD18758.D 504_1.M Wed Sep 29 14:45:34 2004

5.6

Continuing Calibration Summary

Job Number: F26833
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GDD576-CC576
Lab FileID: DD18722.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\0925EDB\DD18722.D\ECD1A.CH Vial: 3
Signal #2 : C:\HPCHEM\2\DATA\0925EDB\DD18722.D\ECD2B.CH
Acq On : 25 Sep 2004 7:01 pm Operator: stephw
Sample : CC576-0.25 Inst : ECD 4
Misc : op11393,gdd576,35,,,2,1,,,water MultiplR: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\2\METHODS\504_1.M (Chemstation Integrator)
Title : EDB/DBCP by EPA 504.1 or SW846 8011
Last Update : Tue Sep 28 16:23:30 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	1,2-Dibromoethane	0.250	0.255	-2.0	105	-0.06	5.69- 5.89
2 S	4-Bromofluorobenzene	2.000	2.140	-7.0	112	-0.03	7.01- 7.21
3	1,2,3-Trichloropropane	0.250	0.266	-6.4	110	-0.03	7.39- 7.59
4	1,2-Dibromo-3-chloropr	0.250	0.250	0.0	113	-0.03	9.42- 9.62
*****	Signal #2 *****						
1	1,2-Dibromoethane	0.250	0.269	-7.6	101	-0.06	5.42- 5.62
2 S	4-Bromofluorobenzene	2.000	2.156	-7.8	110	-0.03	6.76- 6.96
3	1,2,3-Trichloropropane	0.250	0.272	-8.8	102	-0.02	6.94- 7.14
4	1,2-Dibromo-3-chloropr	0.250	0.248	0.8	106	-0.02	9.06- 9.26

(#) = Out of Range SPCC's out = 0 CCC's out = 0
DD18753.D 504_1.M Wed Sep 29 14:44:58 2004

Continuing Calibration Summary

Job Number: F26833
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GDD576-CC576
Lab FileID: DD18731.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\0925EDB\DD18731.D\ECD1A.CH Vial: 4
Signal #2 : C:\HPCHEM\2\DATA\0925EDB\DD18731.D\ECD2B.CH
Acq On : 25 Sep 2004 10:01 pm Operator: stephw
Sample : CC576-0.50 Inst : ECD 4
Misc : op11393,gdd576,35,,,2,1,,,water MultiplIr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\2\METHODS\504_1.M (Chemstation Integrator)
Title : EDB/DBCP by EPA 504.1 or SW846 8011
Last Update : Tue Sep 28 16:23:30 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	1,2-Dibromoethane	0.500	0.477	4.6	100	-0.06	5.69- 5.89
2 S	4-Bromofluorobenzene	4.000	3.949	1.3	110	-0.03	7.01- 7.21
3	1,2,3-Trichloropropane	0.500	0.481	3.8	108	-0.03	7.39- 7.59
4	1,2-Dibromo-3-chloropr	0.500	0.500	0.0	110	-0.03	9.42- 9.62
*****	Signal #2 *****						
1	1,2-Dibromoethane	0.500	0.498	0.4	96	-0.06	5.42- 5.62
2 S	4-Bromofluorobenzene	4.000	4.108	-2.7	103	-0.03	6.76- 6.96
3	1,2,3-Trichloropropane	0.500	0.504	-0.8	99	-0.02	6.94- 7.14
4	1,2-Dibromo-3-chloropr	0.500	0.509	-1.8	104	-0.02	9.06- 9.26

(#) = Out of Range SPCC's out = 0 CCC's out = 0
DD18758.D 504_1.M Wed Sep 29 14:45:35 2004

Initial Calibration Summary

Job Number: F26833
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GEF3348-ICC3348
Lab FileID: EF043786.D

Response Factor Report VOA1

Method : C:\HPCHEM\1\METHODS\DUAL0913.M (Chemstation Integrator)
Title : EPA 602 & 5030B/8021B
Last Update : Tue Sep 07 12:20:43 2004
Response via : Initial Calibration

Calibration Files
1 =EF043784.D 2 =EF043785.D 3 =EF043786.D
4 =EF043787.D 5 =EF043788.D 6 =EF043789.D

		Compound	1	2	3	4	5	6	Avg		%RSD
1)		Methyl tert Butyl E	1.484	1.598	1.453	1.478	1.455	1.470	1.490	E3	3.67
2)		Di-Isopropyl ether	2.288	2.371	2.129	2.162	2.137	2.128	2.202	E3	4.65
3)		Benzene	4.948	4.589	4.162	4.262	4.246	4.215	4.404	E3	6.96
4)	S	a,a,a-TFT(S)	1.357	1.365	1.345	1.469	1.451	1.460	1.408	E3	4.11
5)		Toluene		3.897	3.531	3.618	3.589	3.574	3.642	E3	4.01
6)	S	1-Chloro-4-Fluorobe	2.018	1.949	1.953	2.111	2.105	2.119	2.043	E3	3.91
7)		Chlorobenzene		4.044	3.359	3.475	3.430	3.399	3.541	E3	8.02
8)		Ethylbenzene		3.498	2.920	2.964	2.918	2.888	3.037	E3	8.52
9)		m,p-Xylene		3.598	3.190	3.298	3.241	3.222	3.310	E3	5.01
10)		o-Xylene		3.252	2.888	2.951	2.900	2.844	2.967	E3	5.52
11)		1,3-Dichlorobenzene	2.366	2.229	2.161	2.349	2.329	2.321	2.292	E3	3.50
12)		1,4-Dichlorobenzene	2.626	2.413	2.273	2.482	2.485	2.500	2.463	E3	4.71
13)		1,2-Dichlorobenzene	1.511	1.316	1.266	1.428	1.388	1.354	1.377	E3	6.27
Signal #2											
1)		Methyl tert Butyl E	1.371	1.406	1.289	1.332	1.322	1.334	1.342	E3	3.06
2)		Di-Isopropyl ether	1.945	1.961	1.830	1.893	1.883	1.850	1.894	E3	2.70
3)		Benzene	4.341	3.940	3.726	3.886	3.916	3.816	3.937	E3	5.40
4)	S	a,a,a-TFT(S)	1.149	1.160	1.125	1.276	1.280	1.256	1.208	E3	5.85
5)		Toluene		3.314	3.043	3.273	3.268	3.186	3.217	E3	3.34
6)	S	1-Chloro-4-Fluorobe	1.594	1.592	1.620	1.776	1.793	1.793	1.695	E3	6.04
7)		Chlorobenzene		3.866	3.083	3.233	3.184	3.119	3.297	E3	9.80
8)		Ethylbenzene		3.107	2.686	2.777	2.761	2.739	2.814	E3	5.94
9)		m,p-Xylene		3.207	2.845	2.999	3.049	2.943	3.009	E3	4.46
10)		o-Xylene		2.761	2.494	2.639	2.578	2.532	2.601	E3	4.02
11)		1,3-Dichlorobenzene	1.899	1.883	1.870	2.095	2.050	2.051	1.975	E3	5.13
12)		1,4-Dichlorobenzene	1.970	1.902	1.886	2.065	2.077	2.138	2.006	E3	5.11
13)		1,2-Dichlorobenzene	1.047	1.108	1.153	1.313	1.296	1.275	1.199	E3	9.28

(#) = Out of Range

DUAL0913.M Tue Sep 14 09:05:23 2004 EF

5.6

Continuing Calibration Summary

Job Number: F26833
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GEF3363-CC3348
Lab FileID: EF044225.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\092304\EF044225.D\FID1A.CH Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\092304\EF044225.D\FID2B.CH
Acq On : 23 Sep 2004 7:13 pm Operator: ClaireV
Sample : cc3348-20 Inst : VOA1
Misc : gc3983,gef3363,,,,,1 MultiplIr: 1.00
IntFile Signal #1: AUTOINT1.E IntFile Signal #2: autoint2.e

Method : C:\HPCHEM\1\METHODS\DUAL0913.M (Chemstation Integrator)
Title : EPA 602 & 5030B/8021B
Last Update : Thu Sep 16 09:53:58 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	20.000	18.984	5.1	97	0.00
2		Di-Isopropyl ether	20.000	19.381	3.1	100	0.00
3		Benzene	20.000	19.022	4.9	101	0.00
4	S	a,a,a-TFT(S)	20.000	20.568	-2.8	108	0.00
5		Toluene	20.000	18.986	5.1	98	0.01
6	S	1-Chloro-4-Fluorobenzene	20.000	20.262	-1.3	106	0.01
7		Chlorobenzene	20.000	18.593	7.0	98	0.01
8		Ethylbenzene	20.000	19.101	4.5	99	0.01
9		m,p-Xylene	40.000	38.762	3.1	101	0.01
10		o-Xylene	20.000	19.201	4.0	99	0.01
11		1,3-Dichlorobenzene	20.000	18.944	5.3	100	0.02
12		1,4-Dichlorobenzene	20.000	18.537	7.3	100	0.02
13		1,2-Dichlorobenzene	20.000	17.886	10.6	97	0.01

Signal #2

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	20.000	18.226	8.9	95	0.00
2		Di-Isopropyl ether	20.000	18.879	5.6	98	0.01
3		Benzene	20.000	18.489	7.6	98	0.01
4	S	a,a,a-TFT(S)	20.000	19.896	0.5	107	0.01
5		Toluene	20.000	18.085	9.6	96	0.01
6	S	1-Chloro-4-Fluorobenzene	20.000	19.794	1.0	104	0.01
7		Chlorobenzene	20.000	17.831	10.8	95	0.01
8		Ethylbenzene	20.000	18.620	6.9	98	0.02
9		m,p-Xylene	40.000	37.526	6.2	99	0.01
10		o-Xylene	20.000	18.398	8.0	96	0.02
11		1,3-Dichlorobenzene	20.000	18.413	7.9	97	0.02
12		1,4-Dichlorobenzene	20.000	17.965	10.2	96	0.02
13		1,2-Dichlorobenzene	20.000	17.257	13.7	90	0.02

Average % D = 6.2

(#) = Out of Range SPCC's out = 0 CCC's out = 0
EF043786.D DUAL0913.M Fri Sep 24 09:34:09 2004 EF

Continuing Calibration Summary

Job Number: F26833
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GEF3364-CC3348
Lab FileID: EF044236.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\092304\EF044236.D\FID1A.CH Vial: 32
Signal #2 : C:\HPCHEM\1\DATA\092304\EF044236.D\FID2B.CH
Acq On : 23 Sep 2004 11:42 pm Operator: ClaireV
Sample : cc3348-20 Inst : VOA1
Misc : gc3984,gef3364,,,,,1 MultiplIr: 1.00
IntFile Signal #1: AUTOINT1.E IntFile Signal #2: autoint2.e

Method : C:\HPCHEM\1\METHODS\DUAL0913.M (Chemstation Integrator)
Title : EPA 602 & 5030B/8021B
Last Update : Thu Sep 16 09:53:58 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	Methyl tert Butyl Ether	20.000	20.951	-4.8	107	0.00
2	Di-Isopropyl ether	20.000	21.691	-8.5	112	0.00
3	Benzene	20.000	21.064	-5.3	111	0.00
4 S	a,a,a-TFT(S)	20.000	20.940	-4.7	110	0.00
5	Toluene	20.000	21.367	-6.8	110	0.00
6 S	1-Chloro-4-Fluorobenzene	20.000	21.011	-5.1	110	0.01
7	Chlorobenzene	20.000	20.985	-4.9	111	0.01
8	Ethylbenzene	20.000	21.108	-5.5	110	0.01
9	m,p-Xylene	40.000	42.656	-6.6	111	0.01
10	o-Xylene	20.000	21.287	-6.4	109	0.01
11	1,3-Dichlorobenzene	20.000	21.143	-5.7	112	0.02
12	1,4-Dichlorobenzene	20.000	20.679	-3.4	112	0.02
13	1,2-Dichlorobenzene	20.000	19.484	2.6	106	0.02

Signal #2

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	Methyl tert Butyl Ether	20.000	20.113	-0.6	105	0.00
2	Di-Isopropyl ether	20.000	20.905	-4.5	108	0.01
3	Benzene	20.000	20.455	-2.3	108	0.01
4 S	a,a,a-TFT(S)	20.000	20.242	-1.2	109	0.01
5	Toluene	20.000	20.476	-2.4	108	0.01
6 S	1-Chloro-4-Fluorobenzene	20.000	20.852	-4.3	109	0.01
7	Chlorobenzene	20.000	20.253	-1.3	108	0.01
8	Ethylbenzene	20.000	20.547	-2.7	108	0.02
9	m,p-Xylene	40.000	41.009	-2.5	108	0.01
10	o-Xylene	20.000	20.377	-1.9	106	0.02
11	1,3-Dichlorobenzene	20.000	21.129	-5.6	112	0.02
12	1,4-Dichlorobenzene	20.000	20.311	-1.6	108	0.02
13	1,2-Dichlorobenzene	20.000	19.700	1.5	102	0.02

Average % D = 3.9

(#) = Out of Range SPCC's out = 0 CCC's out = 0
EF043786.D DUAL0913.M Fri Sep 24 09:34:10 2004 EF

Continuing Calibration Summary

Job Number: F26833
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GEF3364-CC3348
Lab FileID: EF044247.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\092304\EF044247.D\FID1A.CH Vial: 43
Signal #2 : C:\HPCHEM\1\DATA\092304\EF044247.D\FID2B.CH
Acq On : 24 Sep 2004 4:12 am Operator: ClaireV
Sample : cc3348-20 Inst : V0A1
Misc : gc3983,gef3364,,,,,1 MultiplIr: 1.00
IntFile Signal #1: AUTOINT1.E IntFile Signal #2: autoint2.e

Method : C:\HPCHEM\1\METHODS\DUAL0913.M (Chemstation Integrator)
Title : EPA 602 & 5030B/8021B
Last Update : Thu Sep 16 09:53:58 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	Methyl tert 8utyl Ether	20.000	19.125	4.4	98	0.00
2	Di-Isopropyl ether	20.000	19.922	0.4	103	0.00
3	Benzene	20.000	19.096	4.5	101	0.00
4 S	a,a,a-TFT(S)	20.000	20.712	-3.6	108	0.00
5	Toluene	20.000	19.325	3.4	100	0.01
6 S	1-Chloro-4-Fluorobenzene	20.000	20.513	-2.6	107	0.01
7	Chlorobenzene	20.000	19.156	4.2	101	0.01
8	Ethylbenzene	20.000	19.310	3.5	100	0.01
9	m,p-Xylene	40.000	39.162	2.1	102	0.01
10	o-Xylene	20.000	19.552	2.2	100	0.01
11	1,3-Dichlorobenzene	20.000	19.262	3.7	102	0.02
12	1,4-Dichlorobenzene	20.000	18.906	5.5	102	0.02
13	1,2-Dichlorobenzene	20.000	18.436	7.8	100	0.01

Signal #2

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	Methyl tert Butyl Ether	20.000	18.083	9.6	94	0.00
2	Di-Isopropyl ether	20.000	18.867	5.7	98	0.01
3	Benzene	20.000	18.180	9.1	96	0.01
4 S	a,a,a-TFT(S)	20.000	19.618	1.9	105	0.01
5	Toluene	20.000	18.389	8.1	97	0.01
6 S	1-Chloro-4-Fluorobenzene	20.000	19.821	0.9	104	0.01
7	Chlorobenzene	20.000	18.238	8.8	98	0.01
8	Ethylbenzene	20.000	18.449	7.8	97	0.01
9	m,p-Xylene	40.000	37.316	6.7	99	0.00
10	o-Xylene	20.000	18.735	6.3	98	0.02
11	1,3-Dichlorobenzene	20.000	18.663	6.7	99	0.02
12	1,4-Dichlorobenzene	20.000	18.516	7.4	98	0.02
13	1,2-Dichlorobenzene	20.000	17.920	10.4	93	0.02

Average % D = 5.3

(#) = Out of Range SPCC's out = 0 CCC's out = 0
EF043786.D DUAL0913.M Fri Sep 24 09:34:11 2004 EF

Continuing Calibration Summary

Job Number: F26833
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GEF3365-CC3348
Lab FileID: EF044260.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\092404\EF044260.D\FID1A.CH Vial: 1
Signal #2 : C:\HPCHEM\1\DATA\092404\EF044260.D\FID2B.CH
Acq On : 24 Sep 2004 9:46 am Operator: ClaireV
Sample : cc3348-40 Inst : VOA1
Misc : gc3980,gef3365,,,,,1 MultiplR: 1.00
IntFile Signal #1: AUTOINT1.E IntFile Signal #2: autoint2.e

Method : C:\HPCHEM\1\METHODS\DUAL0913.M (Chemstation Integrator)
Title : EPA 602 & 5030B/8021B
Last Update : Thu Sep 16 09:53:59 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	40.000	38.464	3.8	97	0.00
2		Di-Isopropyl ether	40.000	41.640	-4.1	106	0.01
3		Benzene	40.000	41.213	-3.0	106	0.01
4	S	a,a,a-TFT(S)	20.000	21.792	-9.0	104	0.01
5		Toluene	40.000	42.453	-6.1	107	0.01
6	S	1-Chloro-4-Fluorobenzene	20.000	22.209	-11.0	107	0.01
7		Chlorobenzene	40.000	41.383	-3.5	105	0.01
8		Ethylbenzene	40.000	42.126	-5.3	108	0.01
9		m,p-Xylene	80.000	86.746	-8.4	109	0.01
10		o-Xylene	40.000	42.990	-7.5	108	0.01
11		1,3-Dichlorobenzene	40.000	43.740	-9.4	107	0.02
12		1,4-Dichlorobenzene	40.000	42.676	-6.7	106	0.01
13		1,2-Dichlorobenzene	40.000	40.399	-1.0	97	0.01

Signal #2

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	40.000	37.894	5.3	95	0.00
2		Di-Isopropyl ether	40.000	40.724	-1.8	102	0.01
3		Benzene	40.000	40.690	-1.7	103	0.00
4	S	a,a,a-TFT(S)	20.000	21.161	-5.8	100	0.01
5		Toluene	40.000	41.580	-3.9	102	0.01
6	S	1-Chloro-4-Fluorobenzene	20.000	21.943	-9.7	105	0.01
7		Chlorobenzene	40.000	39.851	0.4	102	0.01
8		Ethylbenzene	40.000	42.049	-5.1	107	0.01
9		m,p-Xylene	80.000	83.423	-4.3	105	0.00
10		o-Xylene	40.000	41.753	-4.4	103	0.01
11		1,3-Dichlorobenzene	40.000	43.032	-7.6	101	0.02
12		1,4-Dichlorobenzene	40.000	42.921	-7.3	104	0.01
13		1,2-Dichlorobenzene	40.000	41.271	-3.2	94	0.01

Average % D = 5.4

(#) = Out of Range SPCC's out = 0 CCC's out = 0
EF043787.D DUAL0913.M Tue Sep 28 09:20:58 2004 EF

5.6

Continuing Calibration Summary

Job Number: F26833
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GEF3365-CC3348
Lab FileID: EF044271.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\092404\EF044271.D\FID1A.CH Vial: 12
Signal #2 : C:\HPCHEM\1\DATA\092404\EF044271.D\FID2B.CH
Acq On : 24 Sep 2004 2:17 pm Operator: ClaireV
Sample : cc3348-20 Inst : VOA1
Misc : gc3983,gef3365,,,,,1 Multiplr: 1.00
IntFile Signal #1: AUTOINT1.E IntFile Signal #2: autoint2.e

Method : C:\HPCHEM\1\METHODS\DUAL0913.M (Chemstation Integrator)
Title : EPA 602 & 5030B/8021B
Last Update : Thu Sep 16 09:53:59 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	Methyl tert Butyl Ether	20.000	19.987	0.1	102	0.00
2	Di-Isopropyl ether	20.000	21.189	-5.9	110	0.00
3	Benzene	20.000	20.721	-3.6	110	0.00
4 S	a,a,a-TFT(S)	20.000	21.352	-6.8	112	0.00
5	Toluene	20.000	21.111	-5.6	109	0.00
6 S	1-Chloro-4-Fluorobenzene	20.000	21.607	-8.0	113	0.00
7	Chlorobenzene	20.000	20.606	-3.0	109	0.00
8	Ethylbenzene	20.000	21.011	-5.1	109	0.00
9	m,p-Xylene	40.000	42.530	-6.3	110	0.00
10	o-Xylene	20.000	21.217	-6.1	109	0.00
11	1,3-Dichlorobenzene	20.000	21.208	-6.0	113	0.00
12	1,4-Dichlorobenzene	20.000	20.798	-4.0	113	0.00
13	1,2-Dichlorobenzene	20.000	20.971	-4.9	114	0.00

Signal #2

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	Methyl tert Butyl Ether	20.000	18.819	5.9	98	0.00
2	Di-Isopropyl ether	20.000	20.311	-1.6	105	0.00
3	Benzene	20.000	20.024	-0.1	106	0.00
4 S	a,a,a-TFT(S)	20.000	20.374	-1.9	109	0.00
5	Toluene	20.000	20.404	-2.0	108	0.00
6 S	1-Chloro-4-Fluorobenzene	20.000	20.740	-3.7	108	0.00
7	Chlorobenzene	20.000	19.803	1.0	106	0.00
8	Ethylbenzene	20.000	20.111	-0.6	105	0.00
9	m,p-Xylene	40.000	40.376	-0.9	107	0.00
10	o-Xylene	20.000	19.892	0.5	104	0.01
11	1,3-Dichlorobenzene	20.000	20.492	-2.5	108	0.01
12	1,4-Dichlorobenzene	20.000	19.899	0.5	106	0.01
13	1,2-Dichlorobenzene	20.000	19.873	0.6	103	0.01

Average % D = 3.4

(#) = Out of Range SPCC's out = 0 CCC's out = 0
EF043786.D DUAL0913.M Tue Sep 28 09:21:27 2004 EF

Continuing Calibration Summary

Job Number: F26833
Account: EEINCJX EEI
Projeet: Camp Lejeune-Campbell St. Fuel Farm

Sample: GEF3365-CC3348
Lab FileID: EF044282.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\092404\EF044282.D\FID1A.CH Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\092404\EF044282.D\FID2B.CH
Acq On : 24 Sep 2004 7:03 pm Operator: ClaireV
Sample : cc3348-20 Inst : VOA1
Misc : gc3983,gef3365,,,,,1 Multiplr: 1.00
IntFile Signal #1: AUTOINT1.E IntFile Signal #2: autoint2.e

Method : C:\HPCHEM\1\METHODS\DUAL0913.M (Chemstation Integrator)
Title : EPA 602 & 5030B/8021B
Last Update : Thu Sep 16 09:53:59 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	Methyl tert Butyl Ether	20.000	19.577	2.1	100	0.00
2	Di-Isopropyl ether	20.000	20.585	-2.9	106	0.00
3	Benzene	20.000	19.866	0.7	105	0.00
4 S	a,a,a-TFT(S)	20.000	21.481	-7.4	112	0.00
5	Toluene	20.000	20.131	-0.7	104	0.00
6 S	1-Chloro-4-Fluorobenzene	20.000	20.811	-4.1	109	0.00
7	Chlorobenzene	20.000	19.516	2.4	103	0.01
8	Ethylbenzene	20.000	19.785	1.1	103	0.01
9	m,p-Xylene	40.000	39.761	0.6	103	0.00
10	o-Xylene	20.000	19.850	0.7	102	0.01
11	1,3-Dichlorobenzene	20.000	18.589	7.1	99	0.01
12	1,4-Dichlorobenzene	20.000	18.175	9.1	98	0.01
13	1,2-Dichlorobenzene	20.000	16.665	16.7#	91	0.01

Signal #2

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	Methyl tert Butyl Ether	20.000	18.955	5.2	99	0.00
2	Di-Isopropyl ether	20.000	19.597	2.0	101	0.01
3	Benzene	20.000	19.218	3.9	102	0.00
4 S	a,a,a-TFT(S)	20.000	20.400	-2.0	110	0.01
5	Toluene	20.000	19.082	4.6	101	0.01
6 S	1-Chloro-4-Fluorobenzene	20.000	20.172	-0.9	105	0.01
7	Chlorobenzene	20.000	18.659	6.7	100	0.01
8	Ethylbenzene	20.000	19.087	4.6	100	0.01
9	m,p-Xylene	40.000	37.740	5.6	100	0.00
10	o-Xylene	20.000	18.653	6.7	97	0.01
11	1,3-Dichlorobenzene	20.000	18.252	8.7	96	0.02
12	1,4-Dichlorobenzene	20.000	17.434	12.8	93	0.02
13	1,2-Dichlorobenzene	20.000	16.307	18.5#	85	0.02

Average % D = 5.3

(#) = Out of Range SPCC's out = 0 CCC's out = 0
EF043786.D DUAL0913.M Tue Sep 28 09:21:28 2004 EF

Initial Calibration Summary

Job Number: F26833
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GEF3367-ICC3367
Lab FileID: EF044322.D

Response Factor Report VOA1

Method : C:\HPCHEM\1\METHODS\DUAL0928.M (Chemstation Integrator)
Title : EPA 602 & 5030B/8021B
Last Update : Thu Sep 16 09:53:59 2004
Response via : Initial Calibration

Calibration Files
1 =EF044320.D 2 =EF044321.D 3 =EF044322.D
4 =EF044323.D 5 =EF044324.D 6 =EF044325.D

		Compound	1	2	3	4	5	6	Avg		%RSD
1)		Methyl tert Butyl E	1.191	1.499	1.447	1.445	1.421	1.414	1.403	E3	7.70
2)		Di-Isopropyl ether	1.942	2.352	2.255	2.248	2.211	2.191	2.200	E3	6.27
3)		Benzene	4.007	4.567	4.336	4.364	4.253	4.236	4.294	E3	4.28
4)	S	a,a,a-TFT(S)	1.504	1.497	1.505	1.510	1.516	1.552	1.514	E3	1.30
5)		Toluene	3.393	3.782	3.606	3.642	3.616	3.566	3.601	E3	3.49
6)	S	1-Chloro-4-Fluorobe	2.160	2.097	2.143	2.172	2.222	2.275	2.178	E3	2.86
7)		Chlorobenzene		3.990	3.442	3.395	3.416	3.411	3.531	E3	7.28
8)		Ethylbenzene		3.333	2.951	2.944	2.904	2.905	3.007	E3	6.10
9)		m,p-Xylene	3.292	3.482	3.222	3.267	3.267	3.251	3.297	E3	2.85
10)		o-Xylene	2.910	3.052	2.900	2.910	2.890	2.871	2.922	E3	2.23
11)		1,3-Dichlorobenzene		2.035	2.063	2.209	2.293	2.337	2.187	E3	6.17
12)		1,4-Dichlorobenzene		2.159	2.161	2.334	2.452	2.505	2.322	E3	6.92
13)		1,2-Dichlorobenzene		1.133	1.132	1.191	1.212	1.256	1.185	E3	4.51
Signal #2											
1)		Methyl tert Butyl E	1.177	1.513	1.469	1.493	1.451	1.438	1.424	E3	8.71
2)		Di-Isopropyl ether	1.823	2.251	2.193	2.211	2.162	2.132	2.129	E3	7.29
3)		Benzene	3.889	4.546	4.362	4.398	4.294	4.270	4.293	E3	5.14
4)	S	a,a,a-TFT(S)	1.438	1.442	1.465	1.487	1.485	1.512	1.472	E3	1.94
5)		Toluene	3.204	3.681	3.600	3.643	3.574	3.562	3.544	E3	4.87
6)	S	1-Chloro-4-Fluorobe	1.945	1.944	2.042	2.101	2.126	2.168	2.054	E3	4.59
7)		Chlorobenzene	8.963	4.447	3.612	3.537	3.493	3.501	4.592	E3	47.31
		----- Linear regression ----- Coefficient = 0.9999									
		Response Ratio = 4435.12383 + 3444.40353 *A									
8)		Ethylbenzene	3.501	3.379	3.112	3.140	3.084	3.056	3.212	E3	5.70
9)		m,p-Xylene	3.377	3.547	3.319	3.387	3.376	3.365	3.395	E3	2.30
10)		o-Xylene	2.725	2.966	2.828	2.874	2.836	2.817	2.841	E3	2.77
11)		1,3-Dichlorobenzene		2.013	2.064	2.211	2.280	2.300	2.174	E3	5.93
12)		1,4-Dichlorobenzene		1.983	2.043	2.185	2.279	2.305	2.159	E3	6.57
13)		1,2-Dichlorobenzene		1.107	1.124	1.219	1.264	1.299	1.203	E3	7.06

(#) = Out of Range

DUAL0928.M Wed Sep 29 09:16:25 2004 EF

5.6

Continuing Calibration Summary

Job Number: F26833
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GEF3367-CC3367
Lab FileID: EF044336.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\092804\EF044336.D\FID1A.CH Vial: 18
Signal #2 : C:\HPCHEM\1\DATA\092804\EF044336.D\FID2B.CH
Acq On : 28 Sep 2004 6:53 pm Operator: ClaireV
Sample : cc3367-20 Inst : VOA1
Misc : gc3983,gef3367,,,,,1 MultiplIr: 1.00
IntFile Signal #1: AUTOINT1.E IntFile Signal #2: autoint2.e

Method : C:\HPCHEM\1\METHODS\DUAL0928.M (Chemstation Integrator)
Title : EPA 602 & 5030B/8021B
Last Update : Thu Sep 16 09:53:59 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	Methyl tert Butyl Ether	20.000	20.083	-0.4	97	0.00
2	Di-Isopropyl ether	20.000	20.497	-2.5	100	0.00
3	Benzene	20.000	20.217	-1.1	100	0.00
4 S	a,a,a-TFT(S)	20.000	19.764	1.2	99	0.00
5	Toluene	20.000	19.960	0.2	100	0.00
6 S	1-Chloro-4-Fluorobenzene	20.000	19.496	2.5	99	0.00
7	Chlorobenzene	20.000	19.133	4.3	98	0.00
8	Ethylbenzene	20.000	19.521	2.4	99	0.00
9	m,p-Xylene	40.000	38.810	3.0	99	0.00
10	o-Xylene	20.000	19.553	2.2	99	0.00
11	1,3-Dichlorobenzene	20.000	19.060	4.7	101	0.00
12	1,4-Dichlorobenzene	20.000	18.385	8.1	99	0.00
13	1,2-Dichlorobenzene	20.000	18.843	5.8	99	0.00

Signal #2

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	Methyl tert Butyl Ether	20.000	19.971	0.1	97	0.00
2	Di-Isopropyl ether	20.000	20.602	-3.0	100	0.00
3	Benzene	20.000	20.399	-2.0	100	0.00
4 S	a,a,a-TFT(S)	20.000	19.847	0.8	100	0.00
5	Toluene	20.000	20.135	-0.7	99	0.00
6 S	1-Chloro-4-Fluorobenzene	20.000	19.674	1.6	99	0.00
7	Chlorobenzene	20.000	19.408	3.0	99	0.00
8	Ethylbenzene	20.000	19.247	3.8	99	0.00
9	m,p-Xylene	40.000	38.940	2.7	100	0.00
10	o-Xylene	20.000	19.860	0.7	100	0.00
11	1,3-Dichlorobenzene	20.000	18.984	5.1	100	0.00
12	1,4-Dichlorobenzene	20.000	18.681	6.6	99	0.00
13	1,2-Dichlorobenzene	20.000	18.332	8.3	98	0.00

Average % D = 2.9

(#) = Out of Range SPCC's out = 0 CCC's out = 0
EF044322.D DUAL0928.M Wed Sep 29 09:15:50 2004 EF

5.6

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: F26833
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP11357-MB	IJ20883.D	1	09/22/04	AA	09/21/04	OP11357	GIJ1024

The QC reported here applies to the following samples: **Method:** EPA 610

F26833-2, F26833-3, F26833-6

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.0	2.0	ug/l	
208-96-8	Acenaphthylene	ND	5.0	2.0	ug/l	
120-12-7	Anthracene	ND	5.0	2.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.0	2.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.0	2.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.0	2.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.0	2.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.0	2.0	ug/l	
218-01-9	Chrysene	ND	5.0	2.0	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.0	2.0	ug/l	
206-44-0	Fluoranthene	ND	5.0	2.0	ug/l	
86-73-7	Fluorene	ND	5.0	2.0	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.0	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.0	ug/l	
90-12-0	1-Methylnaphthalene	ND	5.0	2.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.0	2.0	ug/l	
85-01-8	Phenanthrene	ND	5.0	2.0	ug/l	
129-00-0	Pyrene	ND	5.0	2.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
321-60-8	2-Fluorobiphenyl	70%	42-123%
84-15-1	o-Terphenyl	93%	51-123%

Blank Spike Summary

Job Number: F26833
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP11357-BS	IJ20882.D	1	09/22/04	AA	09/21/04	OP11357	GIJ1024

The QC reported here applies to the following samples: **Method:** EPA 610

F26833-2, F26833-3, F26833-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
83-32-9	Acenaphthene	25	22.6	90	71-113
208-96-8	Acenaphthylene	25	22.4	90	63-102
120-12-7	Anthracene	25	25.2	101	71-110
56-55-3	Benzo(a)anthracene	25	25.5	102	70-114
50-32-8	Benzo(a)pyrene	25	25.9	104	67-114
205-99-2	Benzo(b)fluoranthene	25	25.6	102	69-115
191-24-2	Benzo(g,h,i)perylene	25	24.6	98	61-117
207-08-9	Benzo(k)fluoranthene	25	24.8	99	69-111
218-01-9	Chrysene	25	26.3	105	70-114
53-70-3	Dibenzo(a,h)anthracene	25	24.3	97	64-114
206-44-0	Fluoranthene	25	25.5	102	71-114
86-73-7	Fluorene	25	24.1	96	69-111
193-39-5	Indeno(1,2,3-cd)pyrene	25	23.4	94	63-112
91-20-3	Naphthalene	25	21.1	84	66-105
90-12-0	1-Methylnaphthalene	25	22.5	90	71-112
91-57-6	2-Methylnaphthalene	25	22.1	88	65-106
85-01-8	Phenanthrene	25	24.3	97	69-112
129-00-0	Pyrene	25	25.5	102	70-114

CAS No.	Surrogate Recoveries	BSP	Limits
321-60-8	2-Fluorobiphenyl	88%	42-123%
84-15-1	o-Terphenyl	100%	51-123%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F26833
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP11357-MS	IJ20888.D	1	09/22/04	AA	09/21/04	OP11357	GIJ1024
OP11357-MSD	IJ20889.D	1	09/22/04	AA	09/21/04	OP11357	GIJ1024
F26833-6	IJ20887.D	1	09/22/04	AA	09/21/04	OP11357	GIJ1024

The QC reported here applies to the following samples: **Method:** EPA 610

F26833-2, F26833-3, F26833-6

CAS No.	Compound	F26833-6 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	ND		48.1	43.3	90	42.9	89	1	59-123/20
208-96-8	Acenaphthylene	ND		48.1	43.2	90	42.8	89	1	51-114/20
120-12-7	Anthracene	ND		48.1	47.8	99	49.6	103	4	64-114/17
56-55-3	Benzo(a)anthracene	ND		48.1	47.3	98	49.7	103	5	66-115/17
50-32-8	Benzo(a)pyrene	ND		48.1	48.8	102	51.2	106	5	62-118/17
205-99-2	Benzo(b)fluoranthene	ND		48.1	47.7	99	49.9	104	5	66-117/17
191-24-2	Benzo(g,h,i)perylene	ND		48.1	46.6	97	49.2	102	5	59-120/17
207-08-9	Benzo(k)fluoranthene	ND		48.1	47.4	99	49.4	103	4	64-116/16
218-01-9	Chrysene	ND		48.1	49.6	103	51.0	106	3	66-117/16
53-70-3	Dibenzo(a,h)anthracene	ND		48.1	46.5	97	48.7	101	5	57-124/18
206-44-0	Fluoranthene	ND		48.1	46.9	98	49.3	103	5	67-116/17
86-73-7	Fluorene	ND		48.1	45.2	94	45.3	94	0	58-122/19
193-39-5	Indeno(1,2,3-cd)pyrene	ND		48.1	45.6	95	47.7	99	5	59-116/18
91-20-3	Naphthalene	ND		48.1	42.1	88	40.4	84	4	47-114/20
90-12-0	1-Methylnaphthalene	ND		48.1	43.9	91	43.2	90	2	55-128/21
91-57-6	2-Methylnaphthalene	ND		48.1	43.2	90	42.4	88	2	51-117/21
85-01-8	Phenanthrene	ND		48.1	45.2	94	46.7	97	3	63-116/18
129-00-0	Pyrene	ND		48.1	46.7	97	49.3	103	5	67-116/17

CAS No.	Surrogate Recoveries	MS	MSD	F26833-6	Limits
321-60-8	2-Fluorobiphenyl	89%	86%	84%	42-123%
84-15-1	o-Terphenyl	96%	98%	95%	51-123%

Semivolatile Surrogate Recovery Summary

Job Number: F26833
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Method: EPA 610	**Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S2 [a]
F26833-2	IJ20891.D	0.0* [b]	0.0* [b]
F26833-2	IJ20894.D	122.0	112.0
F26833-3	IJ20893.D	88.0	88.0
F26833-6	IJ20887.D	84.0	95.0
OP11357-BS	IJ20882.D	88.0	100.0
OP11357-MB	IJ20883.D	70.0	93.0
OP11357-MS	IJ20888.D	89.0	96.0
OP11357-MSD	IJ20889.D	86.0	98.0

Surrogate Compounds	Recovery Limits
S1 = 2-Fluorobiphenyl	42-123%
S2 = o-Terphenyl	51-123%

(a) Recovery from GC signal #1
(b) Outside control limits due to dilution.

GC Surrogate Retention Time Summary

Job Number: F26833
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GIJ1024-CC1001	**Injection Date:**	09/22/04
Lab File ID:	IJ20881.D	**Injection Time:**	09:54
Instrument ID:	GCIJ	**Method:**	EPA 610

	S1 [a] RT	S2 [a] RT
Check Std	5.84	10.40

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
OP11357-BS	IJ20882.D	09/22/04	10:23	5.85	10.40
OP11357-MB	IJ20883.D	09/22/04	10:52	5.85	10.41
ZZZZZZ	IJ20884.D	09/22/04	11:21	5.85	10.41
F26833-6	IJ20887.D	09/22/04	12:48	5.85	10.41
OP11357-MS	IJ20888.D	09/22/04	13:17	5.85	10.41
OP11357-MSD	IJ20889.D	09/22/04	13:46	5.85	10.41
F26833-2	IJ20891.D	09/22/04	14:44	0.00	0.00

Surrogate Compounds

S1 = 2-Fluorobiphenyl
S2 = o-Terphenyl

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: F26833
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GIJ1024-CC1001	**Injection Date:**	09/22/04
Lab File ID:	IJ20892.D	**Injection Time:**	15:13
Instrument ID:	GCIJ	**Method:**	EPA 610

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	5.85	6.61	10.41	11.77

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
F26833-3	IJ20893.D	09/22/04	15:42	5.85		10.40	
F26833-2	IJ20894.D	09/22/04	16:11	5.85		10.40	
GIJ1024-ECC1001	IJ20895.D	09/22/04	16:40	5.85	6.62	10.41	11.77

Surrogate Compounds

S1 = 2-Fluorobiphenyl
S2 = o-Terphenyl

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

Initial Calibration Summary

Job Number: F26833
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GIJ1001-ICC1001
Lab FileID: IJ20408.D

Response Factor Report FID 1

Method : C:\HPCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title : PAH's BY EPA 610 OR 8100
Last Update : Tue Jul 27 15:06:13 2004
Response via : Initial Calibration

Calibration Files
5 =IJ20405.D 10 =IJ20406.D 20 =IJ20407.D 30 =IJ20408.D
40 =IJ20409.D 50 =IJ20410.D

		Compound	5	10	20	30	40	50	Avg		%RSD
1)		Naphthalene	1.391	1.389	1.395	1.369	1.414	1.407	1.394	E4	1.12
2)		2-Methyl Naphthalen	1.325	1.334	1.347	1.327	1.375	1.367	1.346	E4	1.57
3)		1-Methyl Naphthalen	1.398	1.391	1.395	1.372	1.415	1.407	1.396	E4	1.06
4)	S	2-Fluorobiphenyl	1.224	1.240	1.237	1.229	1.273	1.265	1.245	E4	1.62
5)		Acenaphthylene	1.393	1.391	1.395	1.380	1.429	1.419	1.401	E4	1.34
6)		Acenaphthene	1.405	1.415	1.424	1.403	1.452	1.441	1.424	E4	1.39
7)		Fluorene	1.321	1.352	1.366	1.356	1.405	1.398	1.366	E4	2.28
8)		Phenanthrene	1.282	1.311	1.349	1.347	1.399	1.392	1.346	E4	3.37
9)		Anthracene	1.305	1.359	1.353	1.340	1.380	1.365	1.350	E4	1.93
10)	S	O-Terphenyl	1.496	1.471	1.454	1.430	1.475	1.463	1.465	E4	1.49
11)		Fluoranthene	1.388	1.392	1.395	1.378	1.424	1.413	1.399	E4	1.23
12)		Pyrene	1.419	1.373	1.383	1.368	1.416	1.406	1.394	E4	1.60
13)		Benzo(a)Anthracene	1.259	1.306	1.345	1.339	1.401	1.394	1.341	E4	4.00
14)		Chrysene	1.456	1.416	1.381	1.365	1.412	1.402	1.406	E4	2.23
15)		Benzo(b)Fluoranthen	1.279	1.342	1.393	1.389	1.451	1.453	1.384	E4	4.81
16)		Benzo(k)Fluoranthen	1.534	1.511	1.463	1.437	1.471	1.448	1.477	E4	2.54
17)		Benzo(a) Pyrene	1.337	1.327	1.331	1.317	1.365	1.359	1.339	E4	1.40
18)		Indeno(1,2,3-cd)pyr	1.323	1.326	1.356	1.348	1.406	1.400	1.360	E4	2.62
19)		Dibenzo(a,h)anthrac	1.461	1.442	1.419	1.396	1.447	1.436	1.433	E4	1.58
20)		Benzo(g,h,i) Peryle	1.440	1.447	1.437	1.415	1.481	1.453	1.445	E4	1.50

Signal #2

1)		Naphthalene	2.125	2.074	2.063	2.032	2.097	2.080	2.079	E4	1.51
2)		2-Methyl Naphthalen	2.010	1.981	1.982	1.957	2.023	2.008	1.993	E4	1.22
3)		1-Methyl Naphthalen	2.064	2.036	2.039	2.012	2.079	2.066	2.049	E4	1.20
4)	S	2-Fluorobiphenyl	1.927	1.848	1.852	1.829	1.888	1.872	1.869	E4	1.87
5)		Acenaphthylene	2.087	2.067	2.062	2.035	2.101	2.083	2.073	E4	1.11
6)		Acenaphthene	2.123	2.098	2.092	2.065	2.132	2.114	2.104	E4	1.15
7)		Fluorene	2.057	2.035	2.038	2.012	2.079	2.060	2.047	E4	1.15
8)		Phenanthrene	2.090	1.991	2.035	2.000	2.077	2.061	2.042	E4	1.99
9)		Anthracene	2.034	2.008	1.988	1.967	2.025	2.003	2.004	E4	1.22
10)	S	O-Terphenyl	2.249	2.178	2.151	2.114	2.177	2.156	2.171	E4	2.06
11)		Fluoranthene	2.099	2.073	2.071	2.040	2.104	2.085	2.079	E4	1.12
12)		Pyrene	2.113	2.097	2.142	2.048	2.115	2.095	2.102	E4	1.49
13)		Benzo(a)Anthracene	2.123	2.095	2.088	2.060	2.125	2.105	2.099	E4	1.16
14)		Chrysene	2.108	2.057	2.053	2.022	2.087	2.065	2.065	E4	1.44
15)		Benzo(b)Fluoranthen	2.237	2.173	2.113	2.090	2.163	2.139	2.153	E4	2.40
16)		Benzo(k)Fluoranthen	2.195	2.135	2.121	2.086	2.153	2.128	2.136	E4	1.70
17)		Benzo(a) Pyrene	2.061	2.013	1.997	1.971	2.034	2.013	2.015	E4	1.54
18)		Indeno(1,2,3-cd)pyr	2.028	2.095	2.107	2.082	2.188	2.172	2.112	E4	2.82
19)		Dibenzo(a,h)anthrac	2.135	2.097	2.066	2.028	2.070	2.033	2.072	E4	1.94
20)		Benzo(g,h,i) Peryle	2.154	2.106	2.100	2.069	2.138	2.117	2.114	E4	1.41

(#) = Out of Range

8100_H2.M Wed Jul 28 08:08:57 2004

6.6

Initial Calibration Verification

Job Number: F26833
Account: EEINCJX EE1
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GIJ1001-ICV1001
Lab FileID: IJ20411.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\0727PAH\IJ20411.D\FID1B.CH Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\0727PAH\IJ20411.D\FID2A.CH
Acq On : 27 Jul 2004 2:22 pm Operator: aubreya
Sample : icv1001-20 Inst : FID 1
Misc : op10954,gij1001,1000,,,1,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : C:\HPCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title : PAH's BY EPA 610 OR 8100
Last Update : Tue Jul 27 15:06:13 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1		Naphthalene	20.000	21.254	-6.3	106	0.00	4.20- 4.40
2		2-Methyl Naphthalene	20.000	21.719	-8.6	108	0.00	5.11- 5.31
3		1-Methyl Naphthalene	20.000	21.904	-9.5	110	0.00	5.26- 5.46
4	S	2-Fluorobiphenyl		----------NA----------				
5		Acenaphthylene	20.000	21.670	-8.4	109	0.00	6.47- 6.67
6		Acenaphthene	20.000	21.584	-7.9	108	0.00	6.79- 6.99
7		Fluorene	20.000	22.266	-11.3	111	0.00	7.67- 7.87
8		Phenanthrene	20.000	21.858	-9.3	109	0.00	9.35- 9.55
9		Anthracene	20.000	22.804	-14.0	114	0.00	9.43- 9.63
10	S	O-Terphenyl		----------NA----------				
11		Fluoranthene	20.000	21.842	-9.2	109	0.00	11.54-11.74
12		Pyrene	20.000	21.870	-9.4	110	0.00	11.92-12.12
13		Benzo(a)Anthracene	20.000	21.718	-8.6	108	0.00	14.23-14.43
14		Chrysene	20.000	21.757	-8.8	111	0.00	14.30-14.50
15		Benzo(b)Fluoranthene	20.000	21.971	-9.9	109	0.00	16.14-16.34
16		Benzo(k)Fluoranthene	20.000	21.163	-5.8	107	0.00	16.19-16.39
17		Benzo(a) Pyrene	20.000	22.356	-11.8	112	0.00	16.63-16.83
18		Indeno(1,2,3-cd)pyrene	20.000	21.256	-6.3	107	0.00	18.31-18.51
19		Dibenzo(a,h)anthracene	20.000	21.517	-7.6	109	0.00	18.39-18.59
20		Benzo(g,h,i) Perylene	20.000	21.645	-8.2	109	0.00	18.64-18.84
*****		Signal #2 *****						
1		Naphthalene	20.000	21.341	-6.7	107	0.00	4.85- 5.05
2		2-Methyl Naphthalene	20.000	21.853	-9.3	110	0.00	5.75- 5.95
3		1-Methyl Naphthalene	20.000	21.687	-8.4	109	0.00	6.01- 6.21
4	S	2-Fluorobiphenyl		----------NA----------				
5		Acenaphthylene	20.000	21.515	-7.6	108	0.00	7.63- 7.83
6		Acenaphthene	20.000	21.242	-6.2	107	0.00	7.88- 8.08
7		Fluorene	20.000	21.975	-9.9	110	0.00	8.75- 8.95
8		Phenanthrene	20.000	21.481	-7.4	108	0.00	10.78-10.98
9		Anthracene	20.000	22.446	-12.2	113	0.00	10.82-11.02
10	S	O-Terphenyl		----------NA----------				
11		Fluoranthene	20.000	21.720	-8.6	109	0.00	13.15-13.35
12		Pyrene	20.000	21.654	-8.3	106	0.00	13.70-13.90
13		Benzo(a)Anthracene	20.000	21.338	-6.7	107	0.00	16.05-16.25
14		Chrysene	20.000	21.770	-8.8	110	0.00	16.23-16.43
15		Benzo(b)Fluoranthene	20.000	21.095	-5.5	107	0.00	18.12-18.32
16		Benzo(k)Fluoranthene	20.000	21.233	-6.2	107	0.00	18.16-18.36
17		Benzo(a) Pyrene	20.000	22.234	-11.2	112	0.00	18.84-19.04
18		Indeno(1,2,3-cd)pyrene	20.000	20.992	-5.0	105	0.00	20.62-20.82

Initial Calibration Verification

Job Number: F26833
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GIJ1001-ICV1001
Lab FileID: IJ20411.D

19	Dibenzo(a,h)anthracene	20.000	21.714	-8.6	109	0.00	20.68-20.88
20	Benzo(g,h,i) Perylene	20.000	21.433	-7.2	108	0.00	21.26-21.46

(#) = Out of Range SPCC's out = 0 CCC's out = 0
IJ20407.D 8100_H2.M Wed Jul 28 08:09:29 2004

6.6

Continuing Calibration Summary

Job Number: F26833
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GIJ1024-CC1001
Lab FileID: IJ20881.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\0922PAH\IJ20881.D\FID1B.CH Vial: 4
Signal #2 : C:\HPCHEM\1\DATA\0922PAH\IJ20881.D\FID2A.CH
Acq On : 22 Sep 2004 9:54 am Operator: aubreya
Sample : cc1001-30 Inst : FID 1
Misc : op11335,gij1024,1050,,,1,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : C:\HPCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title : PAH's BY EPA 610 OR 8100
Last Update : Wed Sep 22 15:08:09 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	Naphthalene	30.000	31.364	-4.5	106	0.00	4.19- 4.39
2	2-Methyl Naphthalene	30.000	31.171	-3.9	105	0.00	5.10- 5.30
3	1-Methyl Naphthalene	30.000	31.214	-4.0	106	0.00	5.25- 5.45
4 S	2-Fluorobiphenyl	30.000	31.495	-5.0	106	0.00	5.74- 5.94
5	Acenaphthylene	30.000	31.248	-4.2	106	0.00	6.46- 6.66
6	Acenaphthene	30.000	31.415	-4.7	106	0.00	6.78- 6.98
7	Fluorene	30.000	31.622	-5.4	106	0.00	7.67- 7.87
8	Phenanthrene	30.000	31.637	-5.5	105	0.00	9.34- 9.54
9	Anthracene	30.000	31.896	-6.3	107	0.00	9.43- 9.63
10 S	O-Terphenyl	30.000	31.095	-3.6	106	0.00	10.30-10.50
11	Fluoranthene	30.000	31.714	-5.7	107	0.00	11.55-11.75
12	Pyrene	30.000	31.405	-4.7	107	0.00	11.92-12.12
13	Benzo(a)Anthracene	30.000	31.896	-6.3	106	0.00	14.24-14.44
14	Chrysene	30.000	31.870	-6.2	109	0.00	14.31-14.51
15	Benzo(b)Fluoranthene	30.000	32.088	-7.0	107	0.00	16.16-16.36
16	Benzo(k)Fluoranthene	30.000	31.424	-4.7	108	0.00	16.20-16.40
17	Benzo(a) Pyrene	30.000	31.668	-5.6	107	0.00	16.65-16.85
18	Indeno(1,2,3-cd)pyrene	30.000	31.580	-5.3	106	0.00	18.33-18.53
19	Dibenzo(a,h)anthracene	30.000	31.660	-5.5	108	0.00	18.41-18.61
20	Benzo(g,h,i) Perylene	30.000	31.757	-5.9	108	0.01	18.66-18.86
*****	Signal #2 *****						
1	Naphthalene	30.000	31.212	-4.0	106	0.00	4.83- 5.03
2	2-Methyl Naphthalene	30.000	31.212	-4.0	106	0.00	5.73- 5.93
3	1-Methyl Naphthalene	30.000	31.335	-4.5	106	0.00	5.99- 6.19
4 S	2-Fluorobiphenyl	30.000	31.105	-3.7	106	0.00	6.51- 6.71
5	Acenaphthylene	30.000	31.404	-4.7	107	0.00	7.61- 7.81
6	Acenaphthene	30.000	31.426	-4.8	107	0.00	7.86- 8.06
7	Fluorene	30.000	31.394	-4.6	106	0.00	8.73- 8.93
8	Phenanthrene	30.000	31.113	-3.7	106	0.00	10.77-10.97
9	Anthracene	30.000	31.460	-4.9	107	0.00	10.80-11.00
10 S	O-Terphenyl	30.000	31.071	-3.6	106	0.00	11.66-11.86
11	Fluoranthene	30.000	31.351	-4.5	106	0.00	13.14-13.34
12	Pyrene	30.000	31.234	-4.1	107	0.00	13.68-13.88
13	Benzo(a)Anthracene	30.000	31.274	-4.2	106	0.00	16.04-16.24
14	Chrysene	30.000	31.477	-4.9	107	0.00	16.22-16.42
15	Benzo(b)Fluoranthene	30.000	30.912	-3.0	106	0.00	18.11-18.31
16	Benzo(k)Fluoranthene	30.000	31.224	-4.1	107	0.00	18.16-18.36
17	Benzo(a) Pyrene	30.000	31.143	-3.8	106	0.00	18.83-19.03
18	Indeno(1,2,3-cd)pyrene	30.000	31.835	-6.1	108	0.01	20.61-20.81

Continuing Calibration Summary

Job Number: F26833
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GIJ1024-CC1001
Lab FileID: IJ20881.D

19	Dibenzo(a,h)anthracene	30.000	30.989	-3.3	106	0.01	20.67-20.87
20	Benzo(g,h,i) Perylene	30.000	31.138	-3.8	106	0.02	21.24-21.44

(#) = Out of Range SPCC's out = 0 CCC's out = 0
IJ20408.D 8100_H2.M Thu Sep 23 08:07:29 2004

Continuing Calibration Summary

Job Number: F26833
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GIJ1024-CC1001
Lab FileID: IJ20892.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\0922PAH\IJ20892.D\FID1B.CH Vial: 4
Signal #2 : C:\HPCHEM\1\DATA\0922PAH\IJ20892.D\FID2A.CH
Acq On : 22 Sep 2004 3:13 pm Operator: aubreya
Sample : cc1001-30 Inst : FID 1
Misc : op11357,gij1024,1050,,,1,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : C:\HPCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title : PAH's BY EPA 610 OR 8100
Last Update : Wed Sep 22 15:08:09 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	Naphthalene	30.000	32.122	-7.1	109	0.00	4.19- 4.39
2	2-Methyl Naphthalene	30.000	31.965	-6.5	108	0.00	5.10- 5.30
3	1-Methyl Naphthalene	30.000	32.181	-7.3	109	0.00	5.25- 5.45
4 S	2-Fluorobiphenyl	30.000	32.201	-7.3	109	0.00	5.74- 5.94
5	Acenaphthylene	30.000	32.189	-7.3	109	0.00	6.46- 6.66
6	Acenaphthene	30.000	32.187	-7.3	109	0.00	6.78- 6.98
7	Fluorene	30.000	32.366	-7.9	109	0.00	7.67- 7.87
8	Phenanthrene	30.000	32.314	-7.7	108	0.01	9.34- 9.54
9	Anthracene	30.000	32.748	-9.2	110	0.00	9.43- 9.63
10 S	O-Terphenyl	30.000	31.907	-6.4	109	0.00	10.30-10.50
11	Fluoranthene	30.000	32.348	-7.8	109	0.00	11.55-11.75
12	Pyrene	30.000	32.010	-6.7	109	0.00	11.92-12.12
13	Benzo(a)Anthracene	30.000	32.541	-8.5	109	0.01	14.24-14.44
14	Chrysene	30.000	32.501	-8.3	112	0.01	14.31-14.51
15	Benzo(b)Fluoranthene	30.000	32.548	-8.5	108	0.01	16.16-16.36
16	Benzo(k)Fluoranthene	30.000	31.901	-6.3	109	0.01	16.20-16.40
17	Benzo(a) Pyrene	30.000	32.168	-7.2	109	0.01	16.65-16.85
18	Indeno(1,2,3-cd)pyrene	30.000	32.052	-6.8	108	0.01	18.33-18.53
19	Dibenzo(a,h)anthracene	30.000	31.824	-6.1	109	0.01	18.41-18.61
20	Benzo(g,h,i) Perylene	30.000	32.266	-7.6	110	0.01	18.66-18.86
*****	Signal #2 *****						
1	Naphthalene	30.000	31.810	-6.0	108	0.00	4.83- 5.03
2	2-Methyl Naphthalene	30.000	31.753	-5.8	108	0.00	5.73- 5.93
3	1-Methyl Naphthalene	30.000	31.919	-6.4	108	0.00	5.99- 6.19
4 S	2-Fluorobiphenyl	30.000	31.635	-5.5	108	0.00	6.51- 6.71
5	Acenaphthylene	30.000	31.947	-6.5	108	0.00	7.61- 7.81
6	Acenaphthene	30.000	31.971	-6.6	109	0.00	7.86- 8.06
7	Fluorene	30.000	31.923	-6.4	108	0.00	8.73- 8.93
8	Phenanthrene	30.000	31.735	-5.8	108	0.01	10.77-10.97
9	Anthracene	30.000	31.835	-6.1	108	0.01	10.80-11.00
10 S	O-Terphenyl	30.000	31.580	-5.3	108	0.01	11.66-11.86
11	Fluoranthene	30.000	31.801	-6.0	108	0.01	13.14-13.34
12	Pyrene	30.000	31.681	-5.6	108	0.01	13.68-13.88
13	Benzo(a)Anthracene	30.000	31.679	-5.6	108	0.01	16.04-16.24
14	Chrysene	30.000	31.909	-6.4	109	0.01	16.22-16.42
15	Benzo(b)Fluoranthene	30.000	31.139	-3.8	107	0.00	18.11-18.31
16	Benzo(k)Fluoranthene	30.000	31.676	-5.6	108	0.01	18.16-18.36
17	Benzo(a) Pyrene	30.000	31.461	-4.9	107	0.00	18.83-19.03
18	Indeno(1,2,3-cd)pyrene	30.000	31.573	-5.2	107	0.02	20.61-20.81

Continuing Calibration Summary

Job Number: F26833
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GIJ1024-CC1001
Lab FileID: IJ20892.D

19	Dibenzo(a,h)anthracene	30.000	31.464	-4.9	107	0.02	20.67-20.87
20	Benzo(g,h,i) Perylene	30.000	31.497	-5.0	107	0.02	21.24-21.44

(#) = Out of Range SPCC's out = 0 CCC's out = 0
IJ20408.D 8100_H2.M Thu Sep 23 08:07:30 2004

6.9

Continuing Calibration Summary

Job Number: F26833
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GIJ1024-ECC1001
Lab FileID: IJ20895.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\0922PAH\IJ20895.D\FID1B.CH Vial: 1
Signal #2 : C:\HPCHEM\1\DATA\0922PAH\IJ20895.D\FID2A.CH
Acq On : 22 Sep 2004 4:40 pm Operator: aubreya
Sample : ecc1001-20 Inst : FID 1
Misc : op11357,gij1024,1050,,,1,4,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : C:\HPCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title : PAH's BY EPA 610 OR 8100
Last Update : Wed Sep 22 15:08:09 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1		Naphthalene	20.000	22.400	-12.0	112	0.00	4.19- 4.39
2		2-Methyl Naphthalene	20.000	22.055	-10.3	110	0.00	5.10- 5.30
3		1-Methyl Naphthalene	20.000	22.114	-10.6	111	0.00	5.25- 5.45
4	S	2-Fluorobiphenyl	20.000	22.209	-11.0	112	0.00	5.74- 5.94
5		Acenaphthylene	20.000	22.297	-11.5	112	0.00	6.46- 6.66
6		Acenaphthene	20.000	22.302	-11.5	111	0.00	6.78- 6.98
7		Fluorene	20.000	22.375	-11.9	112	0.00	7.67- 7.87
8		Phenanthrene	20.000	22.164	-10.8	111	0.01	9.34- 9.54
9		Anthracene	20.000	22.914	-14.6	114	0.01	9.43- 9.63
10	S	O-Terphenyl	20.000	22.285	-11.4	112	0.00	10.30-10.50
11		Fluoranthene	20.000	22.539	-12.7	113	0.00	11.55-11.75
12		Pyrene	20.000	22.261	-11.3	112	0.00	11.92-12.12
13		Benzo(a)Anthracene	20.000	22.324	-11.6	111	0.00	14.24-14.44
14		Chrysene	20.000	22.829	-14.1	116	0.00	14.31-14.51
15		Benzo(b)Fluoranthene	20.000	22.312	-11.6	111	0.00	16.16-16.36
16		Benzo(k)Fluoranthene	20.000	22.642	-13.2	114	0.00	16.20-16.40
17		Benzo(a) Pyrene	20.000	22.553	-12.8	113	0.01	16.65-16.85
18		Indeno(1,2,3-cd)pyrene	20.000	22.023	-10.1	110	0.00	18.33-18.53
19		Dibenzo(a,h)anthracene	20.000	22.464	-12.3	113	0.00	18.41-18.61
20		Benzo(g,h,i) Perylene	20.000	22.665	-13.3	114	0.00	18.66-18.86
*****		Signal #2 *****						
1		Naphthalene	20.000	22.053	-10.3	111	0.00	4.83- 5.03
2		2-Methyl Naphthalene	20.000	21.928	-9.6	110	0.00	5.73- 5.93
3		1-Methyl Naphthalene	20.000	22.246	-11.2	112	0.00	5.99- 6.19
4	S	2-Fluorobiphenyl	20.000	21.836	-9.2	110	0.00	6.51- 6.71
5		Acenaphthylene	20.000	22.112	-10.6	111	0.01	7.61- 7.81
6		Acenaphthene	20.000	22.100	-10.5	111	0.01	7.86- 8.06
7		Fluorene	20.000	22.085	-10.4	111	0.01	8.73- 8.93
8		Phenanthrene	20.000	21.659	-8.3	109	0.01	10.77-10.97
9		Anthracene	20.000	22.422	-12.1	113	0.01	10.80-11.00
10	S	O-Terphenyl	20.000	21.959	-9.8	111	0.01	11.66-11.86
11		Fluoranthene	20.000	22.112	-10.6	111	0.01	13.14-13.34
12		Pyrene	20.000	22.338	-11.7	110	0.01	13.68-13.88
13		Benzo(a)Anthracene	20.000	22.017	-10.1	111	0.01	16.04-16.24
14		Chrysene	20.000	22.228	-11.1	112	0.01	16.22-16.42
15		Benzo(b)Fluoranthene	20.000	21.646	-8.2	110	0.00	18.11-18.31
16		Benzo(k)Fluoranthene	20.000	22.081	-10.4	111	0.00	18.16-18.36
17		Benzo(a) Pyrene	20.000	21.904	-9.5	111	0.00	18.83-19.03
18		Indeno(1,2,3-cd)pyrene	20.000	21.707	-8.5	109	0.01	20.61-20.81

Continuing Calibration Summary

Job Number: F26833
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GIJ1024-ECC1001
Lab FileID: IJ20895.D

19	Dibenzo(a,h)anthracene	20.000	22.224	-11.1	111	0.01	20.67-20.87
20	Benzo(g,h,i) Perylene	20.000	21.891	-9.5	110	0.02	21.24-21.44

(#) = Out of Range SPCC's out = 0 CCC's out = 0
IJ20407.D 8100_H2.M Thu Sep 23 08:06:33 2004

Southeast
ACCUTEST.
Laboratories

12/08/05

Technical Report for

EEI

Camp Lejeune-Campbell St. Fuel Farm

844271

Accutest Job Number: F26856

Sampling Date: 09/20/04

Report to:

EEI

bmorris@eeimail.com

ATTN: Bill Morris

Total number of pages in report: 100

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Sections: 1 2 3 4 5 6

Table of Contents

-1-

Section 1: Sample Summary **3**
Section 2: Case Narrative/Conformance Summary 4
Section 3: Sample Results 6
3.1: F26856-1: USTCSFF-MW16 6
3.2: F26856-2: USTCSFF-MW12 8
3.3: F26856-3: USTCSFF-MW14 10
3.4: F26856-4: USTCSFF-DW2 12
3.5: F26856-5: USTCSFF-MW11 15
3.6: F26856-6: USTCSFF-MW24 17
3.7: F26856-7: USTCSFF-DUP 19
3.8: F26856-8: TRIP BLANK 21
Section 4: Misc. Forms **22**
4.1: Chain of Custody 23
Section 5: GC Volatiles - QC Data Summaries 25
5.1: Method Blank Summary 26
5.2: Blank Spike Summary 32
5.3: Matrix Spike/Matrix Spike Duplicate Summary 40
5.4: Surrogate Recovery Summaries 46
5.5: GC Surrogate Retention Time Summaries 48
5.6: Initial and Continuing Calibration Summaries 60
Section 6: GC Semi-volatiles - QC Data Summaries 82
6.1: Method Blank Summary 83
6.2: Blank Spike Summary 85
6.3: Matrix Spike/Matrix Spike Duplicate Summary 86
6.4: Surrogate Recovery Summaries 87
6.5: GC Surrogate Retention Time Summaries 88
6.6: Initial and Continuing Calibration Summaries 90

Sample Summary

EEI

Job No: F26856

Camp Lejeune-Campbell St. Fuel Farm
Project No: 844271

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
F26856-1	09/20/04	08:55	BS	09/21/04	AQ	Ground Water	USTCSFF-MW16
F26856-2	09/20/04	10:00	BS	09/21/04	AQ	Ground Water	USTCSFF-MW12
F26856-3	09/20/04	10:55	BS	09/21/04	AQ	Ground Water	USTCSFF-MW14
F26856-4	09/20/04	11:35	BS	09/21/04	AQ	Ground Water	USTCSFF-DW2
F26856-5	09/20/04	12:45	BS	09/21/04	AQ	Ground Water	USTCSFF-MW11
F26856-6	09/20/04	13:20	BS	09/21/04	AQ	Ground Water	USTCSFF-MW24
F26856-7	09/20/04	00:00	BS	09/21/04	AQ	Ground Water	USTCSFF-DUP
F26856-8	09/20/04	14:10	BS	09/21/04	AQ	Trip Blank Water	TRIP BLANK

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: EEI **Job No:** F26856

Site: Camp Lejeune-Campbell St. Fuel Farm **Report Date:** 10/6/2004 12:44:17

7 Samples and 1 Trip Blank were collected on 09/20/2004 and were received at Accutest on 09/21/2004 properly preserved, at 2.8 Deg. C and intact. These Samples received an Accutest job number of F26856. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GC by Method EPA 504.1

Matrix: AQ **Batch ID:** OP11362

All samples were analyzed within the recommended method holding time.

Samples F26855-7MS, F26855-7MSD were used as the QC samples indicated.

All method blanks for this batch meet method specific criteria.

Matrix: AQ **Batch ID:** OP11393

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specifie criteria.

Samples F26871-3MS, F26871-3MSD were used as the QC samples indicated.

Volatiles by GC By Method EPA 601/602

Matrix: AQ **Batch ID:** GEF3363

All samples were analyzed within the reeommended method holding time.

Samples F26810-3MS, F26810-3MSD were used as the QC samples indicated.

All method blanks for this batch meet method specific criteria.

Matrix Spike Recovery for 1,2-Dichlorobenzene is outside control limits. Probable cause: due to matrix interference.

Matrix Spike Duplieate Recovery for 1,2-Dichlorobenzene is outside control limits. Probable cause: due to matrix interference.

Matrix Spike Recoverys for Ethylbenzene, Methyl Tert Butyl Ether are outside control limits. Outside control limits due to high level in sample relative to spike amount.

Samples F26810-3MS, F26810-3MSD have surrogates outside control limits.

F26810-3MS for aaa-Trifluorotoluene: Outside eontrol limits due to matrix interference. Confirmed by reanalysis.

F26810-3MSD for aaa-Trifluorotoluene: Outside control limits due to matrix interference. Confirmed by reanalysis.

Matrix: AQ **Batch ID:** GEF3364

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Samples F26810-9MS, F26810-9MSD were used as the QC samples indicated.

F26856-2: All hits confirmed by dual column analysis.

F26856-3: All hits confirmed by dual column analysis.

F26856-4: All hits eonfirmed by dual column analysis.

F26856-8: All hits eonfirmed by dual column analysis.

Matrix: AQ **Batch ID:** GEF3365

All samples were analyzed within the recommended method holding time.

All method blanks for this bateh meet method specific criteria.

Samples F26810-2MS, F26810-2MSD were used as the QC samples indicated.

F26856-6: All hits confirmed by dual column analysis.

Volatiles by GC By Method EPA 601/602

Matrix: AQ **Batch ID:** GEF3367

All samples were analyzed within the recommended method holding time.

All method blanks for this bateh meet method specific criteria.

Samples F26810-10MS, F26810-10MSD were used as the QC samples indicated.

F26856-1: All hits confirmed by dual eolumn analysis.

Extractables by GC by Method EPA 610

Matrix: AQ **Batch ID:** OP11405

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specifie criteria.

Samples F26845-1MS, F26845-1MSD were used as the QC samples indicated.

Blank Spike Reeoverys for 1-Methylnaphthalene, 2-Methylnaphthalene, Acenaphthene, Acenaphthylene, Fluorene, Naphthalene, Phenanthrene are outside control limits. MS/MSD in control, therefore, method requirements met.

F26856-4: All hits eonfirmed by dual eolumn analysis. All hits confirmed by re-extraction and reanalysis beyond hold time.

Matrix: AQ **Batch ID:** OP11420

The following sample was re-extraeted outside of holding time for method EPA 610: F26856-4

F26856-4: Confirmation run.

Accutest Laborarories Southeast (ALSE) eertifies that this report meets the project requirements for analytical data produced for the

samples as received at ALSE and as stated on the COC. ALSE certifies that the data meets the Data Quality Objeetives for precision, aeeuracy and completeness as specified in the ALSE Quality Manual except as noted above. This report is to be used in its entirety. ALSE is not responsible for any assumptions of data quality if partial data packages are used.

Narrative prepared by:

Date: Oct. 6, 2004

Ellen Pampel, Inorganic QA (signature on file)

Report of Analysis

Client Sample ID:	USTCSFF-MW16		
Lab Sample ID:	F26856-1	**Date Sampled:**	09/20/04
Matrix:	AQ - Ground Water	**Date Received:**	09/21/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	EF044329.D	1	09/28/04	CV	n/a	n/a	GEF3367
Run #2							

	Purge Volnme
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	62.5	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	6.8	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	1.3	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	21.6	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	102%		70-123%
98-08-8	aaa-Trifluorotoluene	104%		73-122%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW16		
Lab Sample ID:	F26856-1	**Date Sampled:**	09/20/04
Matrix:	AQ - Ground Water	**Date Received:**	09/21/04
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD18723.D	1	09/25/04	SKW	09/24/04	OP11393	GDD576
Run #2							

	Initial Volume	Final Volume
Run #1	35.7 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.020	0.0098	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	136%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exeeeds calibration range

J = Indicates an estimated value
B = Indieates analyte found in assoeiated method blank
N = Indieates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW12		
Lab Sample ID:	F26856-2	**Date Sampled:**	09/20/04
Matrix:	AQ - Ground Water	**Date Received:**	09/21/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	EF044248.D	1	09/24/04	CV	n/a	n/a	GEF3364
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	0.58	1.0	0.50	ug/l	J
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	1.4	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	2.1	3.0	1.0	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	94%		70-123%
98-08-8	aaa-Trifluorotoluene	98%		73-122%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analytc found in assoeiated method blank
N = Indicates prcsumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW12		
Lab Sample ID:	F26856-2	**Date Sampled:**	09/20/04
Matrix:	AQ - Ground Water	**Date Received:**	09/21/04
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD18724.D	1	09/25/04	SKW	09/24/04	OP11393	GDD576
Run #2							

	Initial Volume	Final Volume
Run #1	36.2 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0097	ug/l	

CAS No.	Surrogate Recoveries	Run# I	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	101%		60-139%

ND = Not detected MDL - Method Deteetion Limit
RL = Reporting Limit
E = Indicates value exeeeds ealibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW14		
Lab Sample ID:	F26856-3	**Date Sampled:**	09/20/04
Matrix:	AQ - Ground Water	**Date Received:**	09/21/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	EF044249.D	1	09/24/04	CV	n/a	n/a	GEF3364
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	0.54	1.0	0.50	ug/l	J
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	86%		70-123%
98-08-8	aaa-Trifluorotoluene	91%		73-122%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds ealibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indieates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW14		
Lab Sample ID:	F26856-3	**Date Sampled:**	09/20/04
Matrix:	AQ - Ground Water	**Date Received:**	09/21/04
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD18725.D	1	09/25/04	SKW	09/24/04	OP11393	GDD576
Run #2							

	Initial Volume	Final Volume
Run #1	36.8 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0095	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	93%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-DW2		
Lab Sample ID:	F26856-4	**Date Sampled:**	09/20/04
Matrix:	AQ - Ground Water	**Date Received:**	09/21/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	EF044250.D	1	09/24/04	CV	n/a	n/a	GEF3364
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	1.2	3.0	1.0	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	88%		70-123%
98-08-8	aaa-Trifluorotoluene	91%		73-122%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-DW2		
Lab Sample ID:	F26856-4	**Date Sampled:**	09/20/04
Matrix:	AQ - Ground Water	**Date Received:**	09/21/04
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD18592.D	1	09/23/04	SKW	09/22/04	OP11362	GDD573
Run #2							

	Initial Volume	Final Volume
Run #1	36.4 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0096	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	102%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-DW2		
Lab Sample ID:	F26856-4	**Date Sampled:**	09/20/04
Matrix:	AQ - Ground Water	**Date Received:**	09/21/04
Method:	EPA 610 EPA 610	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	IJ20902.D	1	09/28/04	SD	09/27/04	OP11405	GIJ1025
Run #2 [b]	IJ20950.D	4	09/30/04	SD	09/27/04	OP11405	GIJ1027
Run #3 [c]	IJ20954.D	4	09/30/04	SD	09/29/04	OP11420	GIJ1027

	Initial Volume	Final Volume
Run #1	1050 ml	1.0 ml
Run #2	1050 ml	1.0 ml
Run #3	1050 ml	1.0 ml

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	51.2 [d]	19	7.6	ug/l	
208-96-8	Acenaphthylene	ND	4.8	1.9	ug/l	
120-12-7	Anthracene	4.7	4.8	1.9	ug/l	J
56-55-3	Benzo(a)anthracene	ND	4.8	1.9	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.8	1.9	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.8	1.9	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.8	1.9	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.8	1.9	ug/l	
218-01-9	Chrysene	ND	4.8	1.9	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.8	1.9	ug/l	
206-44-0	Fluoranthene	3.2	4.8	1.9	ug/l	J
86-73-7	Fluorene	41.6	4.8	1.9	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.8	1.9	ug/l	
91-20-3	Naphthalene	83.2 [d]	19	7.6	ug/l	
90-12-0	1-Methylnaphthalene	9.5	4.8	1.9	ug/l	
91-57-6	2-Methylnaphthalene	3.4	4.8	1.9	ug/l	J
85-01-8	Phenanthrene	3.2	4.8	1.9	ug/l	J
129-00-0	Pyrene	ND	4.8	1.9	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Run# 3	Limits
321-60-8	2-Fluorobiphenyl	112%	106%	94%	42-123%
84-15-1	o-Terphenyl	107%	109%	101%	51-123%

(a) All hits confirmed by dual column analysis.
(b) All hits confirmed by dual column analysis. All hits confirmed by re-extraction and reanalysis beyond hold time.
(c) Confirmation run.
(d) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW11		
Lab Sample ID:	F26856-5	**Date Sampled:**	09/20/04
Matrix:	AQ - Ground Water	**Date Received:**	09/21/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF044251.D	1	09/24/04	CV	n/a	n/a	GEF3364
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	91%		70-123%
98-08-8	aaa-Trifluorotoluene	95%		73-122%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW11		
Lab Sample ID:	F26856-5	**Date Sampled:**	09/20/04
Matrix:	AQ - Ground Water	**Date Received:**	09/21/04
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD18726.D	1	09/25/04	SKW	09/24/04	OP11393	GDD576
Run #2							

	Initial Volume	Final Volume
Run #1	36.4 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0096	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	90%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW24		
Lab Sample ID:	F26856-6	**Date Sampled:**	09/20/04
Matrix:	AQ - Ground Water	**Date Received:**	09/21/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF044254.D	1	09/24/04	CV	n/a	n/a	GEF3363
Run #2 [a]	EF044266.D	2	09/24/04	CV	n/a	n/a	GEF3365

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	104 [b]	2.0	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	62.4	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	25.1	1.0	0.50	ug/l	
108-88-3	Toluene	79.0	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	181	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	101%	103%	70-123%
98-08-8	aaa-Trifluorotoluene	104%	106%	73-122%

(a) All hits confirmed by dual column analysis.
(b) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW24		
Lab Sample ID:	F26856-6	**Date Sampled:**	09/20/04
Matrix:	AQ - Ground Water	**Date Received:**	09/21/04
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD18727.D	1	09/25/04	SKW	09/24/04	OP11393	GDD576
Run #2							

	Initial Volume	Final Volume
Run #1	36.3 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0096	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	92%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indieates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-DUP		
Lab Sample ID:	F26856-7	**Date Sampled:**	09/20/04
Matrix:	AQ - Ground Water	**Date Received:**	09/21/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF044245.D	1	09/24/04	CV	n/a	n/a	GEF3364
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	90%		70-123%
98-08-8	aaa-Trifluorotoluene	94%		73-122%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-DUP		
Lab Sample ID:	F26856-7	**Date Sampled:**	09/20/04
Matrix:	AQ - Ground Water	**Date Received:**	09/21/04
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD18728.D	1	09/25/04	SKW	09/24/04	OP11393	GDD576
Run #2							

	Initial Volume	Final Volume
Run #1	36.4 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0096	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	87%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	F26856-8	**Date Sampled:**	09/20/04
Matrix:	AQ - Trip Blank Water	**Date Received:**	09/21/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	EF044246.D	1	09/24/04	CV	n/a	n/a	GEF3364
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	0.51	1.0	0.50	ug/l	J
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	0.83	1.0	0.50	ug/l	J
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	8.1	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	3.9	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	86%		70-123%
98-08-8	aaa-Trifluorotoluene	89%		73-122%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

CHAIN OF CUSTODY

ACCUTEST Laboratories

4405 VINELAND ROAD • SUITE C-15
ORLANDO, FL 32811
TEL: 407-425-6700 • FAX: 407-425-0707

ACCUTEST JOB #: F26856
ACCUTEST QUOTE #:

CLIENT INFORMATION

NAME: Engineering + Environment
ADDRESS: 824 Gumbranch Rd Suite 5
CITY: Jacksonville STATE: NC ZIP: 28540
SEND REPORT TO:
PHONE #: 910-449-3214

FACILITY INFORMATION

PROJECT NAME: Campbell St Fuel Farm
LOCATION:
PROJECT NO.:
FAX #: 910-991-3341

ANALYTICAL INFORMATION

MATRIX CODES

DW - DRINKING WATER
GW - GROUND WATER
WW - WASTE WATER
SO - SOIL
SL - SLUDGE
OI - OIL
LIQ - OTHER LIQUID
SOL - OTHER SOLID

ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION DATE	COLLECTION TIME	SAMPLED BY:	MATRIX	# OF BOTTLES	PRESERVATION HCl	PRESERVATION NaOH	PRESERVATION HNO3	PRESERVATION H2SO4	PRESERVATION NONE	PRESERVATION MeOH	PRESERVATION NaHSO4	8260	610	5035	LAB USE ONLY
1	USTCSFF-MW16	9-20-04	8:55	BS	GW	3	X							3			
2	USTCSFF-MW12	9-20-04	10:00	BS	GW	3	X							3			
3	USTCSFF-MW14	9-20-04	10:45	BS	GW	3	X							3			
4	USTCSFF-DW2	9-20-04	11:35	BS	GW	8	X				X	X		3	2	3	
5	USTCSFF-MW11	9-20-04	12:45	BS	GW	3	X							3			
6	USTCSFF-MW24	9-20-04	13:20	BS	GW	3	X							3			
7	USTCSFF-D4P	9-20-04	—	BS	GW	3	X							3			
9	Trip Blank	9-20-04	14:10														

DATA TURNAROUND INFORMATION

☑ STANDARD
☐ 48 HOUR RUSH
☐ 24 HOUR EMERGENCY
☐ OTHER
APPROVED BY:
EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED

DATA DELIVERABLE INFORMATION

☐ STANDARD
☐ COMMERCIAL "B"
☐ DISK DELIVERABLE
☐ STATE FORMS
☑ OTHER (SPECIFY) Nccsa 4

COMMENTS/REMARKS

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESION, INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
1.	9-20-04 14:10	1.	2.		2. Steve Cowan 9-21-04 9:00
RELINQUISHED BY:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
3.		3.	4.		4.
RELINQUISHED BY:	DATE TIME:	RECEIVED BY:	SEAL #	PRESERVE WHERE APPLICABLE ☐	ON ICE ☐ TEMPERATURE 2.5 C
5.		5.			

4.1 4

F26856: Chain of Custody
Page 1 of 2

ACCUTEST LABORATORIES SOUTHEAST SAMPLE RECEIPT CONFIRMATION

Accutest's Job Number: F26856

Client: Engineering & Environmental Project: Cambell St

Date Received: 9-21-04 Time Received: 9:00

of Coolers Received: 1 Cooler Temperatures: 2.8

Delivery Method: (FedEx) UPS Accutest Courier Greyhound Delivery Other

Air Bill Number:

Cooler Custody Seals Intact ?	(Yes)	No	
Chain of Custody Provided ?	(Yes)	No	
COC Match Bottle Label ID's ?	(Yes)	No	
Sample Labels Present on all bottles ?	(Yes)	No	
All Analyses Marked On COC ?	(Yes)	No	
Are All Bottles Intact ?	(Yes)	No	
Samples Preserved Correctly ?	(Yes)	No	
Correct Number of Containers Used ?	(Yes)	No	
Sufficient Sample Volume ?	(Yes)	No	
Trip Blank Provided ?	(Yes)	No	
Trip Blank on COC ?	(Yes)	No	
Trip Blank Intact ?	(Yes)	No	N/A
Trip Blank Matrix ?	Soil	(Water)	N/A
Number of Encores ?	Ø		
Number of Soil Field Kits ?	Ø		

Summary of Comments:

Signature: Steven Eason Date: 9-21-04

Review Signature:

ASBD/HW 05/11/03

F26856: Chain of Custody
Page 2 of 2

ACCUTEST
F26856

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: F26856
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GEF3363-MB	EF044205.D	1	09/23/04	CV	n/a	n/a	GEF3363

The QC reported here applies to the following samples: **Method:** EPA 601/602

F26856-6

CAS No.	Compound	Result	RL	MDL	Units	Q
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
352-33-0	1-Chloro-4-fluorobenzene	95%	70-123%
98-08-8	aaa-Trifluorotoluene	98%	73-122%

Method Blank Summary

Job Number: F26856
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GEF3364-MB	EF044231.D	1	09/23/04	CV	n/a	n/a	GEF3364

5.1

The QC reported here applies to the following samples: **Method:** EPA 601/602

F26856-2, F26856-3, F26856-4, F26856-5, F26856-7, F26856-8

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
352-33-0	1-Chloro-4-fluorobenzene	87%	70-123%
98-08-8	aaa-Trifluorotoluene	96%	73-122%

Method Blank Summary

Job Number: F26856
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GEF3365-MB	EF044262.D	1	09/24/04	CV	n/a	n/a	GEF3365

5.1

The QC reported here applies to the following samples: **Method:** EPA 601/602

F26856-6

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries		Limits
352-33-0	1-Chloro-4-fluorobenzene	93%	70-123%
98-08-8	aaa-Trifluorotoluene	99%	73-122%

Method Blank Summary

Job Number: F26856
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GEF3367-MB	EF044328.D	1	09/28/04	CV	n/a	n/a	GEF3367

5.1

The QC reported here applies to the following samples: **Method:** EPA 601/602

F26856-1

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
352-33-0	1-Chloro-4-fluorobenzene	87%	70-123%
98-08-8	aaa-Trifluorotoluene	95%	73-122%

Method Blank Summary

Job Number: F26856
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP11362-MB	DD18574.D	1	09/22/04	SKW	09/22/04	OP11362	GDD573

5.1.3

The QC reported here applies to the following samples: **Method:** EPA 504.1

F26856-4

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.020	0.010	ug/l	

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	102%	60-139%

Method Blank Summary

Job Number: F26856
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP11393-MB	DD18705.D	1	09/25/04	SKW	09/24/04	OP11393	GDD576

The QC reported here applies to the following samples: **Method:** EPA 504.1

F26856-1, F26856-2, F26856-3, F26856-5, F26856-6, F26856-7

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.020	0.010	ug/l	

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	98%	60-139%

Blank Spike Summary

Job Number: F26856
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GEF3363-BS	EF044204.D	1	09/23/04	CV	n/a	n/a	GEF3363

5.2

The QC reported here applies to the following samples: **Method:** EPA 601/602

F26856-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
108-90-7	Chlorobenzene	20	21.4	107	81-119
95-50-1	1,2-Dichlorobenzene	20	20.1	101	75-120
541-73-1	1,3-Dichlorobenzene	20	21.9	110	77-121
106-46-7	1,4-Dichlorobenzene	20	21.3	107	75-122
100-41-4	Ethylbenzene	20	22.4	112	81-126
1634-04-4	Methyl Tert Butyl Ether	20	20.6	103	76-117
108-88-3	Toluene	20	21.9	110	82-123
1330-20-7	Xylenes (total)	60	65.1	109	82-125

CAS No.	Surrogate Recoveries	BSP	Limits
352-33-0	1-Chloro-4-fluorobenzene	105%	70-123%
98-08-8	aaa-Trifluorotoluene	104%	73-122%

Blank Spike Summary

Job Number: F26856
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GEF3364-BS	EF044230.D	1	09/23/04	CV	n/a	n/a	GEF3364

The QC reported here applies to the following samples: **Method:** EPA 601/602

F26856-2, F26856-3, F26856-4, F26856-5, F26856-7, F26856-8

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	20	20.8	104	86-121
108-90-7	Chlorobenzene	20	19.9	100	81-119
95-50-1	1,2-Dichlorobenzene	20	17.0	85	75-120
541-73-1	1,3-Dichlorobenzene	20	19.5	98	77-121
106-46-7	1,4-Dichlorobenzene	20	18.8	94	75-122
100-41-4	Ethylbenzene	20	21.4	107	81-126
1634-04-4	Methyl Tert Butyl Ether	20	18.9	95	76-117
108-88-3	Toluene	20	20.5	103	82-123
1330-20-7	Xylenes (total)	60	63.5	106	82-125

CAS No.	Surrogate Recoverics	BSP	Limits
352-33-0	1-Chloro-4-fluorobenzene	100%	70-123%
98-08-8	aaa-Trifluorotoluene	100%	73-122%

Blank Spike Summary

Job Number: F26856
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GEF3365-BS	EF044261.D	1	09/24/04	CV	n/a	n/a	GEF3365

The QC reported here applies to the following samples: **Method:** EPA 601/602

F26856-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	20	21.5	108	86-121

CAS No.	Surrogate Recoveries	BSP	Limits
352-33-0	1-Chloro-4-fluorobenzene	103%	70-123%
98-08-8	aaa-Trifluorotoluene	103%	73-122%

Blank Spike Summary

Job Number: F26856
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GEF3367-BS	EF044327.D	1	09/28/04	CV	n/a	n/a	GEF3367

The QC reported herc applies to the following samples: **Method:** EPA 601/602

F26856-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	20	22.7	114	86-121
108-90-7	Chlorobenzene	20	21.9	110	81-119
95-50-1	1,2-Dichlorobenzene	20	21.8	109	75-120
541-73-1	1,3-Dichlorobenzene	20	21.4	107	77-121
106-46-7	1,4-Dichlorobenzene	20	21.3	107	75-122
100-41-4	Ethylbenzene	20	22.2	111	81-126
1634-04-4	Methyl Tert Butyl Ether	20	21.2	106	76-117
108-88-3	Toluene	20	22.7	114	82-123
1330-20-7	Xylenes (total)	60	66.3	111	82-125

CAS No.	Surrogate Recoveries	BSP	Limits
352-33-0	1-Chloro-4-fluorobenzene	99%	70-123%
98-08-8	aaa-Trifluorotoluene	99%	73-122%

Blank Spike Summary

Job Number: F26856
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP11362-BS	DD18575.D	1	09/22/04	SKW	09/22/04	OP11362	GDD573

5.2

The QC reported here applies to the following samples: **Method:** EPA 504.1

F26856-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
106-93-4	1,2-Dibromoethane	0.25	0.21	84	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	102%	60-139%

Blank Spike Summary

Job Number: F26856
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Aualyzed	By	Prep Date	Prep Batch	Aualytical Batch
OP11362-BS2	DD18576.D	1	09/22/04	SKW	09/22/04	OP11362	GDD573

5.2

The QC reported here applies to the following samples: **Method:** EPA 504.1

F26856-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
106-93-4	1,2-Dibromoethane	0.25	0.23	92	70-130

CAS No.	Surrogate Recoverics	BSP	Limits
460-00-4	4-Bromofluorobenzene	108%	60-139%

Blank Spike Summary

Job Number: F26856
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP11393-BS	DD18706.D	1	09/25/04	SKW	09/24/04	OP11393	GDD576

The QC reported here applies to the following samples: **Method:** EPA 504.1

F26856-1, F26856-2, F26856-3, F26856-5, F26856-6, F26856-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
106-93-4	1,2-Dibromoethane	0.25	0.24	96	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	100%	60-139%

Blank Spike Summary

Job Number: F26856
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP11393-BS2	DD18707.D	1	09/25/04	SKW	09/24/04	OP11393	GDD576

5.2

5

The QC reported here applies to the following samples: **Method:** EPA 504.1

F26856-1, F26856-2, F26856-3, F26856-5, F26856-6, F26856-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
106-93-4	1,2-Dibromoethane	0.25	0.22	88	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	98%	60-139%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F26856
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F26810-3MS	EF044223.D	1	09/23/04	CV	n/a	n/a	GEF3363
F26810-3MSD	EF044224.D	1	09/23/04	CV	n/a	n/a	GEF3363
F26810-3	EF044222.D	1	09/23/04	CV	n/a	n/a	GEF3363

The QC reported here applies to the following samples: **Method:** EPA 601/602

F26856-6

CAS No.	Compound	F26810-3 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
108-90-7	Chlorobenzene	ND		20	23.2	116	22.5	113	3	78-120/8
95-50-1	1,2-Dichlorobenzene	32.8		20	34.9	11*	33.9	6*	3	69-125/7
541-73-1	1,3-Dichlorobenzene	ND		20	23.7	119	24.0	120	1	71-126/7
106-46-7	1,4-Dichlorobenzene	ND		20	25.5	128	24.7	124	3	67-129/7
100-41-4	Ethylbenzene	108	E	20	134	130* [a]	130	110	3	74-127/6
1634-04-4	Methyl Tert Butyl Ether	451	E	20	492	205* [a]	466	75	5	66-127/9
108-88-3	Toluene	27.4		20	49.1	109	48.4	105	1	77-124/5
1330-20-7	Xylenes (total)	50.2		60	118	113	117	111	1	76-125/5

CAS No.	Surrogate Recoveries	MS	MSD	F26810-3	Limits
352-33-0	1-Chloro-4-fluorobenzene	118%	117%	117%	70-123%
98-08-8	aaa-Trifluorotoluene	139%* [c]	139%* [c]	138%* [b]	73-122%

(a) Outside control limits due to high level in sample relative to spike amount.
(b) Outside control limits due to matrix interference.
(c) Outside control limits due to matrix interference. Confirmed by reanalysis.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F26856
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F26810-9MS	EF044233.D	1	09/23/04	CV	n/a	n/a	GEF3364
F26810-9MSD	EF044234.D	1	09/23/04	CV	n/a	n/a	GEF3364
F26810-9	EF044232.D	1	09/23/04	CV	n/a	n/a	GEF3364

The QC reported here applies to the following samples: **Method:** EPA 601/602

F26856-2, F26856-3, F26856-4, F26856-5, F26856-7, F26856-8

CAS No.	Compound	F26810-9 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND		20	20.6	103	21.1	106	2	77-125/6
108-90-7	Chlorobenzene	ND		20	20.4	102	20.7	104	1	78-120/8
95-50-1	1,2-Dichlorobenzene	ND		20	18.0	90	18.8	94	4	69-125/7
541-73-1	1,3-Dichlorobenzene	ND		20	20.0	100	21.1	106	5	71-126/7
106-46-7	1,4-Dichlorobenzene	ND		20	19.5	98	20.2	101	4	67-129/7
100-41-4	Ethylbenzene	ND		20	21.5	108	22.2	111	3	74-127/6
1634-04-4	Methyl Tert Butyl Ether	ND		20	19.4	97	19.6	98	1	66-127/9
108-88-3	Toluene	ND		20	21.0	105	21.6	108	3	77-124/5
1330-20-7	Xylenes (total)	ND		60	64.3	107	64.0	107	0	76-125/5

CAS No.	Surrogate Recoveries	MS	MSD	F26810-9	Limits
352-33-0	1-Chloro-4-fluorobenzene	100%	102%	83%	70-123%
98-08-8	aaa-Trifluorotoluene	99%	101%	88%	73-122%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F26856
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F26810-2MS	EF044280.D	100	09/24/04	CV	n/a	n/a	GEF3365
F26810-2MSD	EF044281.D	100	09/24/04	CV	n/a	n/a	GEF3365
F26810-2	EF044276.D	10	09/24/04	CV	n/a	n/a	GEF3365
F26810-2 [a]	EF044279.D	100	09/24/04	CV	n/a	n/a	GEF3365

The QC reported here applies to the following samples: **Method:** EPA 601/602

F26856-6

CAS No.	Compound	F26810-2 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	3340 [b]		2000	5310	99	5240	95	1	77-125/6

CAS No.	Surrogate Recoveries	MS	MSD	F26810-2	F26810-2	Limits
352-33-0	1-Chloro-4-fluorobenzene	103%	100%	106%	93%	70-123%
98-08-8	aaa-Trifluorotoluene	103%	104%	113%	100%	73-122%

(a) All hits confirmed by dual column analysis.
(b) Result is from Run #2.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F26856
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F26810-10MS	EF044334.D	50	09/28/04	CV	n/a	n/a	GEF3367
F26810-10MSD	EF044335.D	50	09/28/04	CV	n/a	n/a	GEF3367
F26810-10 [a]	EF044333.D	50	09/28/04	CV	n/a	n/a	GEF3367

5.3

The QC reported here applies to tbe following samples: **Method:** EPA 601/602

F26856-1

CAS No.	Compound	F26810-10 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	1780		1000	2850	107	2830	105	1	77-125/6
108-90-7	Chlorobenzene	ND		1000	1100	110	1090	109	1	78-120/8
95-50-1	1,2-Diehlorobenzene	ND		1000	1110	111	1090	109	2	69-125/7
541-73-1	1,3-Dichlorobenzene	ND		1000	1090	109	1070	107	2	71-126/7
106-46-7	1,4-Dichlorobenzene	ND		1000	1080	108	1070	107	1	67-129/7
100-41-4	Ethylbenzene	290		1000	1400	111	1370	108	2	74-127/6
1634-04-4	Methyl Tert Butyl Ether	135		1000	1170	104	1210	108	3	66-127/9
108-88-3	Toluene	48.3	J	1000	1180	113	1170	112	1	77-124/5
1330-20-7	Xylenes (total)	76.1	J	3000	3400	111	3370	110	1	76-125/5

CAS No.	Surrogate Recoveries	MS	MSD	F26810-10	Limits
352-33-0	1-Chloro-4-fluorobenzene	99%	99%	77%	70-123%
98-08-8	aaa-Trifluorotoluene	101%	101%	82%	73-122%

(a) All hits confirmed by dual eolumn analysis.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F26856
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP11362-MS	DD18586.D	1	09/23/04	SKW	09/22/04	OP11362	GDD573
OP11362-MSD	DD18587.D	1	09/23/04	SKW	09/22/04	OP11362	GDD573
F26855-7	DD18585.D	1	09/23/04	SKW	09/22/04	OP11362	GDD573

5.3

The QC reported here applies to the following samples: **Method:** EPA 504.1

F26856-4

CAS No.	Compound	F26855-7 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
106-93-4	1,2-Dibromoethane	ND		0.239	0.19	79	0.20	85	5	65-135/25

CAS No.	Surrogate Recoveries	MS	MSD	F26855-7	Limits
460-00-4	4-Bromofluorobenzene	117%	138%	120%	60-139%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F26856
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP11393-MS	DD18729.D	1	09/25/04	SKW	09/24/04	OP11393	GDD576
OP11393-MSD	DD18730.D	1	09/25/04	SKW	09/24/04	OP11393	GDD576
F26871-3	DD18711.D	1	09/25/04	SKW	09/24/04	OP11393	GDD576

The QC reported here applies to the following samples: **Method:** EPA 504.1

F26856-1, F26856-2, F26856-3, F26856-5, F26856-6, F26856-7

CAS No.	Compound	F26871-3 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
106-93-4	1,2-Dibromoethane	ND		0.26	0.23	89	0.23	91	0	65-135/25

CAS No.	Surrogate Recoveries	MS	MSD	F26871-3	Limits
460-00-4	4-Bromofluorobenzene	109%	104%	96%	60-139%

Volatile Surrogate Recovery Summary

Job Number: F26856
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Method: EPA 601/602 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S2 [a]
F26856-1	EF044329.D	102.0	104.0
F26856-2	EF044248.D	94.0	98.0
F26856-3	EF044249.D	86.0	91.0
F26856-4	EF044250.D	88.0	91.0
F26856-5	EF044251.D	91.0	95.0
F26856-6	EF044266.D	103.0	106.0
F26856-6	EF044254.D	101.0	104.0
F26856-7	EF044245.D	90.0	94.0
F26856-8	EF044246.D	86.0	89.0
F26810-10MS	EF044334.D	99.0	101.0
F26810-10MSD	EF044335.D	99.0	101.0
F26810-2MS	EF044280.D	103.0	103.0
F26810-2MSD	EF044281.D	100.0	104.0
F26810-3MS	EF044223.D	118.0	139.0* [b]
F26810-3MSD	EF044224.D	117.0	139.0* [b]
F26810-9MS	EF044233.D	100.0	99.0
F26810-9MSD	EF044234.D	102.0	101.0
GEF3363-BS	EF044204.D	105.0	104.0
GEF3363-MB	EF044205.D	95.0	98.0
GEF3364-BS	EF044230.D	100.0	100.0
GEF3364-MB	EF044231.D	87.0	96.0
GEF3365-BS	EF044261.D	103.0	103.0
GEF3365-MB	EF044262.D	93.0	99.0
GEF3367-BS	EF044327.D	99.0	99.0
GEF3367-MB	EF044328.D	87.0	95.0

Surrogate Compounds	Recovery Limits
S1 = 1-Chloro-4-fluorobenzene	70-123%
S2 = aaa-Trifluorotoluene	73-122%

(a) Recovery from GC signal #2
(b) Outside control limits due to matrix interference. Confirmed by reanalysis.

Volatile Surrogate Recovery Summary

Job Number: F26856
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Method: EPA 504.1 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S1 [b]
F26856-1	DD18723.D		136.0
F26856-2	DD18724.D		101.0
F26856-3	DD18725.D		93.0
F26856-4	DD18592.D		102.0
F26856-5	DD18726.D		90.0
F26856-6	DD18727.D	92.0	
F26856-7	DD18728.D		87.0
OP11362-BS	DD18575.D		102.0
OP11362-BS2	DD18576.D		108.0
OP11362-MB	DD18574.D		102.0
OP11362-MS	DD18586.D		117.0
OP11362-MSD	DD18587.D		138.0
OP11393-BS	DD18706.D		100.0
OP11393-BS2	DD18707.D		98.0
OP11393-MB	DD18705.D		98.0
OP11393-MS	DD18729.D		109.0
OP11393-MSD	DD18730.D		104.0

Surrogate Compounds	Recovery Limits
S1 = 4-Bromofluorobenzene	60-139%

(a) Recovery from GC signal #1
(b) Recovery from GC signal #2

5.4 G

GC Surrogate Retention Time Summary

Job Number: F26856
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GEF3363-CC3348	**Injection Date:**	09/23/04
Lab File ID:	EF044203.D	**Injection Time:**	09:50
Instrument ID:	GCEF	**Method:**	EPA 601/602

	S1 [a] RT	S2 [a] RT
Check Std	8.85	5.77

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
GEF3363-BS	EF044204.D	09/23/04	10:15	8.85	5.77
GEF3363-MB	EF044205.D	09/23/04	10:39	8.85	5.77
ZZZZZZ	EF044206.D	09/23/04	11:03	8.85	5.77
ZZZZZZ	EF044207.D	09/23/04	11:28	8.85	5.77
ZZZZZZ	EF044208.D	09/23/04	11:52	8.85	5.77
ZZZZZZ	EF044209.D	09/23/04	12:17	8.85	5.77
ZZZZZZ	EF044210.D	09/23/04	12:44	8.85	5.77
ZZZZZZ	EF044212.D	09/23/04	13:38	8.85	5.77

Surrogate Compounds

S1 = 1-Chloro-4-fluorobenzene
S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F26856
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GEF3363-CC3348	**Injection Date:**	09/23/04
Lab File ID:	EF044214.D	**Injection Time:**	14:30
Instrument ID:	GCEF	**Method:**	EPA 601/602

	S1 [a] RT	S2 [a] RT
Check Std	8.85	5.77

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
ZZZZZZ	EF044215.D	09/23/04	14:54	8.85	5.77
ZZZZZZ	EF044216.D	09/23/04	15:21	8.85	5.77
ZZZZZZ	EF044217.D	09/23/04	15:48	8.85	5.77
ZZZZZZ	EF044218.D	09/23/04	16:15	8.85	5.77
ZZZZZZ	EF044219.D	09/23/04	16:42	8.85	5.76
F26810-3	EF044222.D	09/23/04	18:00	8.85	5.76
F26810-3MS	EF044223.D	09/23/04	18:24	8.84	5.76
F26810-3MSD	EF044224.D	09/23/04	18:49	8.84	5.76

Surrogate Compounds

S1 = 1-Chloro-4-fluorobenzene
S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F26856
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GEF3363-CC3348	**Injection Date:**	09/23/04
Lab File ID:	EF044225.D	**Injection Time:**	19:13
Instrument ID:	GCEF	**Method:**	EPA 601/602

	S1 [a] RT	S2 [a] RT
Check Std	8.85	5.77

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
ZZZZZZ	EF044228.D	09/23/04	20:26	8.85	5.77
ZZZZZZ	EF044229.D	09/23/04	20:51	8.85	5.77
GEF3364-BS	EF044230.D	09/23/04	21:15	8.85	5.77
GEF3364-MB	EF044231.D	09/23/04	21:39	8.85	5.77
F26810-9	EF044232.D	09/23/04	22:04	8.85	5.77
F26810-9MS	EF044233.D	09/23/04	22:29	8.85	5.77
F26810-9MSD	EF044234.D	09/23/04	22:53	8.85	5.77
ZZZZZZ	EF044235.D	09/23/04	23:17	8.85	5.77

Surrogate Compounds

S1 = 1-Chloro-4-fluorobenzene
S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F26856
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GEF3364-CC3348	**Injection Date:**	09/23/04
Lab File ID:	EF044236.D	**Injection Time:**	23:42
Instrument ID:	GCEF	**Method:**	EPA 601/602

	S1 [a] RT	S2 [a] RT
Check Std	8.85	5.77

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
ZZZZZZ	EF044237.D	09/24/04	00:07	8.85	5.77
ZZZZZZ	EF044238.D	09/24/04	00:31	8.85	5.77
ZZZZZZ	EF044239.D	09/24/04	00:56	8.85	5.77
ZZZZZZ	EF044240.D	09/24/04	01:20	8.85	5.77
ZZZZZZ	EF044241.D	09/24/04	01:44	8.85	5.77
ZZZZZZ	EF044242.D	09/24/04	02:09	8.85	5.77
ZZZZZZ	EF044244.D	09/24/04	02:58	8.85	5.77
F26856-7	EF044245.D	09/24/04	03:22	8.85	5.77
F26856-8	EF044246.D	09/24/04	03:47	8.85	5.77

Surrogate Compounds

S1 = 1-Chloro-4-fluorobenzene
S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F26856
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GEF3364-CC3348	**Injection Date:**	09/24/04
Lab File ID:	EF044247.D	**Injection Time:**	04:12
Instrument ID:	GCEF	**Method:**	EPA 601/602

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	9.07	8.85	6.00	5.77

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
F26856-2	EF044248.D	09/24/04	04:36		8.85		5.77
F26856-3	EF044249.D	09/24/04	05:00		8.85		5.77
F26856-4	EF044250.D	09/24/04	05:25		8.85		5.77
F26856-5	EF044251.D	09/24/04	05:49		8.85		5.77
ZZZZZZ	EF044253.D	09/24/04	06:39		8.85		5.77
F26856-6	EF044254.D	09/24/04	07:03		8.85		5.77
ZZZZZZ	EF044256.D	09/24/04	07:52		8.85		5.77
GEF3364-ECC334E	EF044259.D	09/24/04	09:05	9.08	8.85	6.00	5.77

Surrogate Compounds

S1 = 1-Chloro-4-fluorobenzene
S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F26856
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GEF3365-CC3348	**Injection Date:**	09/24/04
Lab File ID:	EF044260.D	**Injection Time:**	09:46
Instrument ID:	GCEF	**Method:**	EPA 601/602

	S1 [a] RT	S2 [a] RT
Check Std	8.85	5.77

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
GEF3365-BS	EF044261.D	09/24/04	10:10	8.85	5.77
GEF3365-MB	EF044262.D	09/24/04	10:35	8.85	5.77
ZZZZZZ	EF044263.D	09/24/04	10:59	8.85	5.77
ZZZZZZ	EF044265.D	09/24/04	11:51	8.85	5.77
F26856-6	EF044266.D	09/24/04	12:15	8.85	5.77
ZZZZZZ	EF044267.D	09/24/04	12:39	8.85	5.77
ZZZZZZ	EF044268.D	09/24/04	13:04	8.85	5.77
ZZZZZZ	EF044269.D	09/24/04	13:28	8.85	5.77
ZZZZZZ	EF044270.D	09/24/04	13:53	8.84	5.77

Surrogate Compounds

S1 = 1-Chloro-4-fluorobenzene
S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F26856
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GEF3365-CC3348	**Injection Date:**	09/24/04
Lab File ID:	EF044271.D	**Injection Time:**	14:17
Instrument ID:	GCEF	**Method:**	EPA 601/602

	S1 [a] RT	S2 [a] RT
Check Std	8.84	5.77

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
ZZZZZZ	EF044272.D	09/24/04	14:44	8.84	5.76
ZZZZZZ	EF044273.D	09/24/04	15:11	8.84	5.77
ZZZZZZ	EF044274.D	09/24/04	15:38	8.84	5.77
ZZZZZZ	EF044275.D	09/24/04	16:05	8.84	5.77
F26810-2	EF044276.D	09/24/04	16:31	8.84	5.77
ZZZZZZ	EF044278.D	09/24/04	17:25	8.85	5.77
F26810-2	EF044279.D	09/24/04	17:49	8.85	5.77
F26810-2MS	EF044280.D	09/24/04	18:14	8.85	5.77
F26810-2MSD	EF044281.D	09/24/04	18:38	8.85	5.77

Surrogate Compounds

S1 = 1-Chloro-4-fluorobenzene
S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F26856
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GEF3367-ICC3367	**Injection Date:**	09/28/04
Lab File ID:	EF044322.D	**Injection Time:**	13:03
Instrument ID:	GCEF	**Method:**	EPA 601/602

	S1 [a] RT	S2 [a] RT
Check Std	8.82	5.75

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
GEF3367-BS	EF044327.D	09/28/04	15:05	8.83	5.75
GEF3368-BS	EF044327.D	09/28/04	15:05	8.83	5.75
GEF3367-MB	EF044328.D	09/28/04	15:30	8.83	5.75
GEF3368-MB	EF044328.D	09/28/04	15:30	8.83	5.75
F26856-1	EF044329.D	09/28/04	15:54	8.83	5.75
ZZZZZZ	EF044330.D	09/28/04	16:21	8.83	5.75
ZZZZZZ	EF044331.D	09/28/04	16:48	8.83	5.75
ZZZZZZ	EF044332.D	09/28/04	17:15	8.83	5.75
F26810-10	EF044333.D	09/28/04	17:39	8.83	5.75
F26810-10MS	EF044334.D	09/28/04	18:04	8.83	5.75
F26810-10MSD	EF044335.D	09/28/04	18:28	8.83	5.75

Surrogate Compounds

S1 = 1-Chloro-4-fluorobenzene
S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F26856
Account: EEINCJX EE1
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GDD576-1CC576	**Injection Date:**	09/25/04
Lab File ID:	DD18699.D	**Injection Time:**	11:21
Instrument ID:	GCDD	**Method:**	EPA 504.1

	S1 [a] RT
Check Std	6.84

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT
OP11393-MB	DD18705.D	09/25/04	13:21	6.84
OP11393-BS	DD18706.D	09/25/04	13:41	6.84
OP11393-BS2	DD18707.D	09/25/04	14:01	6.84
ZZZZZZ	DD18708.D	09/25/04	14:21	6.84
ZZZZZZ	DD18709.D	09/25/04	14:41	6.84
ZZZZZZ	DD18710.D	09/25/04	15:01	6.84
F26871-3	DD18711.D	09/25/04	15:21	6.84
ZZZZZZ	DD18712.D	09/25/04	15:41	6.84

Surrogate Compounds

S1 = 4-Bromofluorobenzene

(a) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F26856
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GDD576-CC576	**Injection Date:**	09/25/04
Lab File ID:	DD18722.D	**Injection Time:**	19:01
Instrument ID:	GCDD	**Method:**	EPA 504.1

	S1 [a] RT	S1 [b] RT
Check Std	7.08	6.84

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
F26856-1	DD18723.D	09/25/04	19:21		6.84
F26856-2	DD18724.D	09/25/04	19:41		6.84
F26856-3	DD18725.D	09/25/04	20:01		6.84
F26856-5	DD18726.D	09/25/04	20:21		6.84
F26856-6	DD18727.D	09/25/04	20:41	7.08	
F26856-7	DD18728.D	09/25/04	21:01		6.84
OP11393-MS	DD18729.D	09/25/04	21:21		6.84
OP11393-MSD	DD18730.D	09/25/04	21:41		6.84

Surrogate Compounds

S1 = 4-Bromofluorobenzene

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F26856
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GDD573-CC573	**Injection Date:**	09/22/04
Lab File ID:	DD18573.D	**Injection Time:**	22:19
Instrument ID:	GCDD	**Method:**	EPA 504.1

	S1 [a] RT
Check Std	6.84

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT
OP11362-MB	DD18574.D	09/22/04	22:39	6.84
OP11362-BS	DD18575.D	09/22/04	22:59	6.84
OP11362-BS2	DD18576.D	09/22/04	23:18	6.84
ZZZZZZ	DD18577.D	09/22/04	23:38	6.84
ZZZZZZ	DD18578.D	09/22/04	23:58	6.84
ZZZZZZ	DD18579.D	09/23/04	00:18	6.84
ZZZZZZ	DD18580.D	09/23/04	00:38	6.84
ZZZZZZ	DD18581.D	09/23/04	00:58	6.84
ZZZZZZ	DD18582.D	09/23/04	01:18	6.84
ZZZZZZ	DD18583.D	09/23/04	01:38	6.84

Surrogate Compounds

S1 = 4-Bromofluorobenzene

(a) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F26856
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GDD573-CC573	**Injection Date:**	09/23/04
Lab File ID:	DD18584.D	**Injection Time:**	01:57
Instrument ID:	GCDD	**Method:**	EPA 504.1

	S1 [a] RT	S1 [b] RT
Check Std	7.08	6.84

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
F26855-7	DD18585.D	09/23/04	02:17		6.84
OP11362-MS	DD18586.D	09/23/04	02:37		6.84
OP11362-MSD	DD18587.D	09/23/04	02:57		6.84
ZZZZZZ	DD18588.D	09/23/04	03:17		6.84
ZZZZZZ	DD18589.D	09/23/04	03:37		6.84
ZZZZZZ	DD18590.D	09/23/04	03:57		6.84
ZZZZZZ	DD18591.D	09/23/04	04:17		6.84
F26856-4	DD18592.D	09/23/04	04:36		6.84
GDD573-ECC573	DD18593.D	09/23/04	04:56	7.08	6.84

Surrogate Compounds

S1 = 4-Bromofluorobenzene

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

Initial Calibration Summary

Job Number: F26856
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GDD573-ICC573
Lab FileID: DD18557.D

Response Factor Report ECD 4

Method : C:\HPCHEM\2\METHODS\504_1.M (Chemstation Integrator)
Title : EDB/DBCP by EPA 504.1 or SW846 8011
Last Update : Thu Sep 23 15:28:40 2004
Response via : Initial Calibration

Calibration Files
.125=DD18556.D .250=DD18557.D .500=DD18558.D 0.75=DD18559.D
1.0 =DD18560.D 0.1 =DD18562.D

	Compound	.125	.250	.500	0.75	1.0	0.1	Avg	%RSD
1)	1,2-Dibromoethane	6.471	5.794	5.679	5.452	5.585		5.796 E5	6.86
2) S	4-Bromofluorobenzen	5.711	5.179	4.755	4.643	4.706		4.999 E4	9.01
3)	1,2,3-Trichloroprop	1.176	1.090	1.018	0.967	0.991		1.048 E5	8.09
4)	1,2-Dibromo-3-chlor	1.287	1.226	1.222	1.231	1.291		1.252 E6	2.76

Signal #2

1)	1,2-Dibromoethane	1.377	1.244	1.231	1.195	1.240		1.257 E5	5.55
2) S	4-Bromofluorobenzen	8.574	8.199	7.961	7.987	8.306		8.205 E3	3.07
3)	1,2,3-Trichloroprop	2.313	2.077	2.092	2.089	2.135		2.141 E4	4.61
4)	1,2-Dibromo-3-chlor	1.745	1.720	1.703	1.779	1.884		1.766 E5	4.07

(#) = Out of Range

504_1.M Thu Sep 23 15:30:24 2004

5.6

Initial Calibration Verification

Job Number: F26856
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GDD573-ICV573
Lab FileID: DD18562.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\0922EDB\DD18562.D\ECD1A.CH Vial: 8
Signal #2 : C:\HPCHEM\2\DATA\0922EDB\DD18562.D\ECD2B.CH
Acq On : 22 Sep 2004 6:40 pm Operator: stephw
Sample : icv573-0.10 Inst : ECD 4
Misc : op11363,gdd573,35.0,,,2,1,,,water MultiplIr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\2\METHODS\504_1.M (Chemstation Integrator)
Title : EDB/DBCP by EPA 504.1 or SW846 8011
Last Update : Thu Sep 23 15:28:40 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	1,2-Dibromoethane	0.100	0.097	3.0	0	-0.05	5.69- 5.89
2 S	4-Bromofluorobenzene	2.000	2.052	-2.6	0	-0.03	7.01- 7.21
3	1,2,3-Trichloropropane	0.100	0.103	-3.0	0	-0.02	7.39- 7.59
4	1,2-Dibromo-3-chloropr	0.100	0.099	1.0	0	-0.02	9.42- 9.62
*****	Signal #2 *****						
1	1,2-Dibromoethane	0.100	0.094	6.0	0	-0.04	5.42- 5.62
2 S	4-Bromofluorobenzene	2.000	2.042	-2.1	0	-0.02	6.76- 6.96
3	1,2,3-Trichloropropane	0.100	0.095	5.0	0	-0.02	6.94- 7.14
4	1,2-Dibromo-3-chloropr	0.100	0.099	1.0	0	-0.02	9.06- 9.26

(#) = Out of Range SPCC's out = 0 CCC's out = 0
DD18562.D 504_1.M Thu Sep 23 15:30:39 2004

Continuing Calibration Summary

Job Number: F26856
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GDD573-CC573
Lab FileID: DD18573.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\0922EDB\DD18573.D\ECD1A.CH Vial: 3
Signal #2 : C:\HPCHEM\2\DATA\0922EDB\DD18573.D\ECD2B.CH
Acq On : 22 Sep 2004 10:19 pm Operator: stephw
Sample : cc573-0.25 Inst : ECD 4
Misc : op11363,gdd573,35.0,,,2,1,,,water MultiplR: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\2\METHODS\504_1.M (Chemstation Integrator)
Title : EDB/DBCP by EPA 504.1 or SW846 8011
Last Update : Thu Sep 23 08:16:11 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	1,2-Dibromoethane	0.250	0.236	5.6	94	-0.05	5.69- 5.89
2 S	4-Bromofluorobenzene	2.000	2.010	-0.5	97	-0.03	7.01- 7.21
3	1,2,3-Trichloropropane	0.250	0.259	-3.6	100	-0.02	7.39- 7.59
4	1,2-Dibromo-3-chloropr	0.250	0.241	3.6	98	-0.02	9.42- 9.62
*****	Signal #2 *****						
1	1,2-Dibromoethane	0.250	0.247	1.2	100	-0.04	5.42- 5.62
2 S	4-Bromofluorobenzene	2.000	2.048	-2.4	102	-0.02	6.76- 6.96
3	1,2,3-Trichloropropane	0.250	0.249	0.4	103	-0.02	6.94- 7.14
4	1,2-Dibromo-3-chloropr	0.250	0.252	-0.8	103	-0.02	9.06- 9.26

(#) = Out of Range SPCC's out = 0 CCC's out = 0
DD18557.D 504_1.M Thu Sep 23 14:28:19 2004

Continuing Calibration Summary

Job Number: F26856 **Sample:** GDD573-CC573
Account: EEINCJX EEI **Lab FileID:** DD18584.D
Project: Camp Lejeune-Campbell St. Fuel Farm

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\0922EDB\DD18584.D\ECD1A.CH Vial: 4
Signal #2 : C:\HPCHEM\2\DATA\0922EDB\DD18584.D\ECD2B.CH
Acq On : 23 Sep 2004 1:57 am Operator: stephw
Sample : cc573-0.50 Inst : ECD 4
Misc : op11363,gdd573,35.0,,,2,1,,,water MultiplR: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\2\METHODS\504_1.M (Chemstation Integrator)
Title : EDB/DBCP by EPA 504.1 or SW846 8011
Last Update : Thu Sep 23 08:16:11 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	1,2-Dibromoethane	0.500	0.486	2.8	99	-0.05	5.69- 5.89
2 S	4-Bromofluorobenzene	4.000	3.807	4.8	100	-0.03	7.01- 7.21
3	1,2,3-Trichloropropane	0.500	0.486	2.8	100	-0.02	7.39- 7.59
4	1,2-Dibromo-3-chloropr	0.500	0.486	2.8	100	-0.02	9.42- 9.62
*****	Signal #2 *****						
1	1,2-Dibromoethane	0.500	0.501	-0.2	102	-0.04	5.42- 5.62
2 S	4-Bromofluorobenzene	4.000	4.003	-0.1	103	-0.02	6.76- 6.96
3	1,2,3-Trichloropropane	0.500	0.504	-0.8	103	-0.02	6.94- 7.14
4	1,2-Dibromo-3-chloropr	0.500	0.498	0.4	103	-0.02	9.06- 9.26

(#) = Out of Range SPCC's out = 0 CCC's out = 0
DD18558.D 504_1.M Thu Sep 23 14:28:49 2004

Continuing Calibration Summary

Job Number: F26856
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GDD573-ECC573
Lab FileID: DD18593.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\0922EDB\DD18593.D\ECD1A.CH Vial: 3
Signal #2 : C:\HPCHEM\2\DATA\0922EDB\DD18593.D\ECD2B.CH
Acq On : 23 Sep 2004 4:56 am Operator: stephw
Sample : ecc573-0.25 Inst : ECD 4
Misc : op11363,gdd573,35.0,,,2,1,,,water MultiplIr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\2\METHODS\504_1.M (Chemstation Integrator)
Title : EDB/DBCP by EPA 504.1 or SW846 8011
Last Update : Thu Sep 23 08:16:11 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	1,2-Dibromoethane	0.250	0.243	2.8	97	-0.05	5.69- 5.89
2 S	4-Bromofluorobenzene	2.000	2.029	-1.4	98	-0.03	7.01- 7.21
3	1,2,3-Trichloropropane	0.250	0.259	-3.6	99	-0.02	7.39- 7.59
4	1,2-Dibromo-3-chloropr	0.250	0.240	4.0	98	-0.02	9.42- 9.62
*****	Signal #2 *****						
1	1,2-Dibromoethane	0.250	0.252	-0.8	102	-0.04	5.42- 5.62
2 S	4-Bromofluorobenzene	2.000	2.035	-1.8	102	-0.02	6.76- 6.96
3	1,2,3-Trichloropropane	0.250	0.246	1.6	101	-0.02	6.94- 7.14
4	1,2-Dibromo-3-chloropr	0.250	0.249	0.4	102	-0.02	9.06- 9.26

(#) = Out of Range SPCC's out = 0 CCC's out = 0
DD18557.D 504_1.M Thu Sep 23 14:28:20 2004

Initial Calibration Summary

Job Number: F26856
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GDD576-ICC576
Lab FileID: DD18699.D

Response Factor Report ECD 4

Method : C:\HPCHEM\2\METHODS\504_1.M (Chemstation Integrator)
Title : EDB/DBCP by EPA 504.1 or SW846 8011
Last Update : Thu Sep 30 11:25:45 2004
Response via : Initial Calibration

Calibration Files
.125=DD18698.D .250=0D18699.D .500=DD18700.D 0.75=DD18701.D
0.75 =DD18701.D 1.0 =DD18702.D

	Compound	.125	.250	.500	0.75	1.0	Avg		%RSD
1)	1,2-Dibromoethane	7.448	6.972	6.585	6.452	6.829	6.857	E5	5.65
2) S	4-Bromofluorobenzene	5.691	5.358	5.056	4.800	4.972	5.175	E4	6.80
3)	1,2,3-Trichloropropan	1.266	1.209	1.131	1.031	1.079	1.143	E5	8.33
4)	1,2-Dibromo-3-chlorop	1.253	1.264	1.237	1.255	1.344	1.271	E6	3.31

Signal #2

1)	1,2-Dibromoethane	1.487	1.422	1.401	1.351	1.392	1.411	E5	3.54
2) S	4-8romofluorobenzene	8.442	8.616	8.164	8.120	8.493	8.367	E3	2.58
3)	1,2,3-Trichloropropan	2.286	2.210	2.285	2.216	2.279	2.255	E4	1.71
4)	1,2-Dibromo-3-chlorop	1.735	1.755	1.769	1.844	2.028	1.826	E5	6.57

(#) = Out of Range

504_1.M Thu Sep 30 11:26:19 2004

Initial Calibration Verification

Job Number: F26856
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GDD576-ICV576
Lab FileID: DD18704.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\0925EDB\DD18704.D\ECD1A.CH Vial: 8
Signal #2 : C:\HPCHEM\2\DATA\0925EDB\DD18704.D\ECD2B.CH
Acq On : 25 Sep 2004 1:01 pm Operator: stephw
Sample : ICV576-0.25 Inst : ECD 4
Misc : op11393,gdd576,35,,,2,1,,,water MultiplIr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\2\METHODS\504_1.M (Chemstation Integrator)
Title : EDB/DBCP by EPA 504.1 or SW846 8011
Last Update : Tue Sep 28 16:23:30 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	1,2-Dibromoethane	0.250	0.245	2.0	100	-0.06	5.69- 5.89
2 S	4-Bromofluorobenzene	2.000	2.027	-1.4	106	-0.03	7.01- 7.21
3	1,2,3-Trichloropropane	0.250	0.258	-3.2	107	-0.03	7.39- 7.59
4	1,2-Dibromo-3-chloropr	0.250	0.241	3.6	109	-0.03	9.42- 9.62
*****	Signal #2 *****						
1	1,2-Dibromoethane	0.250	0.238	4.8	90	-0.06	5.42- 5.62
2 S	4-Bromofluorobenzene	2.000	2.001	-0.0	102	-0.02	6.76- 6.96
3	1,2,3-Trichloropropane	0.250	0.237	5.2	89	-0.02	6.94- 7.14
4	1,2-Dibromo-3-chloropr	0.250	0.232	7.2	99	-0.02	9.06- 9.26

(#) = Out of Range SPCC's out = 0 CCC's out = 0
DD18753.D 504_1.M Wed Sep 29 14:44:57 2004

Continuing Calibration Summary

Job Number: F26856 **Sample:** GDD576-CC576
Account: EEINCJX EEI **Lab FileID:** DD18713.D
Project: Camp Lejeune-Campbell St. Fuel Farm

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\0925EDB\DD18713.D\ECD1A.CH Vial: 4
Signal #2 : C:\HPCHEM\2\DATA\0925EDB\DD18713.D\ECD2B.CH
Acq On : 25 Sep 2004 4:01 pm Operator: stephw
Sample : CC576-0.50 Inst : ECD 4
Misc : op11393,gdd576,35,,,2,1,,,water MultiplR: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\2\METHODS\504_1.M (Chemstation Integrator)
Title : EDB/DBCP by EPA 504.1 or SW846 8011
Last Update : Tue Sep 28 16:23:30 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	1,2-Dibromoethane	0.500	0.473	5.4	99	-0.06	5.69- 5.89
2 S	4-Bromofluorobenzene	4.000	3.854	3.6	108	-0.03	7.01- 7.21
3	1,2,3-Trichloropropane	0.500	0.477	4.6	107	-0.03	7.39- 7.59
4	1,2-Dibromo-3-chloropr	0.500	0.496	0.8	109	-0.03	9.42- 9.62
*****	Signal #2 *****						
1	1,2-Dibromoethane	0.500	0.493	1.4	95	-0.06	5.42- 5.62
2 S	4-Bromofluorobenzene	4.000	3.984	0.4	100	-0.03	6.76- 6.96
3	1,2,3-Trichloropropane	0.500	0.503	-0.6	99	-0.02	6.94- 7.14
4	1,2-Dibromo-3-chloropr	0.500	0.498	0.4	102	-0.02	9.06- 9.26

(#) = Out of Range SPCC's out = 0 CCC's out = 0
DD18758.D 504_1.M Wed Sep 29 14:45:34 2004

Continuing Calibration Summary

Job Number: F26856
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GDD576-CC576
Lab FileID: DD18722.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\0925EDB\DD18722.D\ECD1A.CH Vial: 3
Signal #2 : C:\HPCHEM\2\DATA\0925EDB\DD18722.D\ECD2B.CH
Acq On : 25 Sep 2004 7:01 pm Operator: stephw
Sample : CC576-0.25 Inst : ECD 4
Misc : op11393,gdd576,35,,,2,1,,,water MultiplR: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\2\METHODS\504_1.M (Chemstation Integrator)
Title : EDB/DBCP by EPA 504.1 or SW846 8011
Last Update : Tue Sep 28 16:23:30 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	1,2-Dibromoethane	0.250	0.255	-2.0	105	-0.06	5.69- 5.89
2 S	4-Bromofluorobenzene	2.000	2.140	-7.0	112	-0.03	7.01- 7.21
3	1,2,3-Trichloropropane	0.250	0.266	-6.4	110	-0.03	7.39- 7.59
4	1,2-Dibromo-3-chloropr	0.250	0.250	0.0	113	-0.03	9.42- 9.62
*****	Signal #2 *****						
1	1,2-Dibromoethane	0.250	0.269	-7.6	101	-0.06	5.42- 5.62
2 S	4-Bromofluorobenzene	2.000	2.156	-7.8	110	-0.03	6.76- 6.96
3	1,2,3-Trichloropropane	0.250	0.272	-8.8	102	-0.02	6.94- 7.14
4	1,2-Dibromo-3-chloropr	0.250	0.248	0.8	106	-0.02	9.06- 9.26

(#) = Out of Range SPCC's out = 0 CCC's out = 0
DD18753.D 504_1.M Wed Sep 29 14:44:58 2004

Continuing Calibration Summary

Job Number: F26856 **Sample:** GDD576-CC576
Account: EEINCJX EEI **Lab FileID:** DD18731.D
Project: Camp Lejeune-Campbell St. Fuel Farm

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\0925EDB\DD18731.D\ECD1A.CH Vial: 4
Signal #2 : C:\HPCHEM\2\DATA\0925EDB\DD18731.D\ECD2B.CH
Acq On : 25 Sep 2004 10:01 pm Operator: stephw
Sample : CC576-0.50 Inst : ECD 4
Misc : op11393,gdd576,35,,,2,1,,,water MultiplR: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\2\METHODS\504_1.M (Chemstation Integrator)
Title : EDB/DBCP by EPA 504.1 or SW846 8011
Last Update : Tue Sep 28 16:23:30 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	1,2-Dibromoethane	0.500	0.477	4.6	100	-0.06	5.69- 5.89
2 S	4-Bromofluorobenzene	4.000	3.949	1.3	110	-0.03	7.01- 7.21
3	1,2,3-Trichloropropane	0.500	0.481	3.8	108	-0.03	7.39- 7.59
4	1,2-Dibromo-3-chloropr	0.500	0.500	0.0	110	-0.03	9.42- 9.62
*****	Signal #2 *****						
1	1,2-Dibromoethane	0.500	0.498	0.4	96	-0.06	5.42- 5.62
2 S	4-Bromofluorobenzene	4.000	4.108	-2.7	103	-0.03	6.76- 6.96
3	1,2,3-Trichloropropane	0.500	0.504	-0.8	99	-0.02	6.94- 7.14
4	1,2-Dibromo-3-chloropr	0.500	0.509	-1.8	104	-0.02	9.06- 9.26

(#) = Out of Range SPCC's out = 0 CCC's out = 0
DD18758.D 504_1.M Wed Sep 29 14:45:35 2004

5.6

Initial Calibration Summary

Job Number: F26856
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GEF3348-ICC3348
Lab FileID: EF043786.D

Response Factor Report VOA1

Method : C:\HPCHEM\1\METHODS\DUAL0913.M (Chemstation Integrator)
Title : EPA 602 & 5030B/8021B
Last Update : Tue Sep 07 12:20:43 2004
Response via : Initial Calibration

Calibration Files
1 =EF043784.D 2 =EF043785.D 3 =EF043786.D
4 =EF043787.D 5 =EF043788.D 6 =EF043789.D

		Compound	1	2	3	4	5	6	Avg		%RSD
1)		Methyl tert Butyl E	1.484	1.598	1.453	1.478	1.455	1.470	1.490	E3	3.67
2)		Di-Isopropyl ether	2.288	2.371	2.129	2.162	2.137	2.128	2.202	E3	4.65
3)		Benzene	4.948	4.589	4.162	4.262	4.246	4.215	4.404	E3	6.96
4)	S	a,a,a-TFT(S)	1.357	1.365	1.345	1.469	1.451	1.460	1.408	E3	4.11
5)		Toluene		3.897	3.531	3.618	3.589	3.574	3.642	E3	4.01
6)	S	1-Chloro-4-Fluorobe	2.018	1.949	1.953	2.111	2.105	2.119	2.043	E3	3.91
7)		Chlorobenzene		4.044	3.359	3.475	3.430	3.399	3.541	E3	8.02
8)		Ethylbenzene		3.498	2.920	2.964	2.918	2.888	3.037	E3	8.52
9)		m,p-Xylene		3.598	3.190	3.298	3.241	3.222	3.310	E3	5.01
10)		o-Xylene		3.252	2.888	2.951	2.900	2.844	2.967	E3	5.52
11)		1,3-Dichlorobenzene	2.366	2.229	2.161	2.349	2.329	2.321	2.292	E3	3.50
12)		1,4-Dichlorobenzene	2.626	2.413	2.273	2.482	2.485	2.500	2.463	E3	4.71
13)		1,2-Dichlorobenzene	1.511	1.316	1.266	1.428	1.388	1.354	1.377	E3	6.27
Signal #2											
1)		Methyl tert Butyl E	1.371	1.406	1.289	1.332	1.322	1.334	1.342	E3	3.06
2)		Di-Isopropyl ether	1.945	1.961	1.830	1.893	1.883	1.850	1.894	E3	2.70
3)		Benzene	4.341	3.940	3.726	3.886	3.916	3.816	3.937	E3	5.40
4)	S	a,a,a-TFT(S)	1.149	1.160	1.125	1.276	1.280	1.256	1.208	E3	5.85
5)		Toluene		3.314	3.043	3.273	3.268	3.186	3.217	E3	3.34
6)	S	1-Chloro-4-Fluorobe	1.594	1.592	1.620	1.776	1.793	1.793	1.695	E3	6.04
7)		Chlorobenzene		3.866	3.083	3.233	3.184	3.119	3.297	E3	9.80
8)		Ethylbenzene		3.107	2.686	2.777	2.761	2.739	2.814	E3	5.94
9)		m,p-Xylene		3.207	2.845	2.999	3.049	2.943	3.009	E3	4.46
10)		o-Xylene		2.761	2.494	2.639	2.578	2.532	2.601	E3	4.02
11)		1,3-Dichlorobenzene	1.899	1.883	1.870	2.095	2.050	2.051	1.975	E3	5.13
12)		1,4-Dichlorobenzene	1.970	1.902	1.886	2.065	2.077	2.138	2.006	E3	5.11
13)		1,2-Dichlorobenzene	1.047	1.108	1.153	1.313	1.296	1.275	1.199	E3	9.28

(#) = Out of Range

DUAL0913.M Tue Sep 14 09:05:23 2004 EF

Continuing Calibration Summary

Job Number: F26856 **Sample:** GEF3363-CC3348
Account: EEINCJX EEI **Lab FileID:** EF044203.D
Project: Camp Lejeune-Campbell St. Fuel Farm

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\092304\EF044203.D\FID1A.CH Vial: 1
Signal #2 : C:\HPCHEM\1\DATA\092304\EF044203.D\FID2B.CH
Acq On : 23 Sep 2004 9:50 am Operator: ClaireV
Sample : cc3348-40 Inst : VOA1
Misc : gc3980,gef3363,,,,,1 MultiplR: 1.00
IntFile Signal #1: AUTOINT1.E IntFile Signal #2: autoint2.e

Method : C:\HPCHEM\1\METHODS\DUAL0913.M (Chemstation Integrator)
Title : EPA 602 & 5030B/8021B
Last Update : Thu Sep 16 09:53:58 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	Methyl tert Butyl Ether	40.000	37.405	6.5	94	0.00
2	Di-Isopropyl ether	40.000	40.971	-2.4	104	0.01
3	Benzene	40.000	40.419	-1.0	104	0.01
4 S	a,a,a-TFT(S)	20.000	21.837	-9.2	105	0.01
5	Toluene	40.000	41.536	-3.8	105	0.01
6 S	1-Chloro-4-Fluorobenzene	20.000	22.036	-10.2	107	0.01
7	Chlorobenzene	40.000	40.493	-1.2	103	0.01
8	Ethylbenzene	40.000	40.735	-1.8	104	0.01
9	m,p-Xylene	80.000	84.161	-5.2	106	0.01
10	o-Xylene	40.000	41.428	-3.6	104	0.01
11	1,3-Dichlorobenzene	40.000	41.868	-4.7	102	0.01
12	1,4-Dichlorobenzene	40.000	41.284	-3.2	102	0.01
13	1,2-Dichlorobenzene	40.000	38.894	2.8	94	0.01

Signal #2

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	Methyl tert Butyl Ether	40.000	36.993	7.5	93	0.00
2	Di-Isopropyl ether	40.000	40.512	-1.3	101	0.01
3	Benzene	40.000	39.202	2.0	99	0.00
4 S	a,a,a-TFT(S)	20.000	21.270	-6.3	101	0.01
5	Toluene	40.000	40.321	-0.8	99	0.01
6 S	1-Chloro-4-Fluorobenzene	20.000	21.887	-9.4	104	0.01
7	Chlorobenzene	40.000	38.639	3.4	99	0.01
8	Ethylbenzene	40.000	40.014	-0.0	101	0.02
9	m,p-Xylene	80.000	83.071	-3.8	104	0.01
10	o-Xylene	40.000	40.441	-1.1	100	0.02
11	1,3-Dichlorobenzene	40.000	41.047	-2.6	97	0.02
12	1,4-Dichlorobenzene	40.000	40.163	-0.4	98	0.02
13	1,2-Dichlorobenzene	40.000	39.654	0.9	91	0.02

Average % D = 3.7

(#) = Out of Range SPCC's out = 0 CCC's out = 0
EF043787.D DUAL0913.M Fri Sep 24 09:33:39 2004 EF

Continuing Calibration Summary

Job Number: F26856
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GEF3363-CC3348
Lab FileID: EF044214.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\092304\EF044214.D\FID1A.CH Vial: 12
Signal #2 : C:\HPCHEM\1\DATA\092304\EF044214.D\FID2B.CH
Acq On : 23 Sep 2004 2:30 pm Operator: ClaireV
Sample : cc3348-20 Inst : VOA1
Misc : gc3980,gef3363,,,,,1 MultiplIr: 1.00
IntFile Signal #1: AUTOINT1.E IntFile Signal #2: autoint2.e

Method : C:\HPCHEM\1\METHODS\DUAL0913.M (Chemstation Integrator)
Title : EPA 602 & 5030B/8021B
Last Update : Thu Sep 16 09:53:58 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	Methyl tert Butyl Ether	20.000	20.748	-3.7	106	0.00
2	Di-Isopropyl ether	20.000	21.821	-9.1	113	0.00
3	Benzene	20.000	21.269	-6.3	113	0.00
4 S	a,a,a-TFT(S)	20.000	21.682	-8.4	113	0.00
5	Toluene	20.000	21.591	-8.0	111	0.00
6 S	1-Chloro-4-Fluorobenzene	20.000	21.423	-7.1	112	0.00
7	Chlorobenzene	20.000	21.172	-5.9	112	0.01
8	Ethylbenzene	20.000	21.338	-6.7	111	0.01
9	m,p-Xylene	40.000	42.949	-7.4	111	0.00
10	o-Xylene	20.000	21.509	-7.5	110	0.01
11	1,3-Dichlorobenzene	20.000	20.983	-4.9	111	0.01
12	1,4-Dichlorobenzene	20.000	20.561	-2.8	111	0.01
13	1,2-Dichlorobenzene	20.000	20.307	-1.5	110	0.01

Signal #2

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	Methyl tert Butyl Ether	20.000	20.050	-0.3	104	0.00
2	Di-Isopropyl ether	20.000	21.412	-7.1	111	0.01
3	Benzene	20.000	20.788	-3.9	110	0.01
4 S	a,a,a-TFT(S)	20.000	21.320	-6.6	114	0.01
5	Toluene	20.000	21.067	-5.3	111	0.01
6 S	1-Chloro-4-Fluorobenzene	20.000	20.951	-4.8	110	0.01
7	Chlorobenzene	20.000	20.229	-1.1	108	0.01
8	Ethylbenzene	20.000	20.794	-4.0	109	0.02
9	m,p-Xylene	40.000	42.131	-5.3	111	0.00
10	o-Xylene	20.000	20.990	-4.9	109	0.02
11	1,3-Dichlorobenzene	20.000	20.865	-4.3	110	0.02
12	1,4-Dichlorobenzene	20.000	20.281	-1.4	108	0.02
13	1,2-Dichlorobenzene	20.000	20.845	-4.2	108	0.02

Average % D = 5.1

(#) = Out of Range SPCC's out = 0 CCC's out = 0
EF043786.D DUAL0913.M Fri Sep 24 09:34:08 2004 EF

Continuing Calibration Summary

Job Number: F26856
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GEF3363-CC3348
Lab FileID: EF044225.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\092304\EF044225.D\FID1A.CH Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\092304\EF044225.D\FID2B.CH
Acq On : 23 Sep 2004 7:13 pm Operator: ClaireV
Sample : cc3348-20 Inst : VOA1
Misc : gc3983,gef3363,,,,,1 MultiplR: 1.00
IntFile Signal #1: AUTOINT1.E IntFile Signal #2: autoint2.e

Method : C:\HPCHEM\1\METHODS\DUAL0913.M (Chemstation Integrator)
Title : EPA 602 & 5030B/8021B
Last Update : Thu Sep 16 09:53:58 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	20.000	18.984	5.1	97	0.00
2		Di-Isopropyl ether	20.000	19.381	3.1	100	0.00
3		Benzene	20.000	19.022	4.9	101	0.00
4	S	a,a,a-TFT(S)	20.000	20.568	-2.8	108	0.00
5		Toluene	20.000	18.986	5.1	98	0.01
6	S	1-Chloro-4-Fluorobenzene	20.000	20.262	-1.3	106	0.01
7		Chlorobenzene	20.000	18.593	7.0	98	0.01
8		Ethylbenzene	20.000	19.101	4.5	99	0.01
9		m,p-Xylene	40.000	38.762	3.1	101	0.01
10		o-Xylene	20.000	19.201	4.0	99	0.01
11		1,3-Dichlorobenzene	20.000	18.944	5.3	100	0.02
12		1,4-Dichlorobenzene	20.000	18.537	7.3	100	0.02
13		1,2-Dichlorobenzene	20.000	17.886	10.6	97	0.01

Signal #2

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	20.000	18.226	8.9	95	0.00
2		Di-Isopropyl ether	20.000	18.879	5.6	98	0.01
3		Benzene	20.000	18.489	7.6	98	0.01
4	S	a,a,a-TFT(S)	20.000	19.896	0.5	107	0.01
5		Toluene	20.000	18.085	9.6	96	0.01
6	S	1-Chloro-4-Fluorobenzene	20.000	19.794	1.0	104	0.01
7		Chlorobenzene	20.000	17.831	10.8	95	0.01
8		Ethylbenzene	20.000	18.620	6.9	98	0.02
9		m,p-Xylene	40.000	37.526	6.2	99	0.01
10		o-Xylene	20.000	18.398	8.0	96	0.02
11		1,3-Dichlorobenzene	20.000	18.413	7.9	97	0.02
12		1,4-Dichlorobenzene	20.000	17.965	10.2	96	0.02
13		1,2-Dichlorobenzene	20.000	17.257	13.7	90	0.02

Average % D = 6.2

(#) = Out of Range SPCC's out = 0 CCC's out = 0
EF043786.D DUAL0913.M Fri Sep 24 09:34:09 2004 EF

Continuing Calibration Summary

Job Number: F26856
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GEF3364-CC3348
Lab FileID: EF044236.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\092304\EF044236.D\FID1A.CH Vial: 32
Signal #2 : C:\HPCHEM\1\DATA\092304\EF044236.D\FID2B.CH
Acq On : 23 Sep 2004 11:42 pm Operator: ClaireV
Sample : cc3348-20 Inst : VOA1
Misc : gc3984,gef3364,,,,,1 MultiplIr: 1.00
IntFile Signal #1: AUTOINT1.E IntFile Signal #2: autoint2.e

Method : C:\HPCHEM\1\METHODS\DUAL0913.M (Chemstation Integrator)
Title : EPA 602 & 5030B/8021B
Last Update : Thu Sep 16 09:53:58 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	Methyl tert Butyl Ether	20.000	20.951	-4.8	107	0.00
2	Di-Isopropyl ether	20.000	21.691	-8.5	112	0.00
3	Benzene	20.000	21.064	-5.3	111	0.00
4 S	a,a,a-TFT(S)	20.000	20.940	-4.7	110	0.00
5	Toluene	20.000	21.367	-6.8	110	0.00
6 S	1-Chloro-4-Fluorobenzene	20.000	21.011	-5.1	110	0.01
7	Chlorobenzene	20.000	20.985	-4.9	111	0.01
8	Ethylbenzene	20.000	21.108	-5.5	110	0.01
9	m,p-Xylene	40.000	42.656	-6.6	111	0.01
10	o-Xylene	20.000	21.287	-6.4	109	0.01
11	1,3-Dichlorobenzene	20.000	21.143	-5.7	112	0.02
12	1,4-Dichlorobenzene	20.000	20.679	-3.4	112	0.02
13	1,2-Dichlorobenzene	20.000	19.484	2.6	106	0.02

Signal #2

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	Methyl tert Butyl Ether	20.000	20.113	-0.6	105	0.00
2	Di-Isopropyl ether	20.000	20.905	-4.5	108	0.01
3	Benzene	20.000	20.455	-2.3	108	0.01
4 S	a,a,a-TFT(S)	20.000	20.242	-1.2	109	0.01
5	Toluene	20.000	20.476	-2.4	108	0.01
6 S	1-Chloro-4-Fluorobenzene	20.000	20.852	-4.3	109	0.01
7	Chlorobenzene	20.000	20.253	-1.3	108	0.01
8	Ethylbenzene	20.000	20.547	-2.7	108	0.02
9	m,p-Xylene	40.000	41.009	-2.5	108	0.01
10	o-Xylene	20.000	20.377	-1.9	106	0.02
11	1,3-Dichlorobenzene	20.000	21.129	-5.6	112	0.02
12	1,4-Dichlorobenzene	20.000	20.311	-1.6	108	0.02
13	1,2-Dichlorobenzene	20.000	19.700	1.5	102	0.02

Average % D = 3.9

(#) = Out of Range SPCC's out = 0 CCC's out = 0
EF043786.D DUAL0913.M Fri Sep 24 09:34:10 2004 EF

Continuing Calibration Summary

Job Number: F26856 **Sample:** GEF3364-CC3348
Account: EEINCJX EEI **Lab FileID:** EF044247.D
Project: Camp Lejeune-Campbell St. Fuel Farm

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\092304\EF044247.D\FID1A.CH Vial: 43
Signal #2 : C:\HPCHEM\1\DATA\092304\EF044247.D\FID2B.CH
Acq On : 24 Sep 2004 4:12 am Operator: ClaireV
Sample : cc3348-20 Inst : VOA1
Misc : gc3983,gef3364,,,,,1 MultiplR: 1.00
IntFile Signal #1: AUTOINT1.E IntFile Signal #2: autoint2.e

Method : C:\HPCHEM\1\METHODS\DUAL0913.M (Chemstation Integrator)
Title : EPA 602 & 5030B/8021B
Last Update : Thu Sep 16 09:53:58 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	20.000	19.125	4.4	98	0.00
2		Di-Isopropyl ether	20.000	19.922	0.4	103	0.00
3		Benzene	20.000	19.096	4.5	101	0.00
4	S	a,a,a-TFT(S)	20.000	20.712	-3.6	108	0.00
5		Toluene	20.000	19.325	3.4	100	0.01
6	S	1-Chloro-4-Fluorobenzene	20.000	20.513	-2.6	107	0.01
7		Chlorobenzene	20.000	19.156	4.2	101	0.01
8		Ethylbenzene	20.000	19.310	3.5	100	0.01
9		m,p-Xylene	40.000	39.162	2.1	102	0.01
10		o-Xylene	20.000	19.552	2.2	100	0.01
11		1,3-Dichlorobenzene	20.000	19.262	3.7	102	0.02
12		1,4-Dichlorobenzene	20.000	18.906	5.5	102	0.02
13		1,2-Dichlorobenzene	20.000	18.436	7.8	100	0.01

Signal #2

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	20.000	18.083	9.6	94	0.00
2		Di-Isopropyl ether	20.000	18.867	5.7	98	0.01
3		Benzene	20.000	18.180	9.1	96	0.01
4	S	a,a,a-TFT(S)	20.000	19.618	1.9	105	0.01
5		Toluene	20.000	18.389	8.1	97	0.01
6	S	1-Chloro-4-Fluorobenzene	20.000	19.821	0.9	104	0.01
7		Chlorobenzene	20.000	18.238	8.8	98	0.01
8		Ethylbenzene	20.000	18.449	7.8	97	0.01
9		m,p-Xylene	40.000	37.316	6.7	99	0.00
10		o-Xylene	20.000	18.735	6.3	98	0.02
11		1,3-Dichlorobenzene	20.000	18.663	6.7	99	0.02
12		1,4-Dichlorobenzene	20.000	18.516	7.4	98	0.02
13		1,2-Dichlorobenzene	20.000	17.920	10.4	93	0.02

Average % D = 5.3

(#) = Out of Range SPCC's out = 0 CCC's out = 0
EF043786.D DUAL0913.M Fri Sep 24 09:34:11 2004 EF

Continuing Calibration Summary

Job Number: F26856
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GEF3364-ECC3348
Lab FileID: EF044259.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\092304\EF044259.D\FID1A.CH Vial: 4
Signal #2 : C:\HPCHEM\1\DATA\092304\EF044259.D\FID2B.CH
Acq On : 24 Sep 2004 9:05 am Operator: ClaireV
Sample : ecc3348-20 Inst : VOA1
Misc : gc3983,gef3364,,,,,1 MultiplIr: 1.00
IntFile Signal #1: AUTOINT1.E IntFile Signal #2: autoint2.e

Method : C:\HPCHEM\1\METHODS\DUAL0913.M (Chemstation Integrator)
Title : EPA 602 & 5030B/8021B
Last Update : Thu Sep 16 09:53:58 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	20.000	20.521	-2.6	105	0.00
2		Di-Isopropyl ether	20.000	20.828	-4.1	108	0.00
3		Benzene	20.000	20.075	-0.4	106	0.00
4	S	a,a,a-TFT(S)	20.000	21.039	-5.2	110	0.00
5		Toluene	20.000	20.415	-2.1	105	0.00
6	S	1-Chloro-4-Fluorobenzene	20.000	21.025	-5.1	110	0.02
7		Chlorobenzene	20.000	20.022	-0.1	106	0.02
8		Ethylbenzene	20.000	20.301	-1.5	106	0.02
9		m,p-Xylene	40.000	41.101	-2.8	107	0.02
10		o-Xylene	20.000	20.499	-2.5	105	0.02
11		1,3-Dichlorobenzene	20.000	19.906	0.5	106	0.02
12		1,4-Dichlorobenzene	20.000	19.442	2.8	105	0.02
13		1,2-Dichlorobenzene	20.000	17.558	12.2	95	0.02

Signal #2

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	20.000	19.774	1.1	103	0.00
2		Di-Isopropyl ether	20.000	20.221	-1.1	105	0.01
3		Benzene	20.000	19.410	2.9	103	0.00
4	S	a,a,a-TFT(S)	20.000	20.274	-1.4	109	0.01
5		Toluene	20.000	19.737	1.3	104	0.01
6	S	1-Chloro-4-Fluorobenzene	20.000	20.966	-4.8	110	0.02
7		Chlorobenzene	20.000	19.674	1.6	105	0.02
8		Ethylbenzene	20.000	19.886	0.6	104	0.02
9		m,p-Xylene	40.000	40.271	-0.7	106	0.02
10		o-Xylene	20.000	19.745	1.3	103	0.02
11		1,3-Dichlorobenzene	20.000	19.709	1.5	104	0.02
12		1,4-Dichlorobenzene	20.000	19.253	3.7	102	0.02
13		1,2-Dichlorobenzene	20.000	17.445	12.8	91	0.02

Average % D = 2.9

(#) = Out of Range SPCC's out = 0 CCC's out = 0
EF043786.D DUAL0913.M Fri Sep 24 09:34:13 2004 EF

Continuing Calibration Summary

Job Number: F26856 **Sample:** GEF3365-CC3348
Account: EEINCJX EEI **Lab FileID:** EF044260.D
Project: Camp Lejeune-Campbell St. Fuel Farm

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\092404\EF044260.D\FID1A.CH Vial: 1
Signal #2 : C:\HPCHEM\1\DATA\092404\EF044260.D\FID2B.CH
Acq On : 24 Sep 2004 9:46 am Operator: ClaireV
Sample : cc3348-40 Inst : VOA1
Misc : gc3980,gef3365,,,,,1 MultiplR: 1.00
IntFile Signal #1: AUTOINT1.E IntFile Signal #2: autoint2.e

Method : C:\HPCHEM\1\METHODS\DUAL0913.M (Chemstation Integrator)
Title : EPA 602 & 5030B/8021B
Last Update : Thu Sep 16 09:53:59 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	40.000	38.464	3.8	97	0.00
2		Di-Isopropyl ether	40.000	41.640	-4.1	106	0.01
3		Benzene	40.000	41.213	-3.0	106	0.01
4	S	a,a,a-TFT(S)	20.000	21.792	-9.0	104	0.01
5		Toluene	40.000	42.453	-6.1	107	0.01
6	S	1-Chloro-4-Fluorobenzene	20.000	22.209	-11.0	107	0.01
7		Chlorobenzene	40.000	41.383	-3.5	105	0.01
8		Ethylbenzene	40.000	42.126	-5.3	108	0.01
9		m,p-Xylene	80.000	86.746	-8.4	109	0.01
10		o-Xylene	40.000	42.990	-7.5	108	0.01
11		1,3-Dichlorobenzene	40.000	43.740	-9.4	107	0.02
12		1,4-Dichlorobenzene	40.000	42.676	-6.7	106	0.01
13		1,2-Dichlorobenzene	40.000	40.399	-1.0	97	0.01

Signal #2

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	40.000	37.894	5.3	95	0.00
2		Di-Isopropyl ether	40.000	40.724	-1.8	102	0.01
3		Benzene	40.000	40.690	-1.7	103	0.00
4	S	a,a,a-TFT(S)	20.000	21.161	-5.8	100	0.01
5		Toluene	40.000	41.580	-3.9	102	0.01
6	S	1-Chloro-4-Fluorobenzene	20.000	21.943	-9.7	105	0.01
7		Chlorobenzene	40.000	39.851	0.4	102	0.01
8		Ethylbenzene	40.000	42.049	-5.1	107	0.01
9		m,p-Xylene	80.000	83.423	-4.3	105	0.00
10		o-Xylene	40.000	41.753	-4.4	103	0.01
11		1,3-Dichlorobenzene	40.000	43.032	-7.6	101	0.02
12		1,4-Dichlorobenzene	40.000	42.921	-7.3	104	0.01
13		1,2-Dichlorobenzene	40.000	41.271	-3.2	94	0.01

Average % D = 5.4

(#) = Out of Range SPCC's out = 0 CCC's out = 0
EF043787.D DUAL0913.M Tue Sep 28 09:20:58 2004 EF

Continuing Calibration Summary

Job Number: F26856
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GEF3365-CC3348
Lab FileID: EF044271.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\092404\EF044271.D\FID1A.CH Vial: 12
Signal #2 : C:\HPCHEM\1\DATA\092404\EF044271.D\FID2B.CH
Acq On : 24 Sep 2004 2:17 pm Operator: ClaireV
Sample : cc3348-20 Inst : VOA1
Misc : gc3983,gef3365,,,,,1 MultiplIr: 1.00
IntFile Signal #1: AUTOINT1.E IntFile Signal #2: autoint2.e

Method : C:\HPCHEM\1\METHODS\DUAL0913.M (Chemstation Integrator)
Title : EPA 602 & 5030B/8021B
Last Update : Thu Sep 16 09:53:59 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	Methyl tert Butyl Ether	20.000	19.987	0.1	102	0.00
2	Di-Isopropyl ether	20.000	21.189	-5.9	110	0.00
3	Benzene	20.000	20.721	-3.6	110	0.00
4 S	a,a,a-TFT(S)	20.000	21.352	-6.8	112	0.00
5	Toluene	20.000	21.111	-5.6	109	0.00
6 S	1-Chloro-4-Fluorobenzene	20.000	21.607	-8.0	113	0.00
7	Chlorobenzene	20.000	20.606	-3.0	109	0.00
8	Ethylbenzene	20.000	21.011	-5.1	109	0.00
9	m,p-Xylene	40.000	42.530	-6.3	110	0.00
10	o-Xylene	20.000	21.217	-6.1	109	0.00
11	1,3-Dichlorobenzene	20.000	21.208	-6.0	113	0.00
12	1,4-Dichlorobenzene	20.000	20.798	-4.0	113	0.00
13	1,2-Dichlorobenzene	20.000	20.971	-4.9	114	0.00

Signal #2

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	Methyl tert Butyl Ether	20.000	18.819	5.9	98	0.00
2	Di-Isopropyl ether	20.000	20.311	-1.6	105	0.00
3	Benzene	20.000	20.024	-0.1	106	0.00
4 S	a,a,a-TFT(S)	20.000	20.374	-1.9	109	0.00
5	Toluene	20.000	20.404	-2.0	108	0.00
6 S	1-Chloro-4-Fluorobenzene	20.000	20.740	-3.7	108	0.00
7	Chlorobenzene	20.000	19.803	1.0	106	0.00
8	Ethylbenzene	20.000	20.111	-0.6	105	0.00
9	m,p-Xylene	40.000	40.376	-0.9	107	0.00
10	o-Xylene	20.000	19.892	0.5	104	0.01
11	1,3-Dichlorobenzene	20.000	20.492	-2.5	108	0.01
12	1,4-Dichlorobenzene	20.000	19.899	0.5	106	0.01
13	1,2-Dichlorobenzene	20.000	19.873	0.6	103	0.01

Average % D = 3.4

(#) = Out of Range SPCC's out = 0 CCC's out = 0
EF043786.D DUAL0913.M Tue Sep 28 09:21:27 2004 EF

Continuing Calibration Summary

Job Number: F26856
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GEF3365-CC3348
Lab FileID: EF044282.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\092404\EF044282.D\FID1A.CH Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\092404\EF044282.D\FID2B.CH
Acq On : 24 Sep 2004 7:03 pm Operator: ClaireV
Sample : cc3348-20 Inst : VOA1
Misc : gc3983,gef3365,,,,,1 Multiplr: 1.00
IntFile Signal #1: AUTOINT1.E IntFile Signal #2: autoint2.e

Method : C:\HPCHEM\1\METHODS\DUAL0913.M (Chemstation Integrator)
Title : EPA 602 & 5030B/8021B
Last Update : Thu Sep 16 09:53:59 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	Methyl tert Butyl Ether	20.000	19.577	2.1	100	0.00
2	Di-Isopropyl ether	20.000	20.585	-2.9	106	0.00
3	Benzene	20.000	19.866	0.7	105	0.00
4 S	a,a,a-TFT(S)	20.000	21.481	-7.4	112	0.00
5	Toluene	20.000	20.131	-0.7	104	0.00
6 S	1-Chloro-4-Fluorobenzene	20.000	20.811	-4.1	109	0.00
7	Chlorobenzene	20.000	19.516	2.4	103	0.01
8	Ethylbenzene	20.000	19.785	1.1	103	0.01
9	m,p-Xylene	40.000	39.761	0.6	103	0.00
10	o-Xylene	20.000	19.850	0.7	102	0.01
11	1,3-Dichlorobenzene	20.000	18.589	7.1	99	0.01
12	1,4-Dichlorobenzene	20.000	18.175	9.1	98	0.01
13	1,2-Dichlorobenzene	20.000	16.665	16.7#	91	0.01

Signal #2

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	Methyl tert Butyl Ether	20.000	18.955	5.2	99	0.00
2	Di-Isopropyl ether	20.000	19.597	2.0	101	0.01
3	Benzene	20.000	19.218	3.9	102	0.00
4 S	a,a,a-TFT(S)	20.000	20.400	-2.0	110	0.01
5	Toluene	20.000	19.082	4.6	101	0.01
6 S	1-Chloro-4-Fluorobenzene	20.000	20.172	-0.9	105	0.01
7	Chlorobenzene	20.000	18.659	6.7	100	0.01
8	Ethylbenzene	20.000	19.087	4.6	100	0.01
9	m,p-Xylene	40.000	37.740	5.6	100	0.00
10	o-Xylene	20.000	18.653	6.7	97	0.01
11	1,3-Dichlorobenzene	20.000	18.252	8.7	96	0.02
12	1,4-Dichlorobenzene	20.000	17.434	12.8	93	0.02
13	1,2-Dichlorobenzene	20.000	16.307	18.5#	85	0.02

Average % D = 5.3

(#) = Out of Range SPCC's out = 0 CCC's out = 0
EF043786.D DUAL0913.M Tue Sep 28 09:21:28 2004 EF

5.6

Initial Calibration Summary

Job Number: F26856
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GEF3367-ICC3367
Lab FileID: EF044322.D

Response Factor Report VOA1

Method : C:\HPCHEM\1\METHODS\DUAL0928.M (Chemstation Integrator)
Title : EPA 602 & 5030B/8021B
Last Update : Thu Sep 16 09:53:59 2004
Response via : Initial Calibration

Calibration Files
1 =EF044320.D 2 =EF044321.D 3 =EF044322.D
4 =EF044323.D 5 =EF044324.D 6 =EF044325.D

		Compound	1	2	3	4	5	6	Avg		%RSD
1)		Methyl tert Butyl E	1.191	1.499	1.447	1.445	1.421	1.414	1.403	E3	7.70
2)		Di-Isopropyl ether	1.942	2.352	2.255	2.248	2.211	2.191	2.200	E3	6.27
3)		Benzene	4.007	4.567	4.336	4.364	4.253	4.236	4.294	E3	4.28
4)	S	a,a,a-TFT(S)	1.504	1.497	1.505	1.510	1.516	1.552	1.514	E3	1.30
5)		Toluene	3.393	3.782	3.606	3.642	3.616	3.566	3.601	E3	3.49
6)	S	1-Chloro-4-Fluorobe	2.160	2.097	2.143	2.172	2.222	2.275	2.178	E3	2.86
7)		Chlorobenzene		3.990	3.442	3.395	3.416	3.411	3.531	E3	7.28
8)		Ethylbenzene		3.333	2.951	2.944	2.904	2.905	3.007	E3	6.10
9)		m,p-Xylene	3.292	3.482	3.222	3.267	3.267	3.251	3.297	E3	2.85
10)		o-Xylene	2.910	3.052	2.900	2.910	2.890	2.871	2.922	E3	2.23
11)		1,3-Dichlorobenzene		2.035	2.063	2.209	2.293	2.337	2.187	E3	6.17
12)		1,4-Dichlorobenzene		2.159	2.161	2.334	2.452	2.505	2.322	E3	6.92
13)		1,2-Dichlorobenzene		1.133	1.132	1.191	1.212	1.256	1.185	E3	4.51
Signal #2											
1)		Methyl tert Butyl E	1.177	1.513	1.469	1.493	1.451	1.438	1.424	E3	8.71
2)		Di-Isopropyl ether	1.823	2.251	2.193	2.211	2.162	2.132	2.129	E3	7.29
3)		Benzene	3.889	4.546	4.362	4.398	4.294	4.270	4.293	E3	5.14
4)	S	a,a,a-TFT(S)	1.438	1.442	1.465	1.487	1.485	1.512	1.472	E3	1.94
5)		Toluene	3.204	3.681	3.600	3.643	3.574	3.562	3.544	E3	4.87
6)	S	1-Chloro-4-Fluorobe	1.945	1.944	2.042	2.101	2.126	2.168	2.054	E3	4.59
7)		Chlorobenzene	8.963	4.447	3.612	3.537	3.493	3.501	4.592	E3	47.31
		----- Linear regression ----- Coefficient = 0.9999									
		Response Ratio = 4435.12383 + 3444.40353 *A									
8)		Ethylbenzene	3.501	3.379	3.112	3.140	3.084	3.056	3.212	E3	5.70
9)		m,p-Xylene	3.377	3.547	3.319	3.387	3.376	3.365	3.395	E3	2.30
10)		o-Xylene	2.725	2.966	2.828	2.874	2.836	2.817	2.841	E3	2.77
11)		1,3-Dichlorobenzene		2.013	2.064	2.211	2.280	2.300	2.174	E3	5.93
12)		1,4-Dichlorobenzene		1.983	2.043	2.185	2.279	2.305	2.159	E3	6.57
13)		1,2-Dichlorobenzene		1.107	1.124	1.219	1.264	1.299	1.203	E3	7.06

(#) = Out of Range

DUAL0928.M Wed Sep 29 09:16:25 2004 EF

Continuing Calibration Summary

Job Number: F26856
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GEF3367-CC3367
Lab FileID: EF044336.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\092804\EF044336.D\FID1A.CH Vial: 18
Signal #2 : C:\HPCHEM\1\DATA\092804\EF044336.D\FID2B.CH
Acq On : 28 Sep 2004 6:53 pm Operator: ClaireV
Sample : cc3367-20 Inst : VOA1
Misc : gc3983,gef3367,,,,,1 MultiplR: 1.00
IntFile Signal #1: AUTOINT1.E IntFile Signal #2: autoint2.e

Method : C:\HPCHEM\1\METHODS\DUAL0928.M (Chemstation Integrator)
Title : EPA 602 & 5030B/8021B
Last Update : Thu Sep 16 09:53:59 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	Methyl tert Butyl Ether	20.000	20.083	-0.4	97	0.00
2	Di-Isopropyl ether	20.000	20.497	-2.5	100	0.00
3	Benzene	20.000	20.217	-1.1	100	0.00
4 S	a,a,a-TFT(S)	20.000	19.764	1.2	99	0.00
5	Toluene	20.000	19.960	0.2	100	0.00
6 S	1-Chloro-4-Fluorobenzene	20.000	19.496	2.5	99	0.00
7	Chlorobenzene	20.000	19.133	4.3	98	0.00
8	Ethylbenzene	20.000	19.521	2.4	99	0.00
9	m,p-Xylene	40.000	38.810	3.0	99	0.00
10	o-Xylene	20.000	19.553	2.2	99	0.00
11	1,3-Dichlorobenzene	20.000	19.060	4.7	101	0.00
12	1,4-Dichlorobenzene	20.000	18.385	8.1	99	0.00
13	1,2-Dichlorobenzene	20.000	18.843	5.8	99	0.00

Signal #2

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	Methyl tert Butyl Ether	20.000	19.971	0.1	97	0.00
2	Di-Isopropyl ether	20.000	20.602	-3.0	100	0.00
3	Benzene	20.000	20.399	-2.0	100	0.00
4 S	a,a,a-TFT(S)	20.000	19.847	0.8	100	0.00
5	Toluene	20.000	20.135	-0.7	99	0.00
6 S	1-Chloro-4-Fluorobenzene	20.000	19.674	1.6	99	0.00
7	Chlorobenzene	20.000	19.408	3.0	99	0.00
8	Ethylbenzene	20.000	19.247	3.8	99	0.00
9	m,p-Xylene	40.000	38.940	2.7	100	0.00
10	o-Xylene	20.000	19.860	0.7	100	0.00
11	1,3-Dichlorobenzene	20.000	18.984	5.1	100	0.00
12	1,4-Dichlorobenzene	20.000	18.681	6.6	99	0.00
13	1,2-Dichlorobenzene	20.000	18.332	8.3	98	0.00

Average % D = 2.9

(#) = Out of Range SPCC's out = 0 CCC's out = 0
EF044322.D DUAL0928.M Wed Sep 29 09:15:50 2004 EF

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summarics
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: F26856
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP11405-MB	IJ20898.D	1	09/28/04	SD	09/27/04	OP11405	GIJ1025

The QC reported here applies to the following samples: **Method:** EPA 610

F26856-4

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.0	2.0	ug/l	
208-96-8	Aeenaphthylene	ND	5.0	2.0	ug/l	
120-12-7	Anthraeene	ND	5.0	2.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.0	2.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.0	2.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.0	2.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.0	2.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.0	2.0	ug/l	
218-01-9	Chrysene	ND	5.0	2.0	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.0	2.0	ug/l	
206-44-0	Fluoranthene	ND	5.0	2.0	ug/l	
86-73-7	Fluorene	ND	5.0	2.0	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.0	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.0	ug/l	
90-12-0	1-Methylnaphthalene	ND	5.0	2.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.0	2.0	ug/l	
85-01-8	Phenanthrene	ND	5.0	2.0	ug/l	
129-00-0	Pyrene	ND	5.0	2.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
321-60-8	2-Fluorobiphenyl	43%	42-123%
84-15-1	o-Terphenyl	72%	51-123%

Method Blank Summary

Job Number: F26856
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP11405-MB	IJ20949.D	1	09/30/04	SD	09/27/04	OP11405	GIJ1027

The QC reported here applies to the following samples: **Method:** EPA 610

F26856-4

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Aeenaphthene	ND	5.0	2.0	ug/l	
208-96-8	Aeenaphthylene	ND	5.0	2.0	ug/l	
120-12-7	Anthracene	ND	5.0	2.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.0	2.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.0	2.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.0	2.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.0	2.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.0	2.0	ug/l	
218-01-9	Chrysene	ND	5.0	2.0	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.0	2.0	ug/l	
206-44-0	Fluoranthene	ND	5.0	2.0	ug/l	
86-73-7	Fluorene	ND	5.0	2.0	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.0	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.0	ug/l	
90-12-0	1-Methylnaphthalene	ND	5.0	2.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.0	2.0	ug/l	
85-01-8	Phenanthrene	ND	5.0	2.0	ug/l	
129-00-0	Pyrene	ND	5.0	2.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
321-60-8	2-Fluorobiphenyl	53%	42-123%
84-15-1	o-Terphenyl	84%	51-123%

Blank Spike Summary

Job Number: F26856
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP11405-BS	IJ20897.D	1	09/28/04	SD	09/27/04	OP11405	GIJ1025

The QC reported here applies to the following samples: **Method:** EPA 610

F26856-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
83-32-9	Acenaphthene	25	13.1	52*	71-113
208-96-8	Acenaphthylene	25	13.1	52*	63-102
120-12-7	Anthracene	25	18.4	74	71-110
56-55-3	Benzo(a)anthracene	25	19.0	76	70-114
50-32-8	Benzo(a)pyrene	25	19.8	79	67-114
205-99-2	Benzo(b)fluoranthene	25	19.2	77	69-115
191-24-2	Benzo(g,h,i)perylene	25	19.3	77	61-117
207-08-9	Benzo(k)fluoranthene	25	19.4	78	69-111
218-01-9	Chrysene	25	20.3	81	70-114
53-70-3	Dibenzo(a,h)anthracene	25	19.1	76	64-114
206-44-0	Fluoranthene	25	19.3	77	71-114
86-73-7	Fluorene	25	13.9	56*	69-111
193-39-5	Indeno(1,2,3-cd)pyrene	25	18.3	73	63-112
91-20-3	Naphthalene	25	12.6	50*	66-105
90-12-0	1-Methylnaphthalene	25	13.3	53*	71-112
91-57-6	2-Methylnaphthalene	25	12.8	51*	65-106
85-01-8	Phenanthrene	25	16.2	65*	69-112
129-00-0	Pyrene	25	19.2	77	70-114

CAS No.	Surrogate Recoveries	BSP	Limits
321-60-8	2-Fluorobiphenyl	51%	42-123%
321-60-8	2-Fluorobiphenyl	50%	42-123%
84-15-1	o-Terphenyl	68%	51-123%
84-15-1	o-Terphenyl	68%	51-123%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F26856
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP11405-MS	IJ20900.D	1	09/28/04	SD	09/27/04	OP11405	GIJ1025
OP11405-MSD	IJ20901.D	1	09/28/04	SD	09/27/04	OP11405	GIJ1025
F26845-1 [a]	IJ20899.D	1	09/28/04	SD	09/27/04	OP11405	GIJ1025

The QC reported here applies to the following samples: **Method:** EPA 610

F26856-4

CAS No.	Compound	F26845-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	ND		49	49.9	102	44.6	91	11	59-123/20
208-96-8	Acenaphthylene	ND		49	49.7	101	44.3	90	11	51-114/20
120-12-7	Anthracene	ND		49	54.3	111	49.7	101	9	64-114/17
56-55-3	Benzo(a)anthracene	ND		49	52.1	106	48.1	98	8	66-115/17
50-32-8	Benzo(a)pyrene	ND		49	53.7	110	49.6	101	8	62-118/17
205-99-2	Benzo(b)fluoranthene	ND		49	53.7	110	48.4	99	10	66-117/17
191-24-2	Benzo(g,h,i)perylene	ND		49	52.8	108	48.6	99	8	59-120/17
207-08-9	Benzo(k)fluoranthene	ND		49	51.4	105	47.7	97	7	64-116/16
218-01-9	Chrysene	ND		49	53.8	110	49.4	101	9	66-117/16
53-70-3	Dibenzo(a,h)anthracene	ND		49	51.8	106	48.0	98	8	57-124/18
206-44-0	Fluoranthene	ND		49	52.5	107	48.7	99	8	67-116/17
86-73-7	Fluorene	ND		49	52.0	106	46.6	95	11	58-122/19
193-39-5	Indeno(1,2,3-cd)pyrene	ND		49	50.4	103	46.5	95	8	59-116/18
91-20-3	Naphthalene	ND		49	47.2	96	43.5	89	8	47-114/20
90-12-0	1-Methylnaphthalene	ND		49	50.2	102	45.7	93	9	55-128/21
91-57-6	2-Methylnaphthalene	ND		49	49.5	101	45.0	92	10	51-117/21
85-01-8	Phenanthrene	ND		49	51.4	105	46.7	95	10	63-116/18
129-00-0	Pyrene	ND		49	53.9	110	48.5	99	11	67-116/17

CAS No.	Surrogate Recoveries	MS	MSD	F26845-1	Limits
321-60-8	2-Fluorobiphenyl	100%	88%	72%	42-123%
84-15-1	o-Terphenyl	103%	95%	93%	51-123%

(a) Associated BS recovery outside of control limits. Insufficient sample to re-extract.

Semivolatile Surrogate Recovery Summary

Job Number: F26856
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Method: EPA 610	**Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S2 [a]
F26856-4	IJ20950.D	106.0	109.0
F26856-4	IJ20954.D	94.0	101.0
F26856-4	IJ20902.D	112.0	107.0
OP11405-BS	IJ20897.D	51.0	68.0
OP11405-MB	IJ20898.D	43.0	72.0
OP11405-MB	IJ20949.D	53.0	84.0
OP11405-MS	IJ20900.D	100.0	103.0
OP11405-MSD	IJ20901.D	88.0	95.0

Surrogate Compounds	Recovery Limits
S1 = 2-Fluorobiphenyl	42-123%
S2 = o-Terphenyl	51-123%

(a) Recovery from GC signal #1

GC Surrogate Retention Time Summary

Job Number: F26856
Account: EEINCJX EE1
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GIJ1025-CC1001	**Injection Date:**	09/28/04
Lab File ID:	IJ20896.D	**Injection Time:**	13:02
Instrument ID:	GCIJ	**Method:**	EPA 610

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	5.84	6.60	10.40	11.75

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
OP11405-BS	IJ20897.D	09/28/04	13:40	5.85	6.62	10.40	11.77
OP11405-MB	IJ20898.D	09/28/04	14:09	5.85		10.41	
F26845-1	IJ20899.D	09/28/04	14:38	5.85		10.41	
OP11405-MS	IJ20900.D	09/28/04	15:07	5.85		10.41	
OP11405-MSD	IJ20901.D	09/28/04	15:36	5.85		10.41	
F26856-4	IJ20902.D	09/28/04	16:05	5.85		10.41	
ZZZZZZ	IJ20903.D	09/28/04	16:34	5.85		10.41	

Surrogate Compounds

S1 = 2-Fluorobiphenyl
S2 = o-Terphenyl

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F26856
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GIJ1027-CC1001	**Injection Date:**	09/30/04
Lab File ID:	IJ20948.D	**Injection Time:**	08:23
Instrument ID:	GCIJ	**Method:**	EPA 610

	S1 [a] RT	S2 [a] RT
Check Std	5.83	10.38

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
OP11405-MB	IJ20949.D	09/30/04	09:15	5.84	10.39
F26856-4	IJ20950.D	09/30/04	09:44	5.84	10.39
OP11420-BS	IJ20951.D	09/30/04	10:13	5.84	10.39
OP11420-MB	IJ20952.D	09/30/04	10:43	5.84	10.40
F26856-4	IJ20954.D	09/30/04	11:41	5.84	10.40
ZZZZZZ	IJ20955.D	09/30/04	12:10	5.85	10.40
ZZZZZZ	IJ20956.D	09/30/04	12:39	5.85	10.40

Surrogate Compounds

S1 = 2-Fluorobiphenyl
S2 = o-Terphenyl

(a) Retention time from GC signal #1

6.5 G

Initial Calibration Summary

Job Number: F26856
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GIJ1001-ICC1001
Lab FileID: IJ20408.D

Response Factor Report FID 1

Method : C:\HPCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title : PAH's BY EPA 610 OR 8100
Last Update : Tue Jul 27 15:06:13 2004
Response via : Initial Calibration

Calibration Files
5 =IJ20405.D 10 =IJ20406.D 20 =IJ20407.D 30 =IJ20408.D
40 =IJ20409.D 50 =IJ20410.D

		Compound	5	10	20	30	40	50	Avg		%RSD
1)		Naphthalene	1.391	1.389	1.395	1.369	1.414	1.407	1.394	E4	1.12
2)		2-Methyl Naphthalen	1.325	1.334	1.347	1.327	1.375	1.367	1.346	E4	1.57
3)		1-Methyl Naphthalen	1.398	1.391	1.395	1.372	1.415	1.407	1.396	E4	1.06
4)	S	2-Fluorobiphenyl	1.224	1.240	1.237	1.229	1.273	1.265	1.245	E4	1.62
5)		Acenaphthylene	1.393	1.391	1.395	1.380	1.429	1.419	1.401	E4	1.34
6)		Acenaphthene	1.405	1.415	1.424	1.403	1.452	1.441	1.424	E4	1.39
7)		Fluorene	1.321	1.352	1.366	1.356	1.405	1.398	1.366	E4	2.28
8)		Phenanthrene	1.282	1.311	1.349	1.347	1.399	1.392	1.346	E4	3.37
9)		Anthracene	1.305	1.359	1.353	1.340	1.380	1.365	1.350	E4	1.93
10)	S	O-Terphenyl	1.496	1.471	1.454	1.430	1.475	1.463	1.465	E4	1.49
11)		Fluoranthene	1.388	1.392	1.395	1.378	1.424	1.413	1.399	E4	1.23
12)		Pyrene	1.419	1.373	1.383	1.368	1.416	1.406	1.394	E4	1.60
13)		Benzo(a)Anthracene	1.259	1.306	1.345	1.339	1.401	1.394	1.341	E4	4.00
14)		Chrysene	1.456	1.416	1.381	1.365	1.412	1.402	1.406	E4	2.23
15)		Benzo(b)Fluoranthen	1.279	1.342	1.393	1.389	1.451	1.453	1.384	E4	4.81
16)		Benzo(k)Fluoranthen	1.534	1.511	1.463	1.437	1.471	1.448	1.477	E4	2.54
17)		Benzo(a) Pyrene	1.337	1.327	1.331	1.317	1.365	1.359	1.339	E4	1.40
18)		Indeno(1,2,3-cd)pyr	1.323	1.326	1.356	1.348	1.406	1.400	1.360	E4	2.62
19)		Dibenzo(a,h)anthrac	1.461	1.442	1.419	1.396	1.447	1.436	1.433	E4	1.58
20)		Benzo(g,h,i) Peryle	1.440	1.447	1.437	1.415	1.481	1.453	1.445	E4	1.50

Signal #2

1)		Naphthalene	2.125	2.074	2.063	2.032	2.097	2.080	2.079	E4	1.51
2)		2-Methyl Naphthalen	2.010	1.981	1.982	1.957	2.023	2.008	1.993	E4	1.22
3)		1-Methyl Naphthalen	2.064	2.036	2.039	2.012	2.079	2.066	2.049	E4	1.20
4)	S	2-Fluorobiphenyl	1.927	1.848	1.852	1.829	1.888	1.872	1.869	E4	1.87
5)		Acenaphthylene	2.087	2.067	2.062	2.035	2.101	2.083	2.073	E4	1.11
6)		Acenaphthene	2.123	2.098	2.092	2.065	2.132	2.114	2.104	E4	1.15
7)		Fluorene	2.057	2.035	2.038	2.012	2.079	2.060	2.047	E4	1.15
8)		Phenanthrene	2.090	1.991	2.035	2.000	2.077	2.061	2.042	E4	1.99
9)		Anthracene	2.034	2.008	1.988	1.967	2.025	2.003	2.004	E4	1.22
10)	S	O-Terphenyl	2.249	2.178	2.151	2.114	2.177	2.156	2.171	E4	2.06
11)		Fluoranthene	2.099	2.073	2.071	2.040	2.104	2.085	2.079	E4	1.12
12)		Pyrene	2.113	2.097	2.142	2.048	2.115	2.095	2.102	E4	1.49
13)		Benzo(a)Anthracene	2.123	2.095	2.088	2.060	2.125	2.105	2.099	E4	1.16
14)		Chrysene	2.108	2.057	2.053	2.022	2.087	2.065	2.065	E4	1.44
15)		Benzo(b)Fluoranthen	2.237	2.173	2.113	2.090	2.163	2.139	2.153	E4	2.40
16)		Benzo(k)Fluoranthen	2.195	2.135	2.121	2.086	2.153	2.128	2.136	E4	1.70
17)		Benzo(a) Pyrene	2.061	2.013	1.997	1.971	2.034	2.013	2.015	E4	1.54
18)		Indeno(1,2,3-cd)pyr	2.028	2.095	2.107	2.082	2.188	2.172	2.112	E4	2.82
19)		Dibenzo(a,h)anthrac	2.135	2.097	2.066	2.028	2.070	2.033	2.072	E4	1.94
20)		Benzo(g,h,i) Peryle	2.154	2.106	2.100	2.069	2.138	2.117	2.114	E4	1.41

(#) = Out of Range

8100_H2.M Wed Jul 28 08:08:57 2004

Initial Calibration Verification

Job Number: F26856
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GIJ1001-ICV1001
Lab FileID: IJ20411.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\0727PAH\IJ20411.D\FID1B.CH Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\0727PAH\IJ20411.D\FID2A.CH
Acq On : 27 Jul 2004 2:22 pm Operator: aubreya
Sample : icv1001-20 Inst : FID 1
Misc : op10954,gij1001,1000,,,1,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : C:\HPCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title : PAH's BY EPA 610 OR 8100
Last Update : Tue Jul 27 15:06:13 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1		Naphthalene	20.000	21.254	-6.3	106	0.00	4.20- 4.40
2		2-Methyl Naphthalene	20.000	21.719	-8.6	108	0.00	5.11- 5.31
3		1-Methyl Naphthalene	20.000	21.904	-9.5	110	0.00	5.26- 5.46
4	S	2-Fluorobiphenyl		----------NA----------				
5		Acenaphthylene	20.000	21.670	-8.4	109	0.00	6.47- 6.67
6		Acenaphthene	20.000	21.584	-7.9	108	0.00	6.79- 6.99
7		Fluorene	20.000	22.266	-11.3	111	0.00	7.67- 7.87
8		Phenanthrene	20.000	21.858	-9.3	109	0.00	9.35- 9.55
9		Anthracene	20.000	22.804	-14.0	114	0.00	9.43- 9.63
10	S	O-Terphenyl		----------NA----------				
11		Fluoranthene	20.000	21.842	-9.2	109	0.00	11.54-11.74
12		Pyrene	20.000	21.870	-9.4	110	0.00	11.92-12.12
13		Benzo(a)Anthracene	20.000	21.718	-8.6	108	0.00	14.23-14.43
14		Chrysene	20.000	21.757	-8.8	111	0.00	14.30-14.50
15		Benzo(b)Fluoranthene	20.000	21.971	-9.9	109	0.00	16.14-16.34
16		Benzo(k)Fluoranthene	20.000	21.163	-5.8	107	0.00	16.19-16.39
17		Benzo(a) Pyrene	20.000	22.356	-11.8	112	0.00	16.63-16.83
18		Indeno(1,2,3-cd)pyrene	20.000	21.256	-6.3	107	0.00	18.31-18.51
19		Dibenzo(a,h)anthracene	20.000	21.517	-7.6	109	0.00	18.39-18.59
20		Benzo(g,h,i) Perylene	20.000	21.645	-8.2	109	0.00	18.64-18.84
*****		Signal #2 *****						
1		Naphthalene	20.000	21.341	-6.7	107	0.00	4.85- 5.05
2		2-Methyl Naphthalene	20.000	21.853	-9.3	110	0.00	5.75- 5.95
3		1-Methyl Naphthalene	20.000	21.687	-8.4	109	0.00	6.01- 6.21
4	S	2-Fluorobiphenyl		----------NA----------				
5		Acenaphthylene	20.000	21.515	-7.6	108	0.00	7.63- 7.83
6		Acenaphthene	20.000	21.242	-6.2	107	0.00	7.88- 8.08
7		Fluorene	20.000	21.975	-9.9	110	0.00	8.75- 8.95
8		Phenanthrene	20.000	21.481	-7.4	108	0.00	10.78-10.98
9		Anthracene	20.000	22.446	-12.2	113	0.00	10.82-11.02
10	S	O-Terphenyl		----------NA----------				
11		Fluoranthene	20.000	21.720	-8.6	109	0.00	13.15-13.35
12		Pyrene	20.000	21.654	-8.3	106	0.00	13.70-13.90
13		Benzo(a)Anthracene	20.000	21.338	-6.7	107	0.00	16.05-16.25
14		Chrysene	20.000	21.770	-8.8	110	0.00	16.23-16.43
15		Benzo(b)Fluoranthene	20.000	21.095	-5.5	107	0.00	18.12-18.32
16		Benzo(k)Fluoranthene	20.000	21.233	-6.2	107	0.00	18.16-18.36
17		Benzo(a) Pyrene	20.000	22.234	-11.2	112	0.00	18.84-19.04
18		Indeno(1,2,3-cd)pyrene	20.000	20.992	-5.0	105	0.00	20.62-20.82

Initial Calibration Verification

Job Number: F26856
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GIJ1001-ICV1001
Lab FileID: IJ20411.D

19	Dibenzo(a,h)anthracene	20.000	21.714	-8.6	109	0.00	20.68-20.88
20	Benzo(g,h,i) Perylene	20.000	21.433	-7.2	108	0.00	21.26-21.46

(#) = Out of Range SPCC's out = 0 CCC's out = 0
IJ20407.D 8100_H2.M Wed Jul 28 08:09:29 2004

Continuing Calibration Summary

Job Number: F26856
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GIJ1025-CC1001
Lab FileID: IJ20896.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\0928PAH\IJ20896.D\FID1B.CH Vial: 1
Signal #2 : C:\HPCHEM\1\DATA\0928PAH\IJ20896.D\FID2A.CH
Acq On : 28 Sep 2004 1:02 pm Operator: sarahm
Sample : cc1001-20 Inst : FID 1
Misc : op11405,gijl025,1000,,,1,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : C:\HPCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title : PAH's BY EPA 610 OR 8100
Last Update : Thu Sep 23 10:40:07 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1		Naphthalene	20.000	19.889	0.6	99	0.00	4.19- 4.39
2		2-Methyl Naphthalene	20.000	19.666	1.7	98	-0.01	5.11- 5.31
3		1-Methyl Naphthalene	20.000	19.832	0.8	99	-0.01	5.25- 5.45
4	S	2-Fluorobiphenyl	20.000	19.912	0.4	100	0.00	5.75- 5.95
5		Acenaphthylene	20.000	20.007	-0.0	100	-0.01	6.47- 6.67
6		Acenaphthene	20.000	20.037	-0.2	100	-0.01	6.79- 6.99
7		Fluorene	20.000	20.019	-0.1	100	0.00	7.67- 7.87
8		Phenanthrene	20.000	19.850	0.7	99	-0.01	9.35- 9.55
9		Anthracene	20.000	20.512	-2.6	102	0.00	9.43- 9.63
10	S	O-Terphenyl	20.000	19.992	0.0	101	0.00	10.31-10.51
11		Fluoranthene	20.000	20.095	-0.5	101	-0.01	11.55-11.75
12		Pyrene	20.000	19.858	0.7	100	-0.01	11.93-12.13
13		Benzo(a)Anthracene	20.000	19.959	0.2	99	0.00	14.25-14.45
14		Chrysene	20.000	20.705	-3.5	105	-0.01	14.32-14.52
15		Benzo(b)Fluoranthene	20.000	19.982	0.1	99	-0.01	16.17-16.37
16		Benzo(k)Fluoranthene	20.000	20.354	-1.8	103	-0.02	16.21-16.41
17		Benzo(a) Pyrene	20.000	20.252	-1.3	102	-0.01	16.66-16.86
18		Indeno(1,2,3-cd)pyrene	20.000	19.676	1.6	99	-0.02	18.34-18.54
19		Dibenzo(a,h)anthracene	20.000	20.110	-0.5	102	-0.02	18.42-18.62
20		Benzo(g,h,i) Perylene	20.000	20.346	-1.7	102	-0.02	18.67-18.87
*****		Signal #2 *****						
1		Naphthalene	20.000	19.815	0.9	100	0.00	4.84- 5.04
2		2-Methyl Naphthalene	20.000	19.769	1.2	99	0.00	5.73- 5.93
3		1-Methyl Naphthalene	20.000	20.045	-0.2	101	0.00	6.00- 6.20
4	S	2-Fluorobiphenyl	20.000	19.666	1.7	99	0.00	6.51- 6.71
5		Acenaphthylene	20.000	19.941	0.3	100	0.00	7.62- 7.82
6		Acenaphthene	20.000	19.949	0.3	100	0.00	7.86- 8.06
7		Fluorene	20.000	19.946	0.3	100	0.00	8.74- 8.94
8		Phenanthrene	20.000	19.715	1.4	99	0.00	10.77-10.97
9		Anthracene	20.000	20.072	-0.4	101	-0.01	10.81-11.01
10	S	O-Terphenyl	20.000	19.838	0.8	100	0.00	11.66-11.86
11		Fluoranthene	20.000	20.024	-0.1	100	0.00	13.14-13.34
12		Pyrene	20.000	20.110	-0.5	99	-0.01	13.69-13.89
13		Benzo(a)Anthracene	20.000	19.949	0.3	100	-0.01	16.05-16.25
14		Chrysene	20.000	19.963	0.2	100	-0.01	16.22-16.42
15		Benzo(b)Fluoranthene	20.000	19.123	4.4	97	-0.01	18.12-18.32
16		Benzo(k)Fluoranthene	20.000	19.869	0.7	100	-0.02	18.16-18.36
17		Benzo(a) Pyrene	20.000	19.996	0.0	101	-0.01	18.84-19.04
18		Indeno(1,2,3-cd)pyrene	20.000	19.803	1.0	99	-0.02	20.62-20.82

Continuing Calibration Summary

Job Number: F26856
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GIJ1025-CC1001
Lab FileID: IJ20896.D

19	Dibenzo(a,h)anthracene	20.000	20.357	-1.8	102	-0.02	20.69-20.89
20	Benzo(g,h,i) Perylene	20.000	19.934	0.3	100	-0.03	21.26-21.46

(#) = Out of Range SPCC's out = 0 CCC's out = 0
IJ20407.D 8100_H2.M Fri Oct 01 09:54:48 2004

Continuing Calibration Summary

Job Number: F26856
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GIJ1025-CC1001
Lab FileID: IJ20904.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\0928PAH\IJ20904.D\FID1B.CH Vial: 9
Signal #2 : C:\HPCHEM\1\DATA\0928PAH\IJ20904.D\FID2A.CH
Acq On : 28 Sep 2004 5:04 pm Operator: sarahm
Sample : cc1001-30 Inst : FID 1
Misc : op11405,gij1025,1000,,,1,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : C:\HPCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title : PAH's BY EPA 610 OR 8100
Last Update : Thu Sep 23 10:40:07 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1		Naphthalene	30.000	31.153	-3.8	106	0.00	4.19- 4.39
2		2-Methyl Naphthalene	30.000	31.013	-3.4	105	0.00	5.11- 5.31
3		1-Methyl Naphthalene	30.000	31.258	-4.2	106	0.00	5.25- 5.45
4	S	2-Fluorobiphenyl	30.000	31.292	-4.3	106	0.00	5.75- 5.95
5		Acenaphthylene	30.000	31.199	-4.0	106	0.00	6.47- 6.67
6		Acenaphthene	30.000	31.252	-4.2	106	0.00	6.79- 6.99
7		Fluorene	30.000	31.442	-4.8	106	0.00	7.67- 7.87
8		Phenanthrene	30.000	31.342	-4.5	104	0.00	9.35- 9.55
9		Anthracene	30.000	31.718	-5.7	107	0.00	9.43- 9.63
10	S	O-Terphenyl	30.000	30.989	-3.3	106	0.00	10.31-10.51
11		Fluoranthene	30.000	31.438	-4.8	106	0.00	11.55-11.75
12		Pyrene	30.000	31.103	-3.7	106	0.00	11.93-12.13
13		Benzo(a)Anthracene	30.000	31.612	-5.4	106	0.00	14.25-14.45
14		Chrysene	30.000	31.734	-5.8	109	0.00	14.32-14.52
15		Benzo(b)Fluoranthene	30.000	31.696	-5.7	105	0.00	16.17-16.37
16		Benzo(k)Fluoranthene	30.000	31.015	-3.4	106	0.00	16.21-16.41
17		Benzo(a) Pyrene	30.000	31.472	-4.9	107	0.00	16.66-16.86
18		Indeno(1,2,3-cd)pyrene	30.000	31.095	-3.6	105	0.00	18.34-18.54
19		Dibenzo(a,h)anthracene	30.000	31.396	-4.7	107	0.00	18.42-18.62
20		Benzo(g,h,i) Perylene	30.000	31.407	-4.7	107	0.00	18.67-18.87
*****		Signal #2 *****						
1		Naphthalene	30.000	30.420	-1.4	104	0.00	4.84- 5.04
2		2-Methyl Naphthalene	30.000	30.382	-1.3	103	0.00	5.73- 5.93
3		1-Methyl Naphthalene	30.000	30.546	-1.8	104	0.00	6.00- 6.20
4	S	2-Fluorobiphenyl	30.000	30.269	-0.9	103	0.00	6.51- 6.71
5		Acenaphthylene	30.000	30.584	-1.9	104	0.00	7.62- 7.82
6		Acenaphthene	30.000	30.623	-2.1	104	0.00	7.86- 8.06
7		Fluorene	30.000	30.589	-2.0	104	0.00	8.74- 8.94
8		Phenanthrene	30.000	30.364	-1.2	103	0.00	10.77-10.97
9		Anthracene	30.000	30.557	-1.9	104	0.00	10.81-11.01
10	S	O-Terphenyl	30.000	30.295	-1.0	104	0.00	11.66-11.86
11		Fluoranthene	30.000	30.590	-2.0	104	0.00	13.14-13.34
12		Pyrene	30.000	30.492	-1.6	104	0.00	13.69-13.89
13		Benzo(a)Anthracene	30.000	30.517	-1.7	104	0.00	16.05-16.25
14		Chrysene	30.000	30.569	-1.9	104	0.00	16.22-16.42
15		Benzo(b)Fluoranthene	30.000	30.052	-0.2	103	0.00	18.12-18.32
16		Benzo(k)Fluoranthene	30.000	30.517	-1.7	104	0.00	18.16-18.36
17		Benzo(a) Pyrene	30.000	30.409	-1.4	104	0.00	18.84-19.04
18		Indeno(1,2,3-cd)pyrene	30.000	30.370	-1.2	103	0.00	20.62-20.82

Continuing Calibration Summary

Job Number: F26856
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GIJ1025-CC1001
Lab FileID: IJ20904.D

19	Dibenzo(a,h)anthracene	30.000	30.691	-2.3	105	0.00	20.69-20.89
20	Benzo(g,h,i) Perylene	30.000	30.441	-1.5	104	0.00	21.26-21.46

(#) = Out of Range SPCC's out = 0 CCC's out = 0

IJ20408.D 8100_H2.M Fri Oct 01 09:55:05 2004

Continuing Calibration Summary

Job Number: F26856
Account: EBINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GIJ1027-CC1001
Lab FileID: IJ20948.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\0930PAH\IJ20948.D\FID1B.CH Vial: 1
Signal #2 : C:\HPCHEM\1\DATA\0930PAH\IJ20948.D\FID2A.CH
Acq On : 30 Sep 2004 8:23 am Operator: sarahm
Sample : cc1001-20 Inst : FID 1
Misc : op11420,gij1027,1000,,,1,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : C:\HPCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title : PAH's BY EPA 610 OR 8100
Last Update : Thu Sep 23 10:40:07 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1		Naphthalene	20.000	20.762	-3.8	104	-0.02	4.19- 4.39
2		2-Methyl Naphthalene	20.000	20.544	-2.7	103	-0.02	5.11- 5.31
3		1-Methyl Naphthalene	20.000	20.876	-4.4	104	-0.02	5.25- 5.45
4	S	2-Fluorobiphenyl	20.000	20.771	-3.9	105	-0.02	5.75- 5.95
5		Acenaphthylene	20.000	20.744	-3.7	104	-0.02	6.47- 6.67
6		Acenaphthene	20.000	20.829	-4.1	104	-0.02	6.79- 6.99
7		Fluorene	20.000	20.892	-4.5	104	-0.02	7.67- 7.87
8		Phenanthrene	20.000	20.736	-3.7	103	-0.02	9.35- 9.55
9		Anthracene	20.000	21.439	-7.2	107	-0.02	9.43- 9.63
10	S	O-Terphenyl	20.000	20.919	-4.6	105	-0.02	10.31-10.51
11		Fluoranthene	20.000	21.079	-5.4	106	-0.03	11.55-11.75
12		Pyrene	20.000	20.823	-4.1	105	-0.02	11.93-12.13
13		Benzo(a)Anthracene	20.000	21.005	-5.0	105	-0.02	14.25-14.45
14		Chrysene	20.000	21.618	-8.1	110	-0.03	14.32-14.52
15		Benzo(b)Fluoranthene	20.000	22.898	-14.5	114	0.02	16.17-16.37
16		Benzo(k)Fluoranthene	20.000	21.462	-7.3	108	-0.03	16.21-16.41
17		Benzo(a) Pyrene	20.000	21.321	-6.6	107	-0.03	16.66-16.86
18		Indeno(1,2,3-cd)pyrene	20.000	20.793	-4.0	104	-0.03	18.34-18.54
19		Dibenzo(a,h)anthracene	20.000	21.366	-6.8	108	-0.03	18.42-18.62
20		Benzo(g,h,i) Perylene	20.000	21.460	-7.3	108	-0.04	18.67-18.87
*****		Signal #2 *****						
1		Naphthalene	20.000	20.631	-3.2	104	-0.02	4.84- 5.04
2		2-Methyl Naphthalene	20.000	20.516	-2.6	103	-0.02	5.73- 5.93
3		1-Methyl Naphthalene	20.000	20.857	-4.3	105	-0.02	6.00- 6.20
4	S	2-Fluorobiphenyl	20.000	20.539	-2.7	104	-0.02	6.51- 6.71
5		Acenaphthylene	20.000	20.922	-4.6	105	-0.02	7.62- 7.82
6		Acenaphthene	20.000	20.930	-4.6	105	-0.02	7.86- 8.06
7		Fluorene	20.000	20.923	-4.6	105	-0.02	8.74- 8.94
8		Phenanthrene	20.000	20.783	-3.9	104	0.01	10.77-10.97
9		Anthracene	20.000	21.177	-5.9	107	-0.03	10.81-11.01
10	S	O-Terphenyl	20.000	20.881	-4.4	105	-0.03	11.66-11.86
11		Fluoranthene	20.000	21.040	-5.2	106	-0.03	13.14-13.34
12		Pyrene	20.000	21.181	-5.9	104	-0.03	13.69-13.89
13		Benzo(a)Anthracene	20.000	21.002	-5.0	106	-0.03	16.05-16.25
14		Chrysene	20.000	21.096	-5.5	106	-0.03	16.22-16.42
15		Benzo(b)Fluoranthene	20.000	21.155	-5.8	108	0.01	18.12-18.32
16		Benzo(k)Fluoranthene	20.000	21.317	-6.6	107	-0.03	18.16-18.36
17		Benzo(a) Pyrene	20.000	21.006	-5.0	106	-0.03	18.84-19.04
18		Indeno(1,2,3-cd)pyrene	20.000	21.083	-5.4	106	0.02	20.62-20.82

Continuing Calibration Summary

Job Number: F26856
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GIJ1027-CC1001
Lab FileID: IJ20948.D

19	Dibenzo(a,h)anthracene	20.000	21.495	-7.5	108	-0.04	20.69-20.89
20	Benzo(g,h,i) Perylene	20.000	20.871	-4.4	105	-0.05	21.26-21.46

(#) = Out of Range SPCC's out = 0 CCC's out = 0
IJ20407.D 8100_H2.M Fri Oct 01 09:20:17 2004

Continuing Calibration Summary

Job Number: F26856
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GIJ1027-CC1001
Lab FileID: IJ20957.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\0930PAH\IJ20957.D\FID1B.CH Vial: 10
Signal #2 : C:\HPCHEM\1\DATA\0930PAH\IJ20957.D\FID2A.CH
Acq On : 30 Sep 2004 1:09 pm Operator: sarahm
Sample : cc1001-30 Inst : FID 1
Misc : op11405,gij1027,1050,,,1,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : C:\HPCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title : PAH's BY EPA 610 OR 8100
Last Update : Thu Sep 23 10:40:07 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1		Naphthalene	30.000	33.570	-11.9	114	0.00	4.19- 4.39
2		2-Methyl Naphthalene	30.000	33.385	-11.3	113	0.00	5.11- 5.31
3		1-Methyl Naphthalene	30.000	33.590	-12.0	114	0.00	5.25- 5.45
4	S	2-Fluorobiphenyl	30.000	33.242	-10.8	112	0.00	5.75- 5.95
5		Acenaphthylene	30.000	33.581	-11.9	114	0.00	6.47- 6.67
6		Acenaphthene	30.000	33.587	-12.0	114	0.00	6.79- 6.99
7		Fluorene	30.000	33.732	-12.4	113	0.00	7.67- 7.87
8		Phenanthrene	30.000	33.728	-12.4	112	0.00	9.35- 9.55
9		Anthracene	30.000	34.076	-13.6	114	0.00	9.43- 9.63
10	S	O-Terphenyl	30.000	33.401	-11.3	114	0.00	10.31-10.51
11		Fluoranthene	30.000	33.896	-13.0	115	0.00	11.55-11.75
12		Pyrene	30.000	33.480	-11.6	114	0.00	11.93-12.13
13		Benzo(a)Anthracene	30.000	34.147	-13.8	114	0.00	14.25-14.45
14		Chrysene	30.000	34.122	-13.7	117	0.00	14.32-14.52
15		Benzo(b)Fluoranthene	30.000	34.154	-13.8	114	0.00	16.17-16.37
16		Benzo(k)Fluoranthene	30.000	33.531	-11.8	115	0.00	16.21-16.41
17		Benzo(a) Pyrene	30.000	33.971	-13.2	115	0.00	16.66-16.86
18		Indeno(1,2,3-cd)pyrene	30.000	33.673	-12.2	113	0.00	18.34-18.54
19		Dibenzo(a,h)anthracene	30.000	33.666	-12.2	115	0.00	18.42-18.62
20		Benzo(g,h,i) Perylene	30.000	33.920	-13.1	116	0.00	18.67-18.87
*****		Signal #2 *****						
1		Naphthalene	30.000	32.473	-8.2	111	0.00	4.84- 5.04
2		2-Methyl Naphthalene	30.000	32.376	-7.9	110	0.00	5.73- 5.93
3		1-Methyl Naphthalene	30.000	32.688	-9.0	111	0.00	6.00- 6.20
4	S	2-Fluorobiphenyl	30.000	32.426	-8.1	110	0.00	6.51- 6.71
5		Acenaphthylene	30.000	32.818	-9.4	111	0.00	7.62- 7.82
6		Acenaphthene	30.000	32.873	-9.6	112	0.00	7.86- 8.06
7		Fluorene	30.000	32.818	-9.4	111	0.00	8.74- 8.94
8		Phenanthrene	30.000	32.635	-8.8	111	0.00	10.77-10.97
9		Anthracene	30.000	32.772	-9.2	111	0.00	10.81-11.01
10	S	O-Terphenyl	30.000	32.621	-8.7	112	0.00	11.66-11.86
11		Fluoranthene	30.000	32.835	-9.5	112	0.00	13.14-13.34
12		Pyrene	30.000	32.776	-9.3	112	0.00	13.69-13.89
13		Benzo(a)Anthracene	30.000	32.797	-9.3	111	0.00	16.05-16.25
14		Chrysene	30.000	32.978	-9.9	112	0.00	16.22-16.42
15		Benzo(b)Fluoranthene	30.000	32.401	-8.0	111	0.00	18.12-18.32
16		Benzo(k)Fluoranthene	30.000	32.794	-9.3	112	-0.01	18.16-18.36
17		Benzo(a) Pyrene	30.000	32.797	-9.3	112	-0.01	18.84-19.04
18		Indeno(1,2,3-cd)pyrene	30.000	33.297	-11.0	113	-0.01	20.62-20.82

Continuing Calibration Summary

Job Number: F26856 **Sample:** GIJ1027-CC1001
Account: EEINCJX EEI **Lab FileID:** IJ20957.D
Project: Camp Lejeune-Campbell St. Fuel Farm

19	Dibenzo(a,h)anthracene	30.000	33.002	-10.0	112	-0.02	20.69-20.89
20	Benzo(g,h,i) Perylene	30.000	32.879	-9.6	112	-0.01	21.26-21.46

(#) = Out of Range SPCC's out = 0 CCC's out = 0
IJ20408.D 8100_H2.M Fri Oct 01 08:22:47 2004

6.5 6

Southeast
ACCUTEST.
Laboratories

12/08/05

Technical Report for

EEI

Camp Lejeune-Campbell St. Fuel Farm

844271/CTO 0003

Accutest Job Number: F26937

Sampling Date: 09/23/04

Report to:

EEI

bmorris@eeimail.com

ATTN: Bill Morris

Total number of pages in report: 72

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Sections: 1 3 4 5 6 7 8

Table of Contents

Section 1: Sample Summary **3**
Section 2: Case Narrative/Conformance Summary **4**
Section 3: Sample Results **6**
3.1: F26937-1: USTCSFF-EFFLUENT 6
3.2: F26937-2: USTCSFF-RWC1 10
3.3: F26937-3: USTCSFF-RWB1 11
3.4: F26937-4: USTCSFF-RWB3 12
3.5: F26937-5: USTCSFF-RWB4 13
Section 4: Misc. Forms **14**
4.1: Chain of Custody 15
Section 5: GC Volatiles - QC Data Summaries **17**
5.1: Method Blank Summary 18
5.2: Blank Spike Summary 20
5.3: Matrix Spike/Matrix Spike Duplicate Summary 22
5.4: Surrogate Recovery Summaries 24
5.5: GC Surrogate Retention Time Summaries 25
5.6: Initial and Continuing Calibration Summaries 28
Section 6: GC Semi-volatiles - QC Data Summaries **34**
6.1: Method Blank Summary 35
6.2: Blank Spike Summary 36
6.3: Matrix Spike/Matrix Spike Duplicate Summary 37
6.4: Surrogate Recovery Summaries 38
6.5: GC Surrogate Retention Time Summaries 39
6.6: Initial and Continuing Calibration Summaries 41
Section 7: Metals Analysis - QC Data Summaries **50**
7.1: Inst QC MA4034: As,Ba,Cd,Cr,Fe,Pb,Mn,Se 51
7.2: Prep QC MP7262: As,Ba,Cd,Cr,Fe,Pb,Mn,Se 65
Section 8: General Chemistry - QC Data Summaries **70**
8.1: Method Blank and Spike Results Summary 71
8.2: Duplicate Results Summary 72

Sample Summary

EEI

Job No: F26937

Camp Lejeune-Campbell St. Fuel Farm
Project No: 844271/CTO 0003

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
F26937-1	09/23/04	14:00	TE	09/24/04	AQ	Ground Water	USTCSFF-EFFLUENT
F26937-2	09/23/04	12:35	TE	09/24/04	AQ	Ground Water	USTCSFF-RWC1
F26937-3	09/23/04	13:10	TE	09/24/04	AQ	Ground Water	USTCSFF-RWB1
F26937-4	09/23/04	12:45	TE	09/24/04	AQ	Ground Water	USTCSFF-RWB3
F26937-5	09/23/04	12:55	TE	09/24/04	AQ	Ground Water	USTCSFF-RWB4

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: EEI **Job No:** F26937

Site: Camp Lejeune-Campbell St. Fuel Farm **Report Date:** 10/20/2004 8:04:13

5 Samples were collected on 09/23/2004 and were received at Accutest on 09/24/2004 properly preserved, at 2 Deg. C and intact. These Samples received an Accutest job number of F26937. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GC by Method EPA 601/602

Matrix: AQ **Batch ID:** GEF3379

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Samples F26937-1MS, F26937-1MSD were used as the QC samples indicated.

RPDs for MSD for 1,2-Dichlorobenzene, 1,4-Diehlorobenzene are outside control limits for sample F26937-1MSD. Probable cause: due to sample non-homogeneity.

Matrix: AQ **Batch ID:** GEF3380

All samples were analyzed within the recommended method holding time.

Samples F26937-5MS, F26937-5MSD were used as the QC samples indicated.

All method blanks for this batch meet method specific criteria.

F26937-4: All hits confirmed by dual column analysis.

F26937-5: Confirmed by GC/MS

F26937-3: All hits confirmed by dual column analysis.

F26937-5 for 1,2-Dichlorobenzene: Elevated reporting limits due to matrix interference.

Extractables by GC by Method EPA 610

Matrix: AQ **Batch ID:** OP11420

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Samples F26935-5MS, F26935-5MSD were used as the QC samples indieated.

Metals By Method SW846 6010B

Matrix: AQ **Batch ID:** MP7262

All samples were digested within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Samples F27253-1DUP, F27253-1MS, F27253-1MSD, F27253-1SDL were used as the QC samples for metals.

RPDs for Duplicate for Iron, Chromium, Lead are outside control limits for sample MP7262-D1. High RPD due to possible sample non-homogeneity for Iron.

MP7262-D1 for Chromium, Lead: RPD acceptable due to low duplicate and sample concentrations.

RPDs for Serial Dilution for Chromium, Lead, Barium, Iron, Manganese are outside control limits for sample MP7262-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL) for Chromium, Lead.

MP7262-SD1 for Barium, Iron, Manganese: Serial dilution indicates possible matrix interference.

Wet Chemistry by Method EPA 160.1

Matrix: AQ **Batch ID:** GN15661

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specifie criteria.

Sample F26923-2DUP was used as the QC sample for Solids, Total Dissolved.

Wet Chemistry by Method EPA 160.2

Matrix: AQ **Batch ID:** GN15687

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample F26937-1DUP was used as the QC sample for Solids, Total Suspended.

Aecutest Laboratories Southeast (ALSE) certifies that this report meets the project requirements for analytical data produeed for the samples as received at ALSE and as stated on the COC. ALSE eertifies that the data meets the Data Quality Objectives for preeision,

aceuracy and completeness as specified in the ALSE Quality Manual except as noted above. This report is to be used in its entirety. ALSE is not responsible for any assumptions of data quality if partial data paekages are used.

Narrative prepared by:

Date: Oct. 20, 2004

Ellen Pampel, Inorganic QA (signature on file)

Wednesday, October 20, 2004

Report of Analysis

Client Sample ID:	USTCSFF-EFFLUENT		
Lab Sample ID:	F26937-1	**Date Sampled:**	09/23/04
Matrix:	AQ - Ground Water	**Date Received:**	09/24/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF044602.D	1	10/05/04	CV	n/a	n/a	GEF3379
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	89%		70-123%
98-08-8	aaa-Trifluorotoluene	95%		73-122%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-EFFLUENT		
Lab Sample ID:	F26937-1	**Date Sampled:**	09/23/04
Matrix:	AQ - Ground Water	**Date Received:**	09/24/04
Method:	EPA 610 EPA 610	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IJ20966.D	1	09/30/04	SD	09/29/04	OP11420	GIJ1027
Run #2							

	Initial Volume	Final Volume
Run #1	1050 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	4.8	1.9	ug/l	
208-96-8	Acenaphthylene	ND	4.8	1.9	ug/l	
120-12-7	Anthracene	ND	4.8	1.9	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.8	1.9	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.8	1.9	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.8	1.9	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.8	1.9	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.8	1.9	ug/l	
218-01-9	Chrysene	ND	4.8	1.9	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.8	1.9	ug/l	
206-44-0	Fluoranthene	ND	4.8	1.9	ug/l	
86-73-7	Fluorene	ND	4.8	1.9	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.8	1.9	ug/l	
91-20-3	Naphthalene	ND	4.8	1.9	ug/l	
90-12-0	1-Methylnaphthalene	ND	4.8	1.9	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.8	1.9	ug/l	
85-01-8	Phenanthrene	ND	4.8	1.9	ug/l	
129-00-0	Pyrene	ND	4.8	1.9	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	82%		42-123%
84-15-1	o-Terphenyl	104%		51-123%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-EFFLUENT		
Lab Sample ID:	F26937-1	**Date Sampled:**	09/23/04
Matrix:	AQ - Ground Water	**Date Received:**	09/24/04
		Percent Solids:	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	< 10	10	ug/l	1	10/13/04	10/15/04	DM	SW846 6010B [1]	SW846 3010A [2]
Barium	< 200	200	ug/l	1	10/13/04	10/15/04	DM	SW846 6010B [1]	SW846 3010A [2]
Cadmium	< 5.0	5.0	ug/l	1	10/13/04	10/15/04	DM	SW846 6010B [1]	SW846 3010A [2]
Chromium	< 10	10	ug/l	1	10/13/04	10/15/04	DM	SW846 6010B [1]	SW846 3010A [2]
Iron	< 300	300	ug/l	1	10/13/04	10/15/04	DM	SW846 6010B [1]	SW846 3010A [2]
Lead	< 5.0	5.0	ug/l	1	10/13/04	10/15/04	DM	SW846 6010B [1]	SW846 3010A [2]
Manganese	17.8	15	ug/l	1	10/13/04	10/15/04	DM	SW846 6010B [1]	SW846 3010A [2]
Selenium	< 10	10	ug/l	1	10/13/04	10/15/04	DM	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA4034
(2) Prep QC Batch: MP7262

RL = Reporting Limit

Report of Analysis

Client Sample ID:	USTCSFF-EFFLUENT		
Lab Sample ID:	F26937-1	**Date Sampled:**	09/23/04
Matrix:	AQ - Ground Water	**Date Received:**	09/24/04
		Percent Solids:	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Hardness, Total as CaCO3	319	4.0	mg/l	1	10/19/04	DM	SW846 6010B/SM 2340B
Solids, Total Dissolved	377	10	mg/l	1	09/28/04 09:00	LE	EPA 160.1
Solids, Total Suspended	< 4.0	4.0	mg/l	1	09/30/04 09:15	LE	EPA 160.2

RL = Reporting Limit

Report of Analysis

Client Sample ID:	USTCSFF-RWC1		
Lab Sample ID:	F26937-2	**Date Sampled:**	09/23/04
Matrix:	AQ - Ground Water	**Date Received:**	09/24/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF044605.D	1	10/06/04	CV	n/a	n/a	GEF3379
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	89%		70-123%
98-08-8	aaa-Trifluorotoluene	96%		73-122%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibratiou range
J = Indieates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidenee of a compound

Report of Analysis

Client Sample ID:	USTCSFF-RWB1		
Lab Sample ID:	F26937-3	**Date Sampled:**	09/23/04
Matrix:	AQ - Ground Water	**Date Received:**	09/24/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Bateh	Analytical Batch
Run #1 [a]	EF044634.D	1	10/06/04	CV	n/a	n/a	GEF3380
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	0.83	1.0	0.50	ug/l	J
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	6.2	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	90%		70-123%
98-08-8	aaa-Trifluorotoluene	97%		73-122%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-RWB3		
Lab Sample ID:	F26937-4	**Date Sampled:**	09/23/04
Matrix:	AQ - Ground Water	**Date Received:**	09/24/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	EF044636.D	2	10/06/04	CV	n/a	n/a	GEF3380
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	160	2.0	1.0	ug/l	
108-90-7	Chlorobenzene	ND	2.0	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	2.0	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	2.0	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	2.0	1.0	ug/l	
100-41-4	Ethylbenzene	18.3	2.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	35.3	2.0	1.0	ug/l	
108-88-3	Toluene	18.9	2.0	1.0	ug/l	
1330-20-7	Xylenes (total)	93.3	6.0	2.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	100%		70-123%
98-08-8	aaa-Trifluorotoluene	104%		73-122%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indieates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indieates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-RWB4		
Lab Sample ID:	F26937-5	**Date Sampled:**	09/23/04
Matrix:	AQ - Ground Water	**Date Received:**	09/24/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	EF044637.D	5	10/06/04	CV	n/a	n/a	GEF3380
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	203	5.0	2.5	ug/l	
108-90-7	Chlorobenzene	ND	5.0	2.5	ug/l	
95-50-1	1,2-Dichlorobenzene [b]	ND	50	50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	2.5	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	2.5	ug/l	
100-41-4	Ethylbenzene	183	5.0	2.5	ug/l	
1634-04-4	Methyl Tert Butyl Ether	30.0	5.0	2.5	ug/l	
108-88-3	Toluene	146	5.0	2.5	ug/l	
1330-20-7	Xylenes (total)	640	15	5.0	ug/l	

CAS No.	Snrrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	102%		70-123%
98-08-8	aaa-Trifluorotoluene	105%		73-122%

(a) Confirmed by GC/MS
(b) Elevated reporting limits due to matrix interference.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indieates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

CHAIN OF CUSTODY

ACCUTEST Laboratories

4405 VINELAND ROAD • SUITE C-15
ORLANDO, FL 32811
TEL: 407-425-6700 • FAX: 407-425-0707

ACCUTEST JOB # F26937
ACCUTEST QUOTE #:

CLIENT INFORMATION

NAME: ENGINEERING & ENVIRONMENT
ADDRESS: 3824 GUM BRANCH RD STE 5
CITY: JACKSONVILLE STATE: NC ZIP: 28540
SEND REPORT TO:
PHONE #: (910) 989-3244

FACILITY INFORMATION

PROJECT NAME: UST Campbell Street Fuel Farm (MCAS)
LOCATION: CTO 0003
PROJECT NO.:
FAX #: (910) 989-3341

ANALYTICAL INFORMATION

602
610
TDS/TSS
6010 (Total Metals + Hardness)
Total Metals + Hardness

MATRIX CODES

DW - DRINKING WATER
GW - GROUND WATER
WW - WASTE WATER
SO - SOIL
SL - SLUDGE
OI - OIL
LIQ - OTHER LIQUID
SOL - OTHER SOLID

LAB USE ONLY

ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION DATE	COLLECTION TIME	SAMPLED BY:	MATRIX	# OF BOTTLES	PRESERVATION HCl	PRESERVATION HNO3	PRESERVATION H2SO4	PRESERVATION NONE	602	610	TDS/TSS	6010 (Total Metals + Hardness)	Total Metals + Hardness	LAB USE ONLY
1	USTCSFF-EFFLUENT	9/23/04	1400	TE	GW	7	X		X	X	3	2	1	1	1	
2	USTCSFF-RWC1	↑	1235	↑	↑		X				3					
3	USTCSFF-RWB1		1310				X				3					
4	USTCSFF-RWB3	↓	1245	↓	↓		X				3					
5	USTCSFF-RWB4	9/23/04	1255	TE	GW		X				3					

DATA TURNAROUND INFORMATION

- [X] STANDARD
- [ ] 48 HOUR RUSH
- [ ] 24 HOUR EMERGENCY
- [ ] OTHER

APPROVED BY:

EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED

DATA DELIVERABLE INFORMATION

- [ ] STANDARD
- [ ] COMMERCIAL "B"
- [ ] DISK DELIVERABLE
- [ ] STATE FORMS
- [X] OTHER (SPECIFY) NEESA 4.0

COMMENTS/REMARKS

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESION, INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
1. [signature]	1600	1. FX	2. FX		2. [signature] Cardoni 9-24-04 9:00
RELINQUISHED BY:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
3.		3.	4.		4.
RELINQUISHED BY:	DATE TIME:	RECEIVED BY:	SEAL #	PRESERVE WHERE APPLICABLE ☐	ON ICE ☐ TEMPERATURE 2.0 °C
5.		5.			

F26937: Chain of Custody
Page 1 of 2

ACCUTEST LABORATORIES SOUTHEAST SAMPLE RECEIPT CONFIRMATION

Accutest's Job Number: F26937

Client: Engineering + Environment Project: 1164 Campbell Street

Date Received: 9-24-04 Time Received: 9:00

of Coolers Received: 1 Cooler Temperatures: 2.4

Delivery Method: (FedEx) UPS Accutest Courier Greyhound Delivery Other

Air Bill Number:

Cooler Custody Seals Intact ?	(Yes)	No	
Chain of Custody Provided ?	(Yes)	No	
COC Match Bottle Label ID's ?	(Yes)	No	
Sample Labels Present on all bottles ?	(Yes)	No	
All Analyses Marked On COC ?	(Yes)	No	
Are All Bottles Intact ?	(Yes)	No	
Samples Preserved Correctly ?	(Yes)	No	
Correct Number of Containers Used ?	(Yes)	No	
Sufficient Sample Volume ?	(Yes)	No	
Trip Blank Provided ?	Yes	(No)	
Trip Blank on COC ?	Yes	(No)	
Trip Blank Intact ?	Yes	No	(N/A)
Trip Blank Matrix ?	Soil	Water	(N/A)
Number of Encores ?	Ø		
Number of Soil Field Kits ?	Ø		

Summary of Comments:

Signature: Steven Curran Date: 9-24-04

Review Signature:

ASBD/HW 05/11/03

F26937: Chain of Custody
Page 2 of 2

ACCUTEST F26937

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: F26937
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GEF3379-MB	EF044601.D	1	10/05/04	CV	n/a	n/a	GEF3379

The QC reported here applies to the following samples: **Method:** EPA 601/602

F26937-1, F26937-2

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
352-33-0	1-Chloro-4-fluorobenzene	90%	70-123%
98-08-8	aaa-Trifluorotoluene	97%	73-122%

Method Blank Summary

Job Number: F26937
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GEF3380-MB	EF044626.D	1	10/06/04	CV	n/a	n/a	GEF3380

The QC reported here applies to the following samples: **Method:** EPA 601/602

F26937-3, F26937-4, F26937-5

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
352-33-0	1-Chloro-4-fluorobenzene	89%	70-123%
98-08-8	aaa-Trifluorotoluene	96%	73-122%

Blank Spike Summary

Job Number: F26937
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GEF3379-BS	EF044600.D	1	10/05/04	CV	n/a	n/a	GEF3379

The QC reported here applies to the following samples: **Method:** EPA 601/602

F26937-1, F26937-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	20	19.6	98	86-121
108-90-7	Chlorobenzene	20	18.8	94	81-119
95-50-1	1,2-Diehlorobenzene	20	19.0	95	75-120
541-73-1	1,3-Diehlorobenzene	20	18.9	95	77-121
106-46-7	1,4-Diehlorobenzene	20	18.5	93	75-122
100-41-4	Ethylbenzene	20	19.2	96	81-126
1634-04-4	Methyl Tert Butyl Ether	20	18.7	94	76-117
108-88-3	Toluene	20	19.3	97	82-123
1330-20-7	Xylenes (total)	60	57.6	96	82-125

CAS No.	Surrogate Recoverics	BSP	Limits
352-33-0	1-Chloro-4-fluorobenzene	102%	70-123%
98-08-8	aaa-Trifluorotoluene	99%	73-122%

Blank Spike Summary

Job Number: F26937
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GEF3380-BS	EF044625.D	1	10/06/04	CV	n/a	n/a	GEF3380

The QC reported here applies to the following samples: **Method:** EPA 601/602

F26937-3, F26937-4, F26937-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	20	19.7	99	86-121
108-90-7	Chlorobenzene	20	18.7	94	81-119
95-50-1	1,2-Dichlorobenzene	20	17.1	86	75-120
541-73-1	1,3-Dichlorobenzene	20	17.9	90	77-121
106-46-7	1,4-Dichlorobenzene	20	17.5	88	75-122
100-41-4	Ethylbenzene	20	19.1	96	81-126
1634-04-4	Methyl Tert Butyl Ether	20	18.0	90	76-117
108-88-3	Toluene	20	19.3	97	82-123
1330-20-7	Xylenes (total)	60	57.1	95	82-125

CAS No.	Surrogate Recoveries	BSP	Limits
352-33-0	1-Chloro-4-fluorobenzene	103%	70-123%
98-08-8	aaa-Trifluorotoluene	102%	73-122%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F26937
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F26937-1MS	EF044603.D	1	10/06/04	CV	n/a	n/a	GEF3379
F26937-1MSD	EF044604.D	1	10/06/04	CV	n/a	n/a	GEF3379
F26937-1	EF044602.D	1	10/05/04	CV	n/a	n/a	GEF3379

The QC reported here applies to the following samples: **Method:** EPA 601/602

F26937-1, F26937-2

CAS No.	Compound	F26937-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND		20	19.6	98	19.8	99	1	77-125/6
108-90-7	Chlorobenzene	ND		20	18.5	93	18.8	94	2	78-120/8
95-50-1	1,2-Dichlorobenzene	ND		20	16.5	83	19.4	97	16*	69-125/7
541-73-1	1,3-Dichlorobenzene	ND		20	18.0	90	19.3	97	7	71-126/7
106-46-7	1,4-Dichlorobenzene	ND		20	17.5	88	18.9	95	8*	67-129/7
100-41-4	Ethylbenzene	ND		20	18.9	95	19.1	96	1	74-127/6
1634-04-4	Methyl Tert Butyl Ether	ND		20	18.1	91	18.5	93	2	66-127/9
108-88-3	Toluene	ND		20	19.3	97	19.5	98	1	77-124/5
1330-20-7	Xylenes (total)	ND		60	57.0	95	57.3	96	1	76-125/5

CAS No.	Surrogate Recoveries	MS	MSD	F26937-1	Limits
352-33-0	1-Chloro-4-fluorobenzene	101%	103%	89%	70-123%
98-08-8	aaa-Trifluorotoluene	100%	101%	95%	73-122%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F26937
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F26937-5MS	EF044638.D	5	10/06/04	CV	n/a	n/a	GEF3380
F26937-5MSD	EF044639.D	5	10/06/04	CV	n/a	n/a	GEF3380
F26937-5 [a]	EF044637.D	5	10/06/04	CV	n/a	n/a	GEF3380

The QC reported here applies to the following samples: **Method:** EPA 601/602

F26937-3, F26937-4, F26937-5

CAS No.	Compound	F26937-5 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	203		100	309	106	309	106	0	77-125/6
108-90-7	Chlorobenzene	ND		100	104	104	104	104	0	78-120/8
95-50-1	1,2-Dichlorobenzene	ND		100	131	93	134	96	2	69-125/7
541-73-1	1,3-Dichlorobenzene	ND		100	111	111	115	115	4	71-126/7
106-46-7	1,4-Dichlorobenzene	ND		100	112	112	115	115	3	67-129/7
100-41-4	Ethylbenzene	183		100	289	106	291	108	1	74-127/6
1634-04-4	Methyl Tert Butyl Ether	30.0		100	126	96	127	97	1	66-127/9
108-88-3	Toluene	146		100	254	108	252	106	1	77-124/5
1330-20-7	Xylenes (total)	640		300	973	111	976	112	0	76-125/5

CAS No.	Surrogate Recoveries	MS	MSD	F26937-5	Limits
352-33-0	1-Chloro-4-fluorobenzene	108%	108%	102%	70-123%
98-08-8	aaa-Trifluorotoluene	106%	106%	105%	73-122%

(a) Confirmed by GC/MS

Volatile Surrogate Recovery Summary

Job Number: F26937
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Method: EPA 601/602 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S2 [a]
F26937-1	EF044602.D	89.0	95.0
F26937-2	EF044605.D	89.0	96.0
F26937-3	EF044634.D	90.0	97.0
F26937-4	EF044636.D	100.0	104.0
F26937-5	EF044637.D	102.0	105.0
F26937-1MS	EF044603.D	101.0	100.0
F26937-1MSD	EF044604.D	103.0	101.0
F26937-5MS	EF044638.D	108.0	106.0
F26937-5MSD	EF044639.D	108.0	106.0
GEF3379-BS	EF044600.D	102.0	99.0
GEF3379-MB	EF044601.D	90.0	97.0
GEF3380-BS	EF044625.D	103.0	102.0
GEF3380-MB	EF044626.D	89.0	96.0

Surrogate Compounds	Recovery Limits
S1 = 1-Chloro-4-fluorobenzene	70-123%
S2 = aaa-Trifluorotoluene	73-122%

(a) Recovery from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F26937
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GEF3380-CC3376	**Injection Date:**	10/06/04
Lab File ID:	EF044624.D	**Injection Time:**	09:47
Instrument ID:	GCEF	**Method:**	EPA 601/602

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	9.07	8.84	6.00	5.76

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
GEF3380-BS	EF044625.D	10/06/04	10:12		8.84		5.77
GEF3381-BS	EF044625.D	10/06/04	10:12	9.06	8.84	5.99	5.77
GEF3380-MB	EF044626.D	10/06/04	10:37		8.85		5.77
GEF3381-MB	EF044626.D	10/06/04	10:37		8.85		5.77
ZZZZZZ	EF044627.D	10/06/04	11:01		8.85		5.77
ZZZZZZ	EF044628.D	10/06/04	11:25		8.85		5.77
ZZZZZZ	EF044629.D	10/06/04	11:50		8.85		5.77
ZZZZZZ	EF044630.D	10/06/04	12:14		8.85		5.77
ZZZZZZ	EF044631.D	10/06/04	12:38		8.85		5.77
ZZZZZZ	EF044632.D	10/06/04	13:03		8.85		5.77
ZZZZZZ	EF044633.D	10/06/04	13:27		8.85		5.77
F26937-3	EF044634.D	10/06/04	13:52		8.85		5.77

Surrogate Compounds

S1 = 1-Chloro-4-fluorobenzene
S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F26937
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GEF3380-CC3376	**Injection Date:**	10/06/04
Lab File ID:	EF044635.D	**Injection Time:**	14:16
Instrument ID:	GCEF	**Method:**	EPA 601/602

	S1 [a] RT	S2 [a] RT
Check Std	8.84	5.76

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
F26937-4	EF044636.D	10/06/04	14:40	8.85	5.77
F26937-5	EF044637.D	10/06/04	15:05	8.85	5.77
F26937-5MS	EF044638.D	10/06/04	15:29	8.84	5.76
F26937-5MSD	EF044639.D	10/06/04	15:54	8.84	5.76
ZZZZZZ	EF044640.D	10/06/04	16:18	8.85	5.77
ZZZZZZ	EF044641.D	10/06/04	16:43	8.85	5.77
ZZZZZZ	EF044642.D	10/06/04	17:07	8.85	5.76
F26939-9	EF044643.D	10/06/04	17:31	8.85	5.77
F26939-9MS	EF044644.D	10/06/04	17:56	8.85	5.77
F26939-9MSD	EF044645.D	10/06/04	18:20	8.85	5.76

Surrogate Compounds

S1 = 1-Chloro-4-fluorobenzene
S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F26937
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GEF3378-CC3376	**Injection Date:**	10/05/04
Lab File ID:	EF044595.D	**Injection Time:**	20:48
Instrument ID:	GCEF	**Method:**	EPA 601/602

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	9.06	8.84	5.99	5.76

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
ZZZZZZ	EF044596.D	10/05/04	21:13		8.84		5.76
ZZZZZZ	EF044597.D	10/05/04	21:37		8.85		5.76
ZZZZZZ	EF044598.D	10/05/04	22:02		8.84		5.76
ZZZZZZ	EF044599.D	10/05/04	22:27		8.84		5.76
GEF3379-BS	EF044600.D	10/05/04	22:51		8.84		5.76
GEF3379-MB	EF044601.D	10/05/04	23:16		8.84		5.76
F26937-1	EF044602.D	10/05/04	23:40		8.84		5.76
F26937-1MS	EF044603.D	10/06/04	00:05		8.84		5.76
F26937-1MSD	EF044604.D	10/06/04	00:29		8.84		5.76
F26937-2	EF044605.D	10/06/04	00:53		8.84		5.76
GEF3379-ECC337[illegible]	EF044606.D	10/06/04	01:18	9.06	8.84	5.99	5.76

Surrogate Compounds

S1 = 1-Chloro-4-fluorobenzene
S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

Initial Calibration Summary

Job Number: F26937
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GEF3376-ICC3376
Lab FileID: EF044546.D

Response Factor Report VOA1

Method : C:\HPCHEM\1\METHODS\DUAL1004.M (Chemstation Integrator)
Title : EPA 602 & 50308/80218
Last Update : Thu Sep 16 09:53:59 2004
Response via : Initial Calibration

Calibration Files
1 =EF044544.D 2 =EF044545.D 3 =EF044546.D
4 =EF044547.D 5 =EF044548.D 6 =EF044549.D

		Compound	1	2	3	4	5	6	Avg		%RSD
1)		Methyl tert 8utyl E		1.667	1.589	1.620	1.580	1.580	1.607	E3	2.31
2)		Di-Isopropyl ether	1.993	2.496	2.344	2.393	2.329	2.330	2.314	E3	7.32
3)		8enzene	4.331	5.126	4.838	4.958	4.777	4.809	4.806	E3	5.53
4)	S	a,a,a-TFT(S)	1.520	1.496	1.452	1.519	1.520	1.436	1.490	E3	2.51
5)		Toluene	3.894	4.268	4.082	4.160	3.981	4.057	4.074	E3	3.23
6)	S	1-Chloro-4-Fluorobe	2.178	2.110	2.103	2.186	2.208	2.106	2.148	E3	2.21
7)		Chlorobenzene		4.430	3.884	3.906	3.753	3.802	3.955	E3	6.90
8)		Ethylbenzene		3.720	3.337	3.365	3.194	3.248	3.373	E3	6.09
9)		m,p-Xylene	3.677	3.901	3.637	3.771	3.574	3.636	3.699	E3	3.20
10)		o-Xylene	3.149	3.474	3.277	3.311	3.160	3.200	3.262	E3	3.75
11)		1,3-Dichlorobenzene	2.814	2.278	2.410	2.550	2.419	2.509	2.497	E3	7.28
12)		1,4-Dichlorobenzene	3.099	2.393	2.545	2.670	2.556	2.690	2.659	E3	9.05
13)		1,2-Dichlorobenzene		1.233	1.364	1.424	1.289	1.342	1.330	E3	5.48
Signal #2											
1)		Methyl tert Butyl E		1.713	1.651	1.698	1.653	1.644	1.672	E3	1.88
2)		Di-Isopropyl ether	1.923	2.456	2.360	2.409	2.325	2.316	2.298	E3	8.31
3)		Benzene	4.337	5.248	5.001	5.101	4.929	4.969	4.931	E3	6.34
4)	S	a,a,a-TFT(S)	1.497	1.477	1.453	1.515	1.530	1.434	1.484	E3	2.47
5)		Toluene	3.788	4.305	4.149	4.234	4.099	4.117	4.115	E3	4.33
6)	S	1-Chloro-4-Fluorobe	2.012	1.999	2.032	2.145	2.157	2.094	2.073	E3	3.30
7)		Chlorobenzene	1.005	0.504	0.413	0.410	0.398	0.399	0.522	E4	46.03
		----- Linear regression ----- Coefficient = 0.9999									
		Response Ratio = 5422.90555 + 3929.89342 *A									
8)		Ethylbenzene	3.942	3.914	3.587	3.651	3.498	3.520	3.685	E3	5.31
9)		m,p-Xylene	3.829	4.087	3.827	3.928	3.788	3.847	3.884	E3	2.83
10)		o-Xylene	3.103	3.424	3.285	3.341	3.190	3.234	3.263	E3	3.48
11)		1,3-Dichlorobenzene	2.713	2.272	2.451	2.601	2.462	2.560	2.510	E3	6.04
12)		1,4-Dichlorobenzene	2.825	2.228	2.438	2.579	2.440	2.576	2.514	E3	7.91
13)		1,2-Dichlorobenzene		1.247	1.416	1.501	1.361	1.407	1.386	E3	6.71

(#) = Out of Range

DUAL1004.M Tue Oct 05 09:46:24 2004 EF

Continuing Calibration Summary

Job Number: F26937
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GEF3378-CC3376
Lab FileID: EF044595.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\100504\EF044595.D\FID1A.CH Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\100504\EF044595.D\FID2B.CH
Acq On : 5 Oct 2004 8:48 pm Operator: ClaireV
Sample : cc3376-20 Inst : VOA1
Misc : gc4025,gef3378,,,,,1 MultiplIr: 1.00
IntFile Signal #1: AUTOINT1.E IntFile Signal #2: autoint2.e

Method : C:\HPCHEM\1\METHODS\DUAL1004.M (Chemstation Integrator)
Title : EPA 602 & 5030B/8021B
Last Update : Mon Oct 04 12:57:05 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	20.000	19.846	0.8	100	0.00
2		Di-Isopropyl ether	20.000	19.979	0.1	99	0.00
3		Benzene	20.000	17.406	13.0	86	0.00
4	S	a,a,a-TFT(S)	20.000	19.702	1.5	101	0.01
5		Toluene	20.000	17.020	14.9	85	0.01
6	S	1-Chloro-4-Fluorobenzene	20.000	20.078	-0.4	103	0.01
7		Chlorobenzene	20.000	18.235	8.8	93	0.01
8		Ethylbenzene	20.000	18.780	6.1	95	0.01
9		m,p-Xylene	40.000	38.431	3.9	98	0.01
10		o-Xylene	20.000	19.565	2.2	97	0.01
11		1,3-Dichlorobenzene	20.000	19.100	4.5	99	0.01
12		1,4-Dichlorobenzene	20.000	19.048	4.8	99	0.01
13		1,2-Dichlorobenzene	20.000	19.572	2.1	95	0.01

Signal #2

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	20.000	19.847	0.8	100	0.00
2		Di-Isopropyl ether	20.000	20.023	-0.1	97	0.00
3		Benzene	20.000	17.547	12.3	87	0.00
4	S	a,a,a-TFT(S)	20.000	19.826	0.9	101	0.00
5		Toluene	20.000	17.116	14.4	85	0.00
6	S	1-Chloro-4-Fluorobenzene	20.000	20.107	-0.5	103	0.00
7		Chlorobenzene	20.000	18.514	7.4	95	0.00
8		Ethylbenzene	20.000	18.634	6.8	96	0.00
9		m,p-Xylene	40.000	38.538	3.7	98	0.00
10		o-Xylene	20.000	19.749	1.3	98	0.00
11		1,3-Dichlorobenzene	20.000	19.450	2.8	100	0.00
12		1,4-Dichlorobenzene	20.000	19.244	3.8	99	0.00
13		1,2-Dichlorobenzene	20.000	19.732	1.3	97	0.00

Average % D = 4.6

(#) = Out of Range SPCC's out = 0 CCC's out = 0
EF044546.D DUAL1004.M Wed Oct 06 09:09:45 2004 EF

Continuing Calibration Summary

Job Number: F26937
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GEF3379-ECC3376
Lab FileID: EF044606.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\100504\EF044606.D\FID1A.CH Vial: 32
Signal #2 : C:\HPCHEM\1\DATA\100504\EF044606.D\FID2B.CH
Acq On : 6 Oct 2004 1:18 am Operator: ClaireV
Sample : ecc3376-20 Inst : VOA1
Misc : gc4033,gef3379,,,,,1 MultiplIr: 1.00
IntFile Signal #1: AUTOINT1.E IntFile Signal #2: autoint2.e

Method : C:\HPCHEM\1\METHODS\DUAL1004.M (Chemstation Integrator)
Title : EPA 602 & 5030B/8021B
Last Update : Mon Oct 04 12:57:05 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	Methyl tert Butyl Ether	20.000	20.977	-4.9	106	0.00
2	Di-Isopropyl ether	20.000	21.112	-5.6	104	0.00
3	Benzene	20.000	18.789	6.1	93	0.00
4 S	a,a,a-TFT(S)	20.000	20.018	-0.1	103	0.01
5	Toluene	20.000	18.349	8.3	92	0.01
6 S	1-Chloro-4-Fluorobenzene	20.000	19.979	0.1	102	0.01
7	Chlorobenzene	20.000	19.190	4.0	98	0.01
8	Ethylbenzene	20.000	19.902	0.5	101	0.01
9	m,p-Xylene	40.000	40.006	-0.0	102	0.01
10	o-Xylene	20.000	20.497	-2.5	102	0.01
11	1,3-Dichlorobenzene	20.000	20.652	-3.3	107	0.01
12	1,4-Dichlorobenzene	20.000	20.262	-1.3	106	0.01
13	1,2-Dichlorobenzene	20.000	21.914	-9.6	107	0.01

Signal #2

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	Methyl tert Butyl Ether	20.000	21.337	-6.7	108	0.00
2	Di-Isopropyl ether	20.000	21.466	-7.3	105	0.00
3	Benzene	20.000	19.179	4.1	95	0.00
4 S	a,a,a-TFT(S)	20.000	20.181	-0.9	103	0.00
5	Toluene	20.000	18.681	6.6	93	0.00
6 S	1-Chloro-4-Fluorobenzene	20.000	20.448	-2.2	104	0.01
7	Chlorobenzene	20.000	19.637	1.8	100	0.01
8	Ethylbenzene	20.000	19.687	1.6	101	0.01
9	m,p-Xylene	40.000	40.403	-1.0	103	0.01
10	o-Xylene	20.000	20.943	-4.7	104	0.01
11	1,3-Dichlorobenzene	20.000	20.975	-4.9	107	0.00
12	1,4-Dichlorobenzene	20.000	20.590	-2.9	106	0.00
13	1,2-Dichlorobenzene	20.000	21.715	-8.6	106	0.00

Average % D = 3.8

(#) = Out of Range SPCC's out = 0 CCC's out = 0
EF044546.D DUAL1004.M Wed Oct 06 09:09:46 2004 EF

Continuing Calibration Summary

Job Number: F26937 **Sample:** GEF3380-CC3376
Account: EEINCJX EEI **Lab FileID:** EF044624.D
Project: Camp Lejeune-Campbell St. Fuel Farm

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\100604\EF044624.D\FID1A.CH Vial: 1
Signal #2 : C:\HPCHEM\1\DATA\100604\EF044624.D\FID2B.CH
Acq On : 6 Oct 2004 9:47 am Operator: ClaireV
Sample : cc3376-40 Inst : VOA1
Misc : gc4033,gef3380,,,,,1 MultiplR: 1.00
IntFile Signal #1: AUTOINT1.E IntFile Signal #2: autoint2.e

Method : C:\HPCHEM\1\METHODS\DUAL1004.M (Chemstation Integrator)
Title : EPA 602 & 5030B/8021B
Last Update : Thu Sep 16 09:53:59 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	40.000	40.022	-0.1	99	0.02
2		Di-Isopropyl ether	40.000	43.433	-8.6	105	0.02
3		Benzene	40.000	40.764	-1.9	99	0.02
4	S	a,a,a-TFT(S)	20.000	20.906	-4.5	103	0.02
5		Toluene	40.000	40.755	-1.9	100	0.02
6	S	1-Chloro-4-Fluorobenzene	20.000	21.566	-7.8	106	0.02
7		Chlorobenzene	40.000	41.183	-3.0	104	0.02
8		Ethylbenzene	40.000	40.947	-2.4	103	0.02
9		m,p-Xylene	80.000	83.568	-4.5	102	0.02
10		o-Xylene	40.000	42.800	-7.0	105	0.02
11		1,3-Dichlorobenzene	40.000	42.338	-5.8	104	0.02
12		1,4-Dichlorobenzene	40.000	41.279	-3.2	103	0.02
13		1,2-Dichlorobenzene	40.000	41.167	-2.9	96	0.02

Signal #2

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	40.000	43.968	-9.9	108	0.00
2		Di-Isopropyl ether	40.000	44.591	-11.5	106	0.00
3		Benzene	40.000	41.345	-3.4	100	0.00
4	S	a,a,a-TFT(S)	20.000	21.174	-5.9	104	0.01
5		Toluene	40.000	41.472	-3.7	101	0.01
6	S	1-Chloro-4-Fluorobenzene	20.000	22.211	-11.1	107	0.01
7		Chlorobenzene	40.000	42.555	-6.4	105	0.01
8		Ethylbenzene	40.000	40.903	-2.3	103	0.01
9		m,p-Xylene	80.000	84.957	-6.2	105	0.01
10		o-Xylene	40.000	43.286	-8.2	106	0.01
11		1,3-Dichlorobenzene	40.000	42.262	-5.7	102	0.01
12		1,4-Dichlorobenzene	40.000	42.430	-6.1	103	0.01
13		1,2-Dichlorobenzene	40.000	41.043	-2.6	95	0.01

Average % D = 5.2

(#) = Out of Range SPCC's out = 0 CCC's out = 0
EF044547.D DUAL1004.M Thu Oct 07 10:12:12 2004 EF

5.6

Continuing Calibration Summary

Job Number: F26937
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GEF3380-CC3376
Lab FileID: EF044635.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\100604\EF044635.D\FID1A.CH Vial: 12
Signal #2 : C:\HPCHEM\1\DATA\100604\EF044635.D\FID2B.CH
Acq On : 6 Oct 2004 2:16 pm Operator: ClaireV
Sample : cc3376-20 Inst : VOA1
Misc : gc4033,gef3380,,,,,1 MultiplR: 1.00
IntFile Signal #1: AUTOINT1.E IntFile Signal #2: autoint2.e

Method : C:\HPCHEM\1\METHODS\DUAL1004.M (Chemstation Integrator)
Title : EPA 602 & 5030B/8021B
Last Update : Thu Sep 16 09:53:59 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	Methyl tert Butyl Ether	20.000	19.589	2.1	99	0.01
2	Di-Isopropyl ether	20.000	20.590	-2.9	102	0.01
3	Benzene	20.000	19.678	1.6	98	0.01
4 S	a,a,a-TFT(S)	20.000	19.772	1.1	101	0.01
5	Toluene	20.000	19.584	2.1	98	0.01
6 S	1-Chloro-4-Fluorobenzene	20.000	20.243	-1.2	103	0.01
7	Chlorobenzene	20.000	19.747	1.3	101	0.01
8	Ethylbenzene	20.000	20.305	-1.5	103	0.01
9	m,p-Xylene	40.000	41.077	-2.7	104	0.01
10	o-Xylene	20.000	20.791	-4.0	103	0.01
11	1,3-Dichlorobenzene	20.000	20.145	-0.7	104	0.01
12	1,4-Dichlorobenzene	20.000	19.954	0.2	104	0.01
13	1,2-Dichlorobenzene	20.000	21.454	-7.3	105	0.02

Signal #2

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	Methyl tert 8utyl Ether	20.000	19.935	0.3	101	0.00
2	Di-Isopropyl ether	20.000	20.873	-4.4	102	0.00
3	Benzene	20.000	20.033	-0.2	99	0.01
4 S	a,a,a-TFT(S)	20.000	20.013	-0.1	102	0.01
5	Toluene	20.000	19.759	1.2	98	0.01
6 S	1-Chloro-4-Fluorobenzene	20.000	20.497	-2.5	105	0.01
7	Chlorobenzene	20.000	20.041	-0.2	102	0.01
8	Ethylbenzene	20.000	20.287	-1.4	104	0.01
9	m,p-Xylene	40.000	41.243	-3.1	105	0.01
10	o-Xylene	20.000	21.217	-6.1	105	0.01
11	1,3-Dichlorobenzene	20.000	20.539	-2.7	105	0.01
12	1,4-Dichlorobenzene	20.000	20.371	-1.9	105	0.01
13	1,2-Dichlorobenzene	20.000	21.045	-5.2	103	0.01

Average % D = 2.2

(#) = Out of Range SPCC's out = 0 CCC's out = 0
EF044546.D DUAL1004.M Thu Oct 07 10:12:43 2004 EF

Continuing Calibration Summary

Job Number: F26937
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GEF3381-CC3376
Lab FileID: EF044646.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\100604\EF044646.D\FID1A.CH Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\100604\EF044646.D\FID2B.CH
Acq On : 6 Oct 2004 6:45 pm Operator: ClaireV
Sample : cc3376-20 Inst : V0A1
Misc : gc4024,gef3381,,,,,1 MultiplR: 1.00
IntFile Signal #1: AUTOINT1.E IntFile Signal #2: autoint2.e

Method : C:\HPCHEM\1\METHODS\DUAL1004.M (Chemstation Integrator)
Title : EPA 602 & 5030B/8021B
Last Update : Thu Sep 16 09:53:59 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	20.000	19.369	3.2	98	0.01
2		Di-Isopropyl ether	20.000	20.504	-2.5	101	0.01
3		Benzene	20.000	19.350	3.2	96	0.01
4	S	a,a,a-TFT(S)	20.000	19.249	3.8	99	0.01
5		Toluene	20.000	19.511	2.4	97	0.02
6	S	1-Chloro-4-Fluorobenzene	20.000	19.450	2.8	99	0.02
7		Chlorobenzene	20.000	19.320	3.4	98	0.02
8		Ethylbenzene	20.000	19.926	0.4	101	0.02
9		m,p-Xylene	40.000	40.075	-0.2	102	0.02
10		o-Xylene	20.000	20.219	-1.1	101	0.02
11		1,3-Dichlorobenzene	20.000	19.414	2.9	101	0.02
12		1,4-Dichlorobenzene	20.000	18.979	5.1	99	0.02
13		1,2-Dichlorobenzene	20.000	19.684	1.6	96	0.02

Signal #2

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1		Methyl tert Butyl Ether	20.000	19.366	3.2	98	0.01
2		Di-Isopropyl ether	20.000	20.675	-3.4	101	0.01
3		Benzene	20.000	19.586	2.1	97	0.01
4	S	a,a,a-TFT(S)	20.000	19.326	3.4	99	0.01
5		Toluene	20.000	19.698	1.5	98	0.01
6	S	1-Chloro-4-Fluorobenzene	20.000	19.660	1.7	100	0.01
7		Chlorobenzene	20.000	19.630	1.9	100	0.02
8		Ethylbenzene	20.000	19.772	1.1	102	0.01
9		m,p-Xylene	40.000	39.701	0.7	101	0.01
10		o-Xylene	20.000	20.581	-2.9	102	0.01
11		1,3-Dichlorobenzene	20.000	19.816	0.9	101	0.01
12		1,4-Dichlorobenzene	20.000	19.477	2.6	100	0.01
13		1,2-Dichlorobenzene	20.000	19.554	2.2	96	0.02

Average % D = 2.3

(#) = Out of Range SPCC's out = 0 CCC's out = 0
EF044546.D DUAL1004.M Thu Oct 07 10:12:44 2004 EF

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: F26937
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP11420-MB	IJ20952.D	1	09/30/04	SD	09/29/04	OP11420	GIJ1027

The QC reported here applies to the following samples: **Method:** EPA 610

F26937-1

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.0	2.0	ug/l	
208-96-8	Acenaphthylene	ND	5.0	2.0	ug/l	
120-12-7	Anthraeene	ND	5.0	2.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.0	2.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.0	2.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.0	2.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.0	2.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.0	2.0	ug/l	
218-01-9	Chrysene	ND	5.0	2.0	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.0	2.0	ug/l	
206-44-0	Fluoranthene	ND	5.0	2.0	ug/l	
86-73-7	Fluorene	ND	5.0	2.0	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.0	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.0	ug/l	
90-12-0	1-Methylnaphthalene	ND	5.0	2.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.0	2.0	ug/l	
85-01-8	Phenanthrene	ND	5.0	2.0	ug/l	
129-00-0	Pyrene	ND	5.0	2.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
321-60-8	2-Fluorobiphenyl	76%	42-123%
84-15-1	o-Terphenyl	103%	51-123%

Blank Spike Summary

Job Number: F26937
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP11420-BS	IJ20951.D	1	09/30/04	SD	09/29/04	OP11420	GIJ1027

The QC reported here applies to the following samples: **Method:** EPA 610

F26937-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
83-32-9	Aeenaphthene	25	23.9	96	71-113
208-96-8	Acenaphthylene	25	23.9	96	63-102
120-12-7	Anthraccne	25	26.1	104	71-110
56-55-3	Benzo(a)anthracene	25	25.4	102	70-114
50-32-8	Benzo(a)pyrene	25	26.0	104	67-114
205-99-2	Benzo(b)fluoranthene	25	25.5	102	69-115
191-24-2	Benzo(g,h,i)perylene	25	25.1	100	61-117
207-08-9	Benzo(k)fluoranthene	25	25.0	100	69-111
218-01-9	Chrysene	25	26.3	105	70-114
53-70-3	Dibenzo(a,h)anthracene	25	25.1	100	64-114
206-44-0	Fluoranthene	25	25.7	103	71-114
86-73-7	Fluorene	25	25.2	101	69-111
193-39-5	Indeno(1,2,3-cd)pyrene	25	24.0	96	63-112
91-20-3	Naphthalene	25	22.6	90	66-105
90-12-0	1-Methylnaphthalene	25	24.0	96	71-112
91-57-6	2-Methylnaphthalene	25	23.3	93	65-106
85-01-8	Phenanthrene	25	24.9	100	69-112
129-00-0	Pyrene	25	26.3	105	70-114

CAS No.	Surrogate Recoveries	BSP	Limits
321-60-8	2-Fluorobiphenyl	94%	42-123%
84-15-1	o-Tcrphenyl	100%	51-123%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F26937
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP11420-MS	IJ20963.D	1	09/30/04	SD	09/29/04	OP11420	GIJ1027
OP11420-MSD	IJ20964.D	1	09/30/04	SD	09/29/04	OP11420	GIJ1027
F26935-5	IJ20962.D	1	09/30/04	SD	09/29/04	OP11420	GIJ1027

The QC reported here applies to the following samples: **Method:** EPA 610

F26937-1

CAS No.	Compound	F26935-5 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	ND		48.1	44.5	93	45.9	95	3	59-123/20
208-96-8	Acenaphthylene	ND		48.1	44.3	92	45.8	95	3	51-114/20
120-12-7	Anthracene	ND		48.1	48.5	101	50.6	105	4	64-114/17
56-55-3	Benzo(a)anthracene	ND		48.1	50.1	104	50.7	105	1	66-115/17
50-32-8	Benzo(a)pyrene	ND		48.1	51.9	108	52.5	109	1	62-118/17
205-99-2	Benzo(b)fluoranthene	ND		48.1	51.3	107	51.1	106	0	66-117/17
191-24-2	Benzo(g,h,i)perylene	ND		48.1	50.0	104	50.7	105	1	59-120/17
207-08-9	Benzo(k)fluoranthene	ND		48.1	49.5	103	50.6	105	2	64-116/16
218-01-9	Chrysene	ND		48.1	51.6	107	52.9	110	2	66-117/16
53-70-3	Dibenzo(a,h)anthracene	ND		48.1	50.3	105	50.8	106	1	57-124/18
206-44-0	Fluoranthene	ND		48.1	50.5	105	50.8	106	1	67-116/17
86-73-7	Fluorene	ND		48.1	47.2	98	48.6	101	3	58-122/19
193-39-5	Indeno(1,2,3-cd)pyrene	ND		48.1	48.9	102	49.4	103	1	59-116/18
91-20-3	Naphthalene	ND		48.1	41.1	85	42.3	88	3	47-114/20
90-12-0	1-Methylnaphthalene	ND		48.1	44.3	92	45.5	95	3	55-128/21
91-57-6	2-Methylnaphthalene	ND		48.1	43.1	90	44.6	93	3	51-117/21
85-01-8	Phenanthrene	ND		48.1	48.1	100	48.9	102	2	63-116/18
129-00-0	Pyrene	ND		48.1	50.4	105	50.7	105	1	67-116/17

CAS No.	Surrogate Reeoveries	MS	MSD	F26935-5	Limits
321-60-8	2-Fluorobiphenyl	88%	91%	84%	42-123%
84-15-1	o-Terphenyl	100%	101%	91%	51-123%

Semivolatile Surrogate Recovery Summary

Job Number: F26937
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Method: EPA 610	**Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S2 [a]
F26937-1	IJ20966.D	82.0	104.0
OP11420-BS	IJ20951.D	94.0	100.0
OP11420-MB	IJ20952.D	76.0	103.0
OP11420-MS	IJ20963.D	88.0	100.0
OP11420-MSD	IJ20964.D	91.0	101.0

Surrogate Compounds	Recovery Limits
S1 = 2-Fluorobiphenyl	42-123%
S2 = o-Terphenyl	51-123%

(a) Recovery from GC signal #1

GC Surrogate Retention Time Summary

Job Number: F26937
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GIJ1027-CC1001	**Injection Date:**	09/30/04
Lab File ID:	IJ20948.D	**Injection Time:**	08:23
Instrument ID:	GCIJ	**Method:**	EPA 610

	S1 [a] RT	S2 [a] RT
Check Std	5.83	10.38

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
OP11405-MB	IJ20949.D	09/30/04	09:15	5.84	10.39
ZZZZZZ	IJ20950.D	09/30/04	09:44	5.84	10.39
OP11420-BS	IJ20951.D	09/30/04	10:13	5.84	10.39
OP11420-MB	IJ20952.D	09/30/04	10:43	5.84	10.40
ZZZZZZ	IJ20954.D	09/30/04	11:41	5.84	10.40
ZZZZZZ	IJ20955.D	09/30/04	12:10	5.85	10.40
ZZZZZZ	IJ20956.D	09/30/04	12:39	5.85	10.40

Surrogate Compounds

S1 = 2-Fluorobiphenyl
S2 = o-Terphenyl

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: F26937
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GIJ1027-CC100I	**Injection Date:**	09/30/04
Lab File ID:	IJ20957.D	**Injection Time:**	13:09
Instrument ID:	GCIJ	**Method:**	EPA 610

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	5.85	6.61	10.40	11.76

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
ZZZZZZ	IJ20958.D	09/30/04	13:38	5.85		10.40	
ZZZZZZ	IJ20959.D	09/30/04	14:07	5.85		10.40	
ZZZZZZ	IJ20960.D	09/30/04	14:37		6.61		11.76
ZZZZZZ	IJ20961.D	09/30/04	15:06	5.85		10.41	
F26935-5	IJ20962.D	09/30/04	15:36	5.85		10.41	
OP11420-MS	IJ20963.D	09/30/04	16:05	5.85		10.41	
OP11420-MSD	IJ20964.D	09/30/04	16:35	5.85		10.41	
ZZZZZZ	IJ20965.D	09/30/04	17:04	5.86		10.41	
F26937-1	IJ20966.D	09/30/04	17:34	5.86		10.41	
ZZZZZZ	IJ20967.D	09/30/04	18:03	5.86		10.41	
GIJ1027-ECC1001	IJ20968.D	09/30/04	18:32	5.85	6.62	10.41	11.77

Surrogate Compounds

S1 = 2-Fluorobiphenyl
S2 = o-Terphenyl

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

Initial Calibration Summary

Job Number: F26937
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GIJ1001-ICCI001
Lab FileID: IJ20408.D

Response Factor Report FID 1

Method : C:\HPCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title : PAH's BY EPA 610 OR 8100
Last Update : Tue Jul 27 15:06:13 2004
Response via : Initial Calibration

Calibration Files
5 =IJ20405.D 10 =IJ20406.D 20 =IJ20407.D 30 =IJ20408.D
40 =IJ20409.D 50 =IJ20410.D

		Compound	5	10	20	30	40	50	Avg		%RSD
1)		Naphthalene	1.391	1.389	1.395	1.369	1.414	1.407	1.394	E4	1.12
2)		2-Methyl Naphthalen	1.325	1.334	1.347	1.327	1.375	1.367	1.346	E4	1.57
3)		1-Methyl Naphthalen	1.398	1.391	1.395	1.372	1.415	1.407	1.396	E4	1.06
4)	S	2-Fluorobiphenyl	1.224	1.240	1.237	1.229	1.273	1.265	1.245	E4	1.62
5)		Acenaphthylene	1.393	1.391	1.395	1.380	1.429	1.419	1.401	E4	1.34
6)		Acenaphthene	1.405	1.415	1.424	1.403	1.452	1.441	1.424	E4	1.39
7)		Fluorene	1.321	1.352	1.366	1.356	1.405	1.398	1.366	E4	2.28
8)		Phenanthrene	1.282	1.311	1.349	1.347	1.399	1.392	1.346	E4	3.37
9)		Anthracene	1.305	1.359	1.353	1.340	1.380	1.365	1.350	E4	1.93
10)	S	O-Terphenyl	1.496	1.471	1.454	1.430	1.475	1.463	1.465	E4	1.49
11)		Fluoranthene	1.388	1.392	1.395	1.378	1.424	1.413	1.399	E4	1.23
12)		Pyrene	1.419	1.373	1.383	1.368	1.416	1.406	1.394	E4	1.60
13)		Benzo(a)Anthracene	1.259	1.306	1.345	1.339	1.401	1.394	1.341	E4	4.00
14)		Chrysene	1.456	1.416	1.381	1.365	1.412	1.402	1.406	E4	2.23
15)		Benzo(b)Fluoranthen	1.279	1.342	1.393	1.389	1.451	1.453	1.384	E4	4.81
16)		Benzo(k)Fluoranthen	1.534	1.511	1.463	1.437	1.471	1.448	1.477	E4	2.54
17)		Benzo(a) Pyrene	1.337	1.327	1.331	1.317	1.365	1.359	1.339	E4	1.40
18)		Indeno(1,2,3-cd)pyr	1.323	1.326	1.356	1.348	1.406	1.400	1.360	E4	2.62
19)		Dibenzo(a,h)anthrac	1.461	1.442	1.419	1.396	1.447	1.436	1.433	E4	1.58
20)		Benzo(g,h,i) Peryle	1.440	1.447	1.437	1.415	1.481	1.453	1.445	E4	1.50

Signal #2

1)		Naphthalene	2.125	2.074	2.063	2.032	2.097	2.080	2.079	E4	1.51
2)		2-Methyl Naphthalen	2.010	1.981	1.982	1.957	2.023	2.008	1.993	E4	1.22
3)		1-Methyl Naphthalen	2.064	2.036	2.039	2.012	2.079	2.066	2.049	E4	1.20
4)	S	2-Fluorobiphenyl	1.927	1.848	1.852	1.829	1.888	1.872	1.869	E4	1.87
5)		Acenaphthylene	2.087	2.067	2.062	2.035	2.101	2.083	2.073	E4	1.11
6)		Acenaphthene	2.123	2.098	2.092	2.065	2.132	2.114	2.104	E4	1.15
7)		Fluorene	2.057	2.035	2.038	2.012	2.079	2.060	2.047	E4	1.15
8)		Phenanthrene	2.090	1.991	2.035	2.000	2.077	2.061	2.042	E4	1.99
9)		Anthracene	2.034	2.008	1.988	1.967	2.025	2.003	2.004	E4	1.22
10)	S	O-Terphenyl	2.249	2.178	2.151	2.114	2.177	2.156	2.171	E4	2.06
11)		Fluoranthene	2.099	2.073	2.071	2.040	2.104	2.085	2.079	E4	1.12
12)		Pyrene	2.113	2.097	2.142	2.048	2.115	2.095	2.102	E4	1.49
13)		Benzo(a)Anthracene	2.123	2.095	2.088	2.060	2.125	2.105	2.099	E4	1.16
14)		Chrysene	2.108	2.057	2.053	2.022	2.087	2.065	2.065	E4	1.44
15)		Benzo(b)Fluoranthen	2.237	2.173	2.113	2.090	2.163	2.139	2.153	E4	2.40
16)		Benzo(k)Fluoranthen	2.195	2.135	2.121	2.086	2.153	2.128	2.136	E4	1.70
17)		Benzo(a) Pyrene	2.061	2.013	1.997	1.971	2.034	2.013	2.015	E4	1.54
18)		Indeno(1,2,3-cd)pyr	2.028	2.095	2.107	2.082	2.188	2.172	2.112	E4	2.82
19)		Dibenzo(a,h)anthrac	2.135	2.097	2.066	2.028	2.070	2.033	2.072	E4	1.94
20)		Benzo(g,h,i) Peryle	2.154	2.106	2.100	2.069	2.138	2.117	2.114	E4	1.41

(#) = Out of Range

8100_H2.M Wed Jul 28 08:08:57 2004

Initial Calibration Verification

Job Number: F26937
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GIJ1001-ICV1001
Lab FileID: IJ20411.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\0727PAH\IJ20411.D\FID1B.CH Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\0727PAH\IJ20411.D\FID2A.CH
Acq On : 27 Jul 2004 2:22 pm Operator: aubreya
Sample : icv1001-20 Inst : FID 1
Misc : op10954,gij1001,1000,,,1,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : C:\HPCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title : PAH's BY EPA 610 OR 8100
Last Update : Tue Jul 27 15:06:13 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1		Naphthalene	20.000	21.254	-6.3	106	0.00	4.20- 4.40
2		2-Methyl Naphthalene	20.000	21.719	-8.6	108	0.00	5.11- 5.31
3		1-Methyl Naphthalene	20.000	21.904	-9.5	110	0.00	5.26- 5.46
4	S	2-Fluorobiphenyl		----------NA----------				
5		Acenaphthylene	20.000	21.670	-8.4	109	0.00	6.47- 6.67
6		Acenaphthene	20.000	21.584	-7.9	108	0.00	6.79- 6.99
7		Fluorene	20.000	22.266	-11.3	111	0.00	7.67- 7.87
8		Phenanthrene	20.000	21.858	-9.3	109	0.00	9.35- 9.55
9		Anthracene	20.000	22.804	-14.0	114	0.00	9.43- 9.63
10	S	O-Terphenyl		----------NA----------				
11		Fluoranthene	20.000	21.842	-9.2	109	0.00	11.54-11.74
12		Pyrene	20.000	21.870	-9.4	110	0.00	11.92-12.12
13		Benzo(a)Anthracene	20.000	21.718	-8.6	108	0.00	14.23-14.43
14		Chrysene	20.000	21.757	-8.8	111	0.00	14.30-14.50
15		Benzo(b)Fluoranthene	20.000	21.971	-9.9	109	0.00	16.14-16.34
16		Benzo(k)Fluoranthene	20.000	21.163	-5.8	107	0.00	16.19-16.39
17		Benzo(a) Pyrene	20.000	22.356	-11.8	112	0.00	16.63-16.83
18		Indeno(1,2,3-cd)pyrene	20.000	21.256	-6.3	107	0.00	18.31-18.51
19		Dibenzo(a,h)anthracene	20.000	21.517	-7.6	109	0.00	18.39-18.59
20		Benzo(g,h,i) Perylene	20.000	21.645	-8.2	109	0.00	18.64-18.84
*****		Signal #2 *****						
1		Naphthalene	20.000	21.341	-6.7	107	0.00	4.85- 5.05
2		2-Methyl Naphthalene	20.000	21.853	-9.3	110	0.00	5.75- 5.95
3		1-Methyl Naphthalene	20.000	21.687	-8.4	109	0.00	6.01- 6.21
4	S	2-Fluorobiphenyl		----------NA----------				
5		Acenaphthylene	20.000	21.515	-7.6	108	0.00	7.63- 7.83
6		Acenaphthene	20.000	21.242	-6.2	107	0.00	7.88- 8.08
7		Fluorene	20.000	21.975	-9.9	110	0.00	8.75- 8.95
8		Phenanthrene	20.000	21.481	-7.4	108	0.00	10.78-10.98
9		Anthracene	20.000	22.446	-12.2	113	0.00	10.82-11.02
10	S	O-Terphenyl		----------NA----------				
11		Fluoranthene	20.000	21.720	-8.6	109	0.00	13.15-13.35
12		Pyrene	20.000	21.654	-8.3	106	0.00	13.70-13.90
13		Benzo(a)Anthracene	20.000	21.338	-6.7	107	0.00	16.05-16.25
14		Chrysene	20.000	21.770	-8.8	110	0.00	16.23-16.43
15		Benzo(b)Fluoranthene	20.000	21.095	-5.5	107	0.00	18.12-18.32
16		Benzo(k)Fluoranthene	20.000	21.233	-6.2	107	0.00	18.16-18.36
17		Benzo(a) Pyrene	20.000	22.234	-11.2	112	0.00	18.84-19.04
18		Indeno(1,2,3-cd)pyrene	20.000	20.992	-5.0	105	0.00	20.62-20.82

Initial Calibration Verification

Job Number: F26937
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GIJ1001-ICV1001
Lab FileID: IJ20411.D

19	Dibenzo(a,h)anthracene	20.000	21.714	-8.6	109	0.00	20.68-20.88
20	Benzo(g,h,i) Perylene	20.000	21.433	-7.2	108	0.00	21.26-21.46

(#) = Out of Range SPCC's out = 0 CCC's out = 0
IJ20407.D 8100_H2.M Wed Jul 28 08:09:29 2004

6.9

Continuing Calibration Summary

Job Number: F26937
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GIJ1027-CC1001
Lab FileID: IJ20948.D

Evaluate Continuing Calibration Report

```
Signal #1 : C:\HPCHEM\1\DATA\0930PAH\IJ20948.D\FID1B.CH  Vial: 1
Signal #2 : C:\HPCHEM\1\DATA\0930PAH\IJ20948.D\FID2A.CH
Acq On    : 30 Sep 2004   8:23 am                    Operator: sarahm
Sample    : cc1001-20                                Inst    : FID 1
Misc      : op11420,gij1027,1000,,,1,1,water         Multiplr: 1.00
IntFile Signal #1: events.e     IntFile Signal #2: events2.e

Method       : C:\HPCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title        : PAH's BY EPA 610 OR 8100
Last Update  : Thu Sep 23 10:40:07 2004
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  15%     Max. Rel. Area : 200%
```

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1		Naphthalene	20.000	20.762	-3.8	104	-0.02	4.19- 4.39
2		2-Methyl Naphthalene	20.000	20.544	-2.7	103	-0.02	5.11- 5.31
3		1-Methyl Naphthalene	20.000	20.876	-4.4	104	-0.02	5.25- 5.45
4	S	2-Fluorobiphenyl	20.000	20.771	-3.9	105	-0.02	5.75- 5.95
5		Acenaphthylene	20.000	20.744	-3.7	104	-0.02	6.47- 6.67
6		Acenaphthene	20.000	20.829	-4.1	104	-0.02	6.79- 6.99
7		Fluorene	20.000	20.892	-4.5	104	-0.02	7.67- 7.87
8		Phenanthrene	20.000	20.736	-3.7	103	-0.02	9.35- 9.55
9		Anthracene	20.000	21.439	-7.2	107	-0.02	9.43- 9.63
10	S	O-Terphenyl	20.000	20.919	-4.6	105	-0.02	10.31-10.51
11		Fluoranthene	20.000	21.079	-5.4	106	-0.03	11.55-11.75
12		Pyrene	20.000	20.823	-4.1	105	-0.02	11.93-12.13
13		Benzo(a)Anthracene	20.000	21.005	-5.0	105	-0.02	14.25-14.45
14		Chrysene	20.000	21.618	-8.1	110	-0.03	14.32-14.52
15		Benzo(b)Fluoranthene	20.000	22.898	-14.5	114	0.02	16.17-16.37
16		Benzo(k)Fluoranthene	20.000	21.462	-7.3	108	-0.03	16.21-16.41
17		Benzo(a) Pyrene	20.000	21.321	-6.6	107	-0.03	16.66-16.86
18		Indeno(1,2,3-cd)pyrene	20.000	20.793	-4.0	104	-0.03	18.34-18.54
19		Dibenzo(a,h)anthracene	20.000	21.366	-6.8	108	-0.03	18.42-18.62
20		Benzo(g,h,i) Perylene	20.000	21.460	-7.3	108	-0.04	18.67-18.87
*****		Signal #2 *****						
1		Naphthalene	20.000	20.631	-3.2	104	-0.02	4.84- 5.04
2		2-Methyl Naphthalene	20.000	20.516	-2.6	103	-0.02	5.73- 5.93
3		1-Methyl Naphthalene	20.000	20.857	-4.3	105	-0.02	6.00- 6.20
4	S	2-Fluorobiphenyl	20.000	20.539	-2.7	104	-0.02	6.51- 6.71
5		Acenaphthylene	20.000	20.922	-4.6	105	-0.02	7.62- 7.82
6		Acenaphthene	20.000	20.930	-4.6	105	-0.02	7.86- 8.06
7		Fluorene	20.000	20.923	-4.6	105	-0.02	8.74- 8.94
8		Phenanthrene	20.000	20.783	-3.9	104	0.01	10.77-10.97
9		Anthracene	20.000	21.177	-5.9	107	-0.03	10.81-11.01
10	S	O-Terphenyl	20.000	20.881	-4.4	105	-0.03	11.66-11.86
11		Fluoranthene	20.000	21.040	-5.2	106	-0.03	13.14-13.34
12		Pyrene	20.000	21.181	-5.9	104	-0.03	13.69-13.89
13		Benzo(a)Anthracene	20.000	21.002	-5.0	106	-0.03	16.05-16.25
14		Chrysene	20.000	21.096	-5.5	106	-0.03	16.22-16.42
15		Benzo(b)Fluoranthene	20.000	21.155	-5.8	108	0.01	18.12-18.32
16		Benzo(k)Fluoranthene	20.000	21.317	-6.6	107	-0.03	18.16-18.36
17		Benzo(a) Pyrene	20.000	21.006	-5.0	106	-0.03	18.84-19.04
18		Indeno(1,2,3-cd)pyrene	20.000	21.083	-5.4	106	0.02	20.62-20.82

Continuing Calibration Summary

Job Number: F26937
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GIJ1027-CC1001
Lab FileID: IJ20948.D

19	Dibenzo(a,h)anthracene	20.000	21.495	-7.5	108	-0.04	20.69-20.89
20	Benzo(g,h,i) Perylene	20.000	20.871	-4.4	105	-0.05	21.26-21.46

(#) = Out of Range SPCC's out = 0 CCC's out = 0
IJ20407.D 8100_H2.M Fri Oct 01 09:20:17 2004

Continuing Calibration Summary

Job Number: F26937
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GIJ1027-CC1001
Lab FileID: IJ20957.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\0930PAH\IJ20957.D\FID1B.CH Vial: 10
Signal #2 : C:\HPCHEM\1\DATA\0930PAH\IJ20957.D\FID2A.CH
Acq On : 30 Sep 2004 1:09 pm Operator: sarahm
Sample : cc1001-30 Inst : FID 1
Misc : op11405,gij1027,1050,,,1,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : C:\HPCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title : PAH's BY EPA 610 OR 8100
Last Update : Thu Sep 23 10:40:07 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	Naphthalene	30.000	33.570	-11.9	114	0.00	4.19- 4.39
2	2-Methyl Naphthalene	30.000	33.385	-11.3	113	0.00	5.11- 5.31
3	1-Methyl Naphthalene	30.000	33.590	-12.0	114	0.00	5.25- 5.45
4 S	2-Fluorobiphenyl	30.000	33.242	-10.8	112	0.00	5.75- 5.95
5	Acenaphthylene	30.000	33.581	-11.9	114	0.00	6.47- 6.67
6	Acenaphthene	30.000	33.587	-12.0	114	0.00	6.79- 6.99
7	Fluorene	30.000	33.732	-12.4	113	0.00	7.67- 7.87
8	Phenanthrene	30.000	33.728	-12.4	112	0.00	9.35- 9.55
9	Anthracene	30.000	34.076	-13.6	114	0.00	9.43- 9.63
10 S	O-Terphenyl	30.000	33.401	-11.3	114	0.00	10.31-10.51
11	Fluoranthene	30.000	33.896	-13.0	115	0.00	11.55-11.75
12	Pyrene	30.000	33.480	-11.6	114	0.00	11.93-12.13
13	Benzo(a)Anthracene	30.000	34.147	-13.8	114	0.00	14.25-14.45
14	Chrysene	30.000	34.122	-13.7	117	0.00	14.32-14.52
15	Benzo(b)Fluoranthene	30.000	34.154	-13.8	114	0.00	16.17-16.37
16	Benzo(k)Fluoranthene	30.000	33.531	-11.8	115	0.00	16.21-16.41
17	Benzo(a) Pyrene	30.000	33.971	-13.2	115	0.00	16.66-16.86
18	Indeno(1,2,3-cd)pyrene	30.000	33.673	-12.2	113	0.00	18.34-18.54
19	Dibenzo(a,h)anthracene	30.000	33.666	-12.2	115	0.00	18.42-18.62
20	Benzo(g,h,i) Perylene	30.000	33.920	-13.1	116	0.00	18.67-18.87
*****	Signal #2 *****						
1	Naphthalene	30.000	32.473	-8.2	111	0.00	4.84- 5.04
2	2-Methyl Naphthalene	30.000	32.376	-7.9	110	0.00	5.73- 5.93
3	1-Methyl Naphthalene	30.000	32.688	-9.0	111	0.00	6.00- 6.20
4 S	2-Fluorobiphenyl	30.000	32.426	-8.1	110	0.00	6.51- 6.71
5	Acenaphthylene	30.000	32.818	-9.4	111	0.00	7.62- 7.82
6	Acenaphthene	30.000	32.873	-9.6	112	0.00	7.86- 8.06
7	Fluorene	30.000	32.818	-9.4	111	0.00	8.74- 8.94
8	Phenanthrene	30.000	32.635	-8.8	111	0.00	10.77-10.97
9	Anthracene	30.000	32.772	-9.2	111	0.00	10.81-11.01
10 S	O-Terphenyl	30.000	32.621	-8.7	112	0.00	11.66-11.86
11	Fluoranthene	30.000	32.835	-9.5	112	0.00	13.14-13.34
12	Pyrene	30.000	32.776	-9.3	112	0.00	13.69-13.89
13	Benzo(a)Anthracene	30.000	32.797	-9.3	111	0.00	16.05-16.25
14	Chrysene	30.000	32.978	-9.9	112	0.00	16.22-16.42
15	Benzo(b)Fluoranthene	30.000	32.401	-8.0	111	0.00	18.12-18.32
16	Benzo(k)Fluoranthene	30.000	32.794	-9.3	112	-0.01	18.16-18.36
17	Benzo(a) Pyrene	30.000	32.797	-9.3	112	-0.01	18.84-19.04
18	Indeno(1,2,3-cd)pyrene	30.000	33.297	-11.0	113	-0.01	20.62-20.82

Continuing Calibration Summary

Job Number: F26937
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GIJ1027-CC1001
Lab FileID: IJ20957.D

19	Dibenzo(a,h)anthracene	30.000	33.002	-10.0	112	-0.02	20.69-20.89
20	Benzo(g,h,i) Perylene	30.000	32.879	-9.6	112	-0.01	21.26-21.46

(#) = Out of Range SPCC's out = 0 CCC's out = 0
IJ20408.D 8100_H2.M Fri Oct 01 08:22:47 2004

6.6

Continuing Calibration Summary

Job Number: F26937
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GIJ1027-ECC1001
Lab FileID: IJ20968.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\0930PAH\IJ20968.D\FID1B.CH Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\0930PAH\IJ20968.D\FID2A.CH
Acq On : 30 Sep 2004 6:32 pm Operator: sarahm
Sample : ecc1001-20 Inst : FID 1
Misc : op11405,gij1027,1010,,,1,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : C:\HPCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title : PAH's BY EPA 610 OR 8100
Last Update : Thu Sep 23 10:40:07 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1		Naphthalene	20.000	22.837	-14.2	114	0.00	4.19- 4.39
2		2-Methyl Naphthalene	20.000	22.569	-12.8	113	0.00	5.11- 5.31
3		1-Methyl Naphthalene	20.000	22.867	-14.3	114	0.00	5.25- 5.45
4	S	2-Fluorobiphenyl	20.000	22.794	-14.0	115	0.00	5.75- 5.95
5		Acenaphthylene	20.000	22.874	-14.4	115	0.00	6.47- 6.67
6		Acenaphthene	20.000	22.910	-14.6	115	0.00	6.79- 6.99
7		Fluorene	20.000	22.903	-14.5	115	0.00	7.67- 7.87
8		Phenanthrene	20.000	22.659	-13.3	113	0.00	9.35- 9.55
9		Anthracene	20.000	23.437	-17.2#	117	0.00	9.43- 9.63
10	S	O-Terphenyl	20.000	22.684	-13.4	114	0.00	10.31-10.51
11		Fluoranthene	20.000	23.153	-15.8#	116	0.00	11.55-11.75
12		Pyrene	20.000	22.811	-14.1	115	0.00	11.93-12.13
13		Benzo(a)Anthracene	20.000	22.920	-14.6	114	0.00	14.25-14.45
14		Chrysene	20.000	23.491	-17.5#	120	0.00	14.32-14.52
15		Benzo(b)Fluoranthene	20.000	22.970	-14.8	114	0.00	16.17-16.37
16		Benzo(k)Fluoranthene	20.000	23.077	-15.4#	117	0.00	16.21-16.41
17		Benzo(a) Pyrene	20.000	23.118	-15.6#	116	0.00	16.66-16.86
18		Indeno(1,2,3-cd)pyrene	20.000	22.553	-12.8	113	0.00	18.34-18.54
19		Dibenzo(a,h)anthracene	20.000	23.185	-15.9#	117	0.00	18.42-18.62
20		Benzo(g,h,i) Perylene	20.000	23.281	-16.4#	117	0.00	18.67-18.87
*****		Signal #2 *****						
1		Naphthalene	20.000	21.903	-9.5	110	0.00	4.84- 5.04
2		2-Methyl Naphthalene	20.000	21.785	-8.9	110	0.00	5.73- 5.93
3		1-Methyl Naphthalene	20.000	22.190	-11.0	112	0.00	6.00- 6.20
4	S	2-Fluorobiphenyl	20.000	21.789	-8.9	110	0.00	6.51- 6.71
5		Acenaphthylene	20.000	22.132	-10.7	111	0.00	7.62- 7.82
6		Acenaphthene	20.000	22.146	-10.7	111	0.00	7.86- 8.06
7		Fluorene	20.000	22.142	-10.7	111	0.00	8.74- 8.94
8		Phenanthrene	20.000	21.620	-8.1	108	0.00	10.77-10.97
9		Anthracene	20.000	22.088	-10.4	111	0.00	10.81-11.01
10	S	O-Terphenyl	20.000	22.084	-10.4	111	0.00	11.66-11.86
11		Fluoranthene	20.000	22.212	-11.1	111	0.00	13.14-13.34
12		Pyrene	20.000	22.180	-10.9	109	0.00	13.69-13.89
13		Benzo(a)Anthracene	20.000	22.133	-10.7	111	0.00	16.05-16.25
14		Chrysene	20.000	22.348	-11.7	112	0.00	16.22-16.42
15		Benzo(b)Fluoranthene	20.000	21.839	-9.2	111	0.00	18.12-18.32
16		Benzo(k)Fluoranthene	20.000	22.237	-11.2	112	0.00	18.16-18.36
17		Benzo(a) Pyrene	20.000	22.080	-10.4	111	0.00	18.84-19.04
18		Indeno(1,2,3-cd)pyrene	20.000	21.945	-9.7	110	-0.01	20.62-20.82

Continuing Calibration Summary

Job Number: F26937
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GIJ1027-ECC1001
Lab FileID: IJ20968.D

19	Dibenzo(a,h)anthracene	20.000	22.505	-12.5	113	-0.01	20.69-20.89
20	Benzo(g,h,i) Perylene	20.000	22.127	-10.6	111	-0.01	21.26-21.46

(#) = Out of Range SPCC's out = 0 CCC's out = 0
IJ20407.D 8100_H2.M Fri Oct 01 08:22:22 2004

6.6.9

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Instrument Runlogs
- Initial and Continuing Calibration Blanks
- Initial and Continuing Calibration Checks
- High and Low Check Standards
- Interfering Element Check Standards
- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: F26937
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR101505.ASC Date Analyzed: 10/15/04 Methods: SW846 6010B
Analyst: DM Run ID: MA4034
Parameters: As,Ba,Cd,Cr,Fe,Pb,Mn,Se

Time	Sample Description	Dilution Factor	PS Recov	Comments
09:07	MA4034-ICV1	1		
09:10	MA4034-ICB1	1		
09:13	MA4034-CRI1	1		
09:18	MA4034-ICSA1	1		
09:21	MA4034-ICSAB1	1		
09:24	MA4034-CCV1	1		
09:29	MA4034-CCB1	1		
10:04	MP7262-MB1	1		
10:08	MP7262-B1	1		
10:14	F27253-1	1		(sample used for QC only; not part of login F26937)
10:18	MA4034-CCV2	1		
10:23	MA4034-CCB2	1		
10:27	MP7262-D1	1		
10:31	MP7262-SD1	5		
10:35	MP7262-S1	1		
10:38	MP7262-S2	1		
10:44	ZZZZZZ	1		
10:48	ZZZZZZ	1		
10:52	ZZZZZZ	1		
10:56	ZZZZZZ	1		
11:00	ZZZZZZ	1		
11:04	ZZZZZZ	1		
11:07	MA4034-CCV3	1		
11:12	MA4034-CCB3	1		
11:16	ZZZZZZ	1		
11:20	ZZZZZZ	1		
11:24	ZZZZZZ	1		
11:28	ZZZZZZ	1		
11:31	F26937-1	1		
---------->	Last reportable sample/prep for job F26937			
11:35	ZZZZZZ	1		
11:39	ZZZZZZ	1		
11:43	ZZZZZZ	1		
11:47	ZZZZZZ	1		

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: F26937
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR101505.ASC Date Analyzed: 10/15/04 Methods: SW846 6010B
Analyst: DM Run ID: MA4034
Parameters: As,Ba,Cd,Cr,Fe,Pb,Mn,Se

	Time	Sample Description	Dilution Factor	PS Recov	Comments
	11:50	ZZZZZZ	1		
	11:54	MA4034-CCV4	1		
	11:59	MA4034-CCB4	1		
---------->	Last reportable CCB for job F26937				
	12:03	ZZZZZZ	1		
	12:07	ZZZZZZ	1		
	12:11	ZZZZZZ	1		
	12:14	MP7274-MB1	1		
	12:18	MP7274-B1	1		
	12:24	F27362-2	1		(sample used for QC only; not part of login F26937)
	12:28	MP7274-D1	1		
	12:32	MP7274-SD1	5		
	12:36	MP7274-S1	1		
	12:40	MP7274-S2	1		
	12:46	MA4034-CCV5	1		
	12:51	MA4034-CCB5	1		
	12:54	ZZZZZZ	1		
	12:58	ZZZZZZ	1		
	13:02	ZZZZZZ	1		
	13:06	ZZZZZZ	1		
	13:10	MP7266-MB1	1		
	13:13	MP7266-B1	1		
	13:17	F27249-1	1		(sample used for QC only; not part of login F26937)
	13:21	MP7266-D1	1		
	13:25	MP7266-SD1	5		
	13:29	MP7266-S1	1		
	13:34	MA4034-CCV6	1		
	13:39	MA4034-CCB6	1		
	13:42	MP7266-S2	1		
	13:49	ZZZZZZ	1		
	13:52	ZZZZZZ	1		
	13:56	ZZZZZZ	1		
	14:00	ZZZZZZ	1		
	14:04	ZZZZZZ	1		

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: F26937
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR101505.ASC Date Analyzed: 10/15/04 Methods: SW846 6010B
Analyst: DM Run ID: MA4034
Parameters: As,Ba,Cd,Cr,Fe,Pb,Mn,Se

Time	Sample Description	Dilution Factor	PS Recov	Comments
14:08	ZZZZZZ	1		
14:11	ZZZZZZ	1		
14:15	ZZZZZZ	1		
14:19	MA4034-CCV7	1		
14:24	MA4034-CCB7	1		
14:31	MP7279-MB1	1		
14:35	MP7279-B1	1		
14:41	F27365-2	1		(sample used for QC only; not part of login F26937)
14:45	MP7279-D1	1		
14:49	MP7279-SD1	5		
14:53	MP7279-S1	1		
14:56	MP7279-S2	1		
15:03	ZZZZZZ	1		
15:06	ZZZZZZ	1		
15:10	ZZZZZZ	1		
15:14	MA4034-CCV8	1		
15:19	MA4034-CCB8	1		
15:23	ZZZZZZ	1		
15:27	ZZZZZZ	1		
15:30	ZZZZZZ	1		
15:34	ZZZZZZ	1		
15:38	ZZZZZZ	1		
15:42	ZZZZZZ	1		
15:46	ZZZZZZ	1		
15:49	MP7263-MB1	1		
15:53	MP7263-B1	1		
15:59	F27162-2	1		(sample used for QC only; not part of login F26937)
16:03	MA4034-CCV9	1		
16:08	MA4034-CCB9	1		
16:12	MP7263-D1	1		
16:16	MP7263-SD1	5		
16:19	MP7263-S1	1		
16:23	MP7263-S2	1		

Accutest laboratories Instrument Runlog
Inorganics Analyses

Login Number: F26937
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR101505.ASC Date Analyzed: 10/15/04 Methods: SW846 6010B
Analyst: DM Run ID: MA4034
Parameters: As,Ba,Cd,Cr,Fe,Pb,Mn,Se

Time	Sample Description	Dilution Factor	PS Recov	Comments
16:29	ZZZZZZ	1		
16:33	ZZZZZZ	1		
16:37	ZZZZZZ	1		
16:41	ZZZZZZ	1		
16:45	ZZZZZZ	1		
16:48	ZZZZZZ	1		
16:52	MA4034-CCV10	1		
16:57	MA4034-CCB10	1		
17:01	ZZZZZZ	1		
17:05	ZZZZZZ	1		
17:09	ZZZZZZ	1		
17:12	ZZZZZZ	1		
17:16	ZZZZZZ	1		
17:20	ZZZZZZ	1		
17:24	ZZZZZZ	1		
17:28	ZZZZZZ	1		
17:31	ZZZZZZ	1		
17:35	ZZZZZZ	1		
17:39	MA4034-CCV11	1		
17:44	MA4034-CCB11	1		
17:48	ZZZZZZ	1		
17:52	ZZZZZZ	1		
17:55	ZZZZZZ	1		
18:00	MA4034-CRI2	1		
18:04	MA4034-CCV12	1		
18:09	MA4034-CCB12	1		

Refer to raw data for calibration curve and standards.

INTERNAL STANDARD SUMMARY

Login Number: F26937
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR101505.ASC Date Analyzed: 10/15/04 Methods: SW846 6010B
Analyst: DM Run ID: MA4034
Parameters: As,Ba,Cd,Cr,Fe,Pb,Mn,Se

Time	Sample Description	Istd#1
09:07	MA4034-ICV1	7319
09:10	MA4034-ICB1	7610 R
09:13	MA4034-CRI1	7488
09:18	MA4034-ICSA1	6742
09:21	MA4034-ICSAB1	6753
09:24	MA4034-CCV1	7231
09:29	MA4034-CCB1	7404
10:04	MP7262-MB1	7611
10:08	MP7262-B1	7363
10:14	F27253-1	8331
10:18	MA4034-CCV2	7278
10:23	MA4034-CCB2	7389
10:27	MP7262-D1	8401
10:31	MP7262-SD1	7766
10:35	MP7262-S1	8081
10:38	MP7262-S2	8109
10:44	ZZZZZZ	7488
10:48	ZZZZZZ	7461
10:52	ZZZZZZ	7249
10:56	ZZZZZZ	6960
11:00	ZZZZZZ	6746
11:04	ZZZZZZ	6888
11:07	MA4034-CCV3	7353
11:12	MA4034-CCB3	7550
11:16	ZZZZZZ	7303
11:20	ZZZZZZ	7250
11:24	ZZZZZZ	6852
11:28	ZZZZZZ	7276
11:31	F26937-1	7333
11:35	ZZZZZZ	7152
11:39	ZZZZZZ	7270
11:43	ZZZZZZ	7312
11:47	ZZZZZZ	7190

INTERNAL STANDARD SUMMARY

Login Number: F26937
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR101505.ASC Date Analyzed: 10/15/04 Methods: SW846 6010B
Analyst: DM Run ID: MA4034
Parameters: As,Ba,Cd,Cr,Fe,Pb,Mn,Se

Time	Sample Description	Istd#1
11:50	ZZZZZZ	7536
11:54	MA4034-CCV4	7377
11:59	MA4034-CCB4	7554
12:03	ZZZZZZ	7542
12:07	ZZZZZZ	7341
12:11	ZZZZZZ	7575
12:14	MP7274-MB1	7565
12:18	MP7274-B1	7368
12:24	F27362-2	7134
12:28	MP7274-D1	7172
12:32	MP7274-SD1	7326
12:36	MP7274-S1	7075
12:40	MP7274-S2	7127
12:46	MA4034-CCV5	7216
12:51	MA4034-CCB5	7465
12:54	ZZZZZZ	6706
12:58	ZZZZZZ	6807
13:02	ZZZZZZ	6794
13:06	ZZZZZZ	6805
13:10	MP7266-MB1	7417
13:13	MP7266-B1	7389
13:17	F27249-1	7598
13:21	MP7266-D1	7500
13:25	MP7266-SD1	7406
13:29	MP7266-S1	7411
13:34	MA4034-CCV6	7119
13:39	MA4034-CCB6	7524
13:42	MP7266-S2	7296
13:49	ZZZZZZ	8144
13:52	ZZZZZZ	8103
13:56	ZZZZZZ	8456
14:00	ZZZZZZ	7367
14:04	ZZZZZZ	7552

INTERNAL STANDARD SUMMARY

Login Number: F26937
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR101505.ASC Date Analyzed: 10/15/04 Methods: SW846 6010B
Analyst: DM Run ID: MA4034
Parameters: As,Ba,Cd,Cr,Fe,Pb,Mn,Se

Time	Sample Description	Istd#1
14:08	ZZZZZZ	7438
14:11	ZZZZZZ	7636
14:15	ZZZZZZ	7376
14:19	MA4034-CCV7	7240
14:24	MA4034-CCB7	7409
14:31	MP7279-MB1	7518
14:35	MP7279-B1	7382
14:41	F27365-2	7709
14:45	MP7279-D1	7691
14:49	MP7279-SD1	7592
14:53	MP7279-S1	7492
14:56	MP7279-S2	7490
15:03	ZZZZZZ	7394
15:06	ZZZZZZ	7631
15:10	ZZZZZZ	7356
15:14	MA4034-CCV8	7255
15:19	MA4034-CCB8	7469
15:23	ZZZZZZ	7459
15:27	ZZZZZZ	7405
15:30	ZZZZZZ	7295
15:34	ZZZZZZ	7541
15:38	ZZZZZZ	7524
15:42	ZZZZZZ	7469
15:46	ZZZZZZ	7512
15:49	MP7263-MB1	7508
15:53	MP7263-B1	7438
15:59	F27162-2	7509
16:03	MA4034-CCV9	7301
16:08	MA4034-CCB9	7536
16:12	MP7263-D1	7447
16:16	MP7263-SD1	7556
16:19	MP7263-S1	7255
16:23	MP7263-S2	7239

INTERNAL STANDARD SUMMARY

Login Number: F26937
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR101505.ASC Date Analyzed: 10/15/04 Methods: SW846 6010B
Analyst: DM Run ID: MA4034
Parameters: As,Ba,Cd,Cr,Fe,Pb,Mn,Se

Time	Sample Description	Istd#1
16:29	ZZZZZZ	7360
16:33	ZZZZZZ	7278
16:37	ZZZZZZ	7564
16:41	ZZZZZZ	7520
16:45	ZZZZZZ	7328
16:48	ZZZZZZ	7369
16:52	MA4034-CCV10	7235
16:57	MA4034-CCB10	7518
17:01	ZZZZZZ	7304
17:05	ZZZZZZ	7341
17:09	ZZZZZZ	7260
17:12	ZZZZZZ	7301
17:16	ZZZZZZ	7270
17:20	ZZZZZZ	7191
17:24	ZZZZZZ	7431
17:28	ZZZZZZ	7530
17:31	ZZZZZZ	7480
17:35	ZZZZZZ	7377
17:39	MA4034-CCV11	7182
17:44	MA4034-CCB11	7366
17:48	ZZZZZZ	7420
17:52	ZZZZZZ	7440
17:55	ZZZZZZ	7502
18:00	MA4034-CRI2	7336
18:04	MA4034-CCV12	7169
18:09	MA4034-CCB12	7442

R = Reference for ISTD limits. ! = Outside limits.

LEGEND:

Istd#	Parameter	Limits
Istd#1	Yttrium	60-125 %

7.1.1

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: F26937
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR101505.ASC Date Analyzed: 10/15/04 Methods: SW846 6010B
QC Limits: result < RL Run ID: MA4034 Units: ug/l

Time:			09:10		09:29		10:23		11:12	
Sample ID:			ICB1		CCB1		CCB2		CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	6.6	anr							
Antimony	5.0	1.5	anr							
Arsenic	10	2.8	-2.7	<10	-0.10	<10	-1.4	<10	-1.1	<10
Barium	200	.5	0.17	<200	0.17	<200	0.36	<200	0.41	<200
Beryllium	4.0	.3	anr							
Cadmium	5.0	.3	0.0	<5.0	-0.060	<5.0	-0.090	<5.0	-0.090	<5.0
Calcium	1000	3.8	anr							
Chromium	10	.4	-0.17	<10	0.13	<10	0.29	<10	0.41	<10
Cobalt	50	.5	anr							
Copper	25	.44	anr							
Iron	300	7.1	-14	<300	16.6	<300	9.0	<300	-4.7	<300
Lead	5.0	1.2	-0.49	<5.0	0.34	<5.0	-0.68	<5.0	-0.29	<5.0
Magnesium	5000	9.9	anr							
Manganese	15	.16	-3.5	<15	-3.5	<15	-3.5	<15	-3.5	<15
Molybdenum	50	.75	anr							
Nickel	40	1.1	anr							
Potassium	5000	14	anr							
Selenium	10	2	1.3	<10	2.3	<10	1.7	<10	2.5	<10
Silver	10	.6	anr							
Sodium	5000	150	anr							
Thallium	10	1.5	anr							
Tin	50	1.5								
Vanadium	50	.47	anr							
Zinc	20	.59	anr							

(*) Outside of QC limits
(anr) Analyte not requested

7.1.2
7

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: F26937
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR101505.ASC Date Analyzed: 10/15/04 Methods: SW846 6010B
QC Limits: result < RL Run ID: MA4034 Units: ug/l

Time:			11:59	
Sample ID:			CCB4	
Metal	RL	IDL	raw	final
Aluminum	200	6.6	anr	
Antimony	5.0	1.5	anr	
Arsenic	10	2.8	0.19	<10
Barium	200	.5	0.55	<200
Beryllium	4.0	.3	anr	
Cadmium	5.0	.3	-0.090	<5.0
Calcium	1000	3.8	anr	
Chromium	10	.4	0.20	<10
Cobalt	50	.5	anr	
Copper	25	.44	anr	
Iron	300	7.1	12.8	<300
Lead	5.0	1.2	-0.62	<5.0
Magnesium	5000	9.9	anr	
Manganese	15	.16	-3.4	<15
Molybdenum	50	.75	anr	
Nickel	40	1.1	anr	
Potassium	5000	14	anr	
Selenium	10	2	2.3	<10
Silver	10	.6	anr	
Sodium	5000	130	anr	
Thallium	10	1.5	anr	
Tin	50	1.5		
Vanadium	50	.47	anr	
Zinc	20	.59	anr	

(*) Outside of QC limits
(anr) Analyte not requested

7.1.2

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: F26937
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR101505.ASC Date Analyzed: 10/15/04 Methods: SW846 6010B
QC Limits: 90 to 110 % Recovery Run ID: MA4034 Units: ug/l

Time:		09:07			09:24			10:18	
Sample ID:	ICV	ICV1		CCV	CCV1		CCV	CCV2	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	2000	1940	97.0	2000	1960	98.0	2000	1990	99.5
Barium	2000	2020	101.0	2000	2050	102.5	2000	2040	102.0
Beryllium	anr								
Cadmium	2000	2020	101.0	2000	2040	102.0	2000	2090	104.5
Calcium	anr								
Chromium	2000	1940	97.0	2000	1960	98.0	2000	2000	100.0
Cobalt	anr								
Copper	anr								
Iron	40000	40900	102.3	40000	41200	103.0	40000	41700	104.3
Lead	2000	2000	100.0	2000	2030	101.5	2000	2040	102.0
Magnesium	anr								
Manganese	2000	2040	102.0	2000	2060	103.0	2000	2090	104.5
Molybdenum	anr								
Nickel	anr								
Potassium	anr								
Selenium	2000	2020	101.0	2000	2040	102.0	2000	2070	103.5
Silver	anr								
Sodium	anr								
Thallium	anr								
Tin									
Vanadium	anr								
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

7.1.3

7

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: F26937
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR101505.ASC Date Analyzed: 10/15/04 Methods: SW846 6010B
QC Limits: 90 to 110 % Recovery Run ID: MA4034 Units: ug/l

Time:		11:07			11:54	
Sample ID:	CCV	CCV3		CCV	CCV4	
Metal	True	Results	% Rec	True	Results	% Rec
Aluminum	anr					
Antimony	anr					
Arsenic	2000	1990	99.5	2000	2000	100.0
Barium	2000	2020	101.0	2000	2020	101.0
Beryllium	anr					
Cadmium	2000	2090	104.5	2000	2090	104.5
Calcium	anr					
Chromium	2000	1990	99.5	2000	1990	99.5
Cobalt	anr					
Copper	anr					
Iron	40000	41500	103.8	40000	41500	103.8
Lead	2000	2050	102.5	2000	2060	103.0
Magnesium	anr					
Manganese	2000	2080	104.0	2000	2080	104.0
Molybdenum	anr					
Nickel	anr					
Potassium	anr					
Selenium	2000	2070	103.5	2000	2070	103.5
Silver	anr					
Sodium	anr					
Thallium	anr					
Tin						
Vanadium	anr					
Zinc	anr					

(*) Outside of QC limits
(anr) Analyte not requested

7.1.3

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: F26937
Account: EEINCOX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IRL01505.ASC Date Analyzed: 10/15/04 Methods: SW846 6010B
QC Limits: 70 to 130 % Recovery Run ID: MA4034 Units: ug/L

Time:			09:13	
Sample ID:	CRI	CRIA	CRI1 **	
Metal	True	True	Results	% Rec
Aluminum	400		anr	
Antimony	10		anr	
Arsenic	20		18.4	92.0
Barium	400		418	104.5
Beryllium	10		anr	
Cadmium	10		10.3	103.0
Calcium	2000		anr	
Chromium	20		21.0	105.0
Cobalt	100		anr	
Copper	50		anr	
Iron	600		530	88.3
Lead	10		9.8	98.0
Magnesium	10000		anr	
Manganese	30		29.5	98.3
Molybdenum	100		anr	
Nickel	80		anr	
Potassium	10000		anr	
Selenium	10		12.4	124.0
Silver	20		anr	
Sodium	10000		anr	
Thallium	20		anr	
Tin	100			
Vanadium	100		anr	
Zinc	40		anr	

(*) Outside of QC limits
(anr) Analyte not requested

7.1.4

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: F26937
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR101505.ASC Date Analyzed: 10/15/04 Methods: SW846 6010B
QC Limits: 80 to 120 % Recovery Run ID: MA4034 Units: ug/l

Time: / Sample ID: / Metal	ICSA True	ICSAB True	09:18 ICSA1 Results	% Rec	09:21 ICSAB1 Results	% Rec
Aluminum	500000	500000	480000	96.0	478000	95.6
Antimony		1000	5.0		1010	101.0
Arsenic		1000	-1.2		1020	102.0
Barium		500	2.6		535	107.0
Beryllium		500	-0.29		531	106.2
Cadmium		1000	-0.65		999	99.9
Calcium	500000	500000	466000	93.2	459000	91.8
Chromium		500	4.9		503	100.6
Cobalt		500	1.4		496	99.2
Copper		500	-0.13		543	108.6
Iron	200000	200000	185000	92.5	189000	94.5
Lead		1000	-2.2		982	98.2
Magnesium	500000	500000	505000	101.0	520000	104.0
Manganese		500	-4.0		490	98.0
Molybdenum		1000	5.4		968	96.8
Nickel		1000	2.4		988	98.8
Potassium			155		-330	
Selenium		1000	-3.5		1000	100.0
Silver		1000	-0.72		1080	108.0
Sodium			256		352	
Thallium		1000	-5.4		937	93.7
Tin		1000	-3.1		963	96.3
Vanadium		500	3.8		510	102.0
Zinc		1000	-9.5		1000	100.0

(*) Outside of QC limits
(anr) Analyte not requested

7.1.5

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: F26937
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

QC Batch ID: MP7262
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date: 10/13/04

Metal	RL	IDL	MB raw	final
Aluminum	200	6.6	anr	
Antimony	5.0	1.5		
Arsenic	10	2.8	1.0	<10
Barium	200	.5	1.1	<200
Beryllium	4.0	.3		
Cadmium	5.0	.3	-0.19	<5.0
Calcium	1000	3.8		
Chromium	10	.4	0.19	<10
Cobalt	50	.5		
Copper	25	.44		
Iron	300	7.1	44.7	<300
Lead	5.0	1.2	-1.0	<5.0
Magnesium	5000	9.9		
Manganese	15	.16	-0.040	<15
Molybdenum	50	.75	anr	
Nickel	40	1.1		
Potassium	5000	14		
Selenium	10	2	2.2	<10
Silver	10	.6		
Sodium	5000	150		
Thallium	10	1.5		
Tin	50	1.5		
Vanadium	50	.47		
Zinc	20	.59	anr	

Associated samples MP7262: F26937-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

7.2.1

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: F26937
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

QC Batch ID: MP7262
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date: 10/13/04 10/13/04

Metal	F27253-1 Original	DUP	RPD	QC Limits	F27253-1 Original	MS	Spikelot MPFLICP	% Rec	QC Limits
Aluminum	anr								
Antimony									
Arsenic	0.0	0.0	NC	0-12	0.0	3540	4000	88.5	83-116
Barium	122	122	0.0	0-13	122	3770	4000	91.2	82-116
Beryllium									
Cadmium	0.0	0.0	NC	0-13	0.0	92.6	100	92.6	80-115
Calcium									
Chromium	3.2	4.1	24.7 (a)	0-12	3.2	377	400	93.5	82-120
Cobalt									
Copper									
Iron	3190	3750	16.1*(b)	0-14	3190	28200	27000	92.6	76-125
Lead	6.1	7.5	20.6 (a)	0-10	6.1	941	1000	93.5	84-118
Magnesium									
Manganese	165	178	7.6	0-13	165	1090	1000	92.5	75-125
Molybdenum	anr								
Nickel									
Potassium									
Selenium	0.0	0.0	NC	0-13	0.0	3610	4000	90.3	84-121
Silver									
Sodium									
Thallium									
Tin									
Vanadium									
Zinc	anr								

Associated samples MP7262: F26937-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) RPD acceptable due to low duplicate and sample concentrations.
(b) High RPD due to possible sample nonhomogeneity.

7.2.2

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: F26937
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

QC Batch ID: MP7262
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date: 10/13/04

Metal	F27253-1 Original	MSD	Spikelot MPFLICP	% Rec	MSD RPD	QC Limit
Aluminum	anr					
Antimony						
Arsenic	0.0	3530	4000	88.3	0.3	20
Barium	122	3810	4000	92.2	1.1	20
Beryllium						
Cadmium	0.0	92.1	100	92.1	0.5	20
Calcium						
Chromium	3.2	379	400	94.0	0.5	20
Cobalt						
Copper						
Iron	3190	29700	27000	98.2	5.2	20
Lead	6.1	948	1000	94.2	0.7	20
Magnesium						
Manganese	165	1150	1000	98.5	5.4	20
Molybdenum	anr					
Nickel						
Potassium						
Selenium	0.0	3610	4000	90.3	0.0	20
Silver						
Sodium						
Thallium						
Tin						
Vanadium						
Zinc	anr					

Associated samples MP7262: F26937-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

7.2.2

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: F26937
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

QC Batch ID: MP7262
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date: 10/13/04

Metal	BSP Result	Spikelot MPFLICP	% Rec	QC Limits
Aluminum	anr			
Antimony				
Arsenic	3940	4000	98.5	80-120
Barium	4050	4000	101.3	80-120
Beryllium				
Cadmium	102	100	102.0	80-120
Calcium				
Chromium	414	400	103.5	80-120
Cobalt				
Copper				
Iron	29100	27000	107.8	80-120
Lead	1040	1000	104.0	80-120
Magnesium				
Manganese	1070	1000	107.0	80-120
Molybdenum	anr			
Nickel				
Potassium				
Selenium	4100	4000	102.5	80-120
Silver				
Sodium				
Thallium				
Tin				
Vanadium				
Zinc	anr			

Associated samples MP7262: F26937-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

7.2.3

SERIAL DILUTION RESULTS SUMMARY

Login Number: F26937
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

QC Batch ID: MP7262
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date: 10/13/04

Metal	F27253-1 Original	SDL 1:5	RPD	QC Limits
Aluminum	anr			
Antimony				
Arsenic	0.00	0.00	NC	0-10
Barium	122	152	24.7*(a)	0-10
Beryllium				
Cadmium	0.00	0.00	NC	0-10
Calcium				
Chromium	3.24	4.02	24.1 (b)	0-10
Cobalt				
Copper				
Iron	3190	3990	25.4*(a)	0-10
Lead	6.10	0.00	100.0(b)	0-10
Magnesium				
Manganese	165	195	17.9*(a)	0-10
Molybdenum	anr			
Nickel				
Potassium				
Selenium	0.00	14.7		0-10
Silver				
Sodium				
Thallium				
Tin				
Vanadium				
Zinc	anr			

Associated samples MP7262: F26937-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) Serial dilution indicates possible matrix interference.
(b) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

7.2.4

General Chemistry

QC Data Summaries

8

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: F26937
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Solids, Total Dissolved	GN15661	10	<10	mg/l				
Solids, Total Suspended	GN15687	4.0	<4.0	mg/l				

Associated Samples:
Batch GN15661: F26937-1
Batch GN15687: F26937-1

8.1

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: F26937
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Solids, Total Dissolved	GN15661	F26923-2	mg/l	1060	1060	0.5	0-29%
Solids, Total Suspended	GN15687	F26937-1	mg/l	<4.0	<4.0	0.0	0-33%

Associated Samples:
Batch GN15661: F26937-1
Batch GN15687: F26937-1

December 2004 Laboratory Reports

Southeast
ACCUTEST.
Laboratories

12/08/05

Technical Report for

EEI

Camp Lejeune-Campbell St. Fuel Farm

CTO-0015

Accutest Job Number: F29018

Sampling Dates: 12/27/04 - 12/28/04

Report to:

EEI

bmorris@eeimail.com

ATTN: Bill Morris

Total number of pages in report: 122

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Sections: 1 2 3 4 5 6

Table of Contents

Section 1: Sample Summary 3
Section 2: Case Narrative/Conformance Summary 5
Section 3: Sample Results 7
3.1: F29018-1: UST-CSFF-DW02 7
3.2: F29018-2: UST-CSFF-122MW09 10
3.3: F29018-3: UST-CSFF-13DW01 13
3.4: F29018-4: UST-CSFF-DUP 16
3.5: F29018-5: UST-CSFF-13MW01 19
3.6: F29018-6: UST-CSFF-122MW08 21
3.7: F29018-7: UST-CSFF-122MW04 23
3.8: F29018-8: UST-CSFF-122MW07 25
3.9: F29018-9: UST-CSFF-122MW03 27
3.10: F29018-10: UST-CSFF-122MW11 29
3.11: F29018-11: UST-CSFF-MW03 31
3.12: F29018-12: UST-CSFF-MW16 33
3.13: F29018-13: UST-CSFF-MW12 35
3.14: F29018-14: UST-CSFF-MW14 37
3.15: F29018-15: UST-CSFF-MW11 39
3.16: F29018-16: UST-CSFF-MW24 41
3.17: F29018-17: UST-CSFF-MW21 43
3.18: F29018-18: UST-CSFF-DW06 45
3.19: F29018-19: TRIP BLANK 48
Section 4: Misc. Forms 50
4.1: Chain of Custody 51
Section 5: GC Volatiles - QC Data Summaries 54
5.1: Method Blank Summary 55
5.2: Blank Spike Summary 58
5.3: Matrix Spike/Matrix Spike Duplicate Summary 62
5.4: Surrogate Recovery Summaries 65
5.5: GC Surrogate Retention Time Summaries 67
5.6: Initial and Continuing Calibration Summaries 75
Section 6: GC Semi-volatiles - QC Data Summaries 100
6.1: Method Blank Summary 101
6.2: Blank Spike Summary 103
6.3: Matrix Spike/Matrix Spike Duplicate Summary 104
6.4: Surrogate Recovery Summaries 105
6.5: GC Surrogate Retention Time Summaries 106
6.6: Initial and Continuing Calibration Summaries 109

Sample Summary

EEI

Job No: F29018

Camp Lejeune-Campbell St. Fuel Farm
Project No: CTO-0015

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
F29018-1	12/27/04	11:00	TE	12/29/04	AQ	Ground Water	UST-CSFF-DW02
F29018-2	12/27/04	11:45	TE	12/29/04	AQ	Ground Water	UST-CSFF-122MW09
F29018-3	12/27/04	12:20	TE	12/29/04	AQ	Ground Water	UST-CSFF-13DW01
F29018-4	12/28/04	00:00	TE	12/29/04	AQ	Ground Water	UST-CSFF-DUP
F29018-5	12/27/04	13:00	TE	12/29/04	AQ	Ground Water	UST-CSFF-13MW01
F29018-6	12/27/04	13:30	TE	12/29/04	AQ	Ground Water	UST-CSFF-122MW08
F29018-7	12/27/04	14:10	TE	12/29/04	AQ	Ground Water	UST-CSFF-122MW04
F29018-8	12/28/04	08:15	TE	12/29/04	AQ	Ground Water	UST-CSFF-122MW07
F29018-9	12/28/04	08:50	TE	12/29/04	AQ	Ground Water	UST-CSFF-122MW03
F29018-10	12/28/04	10:00	TE	12/29/04	AQ	Ground Water	UST-CSFF-122MW11
F29018-11	12/28/04	11:00	TE	12/29/04	AQ	Ground Water	UST-CSFF-MW03
F29018-12	12/28/04	11:15	TE	12/29/04	AQ	Ground Water	UST-CSFF-MW16
F29018-13	12/28/04	11:32	TE	12/29/04	AQ	Ground Water	UST-CSFF-MW12

Sample Summary
(continued)

EEI

Job No: F29018

Camp Lejeune-Campbell St. Fuel Farm
Project No: CTO-0015

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
F29018-14	12/28/04	12:10	TE	12/29/04	AQ	Ground Water	UST-CSFF-MW14
F29018-15	12/28/04	12:35	TE	12/29/04	AQ	Ground Water	UST-CSFF-MW11
F29018-16	12/28/04	13:10	TE	12/29/04	AQ	Ground Water	UST-CSFF-MW24
F29018-17	12/28/04	13:30	TE	12/29/04	AQ	Ground Water	UST-CSFF-MW21
F29018-18	12/28/04	15:00	TE	12/29/04	AQ	Ground Water	UST-CSFF-DW06
F29018-19	12/27/04	17:00	TE	12/29/04	AQ	Trip Blank Water	TRIP BLANK

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: EEI **Job No:** F29018

Site: Camp Lejeune-Campbell St. Fuel Farm **Report Date** 1/17/2005 7:48:31 AM

18 Samples and 1 Trip Blank were collected on between 12/27/2004 and 12/28/2004 and were received at Accutest on 12/29/2004 properly preserved, at 1.8 Deg. C and intact. These Samples received an Accutest job number of F29018. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GC by Method EPA 504.1

Matrix: AQ **Batch ID:** OP12184

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Samples F29018-6MS, F29018-6MSD were used as the QC samples indicated.

Volatiles by GC By Method EPA 601/602

Matrix: AQ **Batch ID:** GQQ39

All samples were analyzed within the recommended method holding time.

Samples F29018-7MS, F29018-7MSD were used as the QC samples indicated.

All method blanks for this batch meet method specific criteria.

Matrix Spike Recovery for Benzene is outside control limits. Probable cause: due to matrix interference.

Matrix Spike Duplicate Recovery for Benzene is outside control limits. Probable cause: due to matrix interference.

F29018-5: All hits confirmed by GC/MS.

F29018-5 for 1,2-Dichlorobenzene: Elevated reporting limits due to matrix interference.

F29018-5 for 1,3-Dichlorobenzene: Elevated reporting limits due to matrix interference.

F29018-5 for 1,4-Dichlorobenzene: Elevated reporting limits due to matrix interference.

F29018-6: All hits confirmed by dual column analysis.

F29018-6 for 1,2-Dichlorobenzene: Elevated reporting limits due to matrix interference.

F29018-8: All hits confirmed by GC/MS.

F29018-8 for 1,2-Dichlorobenzene: Elevated reporting limits due to matrix interference.

F29018-13: All hits confirmed by dual column analysis.

F29018-13 for 1,2-Dichlorobenzene: Elevated reporting limits due to matrix interferenee.

F29018-13 for 1,3-Dichlorobenzene: Elevated reporting limits due to matrix interference.

F29018-13 for 1,4-Dichlorobenzene: Elevated reporting limits due to matrix interference.

F29018-14 for 1,2-Dichlorobenzene: Elevated reporting limits due to matrix interference.

Volatiles by GC By Method EPA 601/602

Matrix: AQ **Batch ID:** GQQ42

All samples were analyzed within the recommended method holding time.

Samples F29025-1MS, F29025-1MSD were used as the QC samples indieated.

All method blanks for this batch meet method specific criteria.

Matrix Spike Recovery for Benzenc is outside control limits. Probable cause: due to matrix interference.

RPD for MSD for Benzene is outside control limits for sample F29025-1MSD. Probable cause: due to sample non-homogeneity.

F29018-1: All hits confirmed by dual column analysis.

F29018-2: All hits confirmed by dual column analysis.

F29018-2 for 1,2-Dichlorobenzene: Elevated reporting limits due to matrix interferenee.

F29018-2 for 1,3-Dichlorobenzene: Elevatcd reporting limits due to matrix interference.

F29018-2 for 1,4-Dichlorobenzene: Elevated rcporting limits due to matrix interference.

F29018-3: All hits confirmed by dual column analysis.

F29018-12: All hits confirmed by dual column analysis.

F29018-12 for 1,2-Dichlorobenzcne: Elevated rcporting limits due to matrix interference.

F29018-16: All hits confirmed by dual column analysis.

F29018-16 for 1,2-Dichlorobenzene: Elevated reporting limits due to matrix interference.

F29018-17: All hits confirmed by dual column analysis.

F29018-17 for 1,2-Dichlorobenzene: Elevated reporting limits due to matrix interference.

Extractables by GC by Method EPA 610

Matrix: AQ **Batch ID:** OP12181

All samples were extracted within the recommended method holding time.

All samples were analyzed within thc reeommended method holding time.

All method blanks for this batch meet method specific criteria.

Samples F29018-3MS, F29018-3MSD werc used as the QC samples indicated.

Matrix Spike Recovery for Anthracene is outside control limits. Probable cause: due to matrix interference.

Matrix Spike Duplicate Recovery for Anthracene is outside control limits. Probable cause: due to matrix interference.

Matrix Spike Recovery for Naphthalene is outsidc control limits. Outside control limits due to high level in sample relative to spike amount.

Sample F29018-3 has surrogates outside control limits. Probable cause: due to matrix interference.

F29018-1: All hits confirmed by dual column analysis.

F29018-2: All hits confirmed by dual column analysis.

F29018-3: All hits confirmcd by dual column analysis.

F29018-3 for o-Terphenyl: Outside control limits due to dilution.

F29018-3 for 2-Fluorobiphenyl: Outside control limits due to dilution.

Aecutest Laboratories Southeast (ALSE) certifies that this report meets the project requirements for analytical data produced for the samples as received at ALSE and as statcd on the COC. ALSE certifies that the data meets the Data Quality Objectivcs for precision, accuracy and completeness as specified in the ALSE Quality Manual exccpt as noted above. This report is to be used in its entirety. ALSE is not responsible for any assumptions of data quality if partial data paekages are used.

Narrative prepared by:

Date: January 17, 2005

Ellen Pampel, Inorganic QA (signature on file)

Monday, January 17, 2005

Report of Analysis

Client Sample ID:	UST-CSFF-DW02		
Lab Sample ID:	F29018-1	**Date Sampled:**	12/27/04
Matrix:	AQ - Ground Water	**Date Received:**	12/29/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	QQ000940.D	1	01/03/05	CV	n/a	n/a	GQQ42
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	9.2	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	7.5	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	2.2	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	14.8	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Ruu# 2	Limits
460-00-4	4-Bromofluorobenzene	100%		59-129%
98-08-8	aaa-Trifluorotoluene	99%		73-122%

(a) All hits confirmed by dual eolumn analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indieates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST-CSFF-DW02		
Lab Sample ID:	F29018-1	**Date Sampled:**	12/27/04
Matrix:	AQ - Ground Water	**Date Received:**	12/29/04
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD21277.D	1	12/30/04	AG	12/30/04	OP12184	GDD639
Run #2							

	Initial Volume	Final Volume
Run #1	35.7 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.020	0.0098	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	90%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST-CSFF-DW02		
Lab Sample ID:	F29018-1	**Date Sampled:**	12/27/04
Matrix:	AQ - Ground Water	**Date Received:**	12/29/04
Method:	EPA 610 EPA 610	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	LL02260.D	1	01/12/05	SD	12/30/04	OP12181	GLL81
Run #2							

	Initial Volume	Final Volume
Run #1	1040 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	27.4	4.8	1.9	ug/l	
208-96-8	Acenaphthylene	ND	4.8	1.9	ug/l	
120-12-7	Anthracene	ND	4.8	1.9	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.8	1.9	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.8	1.9	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.8	1.9	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.8	1.9	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.8	1.9	ug/l	
218-01-9	Chrysene	ND	4.8	1.9	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.8	1.9	ug/l	
206-44-0	Fluoranthene	ND	4.8	1.9	ug/l	
86-73-7	Fluorene	21.5	4.8	1.9	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.8	1.9	ug/l	
91-20-3	Naphthalene	20.4	4.8	1.9	ug/l	
90-12-0	1-Methylnaphthalene	ND	4.8	1.9	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.8	1.9	ug/l	
85-01-8	Phenanthrene	ND	4.8	1.9	ug/l	
129-00-0	Pyrene	ND	4.8	1.9	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	79%		42-123%
84-15-1	o-Terphenyl	111%		51-123%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST-CSFF-122MW09		
Lab Sample ID:	F29018-2	**Date Sampled:**	12/27/04
Matrix:	AQ - Ground Water	**Date Received:**	12/29/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	QQ000941.D	1	01/03/05	CV	n/a	n/a	GQQ42
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	0.91	1.0	0.50	ug/l	J
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene [b]	ND	50	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene [b]	ND	20	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene [b]	ND	5.0	0.50	ug/l	
100-41-4	Ethylbenzene	1.1	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	1.8	3.0	1.0	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	104%		59-129%
98-08-8	aaa-Trifluorotoluene	98%		73-122%

(a) All hits confirmed by dual column analysis.
(b) Elevated reporting limits due to matrix interference.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST-CSFF-122MW09		
Lab Sample ID:	F29018-2	**Date Sampled:**	12/27/04
Matrix:	AQ - Ground Water	**Date Received:**	12/29/04
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD21278.D	1	12/30/04	AG	12/30/04	OP12184	GDD639
Run #2							

	Initial Volume	Final Volume
Run #1	35.4 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.020	0.0099	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	89%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST-CSFF-122MW09		
Lab Sample ID:	F29018-2	**Date Sampled:**	12/27/04
Matrix:	AQ - Ground Water	**Date Received:**	12/29/04
Method:	EPA 610 EPA 610	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	LL02261.D	5	01/12/05	SD	12/30/04	OP12181	GLL81
Run #2							

	Initial Volume	Final Volume
Run #1	1030 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	24	9.7	ug/l	
208-96-8	Acenaphthylene	ND	24	9.7	ug/l	
120-12-7	Anthraecne	ND	24	9.7	ug/l	
56-55-3	Benzo(a)anthracene	ND	24	9.7	ug/l	
50-32-8	Benzo(a)pyrene	ND	24	9.7	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	24	9.7	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	24	9.7	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	24	9.7	ug/l	
218-01-9	Chrysene	ND	24	9.7	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	24	9.7	ug/l	
206-44-0	Fluoranthene	ND	24	9.7	ug/l	
86-73-7	Fluorene	ND	24	9.7	ug/l	
193-39-5	Indeno(1,2,3-ed)pyrene	ND	24	9.7	ug/l	
91-20-3	Naphthalene	142	24	9.7	ug/l	
90-12-0	1-Methylnaphthalene	75.6	24	9.7	ug/l	
91-57-6	2-Methylnaphthalene	31.1	24	9.7	ug/l	
85-01-8	Phenanthrene	ND	24	9.7	ug/l	
129-00-0	Pyrene	ND	24	9.7	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	89%		42-123%
84-15-1	o-Terphenyl	78%		51-123%

(a) All hits confirmed by dual eolumn analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indieates an estimatcd value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidencc of a compound

Report of Analysis

Client Sample ID:	UST-CSFF-13DW01		
Lab Sample ID:	F29018-3	**Date Sampled:**	12/27/04
Matrix:	AQ - Ground Water	**Date Received:**	12/29/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	QQ000936.D	1	01/03/05	CV	n/a	n/a	GQQ42
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	0.52	1.0	0.50	ug/l	J
1330-20-7	Xylenes (total)	1.4	3.0	1.0	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	98%		59-129%
98-08-8	aaa-Trifluorotoluene	99%		73-122%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST-CSFF-13DW01		
Lab Sample ID:	F29018-3	**Date Sampled:**	12/27/04
Matrix:	AQ - Ground Water	**Date Received:**	12/29/04
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD21279.D	1	12/30/04	AG	12/30/04	OP12184	GDD639
Run #2							

	Initial Volume	Final Volume
Run #1	35.8 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.020	0.0098	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	105%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST-CSFF-13DW01		
Lab Sample ID:	F29018-3	**Date Sampled:**	12/27/04
Matrix:	AQ - Ground Water	**Date Received:**	12/29/04
Method:	EPA 610 EPA 610	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	LL02262.D	1	01/12/05	SD	12/30/04	OP12181	GLL81
Run #2 [a]	LL02288.D	10	01/12/05	SD	12/30/04	OP12181	GLL81
Run #3 [a]	LL02289.D	100	01/12/05	SD	12/30/04	OP12181	GLL81

	Initial Volume	Final Volume
Run #1	1050 ml	1.0 ml
Run #2	1050 ml	1.0 ml
Run #3	1050 ml	1.0 ml

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	81.9 [b]	48	19	ug/l	
208-96-8	Acenaphthylene	3.7	4.8	1.9	ug/l	J
120-12-7	Anthracene	ND	4.8	1.9	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.8	1.9	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.8	1.9	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.8	1.9	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.8	1.9	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.8	1.9	ug/l	
218-01-9	Chrysene	ND	4.8	1.9	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.8	1.9	ug/l	
206-44-0	Fluoranthene	ND	4.8	1.9	ug/l	
86-73-7	Fluorene	36.1	4.8	1.9	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.8	1.9	ug/l	
91-20-3	Naphthalene	1610 [c]	480	190	ug/l	
90-12-0	1-Methylnaphthalene	92.8 [b]	48	19	ug/l	
91-57-6	2-Methylnaphthalene	142 [b]	48	19	ug/l	
85-01-8	Phenanthrene	ND	4.8	1.9	ug/l	
129-00-0	Pyrene	ND	4.8	1.9	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Run# 3	Limits
321-60-8	2-Fluorobiphenyl	90%	92%	0% [d]	42-123%
84-15-1	o-Terphenyl	100%	90%	0% [d]	51-123%

(a) All hits confirmed by dual column analysis.
(b) Result is from Run# 2
(c) Result is from Run# 3
(d) Outside control limits due to dilution.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST-CSFF-DUP		
Lab Sample ID:	F29018-4	**Date Sampled:**	12/28/04
Matrix:	AQ - Ground Water	**Date Received:**	12/29/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejcune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	QQ000880.D	1	12/30/04	CV	n/a	n/a	GQQ39
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	96%		70-123%
98-08-8	aaa-Trifluorotoluene	108%		73-122%

ND = Not deteeted MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indieates an estimated value
B = Indicates analyte found in assoeiated method blank
N = Indicates presumptive evidence of a eompound

Report of Analysis

Client Sample ID:	UST-CSFF-DUP		
Lab Sample ID:	F29018-4	**Date Sampled:**	12/28/04
Matrix:	AQ - Ground Water	**Date Received:**	12/29/04
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD21280.D	1	12/30/04	AG	12/30/04	OP12184	GDD639
Run #2							

	Initial Volume	Final Volume
Run #1	34.7 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.020	0.010	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	103%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST-CSFF-DUP		
Lab Sample ID:	F29018-4	**Date Sampled:**	12/28/04
Matrix:	AQ - Ground Water	**Date Received:**	12/29/04
Method:	EPA 610 EPA 610	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LL02265.D	1	01/12/05	SD	12/30/04	OP12181	GLL81
Run #2							

	Initial Volume	Final Volume
Run #1	1040 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	4.8	1.9	ug/l	
208-96-8	Acenaphthylene	ND	4.8	1.9	ug/l	
120-12-7	Anthracene	ND	4.8	1.9	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.8	1.9	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.8	1.9	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.8	1.9	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.8	1.9	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.8	1.9	ug/l	
218-01-9	Chrysene	ND	4.8	1.9	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.8	1.9	ug/l	
206-44-0	Fluoranthene	ND	4.8	1.9	ug/l	
86-73-7	Fluorene	ND	4.8	1.9	ug/l	
193-39-5	Indeno(1,2,3-ed)pyrene	ND	4.8	1.9	ug/l	
91-20-3	Naphthalene	ND	4.8	1.9	ug/l	
90-12-0	1-Methylnaphthalene	ND	4.8	1.9	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.8	1.9	ug/l	
85-01-8	Phenanthrene	ND	4.8	1.9	ug/l	
129-00-0	Pyrene	ND	4.8	1.9	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	73%		42-123%
84-15-1	o-Terphenyl	86%		51-123%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST-CSFF-13MW01		
Lab Sample ID:	F29018-5	**Date Sampled:**	12/27/04
Matrix:	AQ - Ground Water	**Date Received:**	12/29/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	QQ000875.D	1	12/30/04	CV	n/a	n/a	GQQ39
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene [b]	ND	50	50	ug/l	
541-73-1	1,3-Dichlorobenzene [b]	ND	20	20	ug/l	
106-46-7	1,4-Dichlorobenzene [b]	ND	5.0	5.0	ug/l	
100-41-4	Ethylbenzene	0.75	1.0	0.50	ug/l	J
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	0.56	1.0	0.50	ug/l	J
1330-20-7	Xylenes (total)	2.5	3.0	1.0	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	97%		70-123%
98-08-8	aaa-Trifluorotoluene	108%		73-122%

(a) All hits confirmed by GC/MS.
(b) Elevated reporting limits due to matrix interference.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST-CSFF-13MW01		
Lab Sample ID:	F29018-5	**Date Sampled:**	12/27/04
Matrix:	AQ - Ground Water	**Date Received:**	12/29/04
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD21281.D	1	12/30/04	AG	12/30/04	OP12184	GDD639
Run #2							

	Initial Volume	Final Volume
Run #1	35.3 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.020	0.0099	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	92%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indieates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a eompound

Report of Analysis

Client Sample ID:	UST-CSFF-122MW08		
Lab Sample ID:	F29018-6	**Date Sampled:**	12/27/04
Matrix:	AQ - Ground Water	**Date Received:**	12/29/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	QQ000881.D	1	12/30/04	CV	n/a	n/a	GQQ39
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene [b]	ND	5.0	5.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	0.54	1.0	0.50	ug/l	J
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	95%		70-123%
98-08-8	aaa-Trifluorotoluene	107%		73-122%

(a) All hits confirmed by dual column analysis.
(b) Elevated reporting limits due to matrix interference.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST-CSFF-122MW08		
Lab Sample ID:	F29018-6	**Date Sampled:**	12/27/04
Matrix:	AQ - Ground Water	**Date Received:**	12/29/04
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD21282.D	1	12/30/04	AG	12/30/04	OP12184	GDD639
Run #2							

	Initial Volume	Final Volume
Run #1	36.2 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0097	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	90%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates valuc exceeds calibration range
J = Indieates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST-CSFF-122MW04		
Lab Sample ID:	F29018-7	**Date Sampled:**	12/27/04
Matrix:	AQ - Ground Water	**Date Received:**	12/29/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	QQ000882.D	1	12/30/04	CV	n/a	n/a	GQQ39
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	95%		70-123%
98-08-8	aaa-Trifluorotoluene	107%		73-122%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exeeeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST-CSFF-122MW04		
Lab Sample ID:	F29018-7	**Date Sampled:**	12/27/04
Matrix:	AQ - Ground Water	**Date Received:**	12/29/04
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD21285.D	1	12/30/04	AG	12/30/04	OP12184	GDD639
Run #2							

	Initial Volume	Final Volume
Run #1	35.5 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.020	0.0099	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	98%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds ealibration range
J = Indieates an estimated value
B = Indieates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST-CSFF-122MW07		
Lab Sample ID:	F29018-8	**Date Sampled:**	12/28/04
Matrix:	AQ - Ground Water	**Date Received:**	12/29/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	QQ000873.D	1	12/30/04	CV	n/a	n/a	GQQ39
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene [b]	ND	5.0	5.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	0.53	1.0	0.50	ug/l	J
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	96%		70-123%
98-08-8	aaa-Trifluorotoluene	108%		73-122%

(a) All hits confirmed by GC/MS.
(b) Elevated reporting limits due to matrix interferenee.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indieates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST-CSFF-122MW07		
Lab Sample ID:	F29018-8	**Date Sampled:**	12/28/04
Matrix:	AQ - Ground Water	**Date Received:**	12/29/04
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD21286.D	1	12/30/04	AG	12/30/04	OP12184	GDD639
Run #2							

	Initial Volume	Final Volume
Run #1	35.7 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.020	0.0098	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	92%		60-139%

ND = Not deteeted MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds ealibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidenee of a eompound

Report of Analysis

Client Sample ID:	UST-CSFF-122MW03		
Lab Sample ID:	F29018-9	**Date Sampled:**	12/28/04
Matrix:	AQ - Ground Water	**Date Received:**	12/29/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	QQ000872.D	1	12/30/04	CV	n/a	n/a	GQQ39
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Diehlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Diehlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Diehlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	98%		70-123%
98-08-8	aaa-Trifluorotoluene	110%		73-122%

ND = Not deteeted MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in assoeiated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST-CSFF-122MW03		
Lab Sample ID:	F29018-9	**Date Sampled:**	12/28/04
Matrix:	AQ - Ground Water	**Date Received:**	12/29/04
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD21288.D	1	12/30/04	AG	12/30/04	OP12184	GDD639
Run #2							

	Initial Volume	Final Volume
Run #1	35.2 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.020	0.0099	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	91%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indieates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST-CSFF-122MW11		
Lab Sample ID:	F29018-10	**Date Sampled:**	12/28/04
Matrix:	AQ - Ground Water	**Date Received:**	12/29/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	QQ000871.D	1	12/30/04	CV	n/a	n/a	GQQ39
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	95%		70-123%
98-08-8	aaa-Trifluorotoluene	107%		73-122%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indieates value exeeeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST-CSFF-122MW11		
Lab Sample ID:	F29018-10	**Date Sampled:**	12/28/04
Matrix:	AQ - Ground Water	**Date Received:**	12/29/04
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Projeet:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD21289.D	1	12/30/04	AG	12/30/04	OP12184	GDD639
Run #2							

	Initial Volume	Final Volume
Run #1	35.9 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0097	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	89%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST-CSFF-MW03		
Lab Sample ID:	F29018-11	**Date Sampled:**	12/28/04
Matrix:	AQ - Ground Water	**Date Received:**	12/29/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	QQ000870.D	1	12/30/04	CV	n/a	n/a	GQQ39
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	95%		70-123%
98-08-8	aaa-Trifluorotoluene	114%		73-122%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST-CSFF-MW03		
Lab Sample ID:	F29018-11	**Date Sampled:**	12/28/04
Matrix:	AQ - Ground Water	**Date Received:**	12/29/04
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD21290.D	1	12/30/04	AG	12/30/04	OP12184	GDD639
Run #2							

	Initial Volume	Final Volume
Run #1	35.8 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.020	0.0098	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	85%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated valuc
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST-CSFF-MW16		
Lab Sample ID:	F29018-12	**Date Sampled:**	12/28/04
Matrix:	AQ - Ground Water	**Date Received:**	12/29/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	QQ000938.D	1	01/03/05	CV	n/a	n/a	GQQ42
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	65.4	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene [b]	ND	50	50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Diehlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	8.4	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	0.66	1.0	0.50	ug/l	J
1330-20-7	Xylenes (total)	29.1	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	106%		59-129%
98-08-8	aaa-Trifluorotoluene	105%		73-122%

(a) All hits confirmed by dual column analysis.
(b) Elevated reporting limits due to matrix interference.

ND = Not detected MDL - Method Deteetion Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST-CSFF-MW16		
Lab Sample ID:	F29018-12	**Date Sampled:**	12/28/04
Matrix:	AQ - Ground Water	**Date Received:**	12/29/04
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD21291.D	1	12/30/04	AG	12/30/04	OP12184	GDD639
Run #2							

	Initial Volume	Final Volume
Run #1	36.5 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0096	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	101%		60-139%

ND = Not deteeted MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST-CSFF-MW12		
Lab Sample ID:	F29018-13	**Date Sampled:**	12/28/04
Matrix:	AQ - Ground Water	**Date Received:**	12/29/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	QQ000876.D	1	12/30/04	CV	n/a	n/a	GQQ39
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene [b]	ND	10	10	ug/l	
541-73-1	1,3-Dichlorobenzene [b]	ND	5.0	5.0	ug/l	
106-46-7	1,4-Dichlorobenzene [b]	ND	5.0	5.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	0.77	1.0	0.50	ug/l	J
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	97%		70-123%
98-08-8	aaa-Trifluorotoluene	108%		73-122%

(a) All hits confirmed by dual column analysis.
(b) Elevated reporting limits due to matrix interference.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST-CSFF-MW12		
Lab Sample ID:	F29018-13	**Date Sampled:**	12/28/04
Matrix:	AQ - Ground Water	**Date Received:**	12/29/04
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD21292.D	1	12/31/04	AG	12/30/04	OP12184	GDD639
Run #2							

	Initial Volume	Final Volume
Run #1	36.4 ml	2.0 ml
Run #2		

CAS No.	Compouud	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0096	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	100%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indieates value exeeeds calibration range
J = Indicates an cstimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST-CSFF-MW14		
Lab Sample ID:	F29018-14	**Date Sampled:**	12/28/04
Matrix:	AQ - Ground Water	**Date Received:**	12/29/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	QQ000869.D	1	12/30/04	CV	n/a	n/a	GQQ39
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene [a]	ND	5.0	5.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	94%		70-123%
98-08-8	aaa-Trifluorotoluene	108%		73-122%

(a) Elevated reporting limits due to matrix interference.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST-CSFF-MW14		
Lab Sample ID:	F29018-14	**Date Sampled:**	12/28/04
Matrix:	AQ - Ground Water	**Date Received:**	12/29/04
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD21293.D	1	12/31/04	AG	12/30/04	OP12184	GDD639
Run #2							

	Initial Volume	Final Volume
Run #1	35.8 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.020	0.0098	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	101%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indieates value exeeeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidencc of a compound

Report of Analysis

Client Sample ID:	UST-CSFF-MW11		
Lab Sample ID:	F29018-15	**Date Sampled:**	12/28/04
Matrix:	AQ - Ground Water	**Date Received:**	12/29/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	QQ000868.D	1	12/30/04	CV	n/a	n/a	GQQ39
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	93%		70-123%
98-08-8	aaa-Trifluorotoluene	104%		73-122%

ND = Not deteeted MDL - Method Deteetion Limit
RL = Reporting Limit
E = Indicates value exeeeds ealibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST-CSFF-MW11		
Lab Sample ID:	F29018-15	**Date Sampled:**	12/28/04
Matrix:	AQ - Ground Water	**Date Received:**	12/29/04
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD21294.D	1	12/31/04	AG	12/30/04	OP12184	GDD639
Run #2							

	Initial Volume	Final Volume
Run #1	36.3 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0096	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	99%		60-139%

ND = Not detected MDL - Method Dctection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST-CSFF-MW24		
Lab Sample ID:	F29018-16	**Date Sampled:**	12/28/04
Matrix:	AQ - Ground Water	**Date Received:**	12/29/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	QQ000942.D	10	01/03/05	CV	n/a	n/a	GQQ42
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	598	10	5.0	ug/l	
108-90-7	Chlorobenzene	ND	10	5.0	ug/l	
95-50-1	1,2-Dichlorobenzene [b]	ND	50	50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	10	5.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	10	5.0	ug/l	
100-41-4	Ethylbenzene	270	10	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	46.9	10	5.0	ug/l	
108-88-3	Toluene	712	10	5.0	ug/l	
1330-20-7	Xylenes (total)	899	30	10	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	97%		59-129%
98-08-8	aaa-Trifluorotoluene	95%		73-122%

(a) All hits confirmed by dual column analysis.
(b) Elevated reporting limits due to matrix interference.

ND = Not detected MDL - Method Deteetion Limit
RL = Reporting Limit
E = Indicates value exeeeds calibration range
J = Indicates an estimated value
B = Indieates analyte found in assoeiated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST-CSFF-MW24		
Lab Sample ID:	F29018-16	**Date Sampled:**	12/28/04
Matrix:	AQ - Ground Water	**Date Received:**	12/29/04
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD21295.D	1	12/31/04	AG	12/30/04	OP12184	GDD639
Run #2							

	Initial Volume	Final Volume
Run #1	36.2 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0097	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	97%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST-CSFF-MW21		
Lab Sample ID:	F29018-17	**Date Sampled:**	12/28/04
Matrix:	AQ - Ground Water	**Date Received:**	12/29/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	QQ000937.D	1	01/03/05	CV	n/a	n/a	GQQ42
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	8.3	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Diehlorobenzene [b]	ND	20	20	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	1.7	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	50.6	1.0	0.50	ug/l	
108-88-3	Toluene	3.1	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	6.1	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	100%		59-129%
98-08-8	aaa-Trifluorotoluene	102%		73-122%

(a) All hits confirmed by dual column analysis.
(b) Elevated reporting limits due to matrix interference.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST-CSFF-MW21		
Lab Sample ID:	F29018-17	**Date Sampled:**	12/28/04
Matrix:	AQ - Ground Water	**Date Received:**	12/29/04
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD21296.D	1	12/31/04	AG	12/30/04	OP12184	GDD639
Run #2							

	Initial Volume	Final Volume
Run #1	36.2 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0097	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	98%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST-CSFF-DW06		
Lab Sample ID:	F29018-18	**Date Sampled:**	12/28/04
Matrix:	AQ - Ground Water	**Date Received:**	12/29/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	QQ000867.D	1	12/30/04	CV	n/a	n/a	GQQ39
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	94%		70-123%
98-08-8	aaa-Trifluorotoluene	107%		73-122%

ND = Not detected MDL - Method Deteetion Limit
RL = Reporting Limit
E = Indicates value exeeeds ealibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indieates presumptive evidence of a eompound

Report of Analysis

Client Sample ID:	UST-CSFF-DW06		
Lab Sample ID:	F29018-18	**Date Sampled:**	12/28/04
Matrix:	AQ - Ground Water	**Date Received:**	12/29/04
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD21297.D	1	12/31/04	AG	12/30/04	OP12184	GDD639
Run #2							

	Initial Volume	Final Volume
Run #1	36.8 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0095	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	99%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST-CSFF-DW06		
Lab Sample ID:	F29018-18	**Date Sampled:**	12/28/04
Matrix:	AQ - Ground Water	**Date Received:**	12/29/04
Method:	EPA 610 EPA 610	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LL02266.D	1	01/12/05	SD	12/30/04	OP12181	GLL81
Run #2							

	Initial Volume	Final Volume
Run #1	1030 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	4.9	1.9	ug/l	
208-96-8	Acenaphthylene	ND	4.9	1.9	ug/l	
120-12-7	Anthracene	ND	4.9	1.9	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.9	1.9	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.9	1.9	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.9	1.9	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.9	1.9	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.9	1.9	ug/l	
218-01-9	Chrysene	ND	4.9	1.9	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.9	1.9	ug/l	
206-44-0	Fluoranthene	ND	4.9	1.9	ug/l	
86-73-7	Fluorene	ND	4.9	1.9	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.9	1.9	ug/l	
91-20-3	Naphthalene	ND	4.9	1.9	ug/l	
90-12-0	1-Methylnaphthalene	ND	4.9	1.9	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.9	1.9	ug/l	
85-01-8	Phenanthrene	ND	4.9	1.9	ug/l	
129-00-0	Pyrene	ND	4.9	1.9	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	64%		42-123%
84-15-1	o-Terphenyl	79%		51-123%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	F29018-19	**Date Sampled:**	12/27/04
Matrix:	AQ - Trip Blank Water	**Date Received:**	12/29/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	QQ000866.D	1	12/30/04	CV	n/a	n/a	GQQ39
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	94%		70-123%
98-08-8	aaa-Trifluorotoluene	106%		73-122%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analytc found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	F29018-19	**Date Sampled:**	12/27/04
Matrix:	AQ - Trip Blank Water	**Date Received:**	12/29/04
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD21299.D	1	12/31/04	AG	12/30/04	OP12184	GDD639
Run #2							

	Initial Volume	Final Volume
Run #1	36.2 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0097	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	101%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds ealibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a eompound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

CHAIN OF CUSTODY

ACCUTEST

4405 VINELAND ROAD • SUITE C-15
ORLANDO, FL 32811
TEL: 407-425-6700 • FAX: 407-425-0707

ACCUTEST JOB #: F29018
ACCUTEST QUOTE #:

CLIENT INFORMATION

COMPANY: Engineering + Environment
NAME: Bldg 626 Pine Grove Rd
ADDRESS: Camp Lejeune NC 28547
CITY, STATE, ZIP: (910) 989-3014
SEND REPORT TO:
PHONE #: (910) 989-3341

FACILITY INFORMATION

PROJECT NAME: Camp Lejeune Fuel Farm (CSFF)
LOCATION: LEJ53-016 (CTO-0015)
PROJECT NO.:
FAX #: (910) 989-3341

ANALYTICAL INFORMATION

VOCs by 8260B | 610 | EDB 504.1

MATRIX CODES

DW - DRINKING WATER
GW - GROUND WATER
WW - WASTE WATER
SO - SOIL
SL - SLUDGE
OL - OIL
LIQ - OTHER LIQUID
SOL - OTHER SOLID

ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION DATE	COLLECTION TIME	SAMPLED BY:	MATRIX	# OF BOTTLES	PRESERVATION HCl	PRESERVATION NaOH	PRESERVATION HNO3	PRESERVATION H2SO4	PRESERVATION NONE	PRESERVATION OTHER	VOCs by 8260B	610	EDB 504.1	LAB USE ONLY
1	UST-CSFF-DW02	12/27/04	1100	TE	GW	8	X				X	X	X	X	X	
2	UST-CSFF-122MW09	12/27/04	1145		GW	8	X				X	X	X	X	X	
3	UST-CSFF-13DW01	12/27/04	1220			8	X				X	X	X	X	X	
4	UST-CSFF-DUP	12/28/04				8	X				X	X	X	X	X	
5	UST-CSFF-13MW01	12/27/04	1320			6	X					X	X		X	
6	UST-CSFF-122MW08	12/27/04	1330			6	X					X	X		X	
7	UST-CSFF-122MW04	12/27/04	1410			6	X					X	X		X	
8	UST-CSFF-122MW07	12/28/04	0815			6	X						X		X	
9	UST-CSFF-122MW03	12/28/04	0850			6	X						X		X	
10	UST-CSFF-122MW11	12/28/04	1000			6	X						X		X	

DATA TURNAROUND INFORMATION

☒ STANDARD
☐ 48 HOUR RUSH
☐ 24 HOUR EMERGENCY
☐ OTHER
APPROVED BY:
EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED

DATA DELIVERABLE INFORMATION

☐ STANDARD
☐ COMMERCIAL "B"
☐ DISK DELIVERABLE
☐ STATE FORMS
☒ OTHER (SPECIFY) NEESA 4

COMMENTS/REMARKS

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
1.	12/28/04 1780	1. FX	2. FX	12/29/04 0930	2.
3.		3.	4.		4.
5.		5.	SEAL #	PRESERVE WHERE APPLICABLE ☐	ON ICE ☐ TEMPERATURE 1.8 / 1.0 °C

4.1 4

F29018: Chain of Custody
Page 1 of 3

CHAIN OF CUSTODY

ACCUTEST

4405 VINELAND ROAD • SUITE C-15
ORLANDO, FL 32811
TEL: 407-425-6700 • FAX: 407-425-0707

ACCUTEST JOB #: FZ9018
ACCUTEST QUOTE #:

CLIENT INFORMATION

Engineering + Environment
NAME: [illegible] Green Rd
ADDRESS: Cary
CITY: Le[illegible] STATE: NC ZIP: 28547
(910) 989-3214
SEND REPORT TO:
PHONE #: (910) 989-3341

FACILITY INFORMATION

Campbell Street Fuel Farm (CSFF)
PROJECT NAME: NCDOT
LOCATION: LD03-016 (CTO-0015)
PROJECT NO.:
FAX #: (910) 989-3341

ANALYTICAL INFORMATION

602 Sol. EDB

MATRIX CODES

DW - DRINKING WATER
GW - GROUND WATER
WW - WASTE WATER
SO - SOIL
SL - SLUDGE
OI - OIL
LIQ - OTHER LIQUID
SOL - OTHER SOLID

ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION DATE	COLLECTION TIME	SAMPLED BY:	MATRIX	# OF BOTTLES	PRESERVATION HCl	PRESERVATION HNO3	PRESERVATION H2SO4	PRESERVATION NONE	PRESERVATION MeOH	602	Sol. EDB	LAB USE ONLY
11	UST-CSFF-MW03	12/28/04	1100	TE	GW	6	X				X	X	X	
12	UST-CSFF-MW16		1115			6	X				X	X	X	
13	UST-CSFF-MW12		1132			6	X				X	X	X	
14	UST-CSFF-MW14		1210			6	X				X	X	X	
15	UST-CSFF-MW11		1235			6	X				X	X	X	
16	UST-CSFF-MW24		1310			6	X				X	X	X	
17	UST-CSFF-MW21		1330			6	X				X	X	X	
18	UST-CSFF-DW06	12/28/04	1500	TE	GW	6	X				X	X	X	
19	TRIP BLANKS	12/28/04	1700	LDB	W	4	X							
	TEMP BLANK	12/28/04	1700	LDB	W	2				X				

DATA TURNAROUND INFORMATION

- [x] STANDARD
- [ ] 48 HOUR RUSH
- [ ] 24 HOUR EMERGENCY
- [ ] OTHER

APPROVED BY:

EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED

DATA DELIVERABLE INFORMATION

- [ ] STANDARD
- [ ] COMMERCIAL "B"
- [ ] DISK DELIVERABLE
- [ ] STATE FORMS
- [x] OTHER (SPECIFY) Nelac

COMMENTS/REMARKS

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
1.	12/28/04 1700	1. FX	2. FX	12/29/04 9:30	2.
RELINQUISHED BY:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
3.		3.	4.		4.
RELINQUISHED BY:	DATE TIME:	RECEIVED BY:	SEAL #	PRESERVE WHERE APPLICABLE ☐	ON ICE ☐ TEMPERATURE
5.		5.			C

F29018: Chain of Custody
Page 2 of 3

ACCUTEST LABORATORIES SOUTHEAST SAMPLE RECEIPT CONFIRMATION

Accutest's Job Number: FZ9018

Client: Engineering Environment Project: Campbell Street Fuel Farm

Date Received: 12/29/04 Time Received: 9:30

of Coolers Received: 2 Cooler Temperatures: 1.8 1.0

Delivery Method: (FedEx) UPS Accutest Courier Greyhound Delivery Other

Air Bill Number:

Cooler Custody Seals Intact ?	(Yes)	No	
Chain of Custody Provided ?	(Yes)	No	
COC Match Bottle Label ID's ?	Yes	(No)	
Sample Labels Present on all bottles ?	(Yes)	No	
All Analyses Marked On COC ?	Yes	(No)	
Are All Bottles Intact ?	(Yes)	No	
Samples Preserved Correctly ?	(Yes)	No	
Correct Number of Containers Used ?	(Yes)	No	
Sufficient Sample Volume ?	(Yes)	No	
Trip Blank Provided ?	(Yes)	No	
Trip Blank on COC ?	(Yes)	No	
Trip Blank Intact ?	(Yes)	No	N/A
Trip Blank Matrix ?	Soil	(Water)	N/A
Number of Encores ?	Ø		
Number of Soil Field Kits ?	Ø		

Summary of Comments: Sample DW-06 recieved 2 ambers For 610 not on COC Recieved 2 sets of VOC Trip Blanks.

Signature: Date: 12/29/04

Review Signature:

ASBD 12/30/03

4.1 4

F29018: Chain of Custody
Page 3 of 3

GC Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: F29018
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GQQ39-MB	QQ000865.D	1	12/30/04	CV	n/a	n/a	GQQ39

The QC reported here applies to the following samples: **Method:** EPA 601/602

F29018-4, F29018-5, F29018-6, F29018-7, F29018-8, F29018-9, F29018-10, F29018-11, F29018-13, F29018-14, F29018-15, F29018-18, F29018-19

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
352-33-0	1-Chloro-4-fluorobenzene	97%	70-123%
98-08-8	aaa-Trifluorotoluene	109%	73-122%

Method Blank Summary

Job Number: F29018
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GQQ42-MB	QQ000932.D	1	01/03/05	CV	n/a	n/a	GQQ42

The QC reported here applies to the following samples: **Method:** EPA 601/602

F29018-1, F29018-2, F29018-3, F29018-12, F29018-16, F29018-17

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	99%	59-129%
98-08-8	aaa-Trifluorotoluene	99%	73-122%

Method Blank Summary

Job Number: F29018
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP12184-MB	DD21273.D	1	12/30/04	AG	12/30/04	OP12184	GDD639

The QC reported here applies to the following samples: **Method:** EPA 504.1

F29018-1, F29018-2, F29018-3, F29018-4, F29018-5, F29018-6, F29018-7, F29018-8, F29018-9, F29018-10, F29018-11, F29018-12, F29018-13, F29018-14, F29018-15, F29018-16, F29018-17, F29018-18, F29018-19

CAS No.	Componnd	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.020	0.010	ug/l	

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	105%	60-139%

Blank Spike Summary

Job Number: F29018
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GQQ42-BS	QQ000931.D	1	01/03/05	CV	n/a	n/a	GQQ42

5.2

The QC reported here applies to the following samples: **Method:** EPA 601/602

F29018-1, F29018-2, F29018-3, F29018-12, F29018-16, F29018-17

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	20	22.0	110	86-121
108-90-7	Chlorobenzene	20	22.0	110	81-119
95-50-1	1,2-Diehlorobenzene	20	21.6	108	75-120
541-73-1	1,3-Diehlorobenzene	20	22.1	111	77-121
106-46-7	1,4-Diehlorobenzene	20	21.8	109	75-122
100-41-4	Ethylbenzene	20	23.1	116	81-126
1634-04-4	Methyl Tert Butyl Ether	20	22.5	113	76-117
108-88-3	Toluene	20	22.0	110	82-123
1330-20-7	Xylenes (total)	60	67.8	113	82-125

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	99%	59-129%
98-08-8	aaa-Trifluorotoluene	99%	73-122%

Blank Spike Summary

Job Number: F29018
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP12184-BS	DD21274.D	1	12/30/04	AG	12/30/04	OP12184	GDD639

5.2 G

The QC reported here applies to the following samples: **Method:** EPA 504.1

F29018-1, F29018-2, F29018-3, F29018-4, F29018-5, F29018-6, F29018-7, F29018-8, F29018-9, F29018-10, F29018-11, F29018-12, F29018-13, F29018-14, F29018-15, F29018-16, F29018-17, F29018-18, F29018-19

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
106-93-4	1,2-Dibromoethane	0.25	0.20	80	70-130

CAS No.	Surrogate Recoverics	BSP	Limits
460-00-4	4-Bromofluorobenzene	105%	60-139%

Blank Spike Summary

Job Number: F29018
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP12184-BS2	DD21275.D	1	12/30/04	AG	12/30/04	OP12184	GDD639

The QC reported here applies to the following samples: **Method:** EPA 504.1

F29018-1, F29018-2, F29018-3, F29018-4, F29018-5, F29018-6, F29018-7, F29018-8, F29018-9, F29018-10, F29018-11, F29018-12, F29018-13, F29018-14, F29018-15, F29018-16, F29018-17, F29018-18, F29018-19

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
106-93-4	1,2-Dibromoethane	0.25	0.22	88	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	106%	60-139%

Blank Spike Summary

Job Number: F29018
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GQQ39-BS	QQ000864.D	1	12/30/04	CV	n/a	n/a	GQQ39

The QC reported here applies to the following samples: **Method:** SW846 8021B

F29018-4, F29018-5, F29018-6, F29018-7, F29018-8, F29018-9, F29018-10, F29018-11, F29018-13, F29018-14, F29018-15, F29018-18, F29018-19

CAS No.	Compound	Spike ug/l	BSP ng/l	BSP %	Limits
71-43-2	Benzene	20	20.5	103	86-121
108-90-7	Chlorobenzene	20	19.5	98	81-119
95-50-1	1,2-Dichlorobenzene	20	19.3	97	75-120
541-73-1	1,3-Diehlorobenzene	20	19.4	97	77-121
106-46-7	1,4-Diehlorobenzene	20	19.6	98	75-122
100-41-4	Ethylbenzene	20	20.7	104	81-126
1634-04-4	Methyl Tert Butyl Ether	20	19.8	99	76-117
108-88-3	Toluene	20	20.4	102	82-123
1330-20-7	Xylenes (total)	60	60.9	102	82-125

CAS No.	Surrogate Recoveries	BSP	Limits
352-33-0	1-Chloro-4-fluorobenzene	99%	70-123%
98-08-8	aaa-Trifluorotoluene	107%	73-122%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F29018
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F29018-7MS	QQ000883.D	1	12/30/04	CV	n/a	n/a	GQQ39
F29018-7MSD	QQ000884.D	1	12/30/04	CV	n/a	n/a	GQQ39
F29018-7	QQ000882.D	1	12/30/04	CV	n/a	n/a	GQQ39

The QC reported here applies to the following samples: **Method:** EPA 601/602

F29018-4, F29018-5, F29018-6, F29018-7, F29018-8, F29018-9, F29018-10, F29018-11, F29018-13, F29018-14, F29018-15, F29018-18, F29018-19

CAS No.	Compound	F29018-7 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Ree/RPD
71-43-2	Benzene	ND		20	12.1	61*	12.3	62*	2	77-125/6
108-90-7	Chlorobenzene	ND		20	19.0	95	18.9	95	1	78-120/8
95-50-1	1,2-Dichlorobenzene	ND		20	19.0	95	18.7	94	2	69-125/7
541-73-1	1,3-Dichlorobenzene	ND		20	18.9	95	18.7	94	1	71-126/7
106-46-7	1,4-Dichlorobenzene	ND		20	18.8	94	18.8	94	0	67-129/7
100-41-4	Ethylbenzene	ND		20	20.4	102	20.2	101	1	74-127/6
1634-04-4	Methyl Tert Butyl Ether	ND		20	19.9	100	19.9	100	0	66-127/9
108-88-3	Toluene	ND		20	20.1	101	19.9	100	1	77-124/5
1330-20-7	Xylenes (total)	ND		60	59.9	100	59.4	99	1	76-125/5

CAS No.	Surrogate Reeoveries	MS	MSD	F29018-7	Limits
352-33-0	1-Chloro-4-fluorobenzene	102%	100%	95%	70-123%
98-08-8	aaa-Trifluorotoluene	109%	108%	107%	73-122%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F29018
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F29025-1MS	QQ000934.D	1	01/03/05	CV	n/a	n/a	GQQ42
F29025-1MSD	QQ000935.D	1	01/03/05	CV	n/a	n/a	GQQ42
F29025-1	QQ000933.D	1	01/03/05	CV	n/a	n/a	GQQ42

The QC reported here applies to the following samples: **Method:** EPA 601/602

F29018-1, F29018-2, F29018-3, F29018-12, F29018-16, F29018-17

CAS No.	Compound	F29025-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ng/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	1.0	U	20	11.7	59*	20.2	101	53*	77-125/6
108-90-7	Chlorobenzene	1.0	U	20	19.9	100	19.7	99	1	78-120/8
95-50-1	1,2-Dichlorobenzene	1.0	U	20	19.2	96	19.1	96	1	69-125/7
541-73-1	1,3-Dichlorobenzene	1.0	U	20	19.2	96	19.1	96	1	71-126/7
106-46-7	1,4-Dichlorobenzene	1.0	U	20	19.2	96	19.0	95	1	67-129/7
100-41-4	Ethylbenzene	1.0	U	20	20.4	102	20.2	101	1	74-127/6
1634-04-4	Methyl Tert Butyl Ether	1.0	U	20	22.5	113	21.4	107	5	66-127/9
108-88-3	Toluene	1.0	U	20	19.9	100	19.7	99	1	77-124/5
1330-20-7	Xylenes (total)	3.0	U	60	59.7	100	59.3	99	1	76-125/5

CAS No.	Surrogate Recoveries	MS	MSD	F29025-1	Limits
460-00-4	4-Bromofluorobenzene	100%	98%	98%	59-129%
98-08-8	aaa-Trifluorotoluene	101%	100%	98%	73-122%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F29018
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP12184-MS	DD21283.D	1	12/30/04	AG	12/30/04	OP12184	GDD639
OP12184-MSD	DD21284.D	1	12/30/04	AG	12/30/04	OP12184	GDD639
F29018-6	DD21282.D	1	12/30/04	AG	12/30/04	OP12184	GDD639

The QC reported here applies to the following samples: **Method:** EPA 504.1

F29018-1, F29018-2, F29018-3, F29018-4, F29018-5, F29018-6, F29018-7, F29018-8, F29018-9, F29018-10, F29018-11, F29018-12, F29018-13, F29018-14, F29018-15, F29018-16, F29018-17, F29018-18, F29018-19

CAS No.	Compound	F29018-6 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
106-93-4	1,2-Dibromoethane	ND		0.246	0.22	89	0.21	85	5	65-135/25

CAS No.	Surrogate Recoveries	MS	MSD	F29018-6	Limits
460-00-4	4-Bromofluorobenzene	98%	94%	90%	60-139%

Volatile Surrogate Recovery Summary

Job Number: F29018
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Method: EPA 601/602 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S2 [a]	S3 [a]
F29018-1	QQ000940.D	100.0		99.0
F29018-2	QQ000941.D	104.0		98.0
F29018-3	QQ000936.D	98.0		99.0
F29018-4	QQ000880.D		96.0	108.0
F29018-5	QQ000875.D		97.0	108.0
F29018-6	QQ000881.D		95.0	107.0
F29018-7	QQ000882.D		95.0	107.0
F29018-8	QQ000873.D		96.0	108.0
F29018-9	QQ000872.D		98.0	110.0
F29018-10	QQ000871.D		95.0	107.0
F29018-11	QQ000870.D		95.0	114.0
F29018-12	QQ000938.D	106.0		105.0
F29018-13	QQ000876.D		97.0	108.0
F29018-14	QQ000869.D		94.0	108.0
F29018-15	QQ000868.D		93.0	104.0
F29018-16	QQ000942.D	97.0		95.0
F29018-17	QQ000937.D	100.0		102.0
F29018-18	QQ000867.D		94.0	107.0
F29018-19	QQ000866.D		94.0	106.0
F29018-7MS	QQ000883.D		102.0	109.0
F29018-7MSD	QQ000884.D		100.0	108.0
F29025-1MS	QQ000934.D	100.0		101.0
F29025-1MSD	QQ000935.D	98.0		100.0
GQQ39-MB	QQ000865.D		97.0	109.0
GQQ42-BS	QQ000931.D	99.0		99.0
GQQ42-MB	QQ000932.D	99.0		99.0

Surrogate Compounds	Recovery Limits
S1 = 4-Bromofluorobenzene	59-129%
S2 = 1-Chloro-4-fluorobenzene	70-123%
S3 = aaa-Trifluorotoluene	73-122%

(a) Recovery from GC signal #2

Volatile Surrogate Recovery Summary

Job Number: F29018
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Method: EPA 504.1 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]
F29018-1	DD21277.D	90.0
F29018-2	DD21278.D	89.0
F29018-3	DD21279.D	105.0
F29018-4	DD21280.D	103.0
F29018-5	DD21281.D	92.0
F29018-6	DD21282.D	90.0
F29018-7	DD21285.D	98.0
F29018-8	DD21286.D	92.0
F29018-9	DD21288.D	91.0
F29018-10	DD21289.D	89.0
F29018-11	DD21290.D	85.0
F29018-12	DD21291.D	101.0
F29018-13	DD21292.D	100.0
F29018-14	DD21293.D	101.0
F29018-15	DD21294.D	99.0
F29018-16	DD21295.D	97.0
F29018-17	DD21296.D	98.0
F29018-18	DD21297.D	99.0
F29018-19	DD21299.D	101.0
OP12184-BS	DD21274.D	105.0
OP12184-BS2	DD21275.D	106.0
OP12184-MB	DD21273.D	105.0
OP12184-MS	DD21283.D	98.0
OP12184-MSD	DD21284.D	94.0

Surrogate Compounds	Recovery Limits
S1 = 4-Bromofluorobenzene	60-139%

(a) Recovery from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F29018
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GQQ39-CC28	**Injection Date:**	12/30/04
Lab File ID:	QQ000874.D	**Injection Time:**	14:19
Instrument ID:	GCQQ	**Method:**	EPA 601/602

	S1 [a] RT	S2 [a] RT
Check Std	8.83	5.03

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
F29018-5	QQ000875.D	12/30/04	14:48	8.83	5.02
F29018-13	QQ000876.D	12/30/04	15:16	8.83	5.03
F29018-4	QQ000880.D	12/30/04	17:09	8.83	5.03
F29018-6	QQ000881.D	12/30/04	17:38	8.83	5.03
F29018-7	QQ000882.D	12/30/04	18:06	8.83	5.03
F29018-7MS	QQ000883.D	12/30/04	18:34	8.84	5.03
F29018-7MSD	QQ000884.D	12/30/04	19:03	8.83	5.03

Surrogate Compounds

S1 = 1-Chloro-4-fluorobenzene
S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F29018
Account: EEINCJX EE1
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GQQ42-1CC42	**Injection Date:**	01/03/05
Lab File ID:	QQ000925.D	**Injection Time:**	10:51
Instrument ID:	GCQQ	**Method:**	EPA 601/602

	S1 [a] RT	S2 [a] RT
Check Std	11.25	5.03

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
GQQ42-BS	QQ000931.D	01/03/05	14:46	11.25	5.03
GQQ42-MB	QQ000932.D	01/03/05	15:14	11.25	5.04
F29025-1	QQ000933.D	01/03/05	15:43	11.25	5.03
F29025-1MS	QQ000934.D	01/03/05	16:11	11.25	5.03
F29025-1MSD	QQ000935.D	01/03/05	16:39	11.25	5.03
F29018-3	QQ000936.D	01/03/05	17:06	11.25	5.03
F29018-17	QQ000937.D	01/03/05	17:35	11.25	5.03
F29018-12	QQ000938.D	01/03/05	18:03	11.25	5.02

Surrogate Compounds

S1 = 4-Bromofluorobenzene
S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F29018
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GQQ42-CC42	**Injection Date:**	01/03/05
Lab File ID:	QQ000939.D	**Injection Time:**	18:31
Instrument ID:	GCQQ	**Method:**	EPA 601/602

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	11.21	11.25	5.03	5.03

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
F29018-1	QQ000940.D	01/03/05	19:06		11.25		5.02
F29018-2	QQ000941.D	01/03/05	19:35		11.25		5.02
F29018-16	QQ000942.D	01/03/05	20:06		11.25		5.02
GQQ42-ECC42	QQ000944.D	01/03/05	21:03	11.21	11.25	5.04	5.03

Surrogate Compounds

S1 = 4-Bromofluorobenzene
S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F29018
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GDD639-CC639	**Injection Date:**	12/30/04
Lab File ID:	DD21265.D	**Injection Time:**	14:49
Instrument ID:	GCDD	**Method:**	EPA 504.1

	S1 [a] RT
Check Std	6.93

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT
OP12183-MB	DD21266.D	12/30/04	15:39	6.93
OP12183-BS	DD21267.D	12/30/04	15:59	6.93
OP12183-BS2	DD21268.D	12/30/04	16:19	6.93
ZZZZZZ	DD21269.D	12/30/04	16:39	6.93
F29019-4	DD21270.D	12/30/04	16:58	6.93
OP12183-MS	DD21271.D	12/30/04	17:18	6.93
OP12183-MSD	DD21272.D	12/30/04	17:38	6.93
OP12184-MB	DD21273.D	12/30/04	17:58	6.93
OP12184-BS	DD21274.D	12/30/04	18:18	6.93
OP12184-BS2	DD21275.D	12/30/04	18:38	6.93

Surrogate Compounds

S1 = 4-Bromofluorobenzene

(a) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F29018
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GDD639-CC639	**Injection Date:**	12/30/04
Lab File ID:	DD21276.D	**Injection Time:**	18:58
Instrument ID:	GCDD	**Method:**	EPA 504.1

	SI [a] RT
Check Std	6.93

Lab Sample ID	**Lab File ID**	**Date Analyzed**	**Time Analyzed**	**SI [a] RT**
F29018-1	DD21277.D	12/30/04	19:18	6.93
F29018-2	DD21278.D	12/30/04	19:38	6.93
F29018-3	DD21279.D	12/30/04	19:58	6.93
F29018-4	DD21280.D	12/30/04	20:18	6.93
F29018-5	DD21281.D	12/30/04	20:38	6.93
F29018-6	DD21282.D	12/30/04	20:57	6.93
OP12184-MS	DD21283.D	12/30/04	21:17	6.93
OP12184-MSD	DD21284.D	12/30/04	21:37	6.93
F29018-7	DD21285.D	12/30/04	21:57	6.93
F29018-8	DD21286.D	12/30/04	22:17	6.93

Surrogate Compounds

SI = 4-Bromofluorobenzene

(a) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F29018
Account: EEINCJX EEI
Projeet: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GDD639-CC639	**Injection Date:**	12/30/04
Lab File ID:	DD21287.D	**Injection Time:**	22:37
Instrument ID:	GCDD	**Method:**	EPA 504.1

	S1 [a] RT
Check Std	6.93

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT
F29018-9	DD21288.D	12/30/04	22:57	6.93
F29018-10	DD21289.D	12/30/04	23:17	6.93
F29018-11	DD21290.D	12/30/04	23:37	6.93
F29018-12	DD21291.D	12/30/04	23:57	6.93
F29018-13	DD21292.D	12/31/04	00:17	6.93
F29018-14	DD21293.D	12/31/04	00:36	6.93
F29018-15	DD21294.D	12/31/04	00:56	6.93
F29018-16	DD21295.D	12/31/04	01:16	6.93
F29018-17	DD21296.D	12/31/04	01:36	6.93
F29018-18	DD21297.D	12/31/04	01:56	6.93

Surrogate Compounds

S1 = 4-Bromofluorobenzene

(a) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F29018
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GDD639-CC639	**Injection Date:**	12/31/04
Lab File ID:	DD21298.D	**Injection Time:**	02:16
Instrument ID:	GCDD	**Method:**	EPA 504.1

	S1 [a] RT	S1 [b] RT
Check Std	7.18	6.93

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
F29018-19	DD21299.D	12/31/04	02:36		6.93
GDD639-ECC639	DD21300.D	12/31/04	02:56	7.18	6.93

Surrogate Compounds

S1 = 4-Bromofluorobenzene

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F29018
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GQQ39-CC28	**Injection Date:**	12/30/04
Lab File ID:	QQ000863.D	**Injection Time:**	08:58
Instrument ID:	GCQQ	**Method:**	EPA 601/602

	S1 [a] RT	S2 [a] RT
Check Std	8.83	5.03

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
GQQ39-BS	QQ000864.D	12/30/04	09:36	8.83	5.03
GQQ39-MB	QQ000865.D	12/30/04	10:04	8.83	5.03
F29018-19	QQ000866.D	12/30/04	10:32	8.84	5.03
F29018-18	QQ000867.D	12/30/04	11:00	8.83	5.03
F29018-15	QQ000868.D	12/30/04	11:29	8.83	5.03
F29018-14	QQ000869.D	12/30/04	11:58	8.83	5.03
F29018-11	QQ000870.D	12/30/04	12:26	8.83	5.03
F29018-10	QQ000871.D	12/30/04	12:54	8.83	5.02
F29018-9	QQ000872.D	12/30/04	13:23	8.83	5.03
F29018-8	QQ000873.D	12/30/04	13:51	8.83	5.03

Surrogate Compounds

S1 = 1-Chloro-4-fluorobenzene
S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #2

Initial Calibration Summary

Job Number: F29018
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GDD639-ICC639
Lab FileID: DD21253.D

Response Factor Report ECD 4

Method : C:\HPCHEM\2\METHODS\504_1.M (Chemstation Integrator)
Title : EDB/DBCP by EPA 504.1 or SW846 8011
Last Update : Thu Dec 30 12:01:01 2004
Response via : Initial Calibration

Calibration Files
.125=DD21252.D .250=DD21253.D .500=DD21254.D 0.75=DD21255.D
0.75 =DD21255.D 1.0 =DD21256.D

	Compound	.125	.250	.500	0.75	1.0	Avg		%RSD
1)	1,2-Dibromoethane	6.828	6.733	7.103	6.883	7.699	7.049	E5	5.50
2) S	4-Bromofluorobenzene	7.223	6.623	6.260	5.913	5.990	6.402	E4	8.39
3)	1,2,3-Trichloropropan	1.580	1.404	1.343	1.256	1.254	1.367	E5	9.81
4)	1,2-Dibromo-3-chlorop	1.690	1.678	1.752	1.727	1.780	1.726	E6	2.47

Signal #2

1)	1,2-Dibromoethane	2.556	2.405	2.374	2.196	2.381	2.382	E5	5.36
2) S	4-Bromofluorobenzene	2.464	2.302	2.219	2.057	2.059	2.220	E4	7.76
3)	1,2,3-Trichloropropan	4.755	4.486	4.400	4.126	4.218	4.397	E4	5.59
4)	1,2-Dibromo-3-chlorop	5.436	5.202	5.447	5.238	5.599	5.384	E5	3.04

(#) = Out of Range

504_1.M Mon Jan 03 08:39:50 2005

5.6

Initial Calibration Verification

Job Number: F29018
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GDD639-ICV639
Lab FileID: DD21258.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\1230EDB\DD21258.D\ECD1A.CH Vial: 8
Signal #2 : C:\HPCHEM\2\DATA\1230EDB\DD21258.D\ECD28.CH
Acq On : 30 Dec 2004 12:15 pm Operator: ansleyg
Sample : icv639-0.25 Inst : ECD 4
Misc : op12178,gdd639,35.0,,,2,1,,,water MultiplIr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\2\METHODS\504_1.M (Chemstation Integrator)
Title : EDB/DBCP by EPA 504.1 or SW846 8011
Last Update : Thu Dec 30 12:01:01 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	1,2-Dibromoethane	0.250	0.260	-4.0	109	0.00	5.83- 6.03
2 S	4-Bromofluorobenzene	2.000	2.133	-6.7	103	0.00	7.08- 7.28
3	1,2,3-Trichloropropane	0.250	0.267	-6.8	104	0.00	7.46- 7.66
4	1,2-Dibromo-3-chloropr	0.250	0.238	4.8	98	0.00	9.50- 9.70
*****	Signal #2 *****						
1	1,2-Dibromoethane	0.250	0.237	5.2	94	0.00	5.55- 5.75
2 S	4-Bromofluorobenzene	2.000	2.124	-6.2	102	0.00	6.83- 7.03
3	1,2,3-Trichloropropane	0.250	0.253	-1.2	99	0.00	6.99- 7.19
4	1,2-Dibromo-3-chloropr	0.250	0.241	3.6	100	0.00	9.11- 9.31

(#) = Out of Range SPCC's out = 0 CCC's out = 0
DD21253.D 504_1.M Mon Jan 03 08:40:03 2005

Continuing Calibration Summary

Job Number: F29018 **Sample:** GDD639-CC639
Account: EEINCJX EEI **Lab FileID:** DD21265.D
Project: Camp Lejeune-Campbell St. Fuel Farm

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\1230EDB\DD21265.D\ECD1A.CH Vial: 3
Signal #2 : C:\HPCHEM\2\DATA\1230EDB\DD21265.D\ECD2B.CH
Acq On : 30 Dec 2004 2:49 pm Operator: ansleyg
Sample : cc639-0.25 Inst : ECD 4
Misc : op12178,gdd639,36.3,,,2,100,,,water MultiplR: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\2\METHODS\504_1.M (Chemstation Integrator)
Title : EDB/DBCP by EPA 504.1 or SW846 8011
Last Update : Thu Dec 30 12:01:01 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	1,2-Dibromoethane	0.250	0.236	5.6	99	0.00	5.83- 6.03
2 S	4-Bromofluorobenzene	2.000	2.072	-3.6	100	0.00	7.08- 7.28
3	1,2,3-Trichloropropane	0.250	0.260	-4.0	101	0.00	7.46- 7.66
4	1,2-Dibromo-3-chloropr	0.250	0.244	2.4	100	0.00	9.50- 9.70
*****	Signal #2 *****						
1	1,2-Dibromoethane	0.250	0.247	1.2	98	0.00	5.55- 5.75
2 S	4-Bromofluorobenzene	2.000	2.056	-2.8	99	0.00	6.83- 7.03
3	1,2,3-Trichloropropane	0.250	0.259	-3.6	102	0.00	6.99- 7.19
4	1,2-Dibromo-3-chloropr	0.250	0.244	2.4	101	0.00	9.11- 9.31

(#) = Out of Range SPCC's out = 0 CCC's out = 0
DD21253.D 504_1.M Tue Jan 04 09:08:03 2005

5.5

Continuing Calibration Summary

Job Number: F29018
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GDD639-CC639
Lab FileID: DD21276.D

5.6

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\1230EDB\DD21276.D\ECD1A.CH Vial: 4
Signal #2 : C:\HPCHEM\2\DATA\1230EDB\DD21276.D\ECD2B.CH
Acq On : 30 Dec 2004 6:58 pm Operator: ansleyg
Sample : cc639-0.50 Inst : ECD 4
Misc : op12184,gdd639,35.0,,,2,1,,,water MultiplR: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\2\METHODS\504_1.M (Chemstation Integrator)
Title : EDB/DBCP by EPA 504.1 or SW846 8011
Last Update : Thu Dec 30 12:01:01 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	1,2-Dibromoethane	0.500	0.459	8.2	91	0.00	5.83- 6.03
2 S	4-Bromofluorobenzene	4.000	3.722	7.0	95	0.00	7.08- 7.28
3	1,2,3-Trichloropropane	0.500	0.468	6.4	95	0.00	7.46- 7.66
4	1,2-Dibromo-3-chloropr	0.500	0.490	2.0	97	0.00	9.50- 9.70
*****	Signal #2 *****						
1	1,2-Dibromoethane	0.500	0.456	8.8	92	0.00	5.55- 5.75
2 S	4-Bromofluorobenzene	4.000	3.728	6.8	93	0.00	6.83- 7.03
3	1,2,3-Trichloropropane	0.500	0.468	6.4	93	0.00	6.99- 7.19
4	1,2-Dibromo-3-chloropr	0.500	0.488	2.4	96	0.00	9.11- 9.31

(#) = Out of Range SPCC's out = 0 CCC's out = 0
DD21254.D 504_1.M Tue Jan 04 09:08:26 2005

Continuing Calibration Summary

Job Number: F29018
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GDD639-CC639
Lab FileID: DD21287.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\1230EDB\DD21287.D\ECD1A.CH Vial: 3
Signal #2 : C:\HPCHEM\2\DATA\1230EDB\DD21287.D\ECD2B.CH
Acq On : 30 Dec 2004 10:37 pm Operator: ansleyg
Sample : cc639-0.25 Inst : ECD 4
Misc : op12184,gdd639,35.0,,,2,1,,,water MultiplR: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\2\METHODS\504_1.M (Chemstation Integrator)
Title : EDB/DBCP by EPA 504.1 or SW846 8011
Last Update : Thu Dec 30 12:01:01 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	1,2-Dibromoethane	0.250	0.219	12.4	92	0.00	5.83- 6.03
2 S	4-Bromofluorobenzene	2.000	1.979	1.0	96	0.00	7.08- 7.28
3	1,2,3-Trichloropropane	0.250	0.250	0.0	97	0.00	7.46- 7.66
4	1,2-Dibromo-3-chloropr	0.250	0.236	5.6	97	0.00	9.50- 9.70
*****	Signal #2 *****						
1	1,2-Dibromoethane	0.250	0.240	4.0	95	0.00	5.55- 5.75
2 S	4-Bromofluorobenzene	2.000	1.978	1.1	95	0.00	6.83- 7.03
3	1,2,3-Trichloropropane	0.250	0.245	2.0	96	0.00	6.99- 7.19
4	1,2-Dibromo-3-chloropr	0.250	0.234	6.4	97	0.00	9.11- 9.31

(#) = Out of Range SPCC's out = 0 CCC's out = 0
DD21253.D 504_1.M Tue Jan 04 09:08:04 2005

Continuing Calibration Summary

Job Number: F29018
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GDD639-CC639
Lab FileID: DD21298.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\1230EDB\DD21298.D\ECD1A.CH Vial: 4
Signal #2 : C:\HPCHEM\2\DATA\1230EDB\DD21298.D\ECD2B.CH
Acq On : 31 Dec 2004 2:16 am Operator: ansleyg
Sample : cc639-0.50 Inst : ECD 4
Misc : op12184,gdd639,35.0,,,2,1,,,water MultiplIr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\2\METHODS\504_1.M (Chemstation Integrator)
Title : EDB/DBCP by EPA 504.1 or SW846 8011
Last Update : Thu Dec 30 12:01:01 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	1,2-Dibromoethane	0.500	0.482	3.6	96	0.00	5.83- 6.03
2 S	4-Bromofluorobenzene	4.000	3.756	6.1	96	0.00	7.08- 7.28
3	1,2,3-Trichloropropane	0.500	0.467	6.6	95	0.00	7.46- 7.66
4	1,2-Dibromo-3-chloropr	0.500	0.481	3.8	95	0.00	9.50- 9.70
*****	Signal #2 *****						
1	1,2-Dibromoethane	0.500	0.493	1.4	99	0.00	5.55- 5.75
2 S	4-Bromofluorobenzene	4.000	3.787	5.3	95	0.00	6.83- 7.03
3	1,2,3-Trichloropropane	0.500	0.482	3.6	96	0.00	6.99- 7.19
4	1,2-Dibromo-3-chloropr	0.500	0.476	4.8	94	0.00	9.11- 9.31

(#) = Out of Range SPCC's out = 0 CCC's out = 0
DD21254.D 504_1.M Tue Jan 04 09:08:28 2005

Continuing Calibration Summary

Job Number: F29018
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GDD639-ECC639
Lab FileID: DD21300.D

Evaluate Continuing Calibration Report

```
Signal #1 : C:\HPCHEM\2\DATA\1230EDB\DD21300.D\ECD1A.CH  Vial: 3
Signal #2 : C:\HPCHEM\2\DATA\1230EDB\DD21300.D\ECD2B.CH
Acq On    : 31 Dec 2004   2:56 am                    Operator: ansleyg
Sample    : ecc639-0.25                              Inst    : ECD 4
Misc      : op12184,gdd639,35.0,,,2,1,,,water        MultiplR: 1.00
IntFile Signal #1: EVENTS.E     IntFile Signal #2: EVENTS2.E

Method       : C:\HPCHEM\2\METHODS\504_1.M (Chemstation Integrator)
Title        : EDB/DBCP by EPA 504.1 or SW846 8011
Last Update  : Thu Dec 30 12:01:01 2004
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	1,2-Dibromoethane	0.250	0.205	18.0	86	0.00	5.83- 6.03
2 S	4-Bromofluorobenzene	2.000	1.979	1.0	96	0.00	7.08- 7.28
3	1,2,3-Trichloropropane	0.250	0.255	-2.0	100	0.00	7.46- 7.66
4	1,2-Dibromo-3-chloropr	0.250	0.242	3.2	99	0.00	9.50- 9.70
*****	Signal #2 *****						
1	1,2-Dibromoethane	0.250	0.221	11.6	88	0.00	5.55- 5.75
2 S	4-Bromofluorobenzene	2.000	1.992	0.4	96	0.00	6.83- 7.03
3	1,2,3-Trichloropropane	0.250	0.251	-0.4	98	0.00	6.99- 7.19
4	1,2-Dibromo-3-chloropr	0.250	0.238	4.8	99	0.00	9.11- 9.31

```
(#) = Out of Range              SPCC's out = 0  CCC's out = 0
 DD21253.D  504_1.M          Tue Jan 04 09:08:05 2005
```

Initial Calibration Summary

Job Number: F29018
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GQQ28-ICC28
Lab FileID: QQ000619.D

Response Factor Report VOA7

Method : C:\MSDCHEM\2\METHODS\DUAL1215.M (Chemstation Integrator)
Title : EPA 602 & 50308/8021B
Last Update : Wed Dec 15 13:29:58 2004
Response via : Initial Calibration

Calibration Files
1 =QQ000617.D 5 =QQ000618.D 20 =QQ000619.D 40 =QQ000620.D
70 =QQ000621.D 100 =QQ000622.D

	Compound	1	5	20	40	70	100	Avg	%RSD
1)	Methyl tert Butyl E	0.996	1.526	1.495	1.367	1.390	1.566	1.390 E3	14.97
	---- Linear regr., Force(0,0) ---- Coefficient = 0.9933								
	Response Ratio = 0.00000 + 1494.35681 *A								
2)	Di-Isopropyl ether	1.017	1.530	1.463	1.383	1.494	1.538	1.404 E3	14.09
	---- Linear regr., Force(0,0) ---- Coefficient = 0.9984								
	Response Ratio = 0.00000 + 1508.93403 *A								
3)	Benzene	4.094	6.549	6.183	6.075	5.942	5.828	5.779 E3	14.91
	---- Linear regr., Force(0,0) ---- Coefficient = 0.9996								
	Response Ratio = 0.00000 + 5893.92359 *A								
4) S	a,a,a-TFT(S)	1.111	1.098	1.121	1.104	1.102	1.102	1.106 E3	0.75
5)	Toluene	2.595	4.697	4.208	4.159	4.106	4.052	3.969 E3	17.94
	---- Linear regr., Force(0,0) ---- Coefficient = 0.9998								
	Response Ratio = 0.00000 + 4082.13634 *A								
6) S	1-Chloro-4-Fluorobe	1.477	1.470	1.503	1.497	1.502	1.512	1.494 E3	1.11
7)	Chlorobenzene	3.975	4.169	4.000	3.930	3.867	3.801	3.957 E3	3.20
	---- Linear regr., Force(0,0) ---- Coefficient = 0.9998								
	Response Ratio = 0.00000 + 3837.84199 *A								
8)	Ethylbenzene	2.711	3.457	3.221	3.178	3.126	3.055	3.125 E3	7.82
9)	m,p-Xylene	2.139	3.816	3.504	3.449	3.367	3.324	3.266 E3	17.73
	---- Linear regr., Force(0,0) ---- Coefficient = 0.9997								
	Response Ratio = 0.00000 + 3353.24188 *A								
10)	o-Xylene	2.272	3.977	3.712	3.691	3.629	3.566	3.475 E3	17.43
	---- Linear regr., Force(0,0) ---- Coefficient = 0.9997								
	Response Ratio = 0.00000 + 3600.14747 *A								
11)	1,3-Dichlorobenzene	3.452	5.426	5.515	5.487	5.491	5.399	5.128 E3	16.03
	---- Linear regr., Force(0,0) ---- Coefficient = 0.9998								
	Response Ratio = 0.00000 + 5436.31223 *A								
12)	1,4-Dichlorobenzene	3.809	5.900	5.928	5.836	5.928	5.718	5.520 E3	15.25
	---- Linear regr., Force(0,0) ---- Coefficient = 0.9994								
	Response Ratio = 0.00000 + 5795.06754 *A								
13)	1,2-Dichlorobenzene	3.449	5.354	5.422	5.429	5.368	5.318	5.057 E3	15.59
	---- Linear regr., Force(0,0) ---- Coefficient = 0.9999								
	Response Ratio = 0.00000 + 5345.13041 *A								

Signal #2

1)	Methyl tert Butyl E	1.047	1.553	1.577	1.413	1.442	1.615	1.441 E3	14.47

5.6

Initial Calibration Summary

Job Number: F29018
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GQQ28-ICC28
Lab FileID: QQ000619.D

```
          ---- Linear regr., Force(0,0) ----  Coefficient =  0.9937
            Response Ratio = 0.00000 + 1545.00713 *A

 2)     Di-Isopropyl ether  0.957 1.504 1.436 1.329 1.408 1.518 1.359 E3  15.33
          ---- Linear regr., Force(0,0) ----  Coefficient =  0.9963
            Response Ratio = 0.00000 + 1466.32941 *A

 3)     Benzene             4.160 6.611 6.196 6.056 5.957 5.846 5.804 E3  14.61
          ---- Linear regr., Force(0,0) ----  Coefficient =  0.9997
            Response Ratio = 0.00000 + 5907.08650 *A

 4) S   a,a,a-TFT(S)        1.109 1.104 1.126 1.112 1.116 1.123 1.115 E3   0.75
 5)     Toluene             2.594 4.683 4.210 4.152 4.098 4.065 3.967 E3  17.89
          ---- Linear regr., Force(0,0) ----  Coefficient =  0.9998
            Response Ratio = 0.00000 + 4086.82219 *A

 6) S   1-Chloro-4-Fluorobe 1.468 1.485 1.567 1.577 1.688 1.714 1.584 E3   6.39
 7)     Chlorobenzene            4.500 4.045 3.933 3.899 3.832 4.042 E3   6.62
 8)     Ethylbenzene        2.339 3.436 3.269 3.196 3.149 3.106 3.083 E3  12.40
          ---- Linear regr., Force(0,0) ----  Coefficient =  0.9998
            Response Ratio = 0.00000 + 3131.42541 *A

 9)     m,p-Xylene          2.302 3.997 3.638 3.578 3.515 3.479 3.418 E3  16.90
          ---- Linear regr., Force(0,0) ----  Coefficient =  0.9998
            Response Ratio = 0.00000 + 3503.24828 *A

10)     o-Xylene            2.029 3.613 3.385 3.334 3.330 3.262 3.159 E3  17.93
          ---- Linear regr., Force(0,0) ----  Coefficient =  0.9997
            Response Ratio = 0.00000 + 3291.81639 *A

11)     1,3-Dichlorobenzene 3.258 5.134 5.330 5.304 5.338 5.278 4.940 E3  16.75
          ---- Linear regr., Force(0,0) ----  Coefficient =  0.9999
            Response Ratio = 0.00000 + 5298.39229 *A

12)     1,4-Dichlorobenzene 3.534 5.619 5.705 5.688 5.605 5.609 5.293 E3  16.30
          ---- Linear regr., Force(0,0) ----  Coefficient =  0.9999
            Response Ratio = 0.00000 + 5617.57607 *A

13)     1,2-Dichlorobenzene 3.354 5.364 5.473 5.484 5.495 5.435 5.101 E3  16.80
          ---- Linear regr., Force(0,0) ----  Coefficient =  0.9999
            Response Ratio = 0.00000 + 5457.57093 *A

------------------------------------------------------------------------------
(#) = Out of Range

          DUAL1215.M        Wed Dec 15 15:58:45 2004    GCHH
```

5.6

Initial Calibration Verification

Job Number: F29018
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GQQ28-ICV28
Lab FileID: QQ000623.D

Evaluate Continuing Calibration Report

Signal #1 : C:\MSDCHEM\2\DATA\121504\QQ000623.D\ELC1A.CH Vial: 8
Signal #2 : C:\MSDCHEM\2\DATA\121504\QQ000623.D\ELC2B.CH
Acq On : 12-15-04 01:02:46 PM Operator: ClaireV
Sample : ICV28-20 Inst : V0A7
Misc : gc4335,gqq28,,,,,1 Multiplr: 1.00
IntFile Signal #1: AUTOINT1.E IntFile Signal #2: autoint2.e

Method : C:\MSDCHEM\2\METHODS\DUAL1215.M (Chemstation Integrator)
Title : EPA 602 & 5030B/8021B
Last Update : Wed Dec 15 13:29:58 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
	----------	Amount	Calc.	%Drift	----------		
1	Methyl tert 8utyl Ethe	20.000	19.535	2.3	98	0.00	2.39- 2.59
2	Di-Isopropyl ether	20.000	19.368	3.2	100	0.00	2.76- 2.96
3	Benzene	20.000	21.447	-7.2	102	0.00	3.86- 4.06
	----------	Amount	Calc.	%Drift	----------		
4 S	a,a,a-TFT(S)	20.000	19.713	1.4	97	0.00	4.94- 5.14
	----------	Amount	Calc.	%Drift	----------		
5	Toluene	20.000	21.106	-5.5	102	0.00	6.54- 6.74
	----------	Amount	Calc.	%Drift	----------		
6 S	1-Chloro-4-Fluorobenze	20.000	19.800	1.0	98	0.00	8.65- 8.95
	----------	Amount	Calc.	%Drift	----------		
7	Chlorobenzene	20.000	21.407	-7.0	103	0.00	8.88- 9.08
	----------	Amount	Calc.	%Drift	----------		
8	Ethylbenzene	20.000	21.531	-7.7	104	0.00	9.40- 9.60
	----------	Amount	Calc.	%Drift	----------		
9	m,p-Xylene	40.000	43.028	-7.6	103	0.00	9.85-10.05
10	o-Xylene	20.000	21.116	-5.6	102	0.00	10.53-10.73
11	1,3-Dichlorobenzene	20.000	21.413	-7.1	106	0.00	12.73-12.93
12	1,4-Dichlorobenzene	20.000	21.363	-6.8	104	0.00	12.81-13.01
13	1,2-Dichlorobenzene	20.000	21.263	-6.3	105	0.00	13.13-13.33
*****	Signal #2 *****						
1	Methyl tert Butyl Ethe	20.000	19.584	2.1	96	0.00	2.29- 2.49
2	Di-Isopropyl ether	20.000	19.394	3.0	99	0.00	2.61- 2.81
3	Benzene	20.000	21.416	-7.1	102	0.00	3.77- 3.96
	----------	Amount	Calc.	%Drift	----------		
4 S	a,a,a-TFT(S)	20.000	19.789	1.1	98	0.00	4.93- 5.13
	----------	Amount	Calc.	%Drift	----------		
5	Toluene	20.000	20.987	-4.9	102	0.00	6.32- 6.51
	----------	Amount	Calc.	%Drift	----------		

Initial Calibration Verification

Job Number: F29018
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GQQ28-ICV28
Lab FileID: QQ000623.D

			Amount	Calc.	%Drift			
6	S	1-Chloro-4-Fluorobenze	20.000	19.458	2.7	98	0.00	8.74- 8.94
7		Chlorobenzene	20.000	20.577	-2.9	103	0.00	8.85- 9.05
8		Ethylbenzene	20.000	21.588	-7.9	103	0.00	9.16- 9.36
9		m,p-Xylene	40.000	42.738	-6.8	103	0.00	9.43- 9.63
10		o-Xylene	20.000	21.052	-5.3	102	0.00	10.23-10.43
11		1,3-Dichlorobenzene	20.000	21.456	-7.3	107	0.00	12.65-12.85
12		1,4-Dichlorobenzene	20.000	21.530	-7.7	106	0.00	12.77-12.97
13		1,2-Dichlorobenzene	20.000	21.253	-6.3	106	0.00	13.15-13.35

(#) = Out of Range SPCC's out = 0 CCC's out = 0

QQ000619.D DUAL1215.M Wed Dec 15 15:58:09 2004 GCHH

5.6

Continuing Calibration Summary

Job Number: F29018
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GQQ39-CC28
Lab FileID: QQ000863.D

Evaluate Continuing Calibration Report

Signal #1 : C:\MSDCHEM\2\DATA\123004\QQ000863.D\ELC1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\2\DATA\123004\QQ000863.D\ELC2B.CH
Acq On : 12-30-04 08:58:30 AM Operator: ClaireV
Sample : CC28-40 Inst : VOA7
Misc : gc4381,gqq39,,,,,1 MultiplIr: 1.00
IntFile Signal #1: AUTOINT1.E IntFile Signal #2: autoint2.e

Method : C:\MSDCHEM\2\METHODS\DUAL1215.M (Chemstation Integrator)
Title : EPA 602 & 5030B/8021B
Last Update : Wed Dec 15 13:29:58 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
	----------	Amount	Calc.	%Drift	----------		
1	Methyl tert Butyl Ethe	40.000	42.227	-5.6	115	0.00	2.39- 2.59
2	Di-Isopropyl ether	40.000	43.952	-9.9	120	0.00	2.76- 2.96
3	Benzene	40.000	41.322	-3.3	100	0.00	3.86- 4.06
	----------	Amount	Calc.	%Drift	----------		
4 S	a,a,a-TFT(S)	20.000	21.242	-6.2	106	0.00	4.94- 5.14
	----------	Amount	Calc.	%Drift	----------		
5	Toluene	40.000	41.075	-2.7	101	0.00	6.54- 6.74
	----------	Amount	Calc.	%Drift	----------		
6 S	1-Chloro-4-Fluorobenze	20.000	19.917	0.4	99	0.00	8.65- 8.95
	----------	Amount	Calc.	%Drift	----------		
7	Chlorobenzene	40.000	40.731	-1.8	99	0.00	8.88- 9.08
	----------	Amount	Calc.	%Drift	----------		
8	Ethylbenzene	40.000	40.264	-0.7	99	0.00	9.40- 9.60
	----------	Amount	Calc.	%Drift	----------		
9	m,p-Xylene	80.000	81.744	-2.2	99	0.00	9.85-10.05
10	o-Xylene	40.000	40.952	-2.4	100	0.00	10.53-10.73
11	1,3-Dichlorobenzene	40.000	39.594	1.0	98	0.00	12.73-12.93
12	1,4-Dichlorobenzene	40.000	40.088	-0.2	100	0.00	12.81-13.01
13	1,2-Dichlorobenzene	40.000	40.141	-0.4	99	0.00	13.13-13.33
*****	Signal #2 *****						
1	Methyl tert Butyl Ethe	40.000	43.171	-7.9	118	0.00	2.29- 2.49
2	Di-Isopropyl ether	40.000	45.467	-13.7	125	0.00	2.61- 2.81
3	Benzene	40.000	43.057	-7.6	105	0.00	3.77- 3.96
	----------	Amount	Calc.	%Drift	----------		
4 S	a,a,a-TFT(S)	20.000	21.969	-9.8	110	0.00	4.93- 5.13
	----------	Amount	Calc.	%Drift	----------		
5	Toluene	40.000	43.075	-7.7	106	0.00	6.32- 6.51
	----------	Amount	Calc.	%Drift	----------		

Continuing Calibration Summary

Job Number: F29018
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GQQ39-CC28
Lab FileID: QQ000863.D

			Amount	Calc.	%Drift			
6	S	1-Chloro-4-Fluorobenze	20.000	20.345	-1.7	102	0.00	8.74- 8.94
7		Chlorobenzene	40.000	40.806	-2.0	105	0.00	8.85- 9.05
8		Ethylbenzene	40.000	42.699	-6.7	105	0.00	9.16- 9.36
9		m,p-Xylene	80.000	85.856	-7.3	105	0.00	9.43- 9.63
10		o-Xylene	40.000	42.383	-6.0	105	0.00	10.23-10.43
11		1,3-Dichlorobenzene	40.000	41.531	-3.8	104	0.00	12.65-12.85
12		1,4-Dichlorobenzene	40.000	42.062	-5.2	104	0.00	12.77-12.97
13		1,2-Dichlorobenzene	40.000	41.671	-4.2	104	0.00	13.15-13.35

(#) = Out of Range SPCC's out = 0 CCC's out = 0

QQ000620.D DUAL1215.M Sun Jan 02 09:36:35 2005 GCHH

5.6

Continuing Calibration Summary

Job Number: F29018 **Sample:** GQQ39-CC28
Account: EEINCJX EEI **Lab FileID:** QQ000874.D
Project: Camp Lejeune-Campbell St. Fuel Farm

Evaluate Continuing Calibration Report

Signal #1 : C:\MSDCHEM\2\DATA\123004\QQ000874.D\ELC1A.CH Vial: 12
Signal #2 : C:\MSDCHEM\2\DATA\123004\QQ000874.D\ELC2B.CH
Acq On : 12-30-04 02:19:55 PM Operator: ClaireV
Sample : cc28-20 Inst : V0A7
Misc : gc4398,gqq39,,,,,1 MultiplIr: 1.00
IntFile Signal #1: AUTOINT1.E IntFile Signal #2: autoint2.e

Method : C:\MSDCHEM\2\METHODS\DUAL1215.M (Chemstation Integrator)
Title : EPA 602 & 5030B/8021B
Last Update : Wed Dec 15 13:29:58 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	Methyl tert Butyl Ethe	20.000	19.696	1.5	98	0.00	2.39- 2.59
2	Di-Isopropyl ether	20.000	19.173	4.1	99	0.00	2.76- 2.96
3	Benzene	20.000	20.011	-0.1	95	0.00	3.86- 4.06
4 S	a,a,a-TFT(S)	20.000	20.677	-3.4	102	0.00	4.94- 5.14
5	Toluene	20.000	19.704	1.5	96	0.00	6.54- 6.74
6 S	1-Chloro-4-Fluorobenze	20.000	19.532	2.3	97	0.00	8.65- 8.95
7	Chlorobenzene	20.000	19.895	0.5	95	0.00	8.88- 9.08
8	Ethylbenzene	20.000	19.655	1.7	95	0.00	9.40- 9.60
9	m,p-Xylene	40.000	39.638	0.9	95	0.00	9.85-10.05
10	o-Xylene	20.000	19.799	1.0	96	0.00	10.53-10.73
11	1,3-Dichlorobenzene	20.000	19.252	3.7	95	0.00	12.73-12.93
12	1,4-Dichlorobenzene	20.000	19.313	3.4	94	0.00	12.81-13.01
13	1,2-Dichlorobenzene	20.000	19.607	2.0	97	0.00	13.13-13.33
*****	Signal #2 *****						
1	Methyl tert Butyl Ethe	20.000	20.582	-2.9	101	-0.01	2.29- 2.49
2	Di-Isopropyl ether	20.000	20.726	-3.6	106	0.00	2.61- 2.81
3	Benzene	20.000	21.130	-5.6	101	0.00	3.77- 3.96
4 S	a,a,a-TFT(S)	20.000	21.759	-8.8	108	0.00	4.93- 5.13
5	Toluene	20.000	20.861	-4.3	101	0.00	6.32- 6.51

Continuing Calibration Summary

Job Number: F29018
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GQQ39-CC28
Lab FileID: QQ000874.D

			Amount	Calc.	%Drift			
6	S	1-Chloro-4-Fluorobenze	20.000	20.078	-0.4	101	0.00	8.74- 8.94
7		Chlorobenzene	20.000	20.115	-0.6	100	0.00	8.85- 9.05
8		Ethylbenzene	20.000	20.824	-4.1	100	0.00	9.16- 9.36
9		m,p-Xylene	40.000	41.753	-4.4	101	0.00	9.43- 9.63
10		o-Xylene	20.000	20.767	-3.8	101	0.00	10.23-10.43
11		1,3-Dichlorobenzene	20.000	20.106	-0.5	100	0.00	12.65-12.85
12		1,4-Dichlorobenzene	20.000	20.287	-1.4	100	0.00	12.77-12.97
13		1,2-Dichlorobenzene	20.000	20.388	-1.9	102	0.00	13.15-13.35

(#) = Out of Range SPCC's out = 0 CCC's out = 0

QQ000619.D DUAL1215.M Sun Jan 02 09:37:03 2005 GCHH

5.6

Continuing Calibration Summary

Job Number: F29018
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GQQ39-CC28
Lab FileID: QQ000885.D

Evaluate Continuing Calibration Report

Signal #1 : C:\MSDCHEM\2\DATA\123004\QQ000885.D\ELC1A.CH Vial: 22
Signal #2 : C:\MSDCHEM\2\DATA\123004\QQ000885.D\ELC2B.CH
Acq On : 12-30-04 07:31:35 PM Operator: ClaireV
Sample : cc28-20 Inst : VOA7
Misc : gc4398,gqq39,,,,,1 Multiplr: 1.00
IntFile Signal #1: AUTOINT1.E IntFile Signal #2: autoint2.e

Method : C:\MSDCHEM\2\METHODS\DUAL1215.M (Chemstation Integrator)
Title : EPA 602 & 5030B/8021B
Last Update : Wed Dec 15 13:29:58 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
	Amount	Calc.	%Drift				
1	Methyl tert Butyl Ethe	20.000	18.935	5.3	95	-0.01	2.39- 2.59
2	Di-Isopropyl ether	20.000	19.135	4.3	99	-0.01	2.76- 2.96
3	Benzene	20.000	20.053	-0.3	96	0.00	3.86- 4.06
	Amount	Calc.	%Drift				
4 S	a,a,a-TFT(S)	20.000	20.374	-1.9	101	0.00	4.94- 5.14
	Amount	Calc.	%Drift				
5	Toluene	20.000	19.679	1.6	95	0.00	6.54- 6.74
	Amount	Calc.	%Drift				
6 S	1-Chloro-4-Fluorobenze	20.000	19.264	3.7	96	0.00	8.65- 8.95
	Amount	Calc.	%Drift				
7	Chlorobenzene	20.000	19.872	0.6	95	0.00	8.88- 9.08
	Amount	Calc.	%Drift				
8	Ethylbenzene	20.000	19.640	1.8	95	0.00	9.40- 9.60
	Amount	Calc.	%Drift				
9	m,p-Xylene	40.000	39.559	1.1	95	0.00	9.85-10.05
10	o-Xylene	20.000	19.729	1.4	96	0.00	10.53-10.73
11	1,3-Dichlorobenzene	20.000	19.139	4.3	94	0.00	12.73-12.93
12	1,4-Dichlorobenzene	20.000	19.148	4.3	94	0.00	12.81-13.01
13	1,2-Dichlorobenzene	20.000	19.413	2.9	96	0.00	13.13-13.33
*****	Signal #2 *****						
1	Methyl tert Butyl Ethe	20.000	20.219	-1.1	99	-0.01	2.29- 2.49
2	Di-Isopropyl ether	20.000	19.958	0.2	102	-0.01	2.61- 2.81
3	Benzene	20.000	21.169	-5.8	101	0.00	3.77- 3.96
	Amount	Calc.	%Drift				
4 S	a,a,a-TFT(S)	20.000	21.377	-6.9	106	0.00	4.93- 5.13
	Amount	Calc.	%Drift				
5	Toluene	20.000	20.700	-3.5	100	0.00	6.32- 6.51
	Amount	Calc.	%Drift				

Continuing Calibration Summary

Job Number: F29018
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GQQ39-CC28
Lab FileID: QQ000885.D

			Amount	Calc.	%Drift			
6	S	1-Chloro-4-Fluorobenze	20.000	19.857	0.7	100	0.00	8.74- 8.94
7		Chlorobenzene	20.000	20.030	-0.2	100	0.00	8.85- 9.05
8		Ethylbenzene	20.000	20.751	-3.8	99	0.00	9.16- 9.36
9		m,p-Xylene	40.000	41.412	-3.5	100	0.00	9.43- 9.63
10		o-Xylene	20.000	20.899	-4.5	102	0.00	10.23-10.43
11		1,3-Dichlorobenzene	20.000	19.865	0.7	99	0.00	12.65-12.85
12		1,4-Dichlorobenzene	20.000	20.289	-1.4	100	0.00	12.77-12.97
13		1,2-Dichlorobenzene	20.000	20.347	-1.7	101	0.00	13.15-13.35

(#) = Out of Range SPCC's out = 0 CCC's out = 0
QQ000619.D DUAL1215.M Sun Jan 02 09:37:04 2005 GCHH

5.6

Initial Calibration Summary

Job Number: F29018
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GQQ42-ICC42
Lab FileID: QQ000925.D

Response Factor Report VOA7

Method : C:\MSDCHEM\2\METHODS\DUAL0103.M (Chemstation Integrator)
Title : EPA 602 & 5030B/8021B
Last Update : Tue Jan 04 10:39:46 2005
Response via : Initial Calibration

Calibration Files
1 =QQ000923.D 5 =QQ000924.D 20 =QQ000925.D 40 =QQ000926.D
70 =QQ000929.D 100 =QQ000928.D

		Compound	1	5	20	40	70	100	Avg		%RSD
1)		Methyl tert Butyl E	1.068	1.346	1.170	1.229	1.259	1.295	1.228	E3	8.03
2)		Di-Isopropyl ether	1.232	1.516	1.254	1.224	1.265	1.292	1.297	E3	8.46
3)		Benzene	4.817	6.173	5.271	5.117	4.992	4.926	5.216	E3	9.48
4)	S	a,a,a-TFT(S)	1.162	1.152	1.143	1.157	1.159	1.163	1.156	E3	0.63
5)		Toluene	3.203	4.169	3.595	3.535	3.427	3.388	3.553	E3	9.31
6)		Chlorobenzene	2.723	3.807	3.370	3.280	3.205	3.189	3.262	E3	10.70
		---- Linear regr., Force(0,0) ---- Coefficient = 0.9998									
		Response Ratio = 0.00000 + 3207.20079 *A									
7)		Ethylbenzene	2.333	3.141	2.704	2.650	2.561	2.592	2.664	E3	10.01
		---- Linear regr., Force(0,0) ---- Coefficient = 0.9997									
		Response Ratio = 0.00000 + 2592.01286 *A									
8)		m,p-Xylene	2.620	3.502	2.967	2.920	2.809	2.807	2.937	E3	10.26
		---- Linear regr., Force(0,0) ---- Coefficient = 0.9997									
		Response Ratio = 0.00000 + 2823.09001 *A									
9)		o-Xylene	2.780	3.719	3.190	3.144	3.021	3.020	3.146	E3	10.00
		---- Linear regr., Force(0,0) ---- Coefficient = 0.9997									
		Response Ratio = 0.00000 + 3037.16119 *A									
10)	S	BFB (S)	3.087	3.019	3.035	3.051	3.063	3.158	3.069	E3	1.61
11)		1,3-Dichlorobenzene	3.887	5.490	4.778	4.629	4.587	4.591	4.660	E3	10.99
		---- Linear regr., Force(0,0) ---- Coefficient = 0.9999									
		Response Ratio = 0.00000 + 4599.09543 *A									
12)		1,4-Dichlorobenzene	4.175	5.850	5.082	4.957	4.880	4.803	4.958	E3	10.88
		---- Linear regr., Force(0,0) ---- Coefficient = 0.9997									
		Response Ratio = 0.00000 + 4847.93972 *A									
13)		1,2-Dichlorobenzene	3.909	5.362	4.694	4.546	4.538	4.488	4.590	E3	10.15
		---- Linear regr., Force(0,0) ---- Coefficient = 0.9999									
		Response Ratio = 0.00000 + 4514.16037 *A									

Signal #2

1)		Methyl tert Butyl E	1.221	1.502	1.314	1.372	1.341	1.398	1.358	E3	6.88
2)		Di-Isopropyl ether	1.096	1.537	1.245	1.281	1.336	1.323	1.303	E3	11.00
		---- Linear regr., Force(0,0) ---- Coefficient = 0.9995									
		Response Ratio = 0.00000 + 1320.99454 *A									
3)		Benzene	5.107	6.657	5.637	5.517	5.350	5.322	5.598	E3	9.81
4)	S	a,a,a-TFT(S)	1.233	1.233	1.217	1.239	1.233	1.242	1.233	E3	0.71
5)		Toluene	3.392	4.483	3.810	3.782	3.665	3.680	3.802	E3	9.60
6)		Chlorobenzene	2.930	4.039	3.557	3.522	3.447	3.460	3.492	E3	10.11
		---- Linear regr., Force(0,0) ---- Coefficient = 0.9999									

Initial Calibration Summary

Job Number: F29018
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GQQ42-ICC42
Lab FileID: QQ000925.D

```
                Response Ratio = 0.00000 + 3465.02622 *A

 7)     Ethylbenzene          2.515 3.441 2.939 2.896 2.802 2.791 2.897 E3  10.52
            ---- Linear regr., Force(0,0) ----  Coefficient =  0.9997
              Response Ratio = 0.00000 + 2808.38782 *A

 8)     m,p-Xylene            2.857 3.866 3.302 3.269 3.142 3.144 3.263 E3  10.25
            ---- Linear regr., Force(0,0) ----  Coefficient =  0.9997
              Response Ratio = 0.00000 + 3159.97766 *A

 9)     o-Xylene              2.632 3.575 3.092 3.054 2.945 2.964 3.044 E3  10.07
            ---- Linear regr., Force(0,0) ----  Coefficient =  0.9997
              Response Ratio = 0.00000 + 2971.11686 *A

10) S   8F8 (S)               3.300 3.228 3.227 3.218 3.268 3.322 3.260 E3   1.33
11)     1,3-Dichlorobenzene 3.845 5.580 4.945 4.783 4.736 4.730 4.770 E3  11.66
            ---- Linear regr., Force(0,0) ----  Coefficient =  0.9999
              Response Ratio = 0.00000 + 4742.83950 *A

12)     1,4-Dichlorobenzene 4.238 6.004 5.285 5.124 5.086 5.044 5.130 E3  11.01
            ---- Linear regr., Force(0,0) ----  Coefficient =  0.9999
              Response Ratio = 0.00000 + 5070.88306 *A

13)     1,2-Dichlorobenzene 4.153 5.734 5.077 5.001 4.876 4.909 4.959 E3  10.19
            ---- Linear regr., Force(0,0) ----  Coefficient =  0.9998
              Response Ratio = 0.00000 + 4913.18759 *A

--------------------------------------------------------------------------------
(#) = Out of Range

          DUAL0103.M        Tue Jan 04 10:46:05 2005    GCHH
```

5.6.9

Initial Calibration Verification

Job Number: F29018
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GQQ42-ICV42
Lab FileID: QQ000930.D

Evaluate Continuing Calibration Report

```
Signal #1 : C:\MSDCHEM\2\DATA\010305\QQ000930.D\ELC1A.CH Vial: 8
Signal #2 : C:\MSDCHEM\2\DATA\010305\QQ000930.D\ELC28.CH
Acq On    : 1-3-05 02:17:59 PM                    Operator: ClaireV
Sample    : icv42-20                              Inst    : V0A7
Misc      : gc4398,gqq42,,,,,1                    MultiplR: 1.00
IntFile Signal #1: AUTOINT1.E     IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\2\METHODS\DUAL0103.M (Chemstation Integrator)
Title        : EPA 602 & 5030B/8021B
Last Update  : Tue Jan 04 10:39:46 2005
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  15%     Max. Rel. Area : 200%
```

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	Methyl tert Butyl Ethe	20.000	21.812	-9.1	114	0.00	2.38- 2.58
2	Di-Isopropyl ether	20.000	20.476	-2.4	106	0.00	2.75- 2.95
3	Benzene	20.000	20.235	-1.2	100	0.00	3.86- 4.06
4 S	a,a,a-TFT(S)	20.000	19.765	1.2	100	0.00	4.94- 5.14
5	Toluene	20.000	20.460	-2.3	101	0.00	6.54- 6.74
	----------	Amount	Calc.	%Drift			
6	Chlorobenzene	20.000	21.048	-5.2	100	0.00	8.88- 9.08
7	Ethylbenzene	20.000	21.162	-5.8	101	0.00	9.40- 9.60
8	m,p-Xylene	40.000	42.805	-7.0	102	0.00	9.85-10.05
9	o-Xylene	20.000	21.230	-6.2	101	0.00	10.52-10.72
	----------	Amount	Calc.	%Drift			
10 S	BFB(S)	20.000	19.728	1.4	100	0.00	11.11-11.31
	----------	Amount	Calc.	%Drift			
11	1,3-Dichlorobenzene	20.000	21.387	-6.9	103	0.00	12.72-12.92
12	1,4-Dichlorobenzene	20.000	21.495	-7.5	103	0.00	12.81-13.01
13	1,2-Dichlorobenzene	20.000	21.344	-6.7	103	0.00	13.13-13.33

***** Signal #2 *****

	----------	Amount	Calc.	%Drift			
1	Methyl tert Butyl Ethe	20.000	21.955	-9.8	113	0.00	2.28- 2.48
	----------	Amount	Calc.	%Drift			
2	Di-Isopropyl ether	20.000	21.175	-5.9	112	0.00	2.61- 2.81
	----------	Amount	Calc.	%Drift			
3	Benzene	20.000	20.273	-1.4	101	0.00	3.76- 3.96
4 S	a,a,a-TFT(S)	20.000	19.870	0.6	101	0.00	4.93- 5.13
5	Toluene	20.000	20.365	-1.8	102	0.00	6.31- 6.51
	----------	Amount	Calc.	%Drift			
6	Chlorobenzene	20.000	20.723	-3.6	101	0.00	8.85- 9.04
7	Ethylbenzene	20.000	21.116	-5.6	101	0.00	9.15- 9.36
8	m,p-Xylene	40.000	42.451	-6.1	102	0.00	9.42- 9.62
9	o-Xylene	20.000	21.068	-5.3	101	0.00	10.23-10.43
	----------	Amount	Calc.	%Drift			

Initial Calibration Verification

Job Number: F29018
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GQQ42-ICV42
Lab FileID: QQ000930.D

10 S	BFB(S)	20.000	19.675	1.6	99	0.00	11.15-11.35
		Amount	Calc.	%Drift			
11	1,3-Dichlorobenzene	20.000	21.303	-6.5	102	0.00	12.65-12.85
12	1,4-Dichlorobenzene	20.000	21.361	-6.8	102	0.00	12.77-12.97
13	1,2-Dichlorobenzene	20.000	21.117	-5.6	102	0.00	13.15-13.35

(#) = Out of Range SPCC's out = 0 CCC's out = 0
QQ000925.D DUAL0103.M Tue Jan 04 10:45:23 2005 GCHH

5.6

Continuing Calibration Summary

Job Number: F29018
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GQQ42-CC42
Lab FileID: QQ000939.D

Evaluate Continuing Calibration Report

Signal #1 : C:\MSDCHEM\2\DATA\010305\QQ000939.D\ELC1A.CH Vial: 16
Signal #2 : C:\MSDCHEM\2\DATA\010305\QQ000939.D\ELC2B.CH
Acq On : 1-3-05 06:31:28 PM Operator: ClaireV
Sample : cc42-20 Inst : V0A7
Misc : gc4398,gqq42,,,,,1 Multiplr: 1.00
IntFile Signal #1: AUTOINT1.E IntFile Signal #2: autoint2.e

Method : C:\MSDCHEM\2\METHODS\DUAL0103.M (Chemstation Integrator)
Title : EPA 602 & 5030B/8021B
Last Update : Tue Jan 04 10:39:46 2005
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	Methyl tert Butyl Ethe	20.000	19.696	1.5	103	0.00	2.38- 2.58
2	Di-Isopropyl ether	20.000	18.012	9.9	93	0.00	2.75- 2.95
3	Benzene	20.000	20.570	-2.9	102	0.00	3.86- 4.06
4 S	a,a,a-TFT(S)	20.000	19.901	0.5	101	0.00	4.94- 5.14
5	Toluene	20.000	20.952	-4.8	104	0.00	6.54- 6.74
	----------	Amount	Calc.	%Drift	----------		
6	Chlorobenzene	20.000	20.866	-4.3	99	0.00	8.88- 9.08
7	Ethylbenzene	20.000	21.114	-5.6	101	0.00	9.40- 9.60
8	m,p-Xylene	40.000	42.522	-6.3	101	0.00	9.85-10.05
9	o-Xylene	20.000	21.295	-6.5	101	0.00	10.52-10.72
	----------	Amount	Calc.	%Drift	----------		
10 S	BFB(S)	20.000	19.804	1.0	100	0.00	11.11-11.31
	----------	Amount	Calc.	%Drift	----------		
11	1,3-Dichlorobenzene	20.000	20.635	-3.2	99	0.00	12.72-12.92
12	1,4-Dichlorobenzene	20.000	20.930	-4.6	100	0.00	12.81-13.01
13	1,2-Dichlorobenzene	20.000	21.110	-5.5	102	0.00	13.13-13.33

***** Signal #2 *****

	----------	Amount	Calc.	%Drift	----------		
1	Methyl tert Butyl Ethe	20.000	20.096	-0.5	104	0.00	2.28- 2.48
	----------	Amount	Calc.	%Drift	----------		
2	Di-Isopropyl ether	20.000	18.294	8.5	97	0.00	2.61- 2.81
	----------	Amount	Calc.	%Drift	----------		
3	Benzene	20.000	20.578	-2.9	102	0.00	3.76- 3.96
4 S	a,a,a-TFT(S)	20.000	20.010	-0.1	101	0.00	4.93- 5.13
5	Toluene	20.000	20.889	-4.4	104	0.00	6.31- 6.51
	----------	Amount	Calc.	%Drift	----------		
6	Chlorobenzene	20.000	20.626	-3.1	100	0.00	8.85- 9.04
7	Ethylbenzene	20.000	21.204	-6.0	101	0.00	9.15- 9.36
8	m,p-Xylene	40.000	42.564	-6.4	102	0.00	9.42- 9.62
9	o-Xylene	20.000	21.022	-5.1	101	0.00	10.23-10.43
	----------	Amount	Calc.	%Drift	----------		

Continuing Calibration Summary

Job Number: F29018
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GQQ42-CC42
Lab FileID: QQ000939.D

10 S	BFB(S)	20.000	19.873	0.6	100	0.00	11.15-11.35
		Amount	Calc.	%Drift			
11	1,3-Dichlorobenzene	20.000	20.489	-2.4	98	0.00	12.65-12.85
12	1,4-Dichlorobenzene	20.000	20.738	-3.7	99	0.00	12.77-12.97
13	1,2-Dichlorobenzene	20.000	21.266	-6.3	103	0.00	13.15-13.35

(#) = Out of Range SPCC's out = 0 CCC's out = 0
QQ000925.D DUAL0103.M Tue Jan 04 10:45:24 2005 GCHH

5.6

5

Continuing Calibration Summary

Job Number: F29018
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GQQ42-ECC42
Lab FileID: QQ000944.D

Evaluate Continuing Calibration Report

Signal #1 : C:\MSDCHEM\2\DATA\010305\QQ000944.D\ELC1A.CH Vial: 21
Signal #2 : C:\MSDCHEM\2\DATA\010305\QQ000944.D\ELC2B.CH
Acq On : 1-3-05 09:03:20 PM Operator: ClaireV
Sample : ecc42-20 Inst : VOA7
Misc : gc4398,gqq42,,,,,1 MultiplIr: 1.00
IntFile Signal #1: AUTOINT1.E IntFile Signal #2: autoint2.e

Method : C:\MSDCHEM\2\METHODS\DUAL0103.M (Chemstation Integrator)
Title : EPA 602 & 5030B/8021B
Last Update : Tue Jan 04 10:39:46 2005
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	Methyl tert Butyl Ethe	20.000	19.811	0.9	104	0.00	2.38- 2.58
2	Di-Isopropyl ether	20.000	19.388	3.1	100	0.00	2.75- 2.95
3	Benzene	20.000	19.909	0.5	99	0.00	3.86- 4.06
4 S	a,a,a-TFT(S)	20.000	19.501	2.5	99	0.00	4.94- 5.14
5	Toluene	20.000	20.254	-1.3	100	0.00	6.54- 6.74
	----------	Amount	Calc.	%Drift	----------		
6	Chlorobenzene	20.000	20.369	-1.8	97	0.00	8.88- 9.08
7	Ethylbenzene	20.000	20.461	-2.3	98	0.00	9.40- 9.60
8	m,p-Xylene	40.000	41.235	-3.1	98	0.00	9.85-10.05
9	o-Xylene	20.000	20.744	-3.7	99	0.00	10.52-10.72
	----------	Amount	Calc.	%Drift	----------		
10 S	BFB(S)	20.000	19.673	1.6	99	0.00	11.11-11.31
	----------	Amount	Calc.	%Drift	----------		
11	1,3-Dichlorobenzene	20.000	20.069	-0.3	97	0.00	12.72-12.92
12	1,4-Dichlorobenzene	20.000	20.469	-2.3	98	0.00	12.81-13.01
13	1,2-Dichlorobenzene	20.000	20.530	-2.7	99	0.00	13.13-13.33

***** Signal #2 *****

	----------	Amount	Calc.	%Drift	----------		
1	Methyl tert Butyl Ethe	20.000	19.889	0.6	103	0.00	2.28- 2.48
	----------	Amount	Calc.	%Drift	----------		
2	Di-Isopropyl ether	20.000	19.622	1.9	104	0.00	2.61- 2.81
	----------	Amount	Calc.	%Drift	----------		
3	Benzene	20.000	19.901	0.5	99	0.00	3.76- 3.96
4 S	a,a,a-TFT(S)	20.000	19.597	2.0	99	0.00	4.93- 5.13
5	Toluene	20.000	20.260	-1.3	101	0.00	6.31- 6.51
	----------	Amount	Calc.	%Drift	----------		
6	Chlorobenzene	20.000	20.197	-1.0	98	0.00	8.85- 9.04
7	Ethylbenzene	20.000	20.692	-3.5	99	0.00	9.15- 9.36
8	m,p-Xylene	40.000	41.373	-3.4	99	0.00	9.42- 9.62
9	o-Xylene	20.000	20.679	-3.4	99	0.00	10.23-10.43
	----------	Amount	Calc.	%Drift	----------		

Continuing Calibration Summary

Job Number: F29018
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GQQ42-ECC42
Lab FileID: QQ000944.D

10 S	BFB(S)	20.000	19.814	0.9	100	0.00	11.15-11.35
		Amount	Calc.	%Drift			
11	1,3-Dichlorobenzene	20.000	20.071	-0.4	96	0.00	12.65-12.85
12	1,4-Dichlorobenzene	20.000	20.381	-1.9	98	0.00	12.77-12.97
13	1,2-Dichlorobenzene	20.000	20.412	-2.1	99	0.00	13.15-13.35

(#) = Out of Range SPCC's out = 0 CCC's out = 0
QQ000925.D DUAL0103.M Tue Jan 04 10:45:25 2005 GCHH

5.6

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: F29018
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP12181-MB	LL02259.D	1	01/12/05	SD	12/30/04	OP12181	GLL81

The QC reported here applies to the following samples: **Method:** EPA 610

F29018-1, F29018-2, F29018-3, F29018-4, F29018-18

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.0	2.0	ug/l	
208-96-8	Acenaphthylene	ND	5.0	2.0	ug/l	
120-12-7	Anthracene	ND	5.0	2.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.0	2.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.0	2.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.0	2.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.0	2.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.0	2.0	ug/l	
218-01-9	Chrysene	ND	5.0	2.0	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.0	2.0	ug/l	
206-44-0	Fluoranthene	ND	5.0	2.0	ug/l	
86-73-7	Fluorene	ND	5.0	2.0	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.0	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.0	ug/l	
90-12-0	1-Methylnaphthalene	ND	5.0	2.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.0	2.0	ug/l	
85-01-8	Phenanthrene	ND	5.0	2.0	ug/l	
129-00-0	Pyrene	ND	5.0	2.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
321-60-8	2-Fluorobiphenyl	73%	42-123%
84-15-1	o-Terphenyl	85%	51-123%

Method Blank Summary

Job Number: F29018
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP12181-MB	LL02294.D	1	01/13/05	SD	12/30/04	OP12181	GLL82

The QC reported here applies to the following samples: **Method:** EPA 610

F29018-1, F29018-2, F29018-3, F29018-4, F29018-18

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.0	2.0	ug/l	
208-96-8	Acenaphthylene	ND	5.0	2.0	ug/l	
120-12-7	Anthracene	ND	5.0	2.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.0	2.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.0	2.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.0	2.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.0	2.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.0	2.0	ug/l	
218-01-9	Chrysene	ND	5.0	2.0	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.0	2.0	ug/l	
206-44-0	Fluoranthene	ND	5.0	2.0	ug/l	
86-73-7	Fluorene	ND	5.0	2.0	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.0	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.0	ug/l	
90-12-0	1-Methylnaphthalene	ND	5.0	2.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.0	2.0	ug/l	
85-01-8	Phenanthrene	ND	5.0	2.0	ug/l	
129-00-0	Pyrene	ND	5.0	2.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
321-60-8	2-Fluorobiphenyl	82%	42-123%
84-15-1	o-Terphenyl	93%	51-123%

Blank Spike Summary

Job Number: F29018
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP12181-BS	LL02258.D	1	01/12/05	SD	12/30/04	OP12181	GLL81

The QC reported here applies to tbe following samples: **Method:** EPA 610

F29018-1, F29018-2, F29018-3, F29018-4, F29018-18

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
83-32-9	Acenaphthene	25	22.1	88	71-113
208-96-8	Acenaphthylene	25	23.1	92	63-102
120-12-7	Anthracene	25	22.4	90	71-110
56-55-3	Benzo(a)anthracene	25	22.2	89	70-114
50-32-8	Benzo(a)pyrene	25	22.1	88	67-114
205-99-2	Benzo(b)fluoranthene	25	22.5	90	69-115
191-24-2	Benzo(g,h,i)perylene	25	21.5	86	61-117
207-08-9	Benzo(k)fluoranthene	25	22.1	88	69-111
218-01-9	Chrysene	25	21.9	88	70-114
53-70-3	Dibenzo(a,h)anthracene	25	22.3	89	64-114
206-44-0	Fluoranthene	25	22.7	91	71-114
86-73-7	Fluorene	25	22.7	91	69-111
193-39-5	Indeno(1,2,3-cd)pyrene	25	23.8	95	63-112
91-20-3	Naphthalene	25	21.8	87	66-105
90-12-0	1-Methylnaphthalene	25	21.9	88	71-112
91-57-6	2-Methylnaphthalene	25	22.5	90	65-106
85-01-8	Phenanthrene	25	22.5	90	69-112
129-00-0	Pyrene	25	22.8	91	70-114

CAS No.	Surrogate Recoveries	BSP	Limits
321-60-8	2-Fluorobiphenyl	85%	42-123%
84-15-1	o-Terphenyl	93%	51-123%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F29018
Aecount: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP12181-MS	LL02295.D	10	01/13/05	SD	12/30/04	OP12181	GLL82
OP12181-MSD	LL02296.D	10	01/13/05	SD	12/30/04	OP12181	GLL82
F29018-3 [a]	LL02262.D	1	01/12/05	SD	12/30/04	OP12181	GLL81
F29018-3 [a]	LL02288.D	10	01/12/05	SD	12/30/04	OP12181	GLL81

The QC reported here applies to the following samples: **Method:** EPA 610

F29018-1, F29018-2, F29018-3, F29018-4, F29018-18

CAS No.	Compound	F29018-3 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	81.9 [b]		49	120	78	122	82	2	59-123/20
208-96-8	Acenaphthylene	3.7	J	49	47.0	88	49.2	93	5	51-114/20
120-12-7	Anthracene	ND		49	56.8	116*	58.7	120*	3	64-114/17
56-55-3	Benzo(a)anthracene	ND		49	45.0	92	47.6	97	6	66-115/17
50-32-8	Benzo(a)pyrene	ND		49	46.6	95	50.4	103	8	62-118/17
205-99-2	Benzo(b)fluoranthene	ND		49	46.8	95	49.9	102	6	66-117/17
191-24-2	Benzo(g,h,i)perylene	ND		49	44.0	90	47.4	97	7	59-120/17
207-08-9	Benzo(k)fluoranthene	ND		49	47.0	96	50.6	103	7	64-116/16
218-01-9	Chrysene	ND		49	47.0	96	48.1	98	2	66-117/16
53-70-3	Dibenzo(a,h)anthracene	ND		49	43.6	89	47.5	97	9	57-124/18
206-44-0	Fluoranthene	ND		49	42.6	87	44.7	91	5	67-116/17
86-73-7	Fluorene	36.1		49	77.4	84	80.2	90	4	58-122/19
193-39-5	Indeno(1,2,3-cd)pyrene	ND		49	44.5	91	50.5	103	13	59-116/18
91-20-3	Naphthalene	1610 [d]		49	1630	41* [c]	1630	41* [c]	0	47-114/20
90-12-0	1-Methylnaphthalene	92.8 [b]		49	133	82	135	86	1	55-128/21
91-57-6	2-Methylnaphthalene	142 [b]		49	181	80	183	84	1	51-117/21
85-01-8	Phenanthrene	ND		49	44.1	90	46.3	94	5	63-116/18
129-00-0	Pyrene	ND		49	43.0	88	45.2	92	5	67-116/17

CAS No.	Surrogate Recoveries	MS	MSD	F29018-3	F29018-3	Limits
321-60-8	2-Fluorobiphenyl	87%	91%	90%	92%	42-123%
84-15-1	o-Terphenyl	98%	88%	100%	90%	51-123%

(a) All hits confirmed by dual column analysis.
(b) Result is from Run #2.
(c) Outside control limits due to high level in sample relative to spike amount.
(d) Result is from Run #3.

Semivolatile Surrogate Recovery Summary

Job Number: F29018
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Method: EPA 610 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S2 [a]
F29018-1	LL02260.D	79.0	111.0
F29018-2	LL02261.D	89.0	78.0
F29018-3	LL02289.D	0.0* [b]	0.0* [b]
F29018-3	LL02288.D	92.0	90.0
F29018-3	LL02262.D	90.0	100.0
F29018-4	LL02265.D	73.0	86.0
F29018-18	LL02266.D	64.0	79.0
OP12181-BS	LL02258.D	85.0	93.0
OP12181-MB	LL02259.D	73.0	85.0
OP12181-MB	LL02294.D	82.0	93.0
OP12181-MS	LL02295.D	87.0	98.0
OP12181-MSD	LL02296.D	91.0	88.0

Surrogate Compounds	Recovery Limits
S1 = 2-Fluorobiphenyl	42-123%
S2 = o-Terphenyl	51-123%

(a) Reeovery from GC signal #1
(b) Outside control limits due to dilution.

GC Surrogate Retention Time Summary

Job Number: F29018
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GLL81-CC81	**Injection Date:**	01/12/05
Lab File ID:	LL02257.D	**Injection Time:**	01:41
Instrument ID:	GCLL	**Method:**	EPA 610

	S1 [a] RT	S2 [a] RT
Check Std	6.54	12.07

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
OP12181-BS	LL02258.D	01/12/05	02:11	6.54	12.07
OP12181-MB	LL02259.D	01/12/05	02:42	6.54	12.07
F29018-1	LL02260.D	01/12/05	03:12	6.55	12.07
F29018-2	LL02261.D	01/12/05	03:42	6.54	12.07
F29018-3	LL02262.D	01/12/05	04:12	6.55	12.08
F29018-4	LL02265.D	01/12/05	05:43	6.54	12.07
F29018-18	LL02266.D	01/12/05	06:14	6.54	12.07

Surrogate Compounds

S1 = 2-Fluorobiphenyl
S2 = o-Terphenyl

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: F29018
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GLL81-CC81	**Injection Date:**	01/12/05
Lab File ID:	LL02287.D	**Injection Time:**	16:49
Instrument ID:	GCLL	**Method:**	EPA 610

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	6.55	5.24	12.07	10.02

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
F29018-3	LL02288.D	01/12/05	17:19	6.54		12.08	
F29018-3	LL02289.D	01/12/05	17:50	0.00		0.00	
GLL81-ECC81	LL02292.D	01/12/05	19:20	6.54	5.24	12.07	10.01

Surrogate Compounds

S1 = 2-Fluorobiphenyl
S2 = o-Terphenyl

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

6.5

GC Surrogate Retention Time Summary

Job Number: F29018
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GLL82-CC81	**Injection Date:**	01/13/05
Lab File ID:	LL02293.D	**Injection Time:**	12:18
Instrument ID:	GCLL	**Method:**	EPA 610

	S1 [a] RT	S2 [a] RT
Check Std	6.54	12.07

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
OP12181-MB	LL02294.D	01/13/05	12:48	6.54	12.07
OP12181-MS	LL02295.D	01/13/05	13:18	6.54	12.08
OP12181-MSD	LL02296.D	01/13/05	13:48	6.54	12.08

Surrogate Compounds

S1 = 2-Fluorobiphenyl
S2 = o-Terphenyl

(a) Retention time from GC signal #1

Initial Calibration Verification

Job Number: F29018
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GLL81-ICV81
Lab FileID: LL02251.D

Evaluate Continuing Calibration Report

Signal #1 : C:\MSDCHEM\1\DATA\0111PAH\LL02251.D\FID1B.CH Vial: 8
Signal #2 : C:\MSDCHEM\1\DATA\0111PAH\LL02251.D\FID2A.CH
Acq On : 11 Jan 2005 10:40 pm Operator: sarahm
Sample : icv81-20 Inst : FLGSLL
Misc : OP12200,GLL81,1000,,,1,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : C:\MSDCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title : PAH's BY EPA 610 OR 8100
Last Update : Wed Jan 12 13:11:26 2005
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1		Naphthalene	20.000	18.672	6.6	98	0.00	4.70- 4.90
2		2-Methyl Naphthalene	20.000	19.598	2.0	103	0.00	5.62- 5.82
3		1-Methyl Naphthalene	20.000	19.025	4.9	100	0.00	5.89- 6.09
4	S	2-Fluorobiphenyl			----------NA----------			
5		Acenaphthylene	20.000	19.521	2.4	102	0.00	7.61- 7.81
6		Acenaphthene	20.000	18.916	5.4	99	0.00	7.87- 8.07
7		Fluorene	20.000	19.107	4.5	100	0.00	8.81- 9.01
8		Phenanthrene	20.000	18.794	6.0	99	0.00	10.99-11.19
9		Anthracene	20.000	19.290	3.6	101	0.00	11.03-11.23
10	S	O-Terphenyl			----------NA----------			
11		Fluoranthene	20.000	18.738	6.3	99	0.00	13.54-13.74
12		Pyrene	20.000	18.856	5.7	100	0.00	14.13-14.33
13		Benzo(a)Anthracene	20.000	18.584	7.1	99	0.00	16.68-16.88
14		Chrysene	20.000	18.440	7.8	99	0.00	16.86-17.06
15		Benzo(b)Fluoranthene	20.000	18.821	5.9	101	0.00	18.89-19.09
16		Benzo(k)Fluoranthene	20.000	18.734	6.3	100	0.00	18.95-19.15
17		Benzo(a) Pyrene	20.000	18.796	6.0	101	0.00	19.67-19.87
18		Indeno(1,2,3-cd)pyrene	20.000	19.850	0.7	104	0.00	21.53-21.73
19		Dibenzo(a,h)anthracene	20.000	19.706	1.5	102	0.00	21.60-21.80
20		Benzo(g,h,i) Perylene	20.000	18.704	6.5	100	0.02	22.12-22.32
*****		Signal #2 *****						
1		Naphthalene	20.000	19.490	2.6	99	0.00	3.64- 3.84
2		2-Methyl Naphthalene	20.000	20.353	-1.8	103	0.00	4.51- 4.71
3		1-Methyl Naphthalene	20.000	19.890	0.5	100	0.00	4.65- 4.85
4	S	2-Fluorobiphenyl			----------NA----------			
5		Acenaphthylene	20.000	20.205	-1.0	103	0.00	5.86- 6.06
6		Acenaphthene	20.000	19.506	2.5	99	0.00	6.18- 6.38
7		Fluorene	20.000	19.966	0.2	102	0.00	7.10- 7.30
8		Phenanthrene	20.000	19.758	1.2	101	0.00	8.86- 9.06
9		Anthracene	20.000	20.152	-0.8	102	0.00	8.96- 9.16
10	S	O-Terphenyl			----------NA----------			
11		Fluoranthene	20.000	19.989	0.1	102	0.00	11.23-11.43
12		Pyrene	20.000	19.874	0.6	104	0.00	11.62-11.82
13		Benzo(a)Anthracene	20.000	20.051	-0.3	102	0.00	14.13-14.33
14		Chrysene	20.000	19.679	1.6	101	0.00	14.20-14.40
15		Benzo(b)Fluoranthene	20.000	20.080	-0.4	104	0.00	16.20-16.40
16		Benzo(k)Fluoranthene	20.000	20.024	-0.1	105	0.00	16.25-16.45
17		Benzo(a) Pyrene	20.000	20.241	-1.2	105	-0.01	16.73-16.93
18		Indeno(1,2,3-cd)pyrene	20.000	20.041	-0.2	108	0.00	18.55-18.75

Initial Calibration Verification

Job Number: F29018
Account: EEINCJX EEI
Projeet: Camp Lejeune-Campbell St. Fuel Farm

Sample: GLL81-ICV81
Lab FileID: LL02251.D

19	Dibenzo(a,h)anthracene	20.000	20.033	-0.2	107	0.00	18.64-18.84
20	Benzo(g,h,i) Perylene	20.000	19.825	0.9	105	0.00	18.88-19.08

(#) = Out of Range SPCC's out = 0 CCC's out = 0
LL02247.D 8100_H2.M Thu Jan 13 08:11:51 2005

Continuing Calibration Summary

Job Number: F29018
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GLL81-CC81
Lab FileID: LL02257.D

Evaluate Continuing Calibration Report

Signal #1 : C:\MSDCHEM\1\DATA\0111PAH\LL02257.D\FID1B.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\0111PAH\LL02257.D\FID2A.CH
Acq On : 1-12-05 01:41:45 AM Operator: sarahm
Sample : cc81-20 Inst : FLGSLL
Misc : OP12200,GLL81,530,,,1,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : C:\MSDCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title : PAH's BY EPA 610 OR 8100
Last Update : Wed Jan 12 13:11:26 2005
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1		Naphthalene	20.000	19.674	1.6	103	0.00	4.70- 4.90
2		2-Methyl Naphthalene	20.000	19.598	2.0	103	0.00	5.62- 5.82
3		1-Methyl Naphthalene	20.000	19.594	2.0	103	0.00	5.89- 6.09
4	S	2-Fluorobiphenyl	20.000	19.569	2.2	103	0.00	6.44- 6.64
5		Acenaphthylene	20.000	20.238	-1.2	106	0.00	7.61- 7.81
6		Acenaphthene	20.000	19.762	1.2	103	0.00	7.87- 8.07
7		Fluorene	20.000	19.693	1.5	103	0.00	8.81- 9.01
8		Phenanthrene	20.000	19.563	2.2	103	0.00	10.99-11.19
9		Anthracene	20.000	19.608	2.0	102	0.00	11.03-11.23
10	S	O-Terphenyl	20.000	19.581	2.1	103	0.00	11.97-12.17
11		Fluoranthene	20.000	19.429	2.9	102	0.00	13.54-13.74
12		Pyrene	20.000	19.383	3.1	102	0.00	14.13-14.33
13		Benzo(a)Anthracene	20.000	19.080	4.6	101	0.00	16.68-16.88
14		Chrysene	20.000	18.955	5.2	102	0.00	16.86-17.06
15		Benzo(b)Fluoranthene	20.000	19.255	3.7	103	0.00	18.89-19.09
16		Benzo(k)Fluoranthene	20.000	19.207	4.0	103	0.00	18.95-19.15
17		Benzo(a) Pyrene	20.000	19.197	4.0	103	0.00	19.67-19.87
18		Indeno(1,2,3-cd)pyrene	20.000	19.587	2.1	102	0.00	21.53-21.73
19		Dibenzo(a,h)anthracene	20.000	19.548	2.3	101	0.00	21.60-21.80
20		Benzo(g,h,i) Perylene	20.000	19.327	3.4	103	0.01	22.12-22.32
*****		Signal #2 *****						
1		Naphthalene	20.000	20.216	-1.1	103	0.00	3.64- 3.84
2		2-Methyl Naphthalene	20.000	20.155	-0.8	102	0.00	4.51- 4.71
3		1-Methyl Naphthalene	20.000	20.430	-2.1	103	0.00	4.65- 4.85
4	S	2-Fluorobiphenyl	20.000	20.177	-0.9	102	0.00	5.15- 5.35
5		Acenaphthylene	20.000	20.654	-3.3	105	0.00	5.86- 6.06
6		Acenaphthene	20.000	20.475	-2.4	104	0.00	6.18- 6.38
7		Fluorene	20.000	20.274	-1.4	103	0.00	7.10- 7.30
8		Phenanthrene	20.000	20.218	-1.1	103	0.00	8.86- 9.06
9		Anthracene	20.000	20.466	-2.3	104	0.00	8.96- 9.16
10	S	O-Terphenyl	20.000	20.636	-3.2	106	0.00	9.92-10.12
11		Fluoranthene	20.000	20.421	-2.1	104	0.00	11.23-11.43
12		Pyrene	20.000	19.857	0.7	104	0.00	11.62-11.82
13		Benzo(a)Anthracene	20.000	20.761	-3.8	106	0.00	14.13-14.33
14		Chrysene	20.000	20.413	-2.1	105	0.00	14.20-14.40
15		Benzo(b)Fluoranthene	20.000	20.546	-2.7	106	-0.01	16.20-16.40
16		Benzo(k)Fluoranthene	20.000	20.574	-2.9	107	0.00	16.25-16.45
17		Benzo(a) Pyrene	20.000	20.553	-2.8	107	-0.02	16.73-16.93
18		Indeno(1,2,3-cd)pyrene	20.000	20.559	-2.8	110	-0.01	18.55-18.75

Continuing Calibration Summary

Job Number: F29018
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GLL81-CC81
Lab FileID: LL02257.D

19	Dibenzo(a,h)anthracene	20.000	20.541	-2.7	110	0.00	18.64-18.84
20	Benzo(g,h,i) Perylene	20.000	20.693	-3.5	110	0.00	18.88-19.08

(#) = Out of Range SPCC's out = 0 CCC's out = 0
LL02247.D 8100_H2.M Thu Jan 13 08:12:39 2005

Continuing Calibration Summary

Job Number: F29018
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GLL81-CC81
Lab FileID: LL02267.D

Evaluate Continuing Calibration Report

Signal #1 : C:\MSDCHEM\1\DATA\0111PAH\LL02267.D\FID1B.CH Vial: 5
Signal #2 : C:\MSDCHEM\1\DATA\0111PAH\LL02267.D\FID2A.CH
Acq On : 1-12-05 06:44:34 AM Operator: sarahm
Sample : cc81-30 Inst : FLGSLL
Misc : OP12181,GLL81,1030,,,1,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : C:\MSDCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title : PAH's BY EPA 610 OR 8100
Last Update : Wed Jan 12 13:11:26 2005
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1		Naphthalene	30.000	31.217	-4.1	94	0.00	4.70- 4.90
2		2-Methyl Naphthalene	30.000	31.173	-3.9	94	0.00	5.62- 5.82
3		1-Methyl Naphthalene	30.000	31.168	-3.9	94	0.00	5.89- 6.09
4	S	2-Fluorobiphenyl	30.000	31.045	-3.5	94	0.00	6.44- 6.64
5		Acenaphthylene	30.000	32.427	-8.1	96	0.00	7.61- 7.81
6		Acenaphthene	30.000	31.270	-4.2	94	0.00	7.87- 8.07
7		Fluorene	30.000	31.001	-3.3	93	0.00	8.81- 9.01
8		Phenanthrene	30.000	30.502	-1.7	91	0.00	10.99-11.19
9		Anthracene	30.000	31.474	-4.9	95	0.00	11.03-11.23
10	S	O-Terphenyl	30.000	31.101	-3.7	93	0.00	11.97-12.17
11		Fluoranthene	30.000	30.955	-3.2	93	0.00	13.54-13.74
12		Pyrene	30.000	31.018	-3.4	93	0.00	14.13-14.33
13		Benzo(a)Anthracene	30.000	30.918	-3.1	93	0.00	16.68-16.88
14		Chrysene	30.000	30.610	-2.0	93	0.01	16.86-17.06
15		Benzo(b)Fluoranthene	30.000	30.562	-1.9	91	0.01	18.89-19.09
16		Benzo(k)Fluoranthene	30.000	30.736	-2.5	93	0.01	18.95-19.15
17		Benzo(a) Pyrene	30.000	30.591	-2.0	92	0.01	19.67-19.87
18		Indeno(1,2,3-cd)pyrene	30.000	31.085	-3.6	92	0.02	21.53-21.73
19		Dibenzo(a,h)anthracene	30.000	30.993	-3.3	93	0.01	21.60-21.80
20		Benzo(g,h,i) Perylene	30.000	30.559	-1.9	91	0.03	22.12-22.32
*****		Signal #2 *****						
1		Naphthalene	30.000	30.097	-0.3	102	0.00	3.64- 3.84
2		2-Methyl Naphthalene	30.000	30.021	-0.1	102	0.00	4.51- 4.71
3		1-Methyl Naphthalene	30.000	30.005	-0.0	104	0.00	4.65- 4.85
4	S	2-Fluorobiphenyl	30.000	30.003	-0.0	103	0.00	5.15- 5.35
5		Acenaphthylene	30.000	30.494	-1.6	104	0.00	5.86- 6.06
6		Acenaphthene	30.000	30.185	-0.6	104	0.00	6.18- 6.38
7		Fluorene	30.000	30.160	-0.5	103	0.00	7.10- 7.30
8		Phenanthrene	30.000	30.091	-0.3	103	0.00	8.86- 9.06
9		Anthracene	30.000	30.229	-0.8	102	0.00	8.96- 9.16
10	S	O-Terphenyl	30.000	30.438	-1.5	106	0.00	9.92-10.12
11		Fluoranthene	30.000	30.236	-0.8	104	0.00	11.23-11.43
12		Pyrene	30.000	29.326	2.2	104	0.00	11.62-11.82
13		Benzo(a)Anthracene	30.000	30.840	-2.8	105	0.00	14.13-14.33
14		Chrysene	30.000	29.833	0.6	105	0.00	14.20-14.40
15		Benzo(b)Fluoranthene	30.000	30.713	-2.4	106	0.00	16.20-16.40
16		Benzo(k)Fluoranthene	30.000	29.914	0.3	106	0.00	16.25-16.45
17		Benzo(a) Pyrene	30.000	30.208	-0.7	106	-0.01	16.73-16.93
18		Indeno(1,2,3-cd)pyrene	30.000	30.838	-2.8	109	0.00	18.55-18.75

Continuing Calibration Summary

Job Number: F29018
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GLL81-CC81
Lab FileID: LL02267.D

19	Dibenzo(a,h)anthracene	30.000	30.506	-1.7	109	0.00	18.64-18.84
20	Benzo(g,h,i) Perylene	30.000	30.852	-2.8	109	0.00	18.88-19.08

(#) = Out of Range SPCC's out = 0 CCC's out = 0
LL02248.D 8100_H2.M Thu Jan 13 08:13:14 2005

Continuing Calibration Summary

Job Number: F29018
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GLL81-CC81
Lab FileID: LL02287.D

Evaluate Continuing Calibration Report

Signal #1 : C:\MSDCHEM\1\DATA\0111PAH\LL02287.D\FID1B.CH Vial: 5
Signal #2 : C:\MSDCHEM\1\DATA\0111PAH\LL02287.D\FID2A.CH
Acq On : 1-12-05 04:49:49 PM Operator: sarahm
Sample : cc81-30 Inst : FLGSLL
Misc : OP12200,GLL81,1050,,,1,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : C:\MSDCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title : PAH's BY EPA 610 OR 8100
Last Update : Wed Jan 12 13:11:26 2005
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1		Naphthalene	30.000	28.975	3.4	87	0.00	4.70- 4.90
2		2-Methyl Naphthalene	30.000	28.917	3.6	87	0.00	5.62- 5.82
3		1-Methyl Naphthalene	30.000	28.936	3.5	87	0.00	5.89- 6.09
4	S	2-Fluorobiphenyl	30.000	28.898	3.7	87	0.00	6.44- 6.64
5		Acenaphthylene	30.000	30.995	-3.3	92	0.00	7.61- 7.81
6		Acenaphthene	30.000	29.177	2.7	87	0.00	7.87- 8.07
7		Fluorene	30.000	29.054	3.2	87	0.00	8.81- 9.01
8		Phenanthrene	30.000	28.869	3.8	86	0.00	10.99-11.19
9		Anthracene	30.000	29.321	2.3	88	0.00	11.03-11.23
10	S	O-Terphenyl	30.000	29.153	2.8	87	0.00	11.97-12.17
11		Fluoranthene	30.000	29.139	2.9	87	0.01	13.54-13.74
12		Pyrene	30.000	29.198	2.7	88	0.00	14.13-14.33
13		Benzo(a)Anthracene	30.000	29.547	1.5	89	0.00	16.68-16.88
14		Chrysene	30.000	29.422	1.9	90	0.01	16.86-17.06
15		Benzo(b)Fluoranthene	30.000	30.840	-2.8	92	0.02	18.89-19.09
16		Benzo(k)Fluoranthene	30.000	30.791	-2.6	93	0.02	18.95-19.15
17		Benzo(a) Pyrene	30.000	31.736	-5.8	95	0.01	19.67-19.87
18		Indeno(1,2,3-cd)pyrene	30.000	30.552	-1.8	91	0.02	21.53-21.73
19		Dibenzo(a,h)anthracene	30.000	30.376	-1.3	91	0.02	21.60-21.80
20		Benzo(g,h,i) Perylene	30.000	30.743	-2.5	92	0.03	22.12-22.32
*****		Signal #2 *****						
1		Naphthalene	30.000	31.047	-3.5	106	0.00	3.64- 3.84
2		2-Methyl Naphthalene	30.000	31.184	-3.9	106	0.00	4.51- 4.71
3		1-Methyl Naphthalene	30.000	30.997	-3.3	108	0.00	4.65- 4.85
4	S	2-Fluorobiphenyl	30.000	31.201	-4.0	107	0.00	5.15- 5.35
5		Acenaphthylene	30.000	32.040	-6.8	109	0.00	5.86- 6.06
6		Acenaphthene	30.000	31.578	-5.3	108	0.00	6.18- 6.38
7		Fluorene	30.000	31.220	-4.1	107	0.00	7.10- 7.30
8		Phenanthrene	30.000	30.898	-3.0	105	0.00	8.86- 9.06
9		Anthracene	30.000	30.692	-2.3	104	0.00	8.96- 9.16
10	S	O-Terphenyl	30.000	32.308	-7.7	112	0.00	9.92-10.12
11		Fluoranthene	30.000	30.953	-3.2	107	0.00	11.23-11.43
12		Pyrene	30.000	30.092	-0.3	107	0.00	11.62-11.82
13		Benzo(a)Anthracene	30.000	31.769	-5.9	108	0.00	14.13-14.33
14		Chrysene	30.000	30.290	-1.0	107	0.00	14.20-14.40
15		Benzo(b)Fluoranthene	30.000	34.230	-14.1	118	0.00	16.20-16.40
16		Benzo(k)Fluoranthene	30.000	32.681	-8.9	116	0.00	16.25-16.45
17		Benzo(a) Pyrene	30.000	34.444	-14.8	121	-0.01	16.73-16.93
18		Indeno(1,2,3-cd)pyrene	30.000	38.214	-27.4#	135	0.00	18.55-18.75

Continuing Calibration Summary

Job Number: F29018 **Sample:** GLL81-CC81
Account: EEINCJX EEI **Lab FileID:** LL02287.D
Project: Camp Lejeune-Campbell St. Fuel Farm

19	Dibenzo(a,h)anthracene	30.000	36.923	-23.1# 132	0.00	18.64-18.84
20	Benzo(g,h,i) Perylene	30.000	37.129	-23.8# 132	0.01	18.88-19.08

(#) = Out of Range SPCC's out = 0 CCC's out = 0
LL02248.D 8100_H2.M Thu Jan 13 08:13:16 2005

6.6

Continuing Calibration Summary

Job Number: F29018
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GLL81-ECC81
Lab FileID: LL02292.D

Evaluate Continuing Calibration Report

Signal #1 : C:\MSDCHEM\1\DATA\0111PAH\LL02292.D\FID1B.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\0111PAH\LL02292.D\FID2A.CH
Acq On : 1-12-05 07:20:18 PM Operator: sarahm
Sample : ecc81-20 Inst : FLGSLL
Misc : OP12181,GLL81,510,,,1,50,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : C:\MSDCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title : PAH's BY EPA 610 OR 8100
Last Update : Wed Jan 12 13:11:26 2005
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1		Naphthalene	20.000	18.411	7.9	96	0.00	4.70- 4.90
2		2-Methyl Naphthalene	20.000	18.331	8.3	96	0.00	5.62- 5.82
3		1-Methyl Naphthalene	20.000	18.357	8.2	96	0.00	5.89- 6.09
4	S	2-Fluorobiphenyl	20.000	18.322	8.4	96	0.00	6.44- 6.64
5		Acenaphthylene	20.000	19.188	4.1	100	0.00	7.61- 7.81
6		Acenaphthene	20.000	18.463	7.7	96	0.00	7.87- 8.07
7		Fluorene	20.000	18.178	9.1	95	0.00	8.81- 9.01
8		Phenanthrene	20.000	17.838	10.8	94	0.00	10.99-11.19
9		Anthracene	20.000	17.898	10.5	93	0.00	11.03-11.23
10	S	O-Terphenyl	20.000	18.216	8.9	96	0.00	11.97-12.17
11		Fluoranthene	20.000	17.972	10.1	95	0.00	13.54-13.74
12		Pyrene	20.000	18.084	9.6	95	0.00	14.13-14.33
13		Benzo(a)Anthracene	20.000	18.427	7.9	98	0.00	16.68-16.88
14		Chrysene	20.000	18.459	7.7	99	0.00	16.86-17.06
15		Benzo(b)Fluoranthene	20.000	19.202	4.0	103	0.00	18.89-19.09
16		Benzo(k)Fluoranthene	20.000	19.368	3.2	103	0.00	18.95-19.15
17		Benzo(a) Pyrene	20.000	19.449	2.8	104	0.00	19.67-19.87
18		Indeno(1,2,3-cd)pyrene	20.000	19.724	1.4	103	0.00	21.53-21.73
19		Dibenzo(a,h)anthracene	20.000	20.100	-0.5	104	0.00	21.60-21.80
20		Benzo(g,h,i) Perylene	20.000	19.458	2.7	104	0.01	22.12-22.32
*****		Signal #2 *****						
1		Naphthalene	20.000	20.012	-0.1	102	0.00	3.64- 3.84
2		2-Methyl Naphthalene	20.000	19.959	0.2	101	0.00	4.51- 4.71
3		1-Methyl Naphthalene	20.000	20.252	-1.3	102	0.00	4.65- 4.85
4	S	2-Fluorobiphenyl	20.000	20.025	-0.1	102	0.00	5.15- 5.35
5		Acenaphthylene	20.000	20.604	-3.0	105	0.00	5.86- 6.06
6		Acenaphthene	20.000	20.424	-2.1	104	0.00	6.18- 6.38
7		Fluorene	20.000	20.034	-0.2	102	0.00	7.10- 7.30
8		Phenanthrene	20.000	19.716	1.4	101	0.00	8.86- 9.06
9		Anthracene	20.000	19.766	1.2	100	-0.01	8.96- 9.16
10	S	O-Terphenyl	20.000	20.857	-4.3	107	0.00	9.92-10.12
11		Fluoranthene	20.000	19.965	0.2	102	-0.01	11.23-11.43
12		Pyrene	20.000	19.371	3.1	102	0.00	11.62-11.82
13		Benzo(a)Anthracene	20.000	20.191	-1.0	103	-0.01	14.13-14.33
14		Chrysene	20.000	19.792	1.0	101	0.00	14.20-14.40
15		Benzo(b)Fluoranthene	20.000	21.575	-7.9	112	-0.01	16.20-16.40
16		Benzo(k)Fluoranthene	20.000	20.925	-4.6	109	0.00	16.25-16.45
17		Benzo(a) Pyrene	20.000	21.753	-8.8	113	-0.02	16.73-16.93
18		Indeno(1,2,3-cd)pyrene	20.000	24.071	-20.4#	129	-0.01	18.55-18.75

Continuing Calibration Summary

Job Number: F29018 **Sample:** GLL81-ECC81
Account: EEINCJX EEI **Lab FileID:** LL02292.D
Project: Camp Lejeune-Campbell St. Fuel Farm

19	Dibenzo(a,h)anthracene	20.000	23.793	-19.0#	127	0.00	18.64-18.84
20	Benzo(g,h,i) Perylene	20.000	24.287	-21.4#	129	0.00	18.88-19.08

(#) = Out of Range SPCC's out = 0 CCC's out = 0
LL02247.D 8100_H2.M Thu Jan 13 08:12:40 2005

6.9

Continuing Calibration Summary

Job Number: F29018 **Sample:** GLL82-CC81
Account: EEINCJX EEI **Lab FileID:** LL02293.D
Project: Camp Lejeune-Campbell St. Fuel Farm

Evaluate Continuing Calibration Report

Signal #1 : C:\MSDCHEM\1\DATA\0113PAH\LL02293.D\FID1B.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\0113PAH\LL02293.D\FID2A.CH
Acq On : 13 Jan 2005 12:18 pm Operator: sarahm
Sample : cc81-20 Inst : FLGSLL
Misc : OP12181,GLL82,1000,,,1,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : C:\MSDCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title : PAH's BY EPA 610 OR 8100
Last Update : Wed Jan 12 13:11:26 2005
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1		Naphthalene	20.000	18.738	6.3	98	0.00	4.70- 4.90
2		2-Methyl Naphthalene	20.000	18.594	7.0	98	0.00	5.62- 5.82
3		1-Methyl Naphthalene	20.000	18.653	6.7	98	0.00	5.89- 6.09
4	S	2-Fluorobiphenyl	20.000	18.717	6.4	99	0.00	6.44- 6.64
5		Acenaphthylene	20.000	18.571	7.1	97	0.00	7.61- 7.81
6		Acenaphthene	20.000	18.266	8.7	95	0.00	7.87- 8.07
7		Fluorene	20.000	18.152	9.2	95	0.00	8.81- 9.01
8		Phenanthrene	20.000	18.131	9.3	96	0.00	10.99-11.19
9		Anthracene	20.000	18.414	7.9	96	0.00	11.03-11.23
10	S	O-Terphenyl	20.000	18.468	7.7	97	0.00	11.97-12.17
11		Fluoranthene	20.000	18.009	10.0	95	0.00	13.54-13.74
12		Pyrene	20.000	18.071	9.6	95	0.00	14.13-14.33
13		Benzo(a)Anthracene	20.000	18.160	9.2	97	0.00	16.68-16.88
14		Chrysene	20.000	18.145	9.3	97	0.00	16.86-17.06
15		Benzo(b)Fluoranthene	20.000	19.013	4.9	102	0.00	18.89-19.09
16		Benzo(k)Fluoranthene	20.000	19.394	3.0	104	0.00	18.95-19.15
17		Benzo(a) Pyrene	20.000	19.408	3.0	104	0.00	19.67-19.87
18		Indeno(1,2,3-cd)pyrene	20.000	19.563	2.2	102	0.01	21.53-21.73
19		Dibenzo(a,h)anthracene	20.000	19.996	0.0	104	0.00	21.60-21.80
20		Benzo(g,h,i) Perylene	20.000	19.642	1.8	105	0.02	22.12-22.32
*****		Signal #2 *****						
1		Naphthalene	20.000	20.158	-0.8	103	0.00	3.64- 3.84
2		2-Methyl Naphthalene	20.000	19.802	1.0	101	0.00	4.51- 4.71
3		1-Methyl Naphthalene	20.000	19.666	1.7	99	0.00	4.65- 4.85
4	S	2-Fluorobiphenyl	20.000	19.740	1.3	100	0.00	5.15- 5.35
5		Acenaphthylene	20.000	19.236	3.8	98	0.00	5.86- 6.06
6		Acenaphthene	20.000	19.010	4.9	97	0.00	6.18- 6.38
7		Fluorene	20.000	19.299	3.5	98	0.00	7.10- 7.30
8		Phenanthrene	20.000	19.237	3.8	98	0.00	8.86- 9.06
9		Anthracene	20.000	19.396	3.0	99	0.00	8.96- 9.16
10	S	O-Terphenyl	20.000	19.764	1.2	101	0.00	9.92-10.12
11		Fluoranthene	20.000	19.533	2.3	100	0.00	11.23-11.43
12		Pyrene	20.000	19.305	3.5	101	0.00	11.62-11.82
13		Benzo(a)Anthracene	20.000	20.268	-1.3	103	0.00	14.13-14.33
14		Chrysene	20.000	19.964	0.2	102	0.00	14.20-14.40
15		Benzo(b)Fluoranthene	20.000	22.194	-11.0	115	0.00	16.20-16.40
16		Benzo(k)Fluoranthene	20.000	21.956	-9.8	115	0.00	16.25-16.45
17		Benzo(a) Pyrene	20.000	22.848	-14.2	119	-0.01	16.73-16.93
18		Indeno(1,2,3-cd)pyrene	20.000	25.406	-27.0#	136	0.00	18.55-18.75

6.6

Continuing Calibration Summary

Job Number: F29018
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GLL82-CC81
Lab FileID: LL02293.D

19	Dibenzo(a,h)anthracene	20.000	25.173	-25.9#	135	0.00	18.64-18.84
20	Benzo(g,h,i) Perylene	20.000	25.323	-26.6#	135	0.00	18.88-19.08

(#) = Out of Range SPCC's out = 0 CCC's out = 0

LL02247.D 8100_H2.M Fri Jan 14 08:23:19 2005

6.6

Continuing Calibration Summary

Job Number: F29018
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GLL82-CC81
Lab FileID: LL02297.D

Evaluate Continuing Calibration Report

Signal #1 : C:\MSDCHEM\1\DATA\0113PAH\LL02297.D\FID1B.CH Vial: 5
Signal #2 : C:\MSDCHEM\1\DATA\0113PAH\LL02297.D\FID2A.CH
Acq On : 1-13-05 02:18:57 PM Operator: sarahm
Sample : cc81-20 Inst : FLGSLL
Misc : OP12181,GLL82,510,,,1,10,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : C:\MSDCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title : PAH's BY EPA 610 OR 8100
Last Update : Wed Jan 12 13:11:26 2005
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1		Naphthalene	20.000	19.064	4.7	100	0.00	4.70- 4.90
2		2-Methyl Naphthalene	20.000	18.966	5.2	100	0.00	5.62- 5.82
3		1-Methyl Naphthalene	20.000	19.033	4.8	100	0.00	5.89- 6.09
4	S	2-Fluorobiphenyl	20.000	19.014	4.9	100	0.00	6.44- 6.64
5		Acenaphthylene	20.000	19.247	3.8	100	0.00	7.61- 7.81
6		Acenaphthene	20.000	19.012	4.9	99	0.00	7.87- 8.07
7		Fluorene	20.000	18.758	6.2	98	0.00	8.81- 9.01
8		Phenanthrene	20.000	18.476	7.6	97	0.00	10.99-11.19
9		Anthracene	20.000	18.484	7.6	97	0.00	11.03-11.23
10	S	O-Terphenyl	20.000	18.893	5.5	99	0.00	11.97-12.17
11		Fluoranthene	20.000	18.276	8.6	96	0.00	13.54-13.74
12		Pyrene	20.000	18.326	8.4	97	0.00	14.13-14.33
13		Benzo(a)Anthracene	20.000	18.509	7.5	98	0.00	16.68-16.88
14		Chrysene	20.000	18.500	7.5	99	0.00	16.86-17.06
15		Benzo(b)Fluoranthene	20.000	19.618	1.9	105	0.01	18.89-19.09
16		Benzo(k)Fluoranthene	20.000	19.699	1.5	105	0.00	18.95-19.15
17		Benzo(a) Pyrene	20.000	19.939	0.3	107	0.00	19.67-19.87
18		Indeno(1,2,3-cd)pyrene	20.000	19.784	1.1	103	0.01	21.53-21.73
19		Dibenzo(a,h)anthracene	20.000	20.186	-0.9	105	0.00	21.60-21.80
20		Benzo(g,h,i) Perylene	20.000	20.208	-1.0	108	0.02	22.12-22.32
*****		Signal #2 *****						
1		Naphthalene	20.000	20.618	-3.1	105	0.00	3.64- 3.84
2		2-Methyl Naphthalene	20.000	20.242	-1.2	103	0.00	4.51- 4.71
3		1-Methyl Naphthalene	20.000	20.301	-1.5	103	0.00	4.65- 4.85
4	S	2-Fluorobiphenyl	20.000	20.102	-0.5	102	0.00	5.15- 5.35
5		Acenaphthylene	20.000	20.204	-1.0	103	0.00	5.86- 6.06
6		Acenaphthene	20.000	20.275	-1.4	103	0.00	6.18- 6.38
7		Fluorene	20.000	19.965	0.2	102	0.00	7.10- 7.30
8		Phenanthrene	20.000	19.847	0.8	101	0.00	8.86- 9.06
9		Anthracene	20.000	20.054	-0.3	102	-0.01	8.96- 9.16
10	S	O-Terphenyl	20.000	20.809	-4.0	106	0.00	9.92-10.12
11		Fluoranthene	20.000	20.223	-1.1	103	-0.01	11.23-11.43
12		Pyrene	20.000	19.596	2.0	103	0.00	11.62-11.82
13		Benzo(a)Anthracene	20.000	20.783	-3.9	106	0.00	14.13-14.33
14		Chrysene	20.000	20.432	-2.2	105	0.00	14.20-14.40
15		Benzo(b)Fluoranthene	20.000	22.502	-12.5	116	-0.01	16.20-16.40
16		Benzo(k)Fluoranthene	20.000	21.651	-8.3	113	0.00	16.25-16.45
17		Benzo(a) Pyrene	20.000	22.676	-13.4	118	-0.02	16.73-16.93
18		Indeno(1,2,3-cd)pyrene	20.000	24.985	-24.9#	134	0.00	18.55-18.75

Continuing Calibration Summary

Job Number: F29018
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GLL82-CC81
Lab FileID: LL02297.D

19	Dibenzo(a,h)anthracene	20.000	24.729	-23.6#	132	0.00	18.64-18.84
20	Benzo(g,h,i) Perylene	20.000	25.023	-25.1#	133	0.00	18.88-19.08

(#) = Out of Range SPCC's out = 0 CCC's out = 0
LL02247.D 8100_H2.M Thu Jan 13 16:31:47 2005

Southeast
ACCUTEST.
Laboratories

12/08/05

Technical Report for

EEI

CSFF MCAS New River

CTO 0015

Accutest Job Number: F28849

Sampling Date: 12/15/04

Report to:

EEI

bmorris@eeimail.com

ATTN: Bill Morris

Total number of pages in report: 81

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK
This report shall not be reprodnced, except in its entirety, without the written approval of Accutest Laboratories.

Sections: 1 2 3 4 5 6 7 8

Table of Contents

Section 1: Sample Summary **3**
Section 2: Case Narrative/Conformance Summary **4**
Section 3: Sample Results **6**
3.1: F28849-1: USTCSFF-EFF 6
3.2: F28849-2: USTCSFF-RWC1 10
3.3: F28849-3: USTCSFF-RWB1 11
3.4: F28849-4: USTCSFF-RWB3 12
3.5: F28849-5: USTCSFF-RWB4 13
3.6: F28849-6: TRIP BLANK 14
Section 4: Misc. Forms **15**
4.1: Chain of Custody 16
Section 5: GC Volatiles - QC Data Summaries **18**
5.1: Method Blank Summary 19
5.2: Blank Spike Summary 21
5.3: Matrix Spike/Matrix Spike Duplicate Summary 23
5.4: Surrogate Recovery Summaries 25
5.5: GC Surrogate Retention Time Summaries 26
5.6: Initial and Continuing Calibration Summaries 29
Section 6: GC Semi-volatiles - QC Data Summaries **41**
6.1: Method Blank Summary 42
6.2: Blank Spike Summary 43
6.3: Surrogate Recovery Summaries 44
6.4: GC Surrogate Retention Time Summaries 45
6.5: Initial and Continuing Calibration Summaries 46
Section 7: Metals Analysis - QC Data Summaries **53**
7.1: Inst QC MA4148: As,Ba,Be,Cd,Cr,Fe,Pb,Mn,Se 54
7.2: Inst QC MA4150: Se 64
7.3: Prep QC MP7535: As,Ba,Be,Cd,Cr,Fe,Pb,Mn,Se 74
Section 8: General Chemistry - QC Data Summaries **79**
8.1: Method Blank and Spike Results Summary 80
8.2: Duplicate Results Summary 81

Sample Summary

EEI

Job No: F28849

CSFF MCAS New River
Project No: CTO 0015

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
F28849-1	12/15/04	10:45	TE	12/16/04	AQ	Ground Water	USTCSFF-EFF
F28849-2	12/15/04	11:15	TE	12/16/04	AQ	Ground Water	USTCSFF-RWC1
F28849-3	12/15/04	11:45	TE	12/16/04	AQ	Ground Water	USTCSFF-RWB1
F28849-4	12/15/04	12:00	TE	12/16/04	AQ	Ground Water	USTCSFF-RWB3
F28849-5	12/15/04	12:15	TE	12/16/04	AQ	Ground Water	USTCSFF-RWB4
F28849-6	12/15/04	15:00	TE	12/16/04	AQ	Trip Blank Water	TRIP BLANK

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: EEI **Job No:** F28849

Site: CSFF MCAS New River **Report Date:** 12/30/2004 7:39:23

5 Samples and 1 Trip Blank were collected on 12/15/2004 and were received at Accutest on 12/16/2004 properly preserved, at 1 Deg. C and intact. These Samples received an Aecutest job number of F28849. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GC by Method EPA 601/602

Matrix: AQ **Batch ID:** GCD2330

All samples were analyzed within thc rccommended method holding time.

Samples F28849-1MS, F28849-1MSD were used as the QC samplcs indicatcd.

All method blanks for this batch meet method specific criteria.

F28849-3: All hits confirmed by dual column analysis.

F28849-5: All hits confirmed by dual eolumn analysis.

Matrix: AQ **Batch ID:** GCD2333

All samples were analyzed within the recommended method holding time.

Samples F28849-4MS, F28849-4MSD were used as the QC samples indicated.

All method blanks for this batch meet method specific criteria.

Matrix Spike Reeoverys for Methyl Tert Butyl Ether, Benzene are outside control limits. Outside control limits duc to high level in sample relative to spike amount.

Matrix Spike Duplicate Recoverys for Benzene, Methyl Tert Butyl Ether, Xylenes (total) are outside control limits. Probable eause due to matrix interference.

F28849-4: All hits confirmed by dual eolumn analysis.

Extractables by GC by Method EPA 610

Matrix: AQ **Batch ID:** OP12141

All samples wcre extraeted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All mcthod blanks for this batch meet method specific criteria.

OP12141-BS: Insufficient sample for MS/MSD.

Metals by Method SW846 6010B

Matrix: AQ **Batch ID:** MP7535

All samples were digested within the recommended mcthod holding time.

All samples were analyzcd within the recommended method holding time.

All method blanks for this batch meet method speeifie criteria.

Samples F28849-1DUP, F28849-1MS, F28849-1MSD, F28849-1SDL were used as thc QC samples for metals.

RPDs for Duplieate for Arsenic, Barium, Chromium, Iron, Lead, Manganese, Selenium arc outside control limits for sample MP7535-D1. RPD aeceptable due to low duplicate and sample concentrations.

RPDs for Scrial Dilution for Arsenic, Chromium, Iron, Lead, Manganese, Selenium are outside control limits for sample MP7535-SD1. Pereent difference acceptable due to low initial sample concentration (< 50 times IDL).

Wet Chemistry by Method EPA 160.1

Matrix: AQ **Batch ID:** GN16476

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specifie criteria.

Sample F28849-1DUP was used as the QC sample for Solids, Total Dissolved.

Wet Chemistry by Method EPA 160.2

Matrix: AQ **Batch ID:** GN16475

All samples were analyzed within the reeommended method holding time.

All method blanks for this batch meet method speeifie eriteria.

Sample F28935-1DUP was used as the QC sample for Solids, Total Suspended.

Aecutest Laboratories Southeast (ALSE) certifies that this report meets the project requirements for analytieal data produced for the samples as reeeived at ALSE and as stated on the COC. ALSE certifies that the data meets the Data Quality Objectives for preeision, accuracy and completeness as speeified in the ALSE Quality Manual except as noted above. This report is to be used in its entirety. ALSE is not responsible for any assumptions of data quality if partial data packages are used.

Narrative prepared by:

Date: December 30, 2004

Ellen Pampel, Inorganic QA (signature on file)

Thursday, Deeember 30, 2004

Report of Analysis

Client Sample ID:	USTCSFF-EFF		
Lab Sample ID:	F28849-1	**Date Sampled:**	12/15/04
Matrix:	AQ - Ground Water	**Date Received:**	12/16/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD056597.D	1	12/20/04	AJ	n/a	n/a	GCD2330
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	86%		70-123%
98-08-8	aaa-Trifluorotoluene	95%		73-122%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-EFF		
Lab Sample ID:	F28849-1	**Date Sampled:**	12/15/04
Matrix:	AQ - Ground Water	**Date Received:**	12/16/04
Method:	EPA 610 EPA 610	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IJ21539.D	1	12/22/04	SD	12/22/04	OP12141	GIJ1064
Run #2							

	Initial Volume	Final Volume
Run #1	940 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.3	2.1	ug/l	
208-96-8	Acenaphthylene	ND	5.3	2.1	ug/l	
120-12-7	Anthraeene	ND	5.3	2.1	ug/l	
56-55-3	Benzo(a)anthraeene	ND	5.3	2.1	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.3	2.1	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.3	2.1	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.3	2.1	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.3	2.1	ug/l	
218-01-9	Chrysene	ND	5.3	2.1	ug/l	
53-70-3	Dibenzo(a,h)anthraecne	ND	5.3	2.1	ug/l	
206-44-0	Fluoranthene	ND	5.3	2.1	ug/l	
86-73-7	Fluorene	ND	5.3	2.1	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.3	2.1	ug/l	
91-20-3	Naphthalene	ND	5.3	2.1	ug/l	
90-12-0	1-Methylnaphthalene	ND	5.3	2.1	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.3	2.1	ug/l	
85-01-8	Phenanthrene	ND	5.3	2.1	ug/l	
129-00-0	Pyrene	ND	5.3	2.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	75%		42-123%
84-15-1	o-Terphenyl	85%		51-123%

ND = Not detected MDL - Method Deteetion Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-EFF		
Lab Sample ID:	F28849-1	**Date Sampled:**	12/15/04
Matrix:	AQ - Ground Water	**Date Received:**	12/16/04
		Percent Solids:	n/a
Project:	CSFF MCAS New River		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	< 10	10	ug/l	1	12/20/04	12/20/04	SM	SW846 6010B [1]	SW846 3010A [3]
Barium	< 200	200	ug/l	1	12/20/04	12/20/04	SM	SW846 6010B [1]	SW846 3010A [3]
Beryllium	< 4.0	4.0	ug/l	1	12/20/04	12/20/04	SM	SW846 6010B [1]	SW846 3010A [3]
Cadmium	< 5.0	5.0	ug/l	1	12/20/04	12/20/04	SM	SW846 6010B [1]	SW846 3010A [3]
Chromium	< 10	10	ug/l	1	12/20/04	12/20/04	SM	SW846 6010B [1]	SW846 3010A [3]
Iron	< 300	300	ug/l	1	12/20/04	12/20/04	SM	SW846 6010B [1]	SW846 3010A [3]
Lead	< 5.0	5.0	ug/l	1	12/20/04	12/20/04	SM	SW846 6010B [1]	SW846 3010A [3]
Manganese	< 15	15	ug/l	1	12/20/04	12/20/04	SM	SW846 6010B [1]	SW846 3010A [3]
Selenium	< 10	10	ug/l	1	12/20/04	12/21/04	SM	SW846 6010B [2]	SW846 3010A [3]

(1) Instrument QC Batch: MA4148
(2) Instrument QC Batch: MA4150
(3) Prep QC Batch: MP7535

RL = Reporting Limit

Report of Analysis

Client Sample ID:	USTCSFF-EFF		
Lab Sample ID:	F28849-1	**Date Sampled:**	12/15/04
Matrix:	AQ - Ground Water	**Date Received:**	12/16/04
		Percent Solids:	n/a
Project:	CSFF MCAS New River		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Hardness, Total as CaCO3	25.8	4.0	mg/l	1	12/22/04	SM	SW846 6010B/SM 2340B
Solids, Total Dissolved	347	10	mg/l	1	12/22/04 13:50	LE	EPA 160.1
Solids, Total Suspended	4.0	4.0	mg/l	1	12/22/04 11:40	LE	EPA 160.2

RL = Reporting Limit

Report of Analysis

Client Sample ID:	USTCSFF-RWC1		
Lab Sample ID:	F28849-2	**Date Sampled:**	12/15/04
Matrix:	AQ - Ground Water	**Date Received:**	12/16/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD056600.D	1	12/20/04	AJ	n/a	n/a	GCD2330
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	86%		70-123%
98-08-8	aaa-Trifluorotoluene	95%		73-122%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-RWB1		
Lab Sample ID:	F28849-3	**Date Sampled:**	12/15/04
Matrix:	AQ - Ground Water	**Date Received:**	12/16/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	CD056601.D	1	12/20/04	AJ	n/a	n/a	GCD2330
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	4.3	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	17.0	1.0	0.50	ug/l	
108-88-3	Toluene	1.8	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	3.4	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	89%		70-123%
98-08-8	aaa-Trifluorotoluene	96%		73-122%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-RWB3		
Lab Sample ID:	F28849-4	**Date Sampled:**	12/15/04
Matrix:	AQ - Ground Water	**Date Received:**	12/16/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	CD056645.D	2	12/22/04	AJ	n/a	n/a	GCD2333
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	148	2.0	1.0	ug/l	
108-90-7	Chlorobenzene	ND	2.0	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	2.0	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	2.0	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	2.0	1.0	ug/l	
100-41-4	Ethylbenzene	18.7	2.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	44.1	2.0	1.0	ug/l	
108-88-3	Toluene	7.4	2.0	1.0	ug/l	
1330-20-7	Xylenes (total)	93.9	6.0	2.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	98%		70-123%
98-08-8	aaa-Trifluorotoluene	100%		73-122%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-RWB4		
Lab Sample ID:	F28849-5	**Date Sampled:**	12/15/04
Matrix:	AQ - Ground Water	**Date Received:**	12/16/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	CD056603.D	10	12/21/04	AJ	n/a	n/a	GCD2330
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	431	10	5.0	ug/l	
108-90-7	Chlorobenzene	ND	10	5.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	10	5.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	10	5.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	10	5.0	ug/l	
100-41-4	Ethylbenzene	26.1	10	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	170	10	5.0	ug/l	
108-88-3	Toluene	246	10	5.0	ug/l	
1330-20-7	Xylenes (total)	513	30	10	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	96%		70-123%
98-08-8	aaa-Trifluorotoluene	99%		73-122%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	F28849-6	**Date Sampled:**	12/15/04
Matrix:	AQ - Trip Blank Water	**Date Received:**	12/16/04
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD056607.D	1	12/21/04	AJ	n/a	n/a	GCD2330
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	86%		70-123%
98-08-8	aaa-Trifluorotoluene	94%		73-122%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

CHAIN OF CUSTODY

ACCUTEST Laboratories

4405 VINELAND ROAD • SUITE C-15
ORLANDO, FL 32811
TEL: 407-425-6700 • FAX: 407-425-0707

ACCUTEST JOB #: F28849
ACCUTEST QUOTE #:

CLIENT INFORMATION

NAME: Engineering & Environment
ADDRESS: 824 Gumbranch Rd Ste S
CITY: Jacksonville STATE: NC ZIP: 28540
SEND REPORT TO:
PHONE #: (910) 989-3344

FACILITY INFORMATION

PROJECT NAME: CSFF Treatment System
LOCATION: Marine Corps Air Station (MCAS) CTO 0015
PROJECT NO.:
FAX #: (910) 989-3344

ANALYTICAL INFORMATION

ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION DATE	COLLECTION TIME	SAMPLED BY:	MATRIX	# OF BOTTLES	PRESERVATION HCl	PRESERVATION NaOH	PRESERVATION HNO3	PRESERVATION H2SO4	PRESERVATION NONE	USEPA 602	USEPA 610	Total Metals + Hardness	TDS/TSS	LAB USE ONLY
1	UST CSFF-EFF	12/15/04	1045	TE	GW	9	X		X		X	X	X	X	X	
2	UST CSFF-RWC1	↑	1115	↑	↑	3	X					X				
3	UST CSFF-RWB1		1145			3	X					X				
4	UST CSFF-RWB3	↓	1200	↓	↓	3	X					X				
5	UST CSFF-RWB4	12/15/04	1215	TE	GW	3	X					X				
6	Trip Blanks	12/15/04	1500	/	W	2	X					X				
	Temp Blank	12/15/04	1500	/	W	1					X					

MATRIX CODES

DW - DRINKING WATER
GW - GROUND WATER
WW - WASTE WATER
SO - SOIL
SL - SLUDGE
OI - OIL
LIQ - OTHER LIQUID
SOL - OTHER SOLID

DATA TURNAROUND INFORMATION

☒ STANDARD
☐ 48 HOUR RUSH
☐ 24 HOUR EMERGENCY
☐ OTHER
APPROVED BY:
EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED

DATA DELIVERABLE INFORMATION

☐ STANDARD
☐ COMMERCIAL "B"
☐ DISK DELIVERABLE
☐ STATE FORMS
☑ OTHER (SPECIFY) NEESA 4

COMMENTS/REMARKS

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESION, INCLUDING COURIER DELIVERY

RELINQUISHED BY/SAMPLER:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
1.	12/15/04	1. FX	2. FX	12/16/04 9:00	2.
RELINQUISHED BY: 3.	DATE TIME:	RECEIVED BY: 3.	RELINQUISHED BY: 4.	DATE TIME:	RECEIVED BY: 4.
RELINQUISHED BY: 5.	DATE TIME:	RECEIVED BY: 5.	SEAL #	PRESERVE WHERE APPLICABLE ☐	ON ICE ☐ TEMPERATURE 1.0 °C

F28849: Chain of Custody
Page 1 of 2

ACCUTEST LABORATORIES SOUTHEAST SAMPLE RECEIPT CONFIRMATION

Accutest's Job Number: F28849

Client: Engineering + Environmental Project: CSFF Treatment System

Date Received: 12/16/04 Time Received: 9:00

of Coolers Received: 1 Cooler Temperatures: 1.0

Delivery Method: (FedEx) UPS Acceutest Courier Greyhound Delivery Other

Air Bill Number: _____

Cooler Custody Seals Intact ?	(Yes)	No	
Chain of Custody Provided ?	(Yes)	No	
COC Match Bottle Label ID's ?	(Yes)	No	
Sample Labels Present on all bottles ?	(Yes)	No	
All Analyses Marked On COC ?	(Yes)	No	
Are All Bottles Intact ?	(Yes)	No	
Samples Preserved Correctly ?	(Yes)	No	
Correct Number of Containers Used ?	(Yes)	No	
Sufficient Sample Volume ?	(Yes)	No	
Trip Blank Provided ?	(Yes)	No	
Trip Blank on COC ?	(Yes)	No	
Trip Blank Intact ?	(Yes)	No	N/A
Trip Blank Matrix ?	Soil	(Water)	N/A
Number of Encores ?	Ø		
Number of Soil Field Kits ?	Ø		

Summary of Comments: _____

Signature: _____ Date: 12/16/04

Review Signature: _____

ASBD 12/30/03

4.1

F28849: Chain of Custody
Page 2 of 2

F28849

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: F28849
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GCD2330-MB	CD056596.D	1	12/20/04	AJ	n/a	n/a	GCD2330

The QC reported here applies to the following samples: **Method:** EPA 601/602

F28849-1, F28849-2, F28849-3, F28849-5, F28849-6

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
352-33-0	1-Chloro-4-fluorobenzene	84%	70-123%
98-08-8	aaa-Trifluorotoluene	94%	73-122%

Method Blank Summary

Job Number: F28849
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GCD2333-MB	CD056642.D	1	12/22/04	AJ	n/a	n/a	GCD2333

The QC reported here applies to the following samples: **Method:** EPA 601/602

F28849-4

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
352-33-0	1-Chloro-4-fluorobenzene	82%	70-123%
98-08-8	aaa-Trifluorotoluene	93%	73-122%

Blank Spike Summary

Job Number: F28849
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GCD2330-BS	CD056595.D	1	12/20/04	AJ	n/a	n/a	GCD2330

The QC reported here applies to the following samples: **Method:** EPA 601/602

F28849-1, F28849-2, F28849-3, F28849-5, F28849-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	20	18.3	92	86-121
108-90-7	Chlorobenzene	20	18.0	90	81-119
95-50-1	1,2-Dichlorobenzene	20	17.8	89	75-120
541-73-1	1,3-Dichlorobenzene	20	17.2	86	77-121
106-46-7	1,4-Dichlorobenzene	20	17.2	86	75-122
100-41-4	Ethylbenzene	20	18.8	94	81-126
1634-04-4	Methyl Tert Butyl Ether	20	18.5	93	76-117
108-88-3	Toluene	20	18.5	93	82-123
1330-20-7	Xylenes (total)	60	55.5	93	82-125

CAS No.	Surrogate Recoveries	BSP	Limits
352-33-0	1-Chloro-4-fluorobenzene	99%	70-123%
98-08-8	aaa-Trifluorotoluene	98%	73-122%

Blank Spike Summary

Job Number: F28849
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GCD2333-BS	CD056641.D	1	12/22/04	AJ	n/a	n/a	GCD2333

The QC reported here applies to the following samples: **Method:** EPA 601/602

F28849-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	20	17.2	86	86-121
108-90-7	Chlorobenzene	20	17.0	85	81-119
95-50-1	1,2-Dichlorobenzene	20	16.2	81	75-120
541-73-1	1,3-Dichlorobenzene	20	15.9	80	77-121
106-46-7	1,4-Dichlorobenzene	20	16.0	80	75-122
100-41-4	Ethylbenzene	20	17.8	89	81-126
1634-04-4	Methyl Tert Butyl Ether	20	16.6	83	76-117
108-88-3	Toluene	20	17.5	88	82-123
1330-20-7	Xylenes (total)	60	52.8	88	82-125

CAS No.	Surrogate Recoveries	BSP	Limits
352-33-0	1-Chloro-4-fluorobenzene	98%	70-123%
98-08-8	aaa-Trifluorotoluene	98%	73-122%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F28849
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F28849-1MS	CD056598.D	1	12/20/04	AJ	n/a	n/a	GCD2330
F28849-1MSD	CD056599.D	1	12/20/04	AJ	n/a	n/a	GCD2330
F28849-1	CD056597.D	1	12/20/04	AJ	n/a	n/a	GCD2330

The QC reported here applies to the following samples: **Method:** EPA 601/602

F28849-1, F28849-2, F28849-3, F28849-5, F28849-6

CAS No.	Compound	F28849-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND		20	20.2	101	20.0	100	1	77-125/6
108-90-7	Chlorobenzene	ND		20	20.3	102	19.8	99	2	78-120/8
95-50-1	1,2-Dichlorobenzene	ND		20	19.8	99	19.5	98	2	69-125/7
541-73-1	1,3-Dichlorobenzene	ND		20	19.4	97	19.0	95	2	71-126/7
106-46-7	1,4-Dichlorobenzene	ND		20	19.6	98	19.1	96	3	67-129/7
100-41-4	Ethylbenzene	ND		20	21.2	106	21.0	105	1	74-127/6
1634-04-4	Methyl Tert Butyl Ether	ND		20	20.9	105	20.0	100	4	66-127/9
108-88-3	Toluene	ND		20	20.6	103	20.4	102	1	77-124/5
1330-20-7	Xylenes (total)	ND		60	62.3	104	61.9	103	1	76-125/5

CAS No.	Surrogate Recoveries	MS	MSD	F28849-1	Limits
352-33-0	1-Chloro-4-fluorobenzene	100%	98%	86%	70-123%
98-08-8	aaa-Trifluorotoluene	99%	99%	95%	73-122%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F28849
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F28849-4MS	CD056646.D	2	12/22/04	AJ	n/a	n/a	GCD2333
F28849-4MSD	CD056647.D	2	12/22/04	AJ	n/a	n/a	GCD2333
F28849-4 [a]	CD056645.D	2	12/22/04	AJ	n/a	n/a	GCD2333

The QC reported here applies to the following samples: **Method:** EPA 601/602

F28849-4

CAS No.	Compound	F28849-4 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	148		40	140	-20* [b]	136	-30* [b]	3	77-125/6
108-90-7	Chlorobenzene	ND		40	39.1	98	37.6	94	4	78-120/8
95-50-1	1,2-Dichlorobenzene	ND		40	39.4	99	38.9	97	1	69-125/7
541-73-1	1,3-Dichlorobenzene	ND		40	39.2	98	37.8	95	4	71-126/7
106-46-7	1,4-Dichlorobenzene	ND		40	39.8	100	38.5	96	3	67-129/7
100-41-4	Ethylbenzene	18.7		40	52.8	85	50.8	80	4	74-127/6
1634-04-4	Methyl Tert Butyl Ether	44.1		40	67.8	59*	69.4	63*	2	66-127/9
108-88-3	Toluene	7.4		40	44.4	93	43.3	90	3	77-124/5
1330-20-7	Xylenes (total)	93.9		120	186	77	178	70*	4	76-125/5

CAS No.	Surrogate Recoveries	MS	MSD	F28849-4	Limits
352-33-0	1-Chloro-4-fluorobenzene	103%	101%	98%	70-123%
98-08-8	aaa-Trifluorotoluene	101%	100%	100%	73-122%

(a) All hits confirmed by dual column analysis.
(b) Outside control limits due to high level in sample relative to spike amount.

Volatile Surrogate Recovery Summary

Job Number: F28849
Account: EEINCJX EEI
Project: CSFF MCAS New River

Method: EPA 601/602 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S2 [a]
F28849-1	CD056597.D	86.0	95.0
F28849-2	CD056600.D	86.0	95.0
F28849-3	CD056601.D	89.0	96.0
F28849-4	CD056645.D	98.0	100.0
F28849-5	CD056603.D	96.0	99.0
F28849-6	CD056607.D	86.0	94.0
F28849-1MS	CD056598.D	100.0	99.0
F28849-1MSD	CD056599.D	98.0	99.0
F28849-4MS	CD056646.D	103.0	101.0
F28849-4MSD	CD056647.D	101.0	100.0
GCD2330-BS	CD056595.D	99.0	98.0
GCD2330-MB	CD056596.D	84.0	94.0
GCD2333-BS	CD056641.D	98.0	98.0
GCD2333-MB	CD056642.D	82.0	93.0

Surrogate Compounds	Recovery Limits
S1 = 1-Chloro-4-fluorobenzene	70-123%
S2 = aaa-Trifluorotoluene	73-122%

(a) Recovery from GC signal #2

5.4
S1

GC Surrogate Retention Time Summary

Job Number: F28849
Account: EEINCJX EEI
Projeet: CSFF MCAS New River

Check Std:	GCD2330-CC2327	**Injection Date:**	12/21/04
Lab File ID:	CD056605.D	**Injeetion Time:**	01:09
Instrument ID:	GCCD	**Method:**	EPA 601/602

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	9.33	8.90	6.23	5.48

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
ZZZZZZ	CD056606.D	12/21/04	01:33		8.90		5.48
F28849-6	CD056607.D	12/21/04	01:58		8.89		5.48
GCD2330-ECC2327	CD056609.D	12/21/04	02:46	9.34	8.90	6.23	5.48

Surrogate Compounds

S1 = 1-Chloro-4-fluorobenzene
S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F28849
Account: EEINCJX EEI
Project: CSFF MCAS New River

Check Std:	GCD2329-CC2327	**Injection Date:**	12/20/04
Lab File ID:	CD056594.D	**Injection Time:**	20:37
Instrument ID:	GCCD	**Method:**	EPA 601/602

	S1 [a] RT	S2 [a] RT
Check Std	8.89	5.48

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
GCD2330-BS	CD056595.D	12/20/04	21:01	8.90	5.48
GCD2330-MB	CD056596.D	12/20/04	21:25	8.89	5.48
F28849-1	CD056597.D	12/20/04	21:50	8.89	5.48
F28849-1MS	CD056598.D	12/20/04	22:14	8.89	5.48
F28849-1MSD	CD056599.D	12/20/04	22:39	8.90	5.48
F28849-2	CD056600.D	12/20/04	23:03	8.90	5.48
F28849-3	CD056601.D	12/20/04	23:27	8.90	5.48
F28849-5	CD056603.D	12/21/04	00:20	8.89	5.48
ZZZZZZ	CD056604.D	12/21/04	00:45	8.90	5.48

Surrogate Compounds

S1 = 1-Chloro-4-fluorobenzene
S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F28849
Account: EEINCJX EEI
Project: CSFF MCAS New River

Check Std:	GCD2332-CC2327	**Injection Date:**	12/22/04
Lab File ID:	CD056640.D	**Injection Time:**	09:45
Instrument ID:	GCCD	**Method:**	EPA 601/602

	S1 [a] RT	S2 [a] RT
Check Std	8.88	5.46

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
GCD2332-BS	CD056641.D	12/22/04	10:29	8.87	5.46
GCD2333-BS	CD056641.D	12/22/04	10:29	8.87	5.46
GCD2332-MB	CD056642.D	12/22/04	10:53	8.88	5.46
GCD2333-MB	CD056642.D	12/22/04	10:53	8.88	5.46
ZZZZZZ	CD056643.D	12/22/04	11:23	8.87	5.45
ZZZZZZ	CD056644.D	12/22/04	11:50	8.87	5.46
F28849-4	CD056645.D	12/22/04	12:17	8.87	5.46
F28849-4MS	CD056646.D	12/22/04	13:06	8.87	5.46
F28849-4MSD	CD056647.D	12/22/04	13:30	8.86	5.46
ZZZZZZ	CD056648.D	12/22/04	13:54	8.87	5.46

Surrogate Compounds

S1 = 1-Chloro-4-fluorobenzene
S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #2

Initial Calibration Summary

Job Number: F28849
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GCD2327-ICC2327
Lab FileID: CD056517.D

Response Factor Report VOA2

Method : C:\HPCHEM\1\METHODS\GCCD1216.M (Chemstation Integrator)
Title : EPA 602/8021B
Last Update : Thu Dec 16 14:20:16 2004
Response via : Initial Calibration

Calibration Files
1 =CD056514.D 2 =CD056515.D 3 =CD056516.D 4 =CD056517.D
5 =CD056518.D 6 =CD056519.D

		Compound	1	2	3	4	5	6	Avg	%RSD
1)		Methyl tert Butyl E	0.982	1.216	1.203	1.245	1.165	1.134	1.15B E3	8.17
2)		Di-Isopropyl ether	1.494	1.789	1.841	1.848	1.766	1.725	1.744 E3	7.50
3)		BENZENE	3.532	4.260	4.334	4.368	4.244	4.198	4.156 E3	7.51
4)	S	a,a,a-TFT(S)	1.371	1.380	1.467	1.513	1.519	1.519	1.462 E3	4.75
5)		TOLUENE	3.327	4.066	4.191	4.242	4.143	4.094	4.011 E3	8.51
6)	S	1-Chloro-4-Fluorobe		2.012	2.261	2.389	2.452	2.437	2.311 E3	7.91
7)		CHLOROBENZENE	5.177	4.203	4.134	4.290	4.162	4.135	4.350 E3	9.41
		---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9999								
		Response Ratio = 0.00000 + 4285.10778 *A + -1.52847 *A^2								
8)		ETHYLBENZENE	3.985	3.748	3.647	3.642	3.556	3.495	3.679 E3	4.70
9)		m,p-XYLENE	3.006	3.835	3.926	4.042	3.940	3.852	3.767 E3	10.09
		---- Linear regr., Force(0,0) ---- Coefficient = 0.9995								
		Response Ratio = 0.00000 + 3897.28182 *A								
10)		o-XYLENE	2.858	3.666	3.753	3.807	3.667	3.580	3.555 E3	9.86
11)		1,3-DICHLOROBENZENE	1.445	2.447	2.894	3.142	3.115	3.094	2.690 E3	24.66
		---- Linear regr., Force(0,0) ---- Coefficient = 0.9998								
		Response Ratio = 0.00000 + 3099.01264 *A								
12)		1,4-DICHLOROBENZENE	1.274	2.336	2.778	3.143	3.143	3.196	2.645 E3	28.26
		---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9994								
		Response Ratio = 0.00000 + 2968.77686 *A + 2.34166 *A^2								
13)		1,2-DICHLOROBENZENE	1.193	2.031	2.303	2.490	2.464	2.439	2.153 E3	23.23
		---- Linear regr., Force(0,0) ---- Coefficient = 0.9997								
		Response Ratio = 0.00000 + 2447.29738 *A								

Signal #2

1)		Methyl tert Butyl E	1.084	1.389	1.329	1.338	1.245	1.232	1.270 E3	8.54
2)		Di-Isopropyl ether	1.727	2.021	1.963	1.931	1.820	1.795	1.876 E3	6.01
3)		BENZENE	4.100	4.977	4.752	4.741	4.610	4.582	4.627 E3	6.35
4)	S	a,a,a-TFT(S)	1.475	1.485	1.544	1.581	1.597	1.614	1.549 E3	3.79
5)		TOLUENE	3.894	4.796	4.743	4.719	4.621	4.610	4.564 E3	7.37
6)	S	1-Chloro-4-Fluorobe		2.257	2.501	2.630	2.655	2.689	2.546 E3	6.94
7)		CHLOROBENZENE	4.268	4.700	4.748	4.874	4.740	4.767	4.683 E3	4.52
8)		ETHYLBENZENE	3.459	4.162	4.189	4.194	4.110	4.059	4.029 E3	7.05
9)		m,p-XYLENE	3.567	4.456	4.479	4.578	4.436	4.435	4.325 E3	8.68
10)		o-XYLENE	3.436	4.243	4.288	4.284	4.112	4.090	4.076 E3	7.97
11)		1,3-DICHLOROBENZENE	1.797	3.015	3.403	3.713	3.670	3.682	3.213 E3	23.11
		---- Linear regr., Force(0,0) ---- Coefficient = 0.9998								
		Response Ratio = 0.00000 + 3673.37700 *A								
12)		1,4-DICHLOROBENZENE	1.664	2.910	3.392	3.775	3.773	3.877	3.232 E3	26.23
		---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9996								

Job Number: F28849 **Sample:** GCD2327-ICC2327
Account: EEINCJX EEI **Lab FileID:** CD056517.D
Project: CSFF MCAS New River

```
                Response Ratio = 0.00000 + 3541.86460 *A + 3.37968 *A^2

13)      1,2-DICHLOROBENZENE 1.510 2.465 2.728 2.960 2.919 2.891 2.579 E3  21.49
                ---- Linear regr., Force(0,0) ----  Coefficient =  0.9997
                Response Ratio = 0.00000 + 2900.80818 *A

-------------------------------------------------------------------------------
(#) = Out of Range

          GCCD1216.M        Mon Dec 20 09:06:30 2004
```

Continuing Calibration Summary

Job Number: F28849
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GCD2329-CC2327
Lab FileID: CD056594.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\122004\CD056594.D\FID1A.CH Vial: 26
Signal #2 : C:\HPCHEM\1\DATA\122004\CD056594.D\FID2B.CH
Acq On : 20 Dec 2004 8:37 pm Operator: Albertj
Sample : CC2327-40 Inst : V0A2
Misc : gc4358,gcd2329,,,,, Multiplr: 1.00
IntFile Signal #1: PID.E IntFile Signal #2: FID.E

Method : C:\HPCHEM\1\METHODS\GCCD1216.M (Chemstation Integrator)
Title : EPA 602/8021B
Last Update : Thu Dec 16 14:20:16 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	Methyl tert Butyl Ethe	40.000	40.850	-2.1	95	0.01	3.11- 3.51
2	Di-Isopropyl ether	40.000	39.264	1.8	93	0.01	3.66- 3.96
3	BENZENE	40.000	38.691	3.3	92	0.01	5.01- 5.31
4 S	a,a,a-TFT(S)	20.000	19.929	0.4	96	0.02	6.05- 6.36
5	TOLUENE	40.000	39.309	1.7	93	0.02	7.49- 7.79
6 S	1-Chloro-4-Fluorobenze	20.000	20.592	-3.0	100	0.02	9.14- 9.45
	----------	Amount	Calc.	%Drift			----------
7	CHLOROBENZENE	40.000	37.506	6.2	92	0.03	9.31- 9.61
	----------	Amount	Calc.	%Drift			----------
8	ETHYLBENZENE	40.000	37.128	7.2	94	0.03	9.65- 9.95
	----------	Amount	Calc.	%Drift			----------
9	m,p-XYLENE	80.000	76.890	3.9	93	0.03	9.95-10.25
	----------	Amount	Calc.	%Drift			----------
10	o-XYLENE	40.000	39.391	1.5	92	0.03	10.50-10.80
	----------	Amount	Calc.	%Drift			----------
11	1,3-DICHLOROBENZENE	40.000	37.687	5.8	93	0.03	12.98-13.18
12	1,4-DICHLOROBENZENE	40.000	37.927	5.2	92	0.03	13.10-13.30
13	1,2-DICHLOROBENZENE	40.000	38.647	3.4	95	0.03	13.56-13.86

***** Signal #2 *****

	----------	Amount	Calc.	%Drift			----------
1	Methyl tert Butyl Ethe	40.000	40.040	-0.1	95	0.00	2.74- 3.14
2	Di-Isopropyl ether	40.000	38.089	4.8	93	0.00	3.33- 3.63
3	BENZENE	40.000	37.271	6.8	91	0.00	4.57- 4.87
4 S	a,a,a-TFT(S)	20.000	19.835	0.8	97	0.00	5.32- 5.62
5	TOLUENE	40.000	38.431	3.9	93	0.01	7.16- 7.46
6 S	1-Chloro-4-Fluorobenze	20.000	20.505	-2.5	99	0.02	8.72- 9.02
7	CHLOROBENZENE	40.000	38.057	4.9	91	0.02	9.01- 9.31
8	ETHYLBENZENE	40.000	38.739	3.2	93	0.02	9.46- 9.76
9	m,p-XYLENE	80.000	78.715	1.6	93	0.02	9.76-10.06
10	o-XYLENE	40.000	38.954	2.6	93	0.02	10.29-10.59
	----------	Amount	Calc.	%Drift			----------
11	1,3-DICHLOROBENZENE	40.000	37.331	6.7	92	0.02	12.93-13.13

Continuing Calibration Summary

Job Number: F28849
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GCD2329-CC2327
Lab FileID: CD056594.D

12	1,4-DICHLOROBENZENE	40.000	37.953	5.1	92	0.02	13.00-13.20
13	1,2-DICHLOROBENZENE	40.000	38.642	3.4	95	0.02	13.46-13.70

(#) = Out of Range SPCC's out = 0 CCC's out = 0
CD056517.D GCCD1216.M Tue Dec 21 09:01:48 2004

5.6

Continuing Calibration Summary

Job Number: F28849
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GCD2330-CC2327
Lab FileID: CD056605.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\122004\CD056605.D\FID1A.CH Vial: 36
Signal #2 : C:\HPCHEM\1\DATA\122004\CD056605.D\FID2B.CH
Acq On : 21 Dec 2004 1:09 am Operator: Albertj
Sample : cc2327-20 Inst : VOA2
Misc : gc4363,gcd2330,,,,, MultiplIr: 1.00
IntFile Signal #1: PID.E IntFile Signal #2: FID.E

Method : C:\HPCHEM\1\METHODS\GCCD1216.M (Chemstation Integrator)
Title : EPA 602/8021B
Last Update : Thu Dec 16 14:20:16 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	Methyl tert Butyl Ethe	20.000	19.064	4.7	92	0.02	3.11- 3.51
2	Di-Isopropyl ether	20.000	18.940	5.3	90	0.01	3.66- 3.96
3	BENZENE	20.000	18.647	6.8	89	0.02	5.01- 5.31
4 S	a,a,a-TFT(S)	20.000	19.708	1.5	98	0.02	6.05- 6.36
5	TOLUENE	20.000	18.684	6.6	89	0.02	7.49- 7.79
6 S	1-Chloro-4-Fluorobenze	20.000	19.635	1.8	100	0.03	9.14- 9.45
	----------	Amount	Calc.	%Drift	----------		
7	CHLOROBENZENE	20.000	17.456	12.7	90	0.03	9.31- 9.61
	----------	Amount	Calc.	%Drift	----------		
8	ETHYLBENZENE	20.000	17.789	11.1	90	0.03	9.65- 9.95
	----------	Amount	Calc.	%Drift	----------		
9	m,p-XYLENE	40.000	36.086	9.8	90	0.03	9.95-10.25
	----------	Amount	Calc.	%Drift	----------		
10	o-XYLENE	20.000	19.021	4.9	90	0.03	10.50-10.80
	----------	Amount	Calc.	%Drift	----------		
11	1,3-DICHLOROBENZENE	20.000	17.224	13.9	92	0.04	12.98-13.18
12	1,4-DICHLOROBENZENE	20.000	17.438	12.8	94	0.04	13.10-13.30
13	1,2-DICHLOROBENZENE	20.000	17.934	10.3	95	0.04	13.56-13.86
*****	Signal #2 *****						
	----------	Amount	Calc.	%Drift	----------		
1	Methyl tert Butyl Ethe	20.000	19.393	3.0	93	0.01	2.74- 3.14
2	Di-Isopropyl ether	20.000	18.902	5.5	90	0.00	3.33- 3.63
3	BENZENE	20.000	18.288	8.6	89	0.01	4.57- 4.87
4 S	a,a,a-TFT(S)	20.000	19.613	1.9	98	0.01	5.32- 5.62
5	TOLUENE	20.000	18.614	6.9	90	0.02	7.16- 7.46
6 S	1-Chloro-4-Fluorobenze	20.000	19.601	2.0	100	0.02	8.72- 9.02
7	CHLOROBENZENE	20.000	18.063	9.7	89	0.02	9.01- 9.31
8	ETHYLBENZENE	20.000	18.624	6.9	90	0.02	9.46- 9.76
9	m,p-XYLENE	40.000	36.517	8.7	88	0.02	9.76-10.06
10	o-XYLENE	20.000	19.103	4.5	91	0.03	10.29-10.59
	----------	Amount	Calc.	%Drift	----------		
11	1,3-DICHLOROBENZENE	20.000	17.333	13.3	94	0.03	12.93-13.13

Continuing Calibration Summary

Job Number: F28849
Account: EEINCJX EEI
Projeet: CSFF MCAS New River

Sample: GCD2330-CC2327
Lab FileID: CD056605.D

12	1,4-DICHLOROBENZENE	20.000	17.557	12.2	93	0.03	13.00-13.20
13	1,2-DICHLOROBENZENE	20.000	17.942	10.3	95	0.03	13.46-13.70

(#) = Out of Range SPCC's out = 0 CCC's out = 0
CD056516.D GCCD1216.M Tue Dec 21 09:02:16 2004

5.6

Continuing Calibration Summary

Job Number: F28849
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GCD2330-ECC2327
Lab FileID: CD056609.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\122004\CD056609.D\FID1A.CH Vial: 40
Signal #2 : C:\HPCHEM\1\DATA\122004\CD056609.D\FID2B.CH
Acq On : 21 Dec 2004 2:46 am Operator: Albertj
Sample : ecc2327-40 Inst : VOA2
Misc : gc4363,gcd2330,,,,, Multiplr: 1.00
IntFile Signal #1: PID.E IntFile Signal #2: FID.E

Method : C:\HPCHEM\1\METHODS\GCCD1216.M (Chemstation Integrator)
Title : EPA 602/8021B
Last Update : Thu Dec 16 14:20:16 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	Methyl tert Butyl Ethe	40.000	40.258	-0.6	94	0.02	3.11- 3.51
2	Di-Isopropyl ether	40.000	38.993	2.5	92	0.02	3.66- 3.96
3	BENZENE	40.000	38.414	4.0	91	0.02	5.01- 5.31
4 S	a,a,a-TFT(S)	20.000	20.023	-0.1	97	0.02	6.05- 6.36
5	TOLUENE	40.000	38.768	3.1	92	0.03	7.49- 7.79
6 S	1-Chloro-4-Fluorobenze	20.000	20.500	-2.5	99	0.04	9.14- 9.45
	----------	Amount	Calc.	%Drift			
7	CHLOROBENZENE	40.000	37.050	7.4	91	0.04	9.31- 9.61
	----------	Amount	Calc.	%Drift			
8	ETHYLBENZENE	40.000	36.918	7.7	93	0.04	9.65- 9.95
	----------	Amount	Calc.	%Drift			
9	m,p-XYLENE	80.000	76.297	4.6	92	0.04	9.95-10.25
	----------	Amount	Calc.	%Drift			
10	o-XYLENE	40.000	39.533	1.2	92	0.04	10.50-10.80
	----------	Amount	Calc.	%Drift			
11	1,3-DICHLOROBENZENE	40.000	37.464	6.3	92	0.04	12.98-13.18
12	1,4-DICHLOROBENZENE	40.000	37.917	5.2	92	0.04	13.10-13.30
13	1,2-DICHLOROBENZENE	40.000	38.638	3.4	95	0.04	13.56-13.86

***** Signal #2 *****

	----------	Amount	Calc.	%Drift			
1	Methyl tert Butyl Ethe	40.000	39.541	1.1	94	0.01	2.74- 3.14
2	Di-Isopropyl ether	40.000	37.916	5.2	92	0.00	3.33- 3.63
3	BENZENE	40.000	37.114	7.2	91	0.01	4.57- 4.87
4 S	a,a,a-TFT(S)	20.000	19.810	1.0	97	0.01	5.32- 5.62
5	TOLUENE	40.000	38.101	4.7	92	0.02	7.16- 7.46
6 S	1-Chloro-4-Fluorobenze	20.000	20.402	-2.0	99	0.03	8.72- 9.02
7	CHLOROBENZENE	40.000	38.112	4.7	92	0.03	9.01- 9.31
8	ETHYLBENZENE	40.000	38.208	4.5	92	0.03	9.46- 9.76
9	m,p-XYLENE	80.000	77.968	2.5	92	0.03	9.76-10.06
10	o-XYLENE	40.000	38.730	3.2	92	0.04	10.29-10.59
	----------	Amount	Calc.	%Drift			
11	1,3-DICHLOROBENZENE	40.000	37.502	6.2	93	0.03	12.93-13.13

5.6

Continuing Calibration Summary

Job Number: F28849
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GCD2330-ECC2327
Lab FileID: CD056609.D

12	1,4-DICHLOROBENZENE	40.000	38.200	4.5	93	0.03	13.00-13.20
13	1,2-DICHLOROBENZENE	40.000	38.539	3.7	94	0.03	13.46-13.70

(#) = Out of Range SPCC's out = 0 CCC's out = 0
CD056517.D GCCD1216.M Tue Dec 21 09:01:49 2004

5.6

Continuing Calibration Summary

Job Number: F28849
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GCD2332-CC2327
Lab FileID: CD056640.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\122204\CD056640.D\FID1A.CH Vial: 1
Signal #2 : C:\HPCHEM\1\DATA\122204\CD056640.D\FID2B.CH
Acq On : 22 Dec 2004 9:45 am Operator: Albertj
Sample : CC2327-40 Inst : VOA2
Misc : gc4359,gcd2332,,,,, Multiplr: 1.00
IntFile Signal #1: PID.E IntFile Signal #2: FID.E

Method : C:\HPCHEM\1\METHODS\GCCD1216.M (Chemstation Integrator)
Title : EPA 602/8021B
Last Update : Thu Dec 16 14:20:16 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	Methyl tert Butyl Ethe	40.000	38.837	2.9	90	0.00	3.11- 3.51
2	Di-Isopropyl ether	40.000	40.059	-0.1	94	0.00	3.66- 3.96
3	BENZENE	40.000	39.659	0.9	94	0.00	5.01- 5.31
4 S	a,a,a-TFT(S)	20.000	20.007	-0.0	97	0.00	6.05- 6.36
5	TOLUENE	40.000	40.293	-0.7	95	0.00	7.49- 7.79
6 S	1-Chloro-4-Fluorobenze	20.000	20.828	-4.1	101	0.02	9.14- 9.45
	----------	Amount	Calc.	%Drift			----------
7	CHLOROBENZENE	40.000	38.003	5.0	94	0.02	9.31- 9.61
	----------	Amount	Calc.	%Drift			----------
8	ETHYLBENZENE	40.000	37.766	5.6	95	0.02	9.65- 9.95
	----------	Amount	Calc.	%Drift			----------
9	m,p-XYLENE	80.000	78.620	1.7	95	0.02	9.95-10.25
	----------	Amount	Calc.	%Drift			----------
10	o-XYLENE	40.000	40.232	-0.6	94	0.02	10.50-10.80
	----------	Amount	Calc.	%Drift			----------
11	1,3-DICHLOROBENZENE	40.000	37.728	5.7	93	0.02	12.98-13.18
12	1,4-DICHLOROBENZENE	40.000	38.306	4.2	93	0.02	13.10-13.30
13	1,2-DICHLOROBENZENE	40.000	38.215	4.5	94	0.02	13.56-13.86

***** Signal #2 *****

	----------	Amount	Calc.	%Drift			----------
1	Methyl tert Butyl Ethe	40.000	37.907	5.2	90	0.00	2.74- 3.14
2	Di-Isopropyl ether	40.000	38.823	2.9	94	-0.01	3.33- 3.63
3	BENZENE	40.000	38.271	4.3	93	0.00	4.57- 4.87
4 S	a,a,a-TFT(S)	20.000	19.790	1.1	97	0.00	5.32- 5.62
5	TOLUENE	40.000	38.922	2.7	94	0.00	7.16- 7.46
6 S	1-Chloro-4-Fluorobenze	20.000	20.372	-1.9	99	0.00	8.72- 9.02
7	CHLOROBENZENE	40.000	38.873	2.8	93	0.00	9.01- 9.31
8	ETHYLBENZENE	40.000	39.422	1.4	95	0.00	9.46- 9.76
9	m,p-XYLENE	80.000	79.967	0.0	94	0.00	9.76-10.06
10	o-XYLENE	40.000	39.529	1.2	94	0.00	10.29-10.59
	----------	Amount	Calc.	%Drift			----------
11	1,3-DICHLOROBENZENE	40.000	37.459	6.4	93	0.00	12.93-13.13

5.6

Continuing Calibration Summary

Job Number: F28849
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GCD2332-CC2327
Lab FileID: CD056640.D

12	1,4-DICHLOROBENZENE	40.000	38.241	4.4	93	0.00	13.00-13.20
13	1,2-DICHLOROBENZENE	40.000	37.745	5.6	92	0.01	13.46-13.70

(#) = Out of Range SPCC's out = 0 CCC's out = 0
CD056517.D GCCD1216.M Thu Dec 23 08:22:41 2004

Continuing Calibration Summary

Job Number: F28849
Aecount: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GCD2332-CC2327
Lab FileID: CD056651.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\122204\CD056651.D\FID1A.CH Vial: 11
Signal #2 : C:\HPCHEM\1\DATA\122204\CD056651.D\FID2B.CH
Acq On : 22 Dec 2004 3:06 pm Operator: Albertj
Sample : CC2327-20 Inst : VOA2
Misc : gc4372,gcd2332,,,,, Multiplr: 1.00
IntFile Signal #1: PID.E IntFile Signal #2: FID.E

Method : C:\HPCHEM\1\METHODS\GCCD1216.M (Chemstation Integrator)
Title : EPA 602/8021B
Last Update : Thu Dec 16 14:20:16 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	Methyl tert Butyl Ethe	20.000	16.496	17.5#	79	0.00	3.11- 3.51
2	Di-Isopropyl ether	20.000	16.937	15.3#	80	0.00	3.66- 3.96
3	BENZENE	20.000	17.680	11.6	85	0.00	5.01- 5.31
4 S	a,a,a-TFT(S)	20.000	16.216	18.9#	81	0.00	6.05- 6.36
5	TOLUENE	20.000	17.540	12.3	84	0.00	7.49- 7.79
6 S	1-Chloro-4-Fluorobenze	20.000	16.458	17.7#	84	0.00	9.14- 9.45
	----------	Amount	Calc.	%Drift	----------		
7	CHLOROBENZENE	20.000	16.609	17.0#	86	0.00	9.31- 9.61
	----------	Amount	Calc.	%Drift	----------		
8	ETHYLBENZENE	20.000	17.049	14.8	86	0.00	9.65- 9.95
	----------	Amount	Calc.	%Drift	----------		
9	m,p-XYLENE	40.000	36.249	9.4	90	0.01	9.95-10.25
	----------	Amount	Calc.	%Drift	----------		
10	o-XYLENE	20.000	18.625	6.9	88	0.01	10.50-10.80
	----------	Amount	Calc.	%Drift	----------		
11	1,3-DICHLOROBENZENE	20.000	16.903	15.5#	90	0.01	12.98-13.18
12	1,4-DICHLOROBENZENE	20.000	17.100	14.5	93	0.01	13.10-13.30
13	1,2-DICHLOROBENZENE	20.000	18.151	9.2	96	0.01	13.56-13.86
*****	Signal #2 *****						
	----------	Amount	Calc.	%Drift	----------		
1	Methyl tert Butyl Ethe	20.000	19.314	3.4	92	0.00	2.74- 3.14
2	Di-Isopropyl ether	20.000	19.844	0.8	95	0.00	3.33- 3.63
3	BENZENE	20.000	20.327	-1.6	99	0.00	4.57- 4.87
4 S	a,a,a-TFT(S)	20.000	19.017	4.9	95	0.00	5.32- 5.62
5	TOLUENE	20.000	20.434	-2.2	98	0.00	7.16- 7.46
6 S	1-Chloro-4-Fluorobenze	20.000	19.510	2.4	99	0.00	8.72- 9.02
7	CHLOROBENZENE	20.000	19.824	0.9	98	0.00	9.01- 9.31
8	ETHYLBENZENE	20.000	20.624	-3.1	99	0.00	9.46- 9.76
9	m,p-XYLENE	40.000	41.458	-3.6	100	0.00	9.76-10.06
10	o-XYLENE	20.000	21.109	-5.5	100	0.00	10.29-10.59
	----------	Amount	Calc.	%Drift	----------		
11	1,3-DICHLOROBENZENE	20.000	19.549	2.3	106	0.00	12.93-13.13

5.6

Continuing Calibration Summary

Job Number: F28849
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GCD2332-CC2327
Lab FileID: CD05665I.D

12	1,4-DICHLOROBENZENE	20.000	19.702	1.5	105	0.00	13.00-13.20
13	1,2-DICHLOROBENZENE	20.000	20.280	-1.4	108	0.00	13.46-13.70

(#) = Out of Range SPCC's out = 0 CCC's out = 0
CD056516.D GCCD1216.M Thu Dec 23 08:23:14 2004

5.6

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: F28849
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP12141-MB	IJ21537.D	1	12/22/04	SD	12/22/04	OP12141	GIJ1064

The QC reported here applies to the following samples: **Method:** EPA 610

F28849-1

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.0	2.0	ug/l	
208-96-8	Aeenaphthylene	ND	5.0	2.0	ug/l	
120-12-7	Anthracene	ND	5.0	2.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.0	2.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.0	2.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.0	2.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.0	2.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.0	2.0	ug/l	
218-01-9	Chrysene	ND	5.0	2.0	ug/l	
53-70-3	Dibcnzo(a,h)anthracene	ND	5.0	2.0	ug/l	
206-44-0	Fluoranthene	ND	5.0	2.0	ug/l	
86-73-7	Fluorene	ND	5.0	2.0	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.0	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.0	ug/l	
90-12-0	1-Methylnaphthalene	ND	5.0	2.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.0	2.0	ug/l	
85-01-8	Phenanthrene	ND	5.0	2.0	ug/l	
129-00-0	Pyrene	ND	5.0	2.0	ug/l	

CAS No.	Snrrogate Recoveries		Limits
321-60-8	2-Fluorobiphenyl	80%	42-123%
84-15-1	o-Terphenyl	86%	51-123%

Blank Spike Summary

Job Number: F28849
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP12141-BS [a]	IJ21536.D	1	12/22/04	SD	12/22/04	OP12141	GIJ1064

The QC reported here applies to the following samples: **Method:** EPA 610

F28849-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
83-32-9	Acenaphthene	25	23.1	92	71-113
208-96-8	Acenaphthylene	25	23.1	92	63-102
120-12-7	Anthracene	25	25.7	103	71-110
56-55-3	Benzo(a)anthracene	25	25.4	102	70-114
50-32-8	Benzo(a)pyrene	25	25.4	102	67-114
205-99-2	Benzo(b)fluoranthene	25	25.4	102	69-115
191-24-2	Benzo(g,h,i)perylene	25	23.9	96	61-117
207-08-9	Benzo(k)fluoranthene	25	24.6	98	69-111
218-01-9	Chrysene	25	25.7	103	70-114
53-70-3	Dibenzo(a,h)anthracene	25	23.9	96	64-114
206-44-0	Fluoranthene	25	25.8	103	71-114
86-73-7	Fluorene	25	24.8	99	69-111
193-39-5	Indeno(1,2,3-cd)pyrene	25	24.9	100	63-112
91-20-3	Naphthalene	25	19.9	80	66-105
90-12-0	1-Methylnaphthalene	25	21.5	86	71-112
91-57-6	2-Methylnaphthalene	25	21.8	87	65-106
85-01-8	Phenanthrene	25	25.5	102	69-112
129-00-0	Pyrene	25	25.8	103	70-114

CAS No.	Surrogate Recoveries	BSP	Limits
321-60-8	2-Fluorobiphenyl	87%	42-123%
84-15-1	o-Terphenyl	98%	51-123%

(a) Insufficient sample for MS/MSD.

Semivolatile Surrogate Recovery Summary

Job Number: F28849
Account: EEINCJX EEI
Project: CSFF MCAS New River

Method: EPA 610	**Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S2 [a]
F28849-1	IJ21539.D	75.0	85.0
OP12141-BS	IJ21536.D	87.0	98.0
OP12141-MB	IJ21537.D	80.0	86.0

Surrogate Compounds	Recovery Limits
S1 = 2-Fluorobiphenyl	42-123%
S2 = o-Terphenyl	51-123%

(a) Recovery from GC signal #1

6.3

GC Surrogate Retention Time Summary

Job Number: F28849
Account: EEINCJX EEI
Project: CSFF MCAS New River

Check Std:	GIJ1064-CC1048	**Injection Date:**	12/22/04
Lab File ID:	IJ21535.D	**Injection Time:**	16:49
Instrument ID:	GCIJ	**Method:**	EPA 610

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	5.75	6.51	10.29	11.64

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
OP12141-BS	IJ21536.D	12/22/04	17:18	5.76		10.29	
OP12141-MB	IJ21537.D	12/22/04	17:47	5.76		10.29	
ZZZZZZ	IJ21538.D	12/22/04	18:17	5.76		10.29	
F28849-1	IJ21539.D	12/22/04	18:46	5.76		10.29	
GIJ1064-ECC1048	IJ21540.D	12/22/04	19:15	5.76	6.51	10.30	11.64

Surrogate Compounds

S1 = 2-Fluorobiphenyl
S2 = o-Terphenyl

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

6.4

Initial Calibration Summary

Job Number: F28849
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GIJ1048-ICC1048
Lab FileID: IJ21331.D

Response Factor Report FID 1

Method : C:\HPCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title : PAH's BY EPA 610 OR 8100
Last Update : Mon Nov 22 15:09:55 2004
Response via : Initial Calibration

Calibration Files
5 =IJ21332.D 10 =IJ21333.D 20 =IJ21331.D 30 =IJ21334.D
40 =IJ21335.D 50 =IJ21336.D

		Compound	5	10	20	30	40	50	Avg		%RSD
1)		Naphthalene	1.366	1.376	1.391	1.386	1.537	1.414	1.412	E4	4.49
2)		2-Methyl Naphthalen	1.321	1.305	1.323	1.321	1.468	1.362	1.350	E4	4.49
3)		1-Methyl Naphthalen	1.381	1.346	1.360	1.353	1.499	1.391	1.388	E4	4.09
4)	S	2-Fluorobiphenyl	1.146	1.163	1.198	1.196	1.329	1.233	1.211	E4	5.37
5)		Acenaphthylene	1.309	1.311	1.325	1.332	1.471	1.375	1.354	E4	4.60
6)		Acenaphthene	1.349	1.327	1.344	1.355	1.500	1.395	1.378	E4	4.63
7)		Fluorene	1.269	1.293	1.307	1.312	1.456	1.353	1.332	E4	5.02
8)		Phenanthrene	1.256	1.270	1.307	1.312	1.459	1.357	1.327	E4	5.56
9)		Anthracene	1.348	1.311	1.303	1.300	1.435	1.331	1.338	E4	3.80
10)	S	O-Terphenyl	1.474	1.422	1.420	1.411	1.559	1.446	1.456	E4	3.83
11)		Fluoranthene	1.366	1.358	1.363	1.362	1.508	1.401	1.393	E4	4.20
12)		Pyrene	1.369	1.342	1.355	1.352	1.498	1.391	1.384	E4	4.19
13)		Benzo(a)Anthracene	1.284	1.303	1.354	1.356	1.513	1.407	1.370	E4	6.03
14)		Chrysene	1.489	1.424	1.407	1.394	1.540	1.427	1.447	E4	3.88
15)		Benzo(b)Fluoranthen	1.348	1.339	1.376	1.386	1.556	1.434	1.406	E4	5.72
16)		Benzo(k)Fluoranthen	1.549	1.479	1.466	1.445	1.584	1.434	1.493	E4	4.04
17)		Benzo(a) Pyrene	1.355	1.316	1.335	1.325	1.470	1.365	1.361	E4	4.14
18)		Indeno(1,2,3-cd)pyr	1.285	1.294	1.349	1.340	1.491	1.384	1.357	E4	5.53
19)		Dibenzo(a,h)anthrac	1.480	1.425	1.427	1.403	1.545	1.431	1.452	E4	3.59
20)		Benzo(g,h,i) Peryle	1.481	1.421	1.431	1.400	1.557	1.440	1.455	E4	3.89

Signal #2

1)		Naphthalene	2.070	2.013	2.064	2.033	2.257	2.093	2.088	E4	4.18
2)		2-Methyl Naphthalen	1.901	1.905	1.957	1.933	2.146	1.991	1.972	E4	4.64
3)		1-Methyl Naphthalen	2.006	1.961	1.989	1.964	2.187	2.041	2.025	E4	4.19
4)	S	2-Fluorobiphenyl	1.745	1.711	1.766	1.757	1.952	1.808	1.790	E4	4.77
5)		Acenaphthylene	1.969	1.921	1.980	1.952	2.162	2.005	1.998	E4	4.25
6)		Acenaphthene	2.008	1.955	1.997	1.982	2.194	2.035	2.028	E4	4.21
7)		Fluorene	1.930	1.887	1.935	1.916	2.125	1.974	1.961	E4	4.34
8)		Phenanthrene	1.827	1.841	1.934	1.909	2.142	1.993	1.941	E4	5.98
9)		Anthracene	2.043	1.854	1.905	1.888	2.069	1.917	1.946	E4	4.54
10)	S	O-Terphenyl	2.162	2.077	2.095	2.064	2.282	2.115	2.132	E4	3.79
11)		Fluoranthene	2.026	1.969	2.012	1.987	2.202	2.043	2.040	E4	4.10
12)		Pyrene	2.112	2.013	2.034	2.007	2.222	2.067	2.076	E4	3.92
13)		Benzo(a)Anthracene	2.063	2.011	2.060	2.033	2.252	2.089	2.085	E4	4.14
14)		Chrysene	2.074	2.014	2.044	2.011	2.224	2.069	2.073	E4	3.79
15)		Benzo(b)Fluoranthen	2.054	2.017	2.087	2.053	2.292	2.128	2.105	E4	4.70
16)		Benzo(k)Fluoranthen	2.157	2.095	2.124	2.087	2.295	2.128	2.148	E4	3.56
17)		Benzo(a) Pyrene	2.000	1.947	1.989	1.951	2.161	2.001	2.008	E4	3.90
18)		Indeno(1,2,3-cd)pyr	1.923	1.949	2.058	2.033	2.293	2.112	2.061	E4	6.47
19)		Dibenzo(a,h)anthrac	2.159	2.017	2.069	1.995	2.158	2.009	2.068	E4	3.60
20)		Benzo(g,h,i) Peryle	2.113	2.061	2.077	2.027	2.238	2.071	2.098	E4	3.53

(#) = Out of Range

8100_H2.M Tue Nov 23 08:05:23 2004

Initial Calibration Verification

Job Number: F28849
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GIJ1048-ICV1048
Lab FileID: IJ21337.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\1122PAH\IJ21337.D\FID1B.CH Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\1122PAH\IJ21337.D\FID2A.CH
Acq On : 22 Nov 2004 3:11 pm Operator: sarahm
Sample : icv1048-20 Inst : FID 1
Misc : op11882,gij1048,1000,,,1,1,water Multip1r: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : C:\HPCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title : PAH's BY EPA 610 OR 8100
Last Update : Mon Nov 22 15:09:55 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1		Naphthalene	20.000	19.079	4.6	97	0.00	4.12- 4.32
2		2-Methyl Naphthalene	20.000	19.829	0.9	101	0.00	5.03- 5.23
3		1-Methyl Naphthalene	20.000	20.117	-0.6	103	0.00	5.17- 5.37
4	S	2-Fluorobiphenyl			----------NA----------			
5		Acenaphthylene	20.000	19.800	1.0	101	0.00	6.37- 6.57
6		Acenaphthene	20.000	19.639	1.8	101	0.00	6.69- 6.89
7		Fluorene	20.000	20.461	-2.3	104	0.00	7.56- 7.76
8		Phenanthrene	20.000	20.022	-0.1	102	0.00	9.23- 9.43
9		Anthracene	20.000	20.458	-2.3	105	0.00	9.31- 9.51
10	S	O-Terphenyl			----------NA----------			
11		Fluoranthene	20.000	20.074	-0.4	103	0.00	11.42-11.62
12		Pyrene	20.000	20.151	-0.8	103	0.00	11.79-11.99
13		Benzo(a)Anthracene	20.000	19.834	0.8	100	0.00	14.10-14.30
14		Chrysene	20.000	20.106	-0.5	103	0.00	14.16-14.36
15		Benzo(b)Fluoranthene	20.000	19.805	1.0	101	0.00	16.00-16.20
16		Benzo(k)Fluoranthene	20.000	19.552	2.2	100	0.00	16.04-16.24
17		Benzo(a) Pyrene	20.000	20.398	-2.0	104	0.00	16.49-16.69
18		Indeno(1,2,3-cd)pyrene	20.000	19.389	3.1	98	0.00	18.16-18.36
19		Dibenzo(a,h)anthracene	20.000	19.707	1.5	100	0.00	18.24-18.44
20		Benzo(g,h,i) Perylene	20.000	19.658	1.7	100	0.01	18.48-18.68
*****		Signal #2 *****						
1		Naphthalene	20.000	19.198	4.0	97	0.00	4.75- 4.95
2		2-Methyl Naphthalene	20.000	19.979	0.1	101	0.00	5.63- 5.83
3		1-Methyl Naphthalene	20.000	19.926	0.4	101	0.00	5.89- 6.09
4	S	2-Fluorobiphenyl			----------NA----------			
5		Acenaphthylene	20.000	19.650	1.8	99	0.00	7.50- 7.70
6		Acenaphthene	20.000	19.456	2.7	99	0.00	7.74- 7.94
7		Fluorene	20.000	20.215	-1.1	102	0.00	8.61- 8.81
8		Phenanthrene	20.000	19.767	1.2	99	0.00	10.64-10.84
9		Anthracene	20.000	20.120	-0.6	103	0.00	10.67-10.87
10	S	O-Terphenyl			----------NA----------			
11		Fluoranthene	20.000	19.985	0.1	101	0.00	12.99-13.19
12		Pyrene	20.000	19.912	0.4	102	0.00	13.54-13.74
13		Benzo(a)Anthracene	20.000	19.570	2.1	99	0.00	15.89-16.09
14		Chrysene	20.000	19.915	0.4	101	0.00	16.06-16.26
15		Benzo(b)Fluoranthene	20.000	19.564	2.2	99	0.00	17.94-18.14
16		Benzo(k)Fluoranthene	20.000	19.454	2.7	98	0.00	17.98-18.18
17		Benzo(a) Pyrene	20.000	20.350	-1.8	103	0.00	18.66-18.86
18		Indeno(1,2,3-cd)pyrene	20.000	19.086	4.6	96	0.00	20.40-20.60

6.5

Initial Calibration Verification

Job Number: F28849
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GIJ1048-ICV1048
Lab FileID: IJ21337.D

19	Dibenzo(a,h)anthracene	20.000	19.895	0.5	99	0.00	20.46-20.66
20	Benzo(g,h,i) Perylene	20.000	19.397	3.0	98	0.01	21.00-21.20

(#) = Out of Range SPCC's out = 0 CCC's out = 0
IJ21331.D 8100_H2.M Tue Nov 23 08:05:37 2004

Continuing Calibration Summary

Job Number: F28849
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GIJ1064-CC1048
Lab FileID: IJ21535.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\1222PAH\IJ21535.D\FID1B.CH Vial: 1
Signal #2 : C:\HPCHEM\1\DATA\1222PAH\IJ21535.D\FID2A.CH
Acq On : 22 Dec 2004 4:49 pm Operator: sarahm
Sample : cc1048-20 Inst : FID 1
Misc : op12141,gij1064,1000,,,1,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : C:\HPCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title : PAH's BY EPA 610 OR 8100
Last Update : Tue Dec 07 08:34:18 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1		Naphthalene	20.000	20.775	-3.9	105	-0.02	4.13- 4.33
2		2-Methyl Naphthalene	20.000	20.896	-4.5	107	-0.02	5.04- 5.24
3		1-Methyl Naphthalene	20.000	20.867	-4.3	107	-0.02	5.18- 5.38
4	S	2-Fluorobiphenyl	20.000	21.260	-6.3	107	-0.02	5.67- 5.87
5		Acenaphthylene	20.000	21.472	-7.4	110	-0.02	6.39- 6.59
6		Acenaphthene	20.000	21.371	-6.9	110	-0.02	6.71- 6.91
7		Fluorene	20.000	21.542	-7.7	110	-0.02	7.58- 7.78
8		Phenanthrene	20.000	21.466	-7.3	109	-0.02	9.25- 9.45
9		Anthracene	20.000	21.223	-6.1	109	-0.02	9.33- 9.53
10	S	O-Terphenyl	20.000	21.306	-6.5	109	-0.01	10.21-10.41
11		Fluoranthene	20.000	21.276	-6.4	109	-0.02	11.45-11.65
12		Pyrene	20.000	21.130	-5.6	108	-0.02	11.82-12.02
13		Benzo(a)Anthracene	20.000	20.934	-4.7	106	-0.01	14.13-14.33
14		Chrysene	20.000	20.828	-4.1	107	-0.02	14.20-14.40
15		Benzo(b)Fluoranthene	20.000	20.713	-3.6	106	-0.02	16.05-16.25
16		Benzo(k)Fluoranthene	20.000	20.864	-4.3	106	-0.02	16.09-16.29
17		Benzo(a) Pyrene	20.000	20.689	-3.4	105	-0.02	16.53-16.73
18		Indeno(1,2,3-cd)pyrene	20.000	20.704	-3.5	104	-0.01	18.21-18.41
19		Dibenzo(a,h)anthracene	20.000	20.502	-2.5	104	-0.01	18.29-18.49
20		Benzo(g,h,i) Perylene	20.000	20.613	-3.1	105	-0.02	18.54-18.74
*****		Signal #2 *****						
1		Naphthalene	20.000	20.905	-4.5	106	0.00	4.75- 4.95
2		2-Methyl Naphthalene	20.000	21.040	-5.2	106	0.00	5.63- 5.83
3		1-Methyl Naphthalene	20.000	21.102	-5.5	107	0.00	5.89- 6.09
4	S	2-Fluorobiphenyl	20.000	21.254	-6.3	108	0.00	6.40- 6.60
5		Acenaphthylene	20.000	21.469	-7.3	108	0.00	7.50- 7.70
6		Acenaphthene	20.000	21.519	-7.6	109	0.00	7.74- 7.94
7		Fluorene	20.000	21.591	-8.0	109	0.00	8.62- 8.82
8		Phenanthrene	20.000	21.554	-7.8	108	0.00	10.64-10.84
9		Anthracene	20.000	20.963	-4.8	107	0.00	10.68-10.88
10	S	O-Terphenyl	20.000	21.453	-7.3	109	0.00	11.53-11.73
11		Fluoranthene	20.000	21.323	-6.6	108	0.00	13.00-13.20
12		Pyrene	20.000	21.162	-5.8	108	0.00	13.55-13.75
13		Benzo(a)Anthracene	20.000	20.951	-4.8	106	0.00	15.90-16.10
14		Chrysene	20.000	20.824	-4.1	106	0.00	16.07-16.27
15		Benzo(b)Fluoranthene	20.000	20.762	-3.8	105	0.00	17.96-18.16
16		Benzo(k)Fluoranthene	20.000	20.581	-2.9	104	0.00	18.01-18.21
17		Benzo(a) Pyrene	20.000	20.759	-3.8	105	0.00	18.68-18.88
18		Indeno(1,2,3-cd)pyrene	20.000	20.705	-3.5	104	0.00	20.43-20.63

6.5

Continuing Calibration Summary

Job Number: F28849
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GIJ1064-CC1048
Lab FileID: IJ21535.D

19	Dibenzo(a,h)anthracene	20.000	21.008	-5.0	105	0.00	20.49-20.69
20	Benzo(g,h,i) Perylene	20.000	20.623	-3.1	104	0.00	21.04-21.24

(#) = Out of Range SPCC's out = 0 CCC's out = 0
IJ21331.D 8100_H2.M Thu Dec 23 07:50:56 2004

6.5

Continuing Calibration Summary

Job Number: F28849
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GIJ1064-ECC1048
Lab FileID: IJ21540.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\1222PAH\IJ21540.D\FID1B.CH Vial: 6
Signal #2 : C:\HPCHEM\1\DATA\1222PAH\IJ21540.D\FID2A.CH
Acq On : 22 Dec 2004 7:15 pm Operator: sarahm
Sample : ecc1048-30 Inst : FID 1
Misc : op12141,gij1064,940,,,1,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : C:\HPCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title : PAH's BY EPA 610 OR 8100
Last Update : Tue Dec 07 08:34:18 2004
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1		Naphthalene	30.000	29.921	0.3	102	-0.01	4.13- 4.33
2		2-Methyl Naphthalene	30.000	30.053	-0.2	102	-0.01	5.04- 5.24
3		1-Methyl Naphthalene	30.000	29.919	0.3	102	-0.01	5.18- 5.38
4	S	2-Fluorobiphenyl	30.000	30.771	-2.6	104	-0.01	5.67- 5.87
5		Acenaphthylene	30.000	30.975	-3.3	105	-0.01	6.39- 6.59
6		Acenaphthene	30.000	31.024	-3.4	105	-0.01	6.71- 6.91
7		Fluorene	30.000	31.046	-3.5	105	-0.01	7.58- 7.78
8		Phenanthrene	30.000	31.003	-3.3	104	-0.01	9.25- 9.45
9		Anthracene	30.000	30.460	-1.5	104	-0.01	9.33- 9.53
10	S	O-Terphenyl	30.000	30.484	-1.6	105	-0.01	10.21-10.41
11		Fluoranthene	30.000	30.562	-1.9	104	-0.01	11.45-11.65
12		Pyrene	30.000	30.400	-1.3	104	-0.01	11.82-12.02
13		Benzo(a)Anthracene	30.000	30.267	-0.9	102	0.00	14.13-14.33
14		Chrysene	30.000	29.717	0.9	103	0.00	14.20-14.40
15		Benzo(b)Fluoranthene	30.000	30.130	-0.4	102	0.00	16.05-16.25
16		Benzo(k)Fluoranthene	30.000	29.518	1.6	102	0.00	16.09-16.29
17		Benzo(a) Pyrene	30.000	29.750	0.8	102	0.00	16.53-16.73
18		Indeno(1,2,3-cd)pyrene	30.000	29.953	0.2	101	0.00	18.21-18.41
19		Dibenzo(a,h)anthracene	30.000	29.244	2.5	101	0.00	18.29-18.49
20		Benzo(g,h,i) Perylene	30.000	29.616	1.3	103	0.00	18.54-18.74
*****		Signal #2 *****						
1		Naphthalene	30.000	29.790	0.7	102	0.00	4.75- 4.95
2		2-Methyl Naphthalene	30.000	30.075	-0.2	102	0.00	5.63- 5.83
3		1-Methyl Naphthalene	30.000	29.968	0.1	103	0.00	5.89- 6.09
4	S	2-Fluorobiphenyl	30.000	30.418	-1.4	103	0.00	6.40- 6.60
5		Acenaphthylene	30.000	30.587	-2.0	104	0.00	7.50- 7.70
6		Acenaphthene	30.000	30.704	-2.3	105	0.01	7.74- 7.94
7		Fluorene	30.000	30.850	-2.8	105	0.01	8.62- 8.82
8		Phenanthrene	30.000	31.020	-3.4	105	0.01	10.64-10.84
9		Anthracene	30.000	30.209	-0.7	104	0.01	10.68-10.88
10	S	O-Terphenyl	30.000	30.470	-1.6	105	0.01	11.53-11.73
11		Fluoranthene	30.000	30.405	-1.4	104	0.01	13.00-13.20
12		Pyrene	30.000	30.116	-0.4	104	0.01	13.55-13.75
13		Benzo(a)Anthracene	30.000	29.816	0.6	102	0.02	15.90-16.10
14		Chrysene	30.000	29.544	1.5	101	0.02	16.07-16.27
15		Benzo(b)Fluoranthene	30.000	29.233	2.6	100	0.02	17.96-18.16
16		Benzo(k)Fluoranthene	30.000	30.002	-0.0	103	0.03	18.01-18.21
17		Benzo(a) Pyrene	30.000	29.500	1.7	101	0.03	18.68-18.88
18		Indeno(1,2,3-cd)pyrene	30.000	29.878	0.4	101	0.03	20.43-20.63

Continuing Calibration Summary

Job Number: F28849
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GIJ1064-ECC1048
Lab FileID: IJ21540.D

19	Dibenzo(a,h)anthracene	30.000	29.192	2.7	101	0.03	20.49-20.69
20	Benzo(g,h,i) Perylene	30.000	29.525	1.6	102	0.04	21.04-21.24

(#) = Out of Range SPCC's out = 0 CCC's out = 0
IJ21334.D 8100_H2.M Thu Dec 23 07:51:09 2004

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Instrument Runlogs
- Initial and Continuing Calibration Blanks
- Initial and Continuing Calibration Checks
- High and Low Check Standards
- Interfering Element Check Standards
- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: F28849
Account: EEINCJX - EEI
Project: CSFF MCAS New River

File ID: IR122004.ASC Date Analyzed: 12/20/04 Methods: SW846 6010B
Analyst: SM Run ID: MA4148
Parameters: As,Ba,Be,Cd,Cr,Fe,Pb,Mn,Se

Time	Sample Description	Dilution Factor	PS Recov	Comments
11:12	MA4148-1CV1	1		
11:17	MA4148-1CB1	1		
11:20	MA4148-CRI1	1		
11:37	MA4148-ICSA1	1		
11:38	MA4148-ICSAB1	1		
11:42	MA4148-CCV1	1		
11:52	MA4148-CCB1	1		
11:56	MP7534-MB1	1		
12:00	MP7534-B1	1		
12:07	F28815-2	1		(sample used for QC only; not part of login F28849)
12:11	MP7534-D1	1		
12:15	MP7534-SD1	5		
12:18	MP7534-S1	1		
12:22	MP7534-S2	1		
12:30	ZZZZZZ	1		
12:33	ZZZZZZ	1		
12:41	MP7534-MB2	1		
12:44	MA4148-CCV2	1		
12:51	MA4148-CCB2	1		
12:54	ZZZZZZ	1		
12:58	ZZZZZZ	1		
13:02	ZZZZZZ	1		
13:06	ZZZZZZ	1		
13:10	ZZZZZZ	1		
13:13	ZZZZZZ	1		
13:17	ZZZZZZ	1		
13:21	ZZZZZZ	1		
13:25	ZZZZZZ	1		
13:29	ZZZZZZ	1		
13:32	MA4148-CCV3	1		
13:39	MA4148-CCB3	1		
13:42	ZZZZZZ	1		
13:46	ZZZZZZ	1		

7.1
7

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: F28849
Account: EEINCJX - EEI
Project: CSFF MCAS New River

File ID: IR122004.ASC Date Analyzed: 12/20/04 Methods: SW846 6010B
Analyst: SM Run ID: MA4148
Parameters: As,Ba,Be,Cd,Cr,Fe,Pb,Mn,Se

Time	Sample Description	Dilution Factor	PS Recov	Comments
13:50	ZZZZZZ	1		
13:54	ZZZZZZ	1		
13:58	ZZZZZZ	1		
14:05	MP7535-MB1	1		
14:09	MP7535-B1	1		
14:16	F28849-1	1		
14:20	MP7535-D1	1		
14:23	MP7535-SD1	5		
14:48	MA4148-CCV4	1		
14:54	MA4148-CCB4	1		
14:58	MP7535-S1	1		
15:02	MP7535-S2	1		
---------->	Last reportable sample/prep for job F28849			
15:09	MA4148-CRI2	1		
15:13	MA4148-CCV5	1		
15:19	MA4148-CCB5	1		
---------->	Last reportable CCB for job F28849			

Refer to raw data for calibration curve and standards.

INTERNAL STANDARD SUMMARY

Login Number: F28849
Account: EEINCJX - EEI
Project: CSFF MCAS New River

File ID: IR122C04.ASC Date Analyzed: 12/20/04 Methods: SW846 6010B
Analyst: SM Run ID: MA4148
Parameters: As,Ba,Be,Cd,Cr,Fe,Pb,Mn,Se

Time	Sample Description	Istd#1
11:12	MA4148-ICV1	7228
11:17	MA4148-ICB1	7191 R
11:20	MA4148-CRI1	7240
11:37	MA4148-ICSA1	6187
11:38	MA4148-ICSAB1	6343
11:42	MA4148-CCV1	6924
11:52	MA4148-CCB1	7199
11:56	MP7534-MB1	7148
12:00	MP7534-B1	6900
12:07	F28815-2	7127
12:11	MP7534-D1	7192
12:15	MP7534-SD1	7218
12:18	MP7534-S1	6940
12:22	MP7534-S2	6900
12:30	ZZZZZZ	7257
12:33	ZZZZZZ	7378
12:41	MP7534-MB2	7220
12:44	MA4148-CCV2	6905
12:51	MA4148-CCB2	7311
12:54	ZZZZZZ	7270
12:58	ZZZZZZ	7143
13:02	ZZZZZZ	6975
13:06	ZZZZZZ	7203
13:10	ZZZZZZ	7158
13:13	ZZZZZZ	7090
13:17	ZZZZZZ	7156
13:21	ZZZZZZ	7101
13:25	ZZZZZZ	7262
13:29	ZZZZZZ	7186
13:32	MA4148-CCV3	7054
13:39	MA4148-CCB3	7162
13:42	ZZZZZZ	6538
13:46	ZZZZZZ	6882

7.1.1 7

INTERNAL STANDARD SUMMARY

Login Number: F28849
Account: EEINCOX - EEI
Project: CSFF MCAS New River

File ID: IR122004.ASC Date Analyzed: 12/20/04 Methods: SW846 6010B
Analyst: SM Run ID: MA4148
Parameters: As,Ba,Be,Cd,Cr,Fe,Pb,Mn,Se

Time	Sample Description	Istd#1
13:50	ZZZZZZ	6687
13:54	ZZZZZZ	6709
13:58	ZZZZZZ	6985
14:05	MP7535-MB1	7342
14:09	MP7535-B1	7162
14:16	F28849-1	7110
14:20	MP7335-D1	7186
14:23	MP7335-SD1	7223
14:48	MA4148-CCV4	7065
14:54	MA4148-CCB4	7293
14:58	MP7535-S1	7013
15:02	MP7535-S2	7070
15:09	MA4148-CRI2	7405
15:13	MA4148-CCV5	6953
15:19	MA4148-CCB5	7299

R = Reference for ISTD limits. ! = Outside limits.

LEGEND:

Istd#	Parameter	Limits
Istd#1	Yttrium	60-125 %

7.1.1

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: F28849
Account: EEINCJX - EEI
Project: CSFF MCAS New River

File ID: IR122004.ASC Date Analyzed: 12/20/04 Methods: SW846 6010B
QC Limits: result < RL Run ID: MA4148 Units: ug/l

Time:			11:17		11:52		12:51		13:39	
Sample ID:			ICB1		CCB1		CCB2		CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	6.6								
Antimony	5.0	1.5								
Arsenic	10	2.8	-1.6	<10	-3.5	<10	0.27	<10	-0.34	<10
Barium	200	.5	-0.23	<200	-0.43	<200	-0.38	<200	-0.36	<200
Beryllium	4.0	.3	-0.43	<4.0	-0.39	<4.0	0.20	<4.0	0.080	<4.0
Cadmium	5.0	.3	-0.22	<5.0	-0.45	<5.0	-0.44	<5.0	-0.51	<5.0
Calcium	1000	3.8								
Chromium	10	.4	-0.42	<10	0.15	<10	0.37	<10	0.93	<10
Cobalt	50	.5								
Copper	25	.44								
Iron	300	7.1	-7.3	<300	-6.2	<300	-13	<300	-2.7	<300
Lead	5.0	1.2	0.52	<5.0	0.10	<5.0	2.1	<5.0	-0.10	<5.0
Magnesium	5000	9.9								
Manganese	15	.16	-0.24	<15	-0.33	<15	-0.29	<15	-0.21	<15
Molybdenum	50	.75								
Nickel	40	1.1	anr							
Potassium	5000	14								
Selenium	10	2	-1.4	<10	2.2	<10	4.5	<10	4.1	<10
Silver	10	.6								
Sodium	5000	150								
Thallium	10	1.5								
Tin	50	1.5								
Vanadium	50	.47								
Zinc	20	.59	anr							

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: F28849
Account: EEINCJX - EEI
Project: CSFF MCAS New River

File ID: IR122004.ASC Date Analyzed: 12/20/04 Methods: SW846 6010B
QC Limits: result < RL Run ID: MA4148 Units: ug/l

Time:			14:54		15:19	
Sample ID:			CCB4		CCB5	
Metal	RL	IDL	raw	final	raw	final
Aluminum	200	6.6				
Antimony	5.0	1.5				
Arsenic	10	2.8	1.6	<10	-0.21	<10
Barium	200	.5	-0.20	<200	-0.39	<200
Beryllium	4.0	.3	-0.68	<4.0	-0.76	<4.0
Cadmium	5.0	.3	-0.090	<5.0	-0.40	<5.0
Calcium	1000	3.8				
Chromium	10	.4	1.2	<10	0.44	<10
Cobalt	50	.5				
Copper	25	.44				
Iron	300	7.1	0.34	<300	-7.1	<300
Lead	5.0	1.2	-0.30	<5.0	0.070	<5.0
Magnesium	5000	9.9				
Manganese	15	.16	-0.11	<15	-0.39	<15
Molybdenum	50	.75				
Nickel	40	1.1	anr			
Potassium	5000	14				
Selenium	10	2	4.1	<10	3.7	<10
Silver	10	.6				
Sodium	5000	150				
Thallium	10	1.5				
Tin	50	1.5				
Vanadium	50	.47				
Zinc	20	.59	anr			

(*) Outside of QC limits
(anr) Analyte not requested

7.1.2
7

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: F28849
Account: EEINCUX - EEI
Project: CSFF MCAS New River

File ID: IR122004.ASC Date Analyzed: 12/20/04 Methods: SW846 6010B
QC Limits: 90 to 110 % Recovery Run ID: MA4148 Units: ug/l

Time:		11:12			11:42			12:44	
Sample ID:	ICV	ICV1		CCV	CCV1		CCV	CCV2	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum									
Antimony									
Arsenic	2000	1890	94.5	2000	1980	99.0	2000	2040	102.0
Barium	2000	1950	97.5	2000	2060	103.0	2000	2110	105.5
Beryllium	2000	1990	99.5	2000	2060	103.0	2000	2110	105.5
Cadmium	2000	1970	98.5	2000	2040	102.0	2000	2090	104.5
Calcium									
Chromium	2000	1900	95.0	2000	1980	99.0	2000	2020	101.0
Cobalt									
Copper									
Iron	40000	39300	98.3	40000	40800	102.0	40000	41500	103.8
Lead	2000	1950	97.5	2000	2020	101.0	2000	2060	103.0
Magnesium									
Manganese	2000	1990	99.5	2000	2070	103.5	2000	2120	106.0
Molybdenum									
Nickel	anr								
Potassium									
Selenium	2000	1960	98.0	2000	2050	102.5	2000	2110	105.5
Silver									
Sodium									
Thallium									
Tin									
Vanadium									
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

7.1.3

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: F28849
Account: EEINCJX - EEI
Project: CSFF MCAS New River

File ID: IR122004.ASC Date Analyzed: 12/20/04 Methods: SW846 6010B
QC Limits: 90 to 110 % Recovery Run ID: MA4148 Units: ug/l

Time:		13:32			14:48			15:13	
Sample ID:	CCV	CCV3		CCV	CCV4		CCV	CCV5	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum									
Antimony									
Arsenic	2000	2000	100.0	2000	1940	97.0	2000	1930	96.5
Barium	2000	2080	104.0	2000	2000	100.0	2000	2010	100.5
Beryllium	2000	2070	103.5	2000	2040	102.0	2000	2040	102.0
Cadmium	2000	2040	102.0	2000	2020	101.0	2000	2020	101.0
Calcium									
Chromium	2000	1980	99.0	2000	1950	97.5	2000	1960	98.0
Cobalt									
Copper									
Iron	40000	40700	101.8	40000	41600	104.0	40000	41700	104.3
Lead	2000	2020	101.0	2000	2000	100.0	2000	1990	99.5
Magnesium									
Manganese	2000	2080	104.0	2000	2040	102.0	2000	2040	102.0
Molybdenum									
Nickel	anr								
Potassium									
Selenium	2000	2070	103.5	2000	2020	101.0	2000	2000	100.0
Silver									
Sodium									
Thallium									
Tin									
Vanadium									
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

7.1.3

7

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: F28849
Account: EEINCJX - EEI
Project: CSFF MCAS New River

File ID: IR122004.ASC Date Analyzed: 12/20/04 Methods: SW846 6010B
QC Limits: 70 to 130 % Recovery Run ID: MA4148 Units: ug/l

Time:			11:20		15:09	
Sample ID:	CRI	CRIA	CRI1		CRI2	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	400					
Antimony	10					
Arsenic	20		20.0	100.0	17.6	88.0
Barium	400		413	103.3	401	100.3
Beryllium	10		9.9	99.0	9.3	93.0
Cadmium	10		9.9	99.0	9.4	94.0
Calcium	2000					
Chromium	20		20.7	103.5	20.6	103.0
Cobalt	100					
Copper	50					
Iron	600		507	84.5	530	88.3
Lead	10		11.7	117.0	10.1	101.0
Magnesium	10000					
Manganese	30		32.3	107.7	31.7	105.7
Molybdenum	100					
Nickel	80		anr			
Potassium	10000					
Selenium	10		11.7	117.0	14.7	147.0
Silver	20					
Sodium	10000					
Thallium	20					
Tin	100					
Vanadium	100					
Zinc	40		anr			

(*) Outside of QC limits
(anr) Analyte not requested

7.1.4

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: F28849
Account: EEINCJX - EEI
Project: CSFF MCAS New River

File ID: IR122004.ASC Date Analyzed: 12/20/04 Methods: SW846 6010B
QC Limits: 80 to 120 % Recovery Run ID: MA4148 Units: ug/l

Time:			11:37		11:38	
Sample ID:	ICSA	ICSAB	ICSA1		ICSAB1	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	500000	500000	503000	100.6	487000	97.4
Antimony		1000	2.1		1000	100.0
Arsenic		1000	-2.0		1010	101.0
Barium		500	0.35		543	108.6
Beryllium		500	-2.5		521	104.2
Cadmium		1000	0.090		978	97.8
Calcium	500000	500000	474000	94.8	458000	91.6
Chromium		500	3.9		501	100.2
Cobalt		500	0.98		492	98.4
Copper		500	1.0		566	113.2
Iron	200000	200000	198000	99.0	196000	98.0
Lead		1000	-0.90		967	96.7
Magnesium	500000	500000	516000	103.2	497000	99.4
Manganese		500	-0.82		517	103.4
Molybdenum		1000	-4.1		976	97.6
Nickel		1000	1.9		976	97.6
Potassium			-3.7		-380	
Selenium		1000	5.6		1000	100.0
Silver		1000	-0.37		1130	113.0
Sodium			106		193	
Thallium		1000	1.1		932	93.2
Tin		1000	-8.0		961	96.1
Vanadium		500	-5.2		508	101.6
Zinc		1000	-0.13		988	98.8

(*) Outside of QC limits
(anr) Analyte not requested

7.1.5
7

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: F28849
Account: EEINCJX - EEI
Project: CSFF MCAS New River

File ID: IR122105.ASC Date Analyzed: 12/21/04 Methods: SW846 6010B
Analyst: SM Run ID: MA4150
Parameters: Se

	Time	Sample Description	Dilution Factor	PS Recov	Comments
	10:57	MA4150-ICV1	1		
	11:02	MA4150-ICB1	1		
	11:05	MA4150-CRI1	1		
	11:17	MA4150-ICSA1	1		
	11:18	MA4150-ICSAB1	1		
	11:21	MA4150-CCV1	1		
	11:27	MA4150-CCB1	1		
	11:31	F28849-1	1		
	11:34	MP7535-D1	1		
---------->		Last reportable sample/prep for job F28849			
	11:42	MP7540-MB1	1		
	11:46	MP7540-B1	1		
	11:53	F28865-1	1		(sample used for QC only; not part of login F28849)
	11:57	MP7540-D1	1		
	12:00	MP7540-SD1	5		
	12:04	MP7540-S1	1		
	12:08	MP7540-S2	1		
	12:15	ZZZZZZ	1		
	12:19	MA4150-CCV2	1		
	12:25	MA4150-CCB2	1		
---------->		Last reportable CCB for job F28849			
	12:29	ZZZZZZ	1		
	12:33	ZZZZZZ	1		
	12:37	ZZZZZZ	1		
	12:40	ZZZZZZ	1		
	12:44	ZZZZZZ	1		
	12:48	ZZZZZZ	1		
	12:52	ZZZZZZ	1		
	12:56	ZZZZZZ	1		
	12:59	ZZZZZZ	1		
	13:03	ZZZZZZ	1		
	13:22	MA4150-CCV3	1		
	13:28	MA4150-CCB3	1		
	13:32	ZZZZZZ	1		
	13:36	ZZZZZZ	1		

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: F28849
Account: EEINCJX - EEI
Project: CSFF MCAS New River

File ID: IR122105.ASC Date Analyzed: 12/21/04 Methods: SW846 6010B
Analyst: SM Run ID: MA4150
Parameters: Se

Time	Sample Description	Dilution Factor	PS Recov	Comments
13:40	ZZZZZZ	1		
13:43	ZZZZZZ	1		
13:47	ZZZZZZ	1		
13:51	ZZZZZZ	1		
13:58	MP7539-MB1	1		
14:02	MP7539-B1	1		
14:09	F28669-3	1		(sample used for QC only; not part of login F28849)
14:13	MP7539-D1	1		
14:23	MA4150-CCV4	1		
14:29	MA4150-CCB4	1		
14:33	MP7539-SD1	5		
14:37	MP7539-S1	1		
14:41	MP7539-S2	1		
14:48	ZZZZZZ	1		
14:52	ZZZZZZ	1		
14:56	ZZZZZZ	1		
14:59	ZZZZZZ	1		
15:03	ZZZZZZ	1		
15:07	ZZZZZZ	1		
15:11	ZZZZZZ	1		
15:15	MA4150-CCV5	1		
15:21	MA4150-CCB5	1		
15:24	ZZZZZZ	1		
15:28	ZZZZZZ	1		
15:32	ZZZZZZ	1		
15:36	ZZZZZZ	1		
15:40	ZZZZZZ	1		
15:44	ZZZZZZ	1		
15:47	ZZZZZZ	1		
15:51	ZZZZZZ	1		
15:55	ZZZZZZ	1		
15:59	ZZZZZZ	1		
16:03	MA4150-CCV6	1		

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: F28849
Account: EEINCJX - EEI
Project: CSFF MCAS New River

File ID: IR122105.ASC Date Analyzed: 12/21/04 Methods: SW846 6010B
Analyst: SM Run ID: MA4150
Parameters: Se

Time	Sample Description	Dilution Factor	PS Recov	Comments
16:09	MA4150-CCB6	1		
16:13	ZZZZZZ	1		
16:16	MA4150-CRI2	1		
16:20	MA4150-CCV7	1		
16:26	MA4150-CCB7	1		

Refer to raw data for calibration curve and standards.

7.2
7

INTERNAL STANDARD SUMMARY

Login Number: F28849
Account: EEINCJX - EEI
Project: CSFF MCAS New River

File ID: IR122105.ASC Date Analyzed: 12/21/04 Methods: SW846 6010B
Analyst: SM Run ID: MA4150
Parameters: Se

Time	Sample Description	Istd#1
10:57	MA4150-ICV1	6765
11:02	MA4150-ICB1	7139 R
11:05	MA4150-CRI1	7499
11:17	MA4150-ICSA1	6348
11:18	MA4150-ICSAB1	6326
11:21	MA4150-CCV1	6872
11:27	MA4150-CCB1	7228
11:31	F28849-1	6895
11:34	MP7535-D1	7060
11:42	MP7540-MB1	7157
11:46	MP7540-B1	7059
11:53	F28865-1	7162
11:57	MP7540-D1	7187
12:00	MP7540-SD1	7079
12:04	MP7540-S1	6916
12:08	MP7540-S2	6709
12:15	ZZZZZZ	6860
12:19	MA4150-CCV2	7055
12:25	MA4150-CCB2	7224
12:29	ZZZZZZ	6882
12:33	ZZZZZZ	6505
12:37	ZZZZZZ	7573
12:40	ZZZZZZ	7194
12:44	ZZZZZZ	7703
12:48	ZZZZZZ	7223
12:52	ZZZZZZ	7082
12:56	ZZZZZZ	7209
12:59	ZZZZZZ	8012
13:03	ZZZZZZ	7740
13:22	MA4150-CCV3	7074
13:28	MA4150-CCB3	7370
13:32	ZZZZZZ	6980
13:36	ZZZZZZ	6975

7.2.1
7

INTERNAL STANDARD SUMMARY

Login Number: F28849
Account: EEINCJX - EEI
Project: CSFF MCAS New River

File ID: IR122105.ASC
Analyst: SM
Parameters: Se

Date Analyzed: 12/21/04
Run ID: MA4150

Methods: SW846 6010B

Time	Sample Description	Istd#1
13:40	ZZZZZZ	7106
13:43	ZZZZZZ	7256
13:47	ZZZZZZ	7496
13:51	ZZZZZZ	6907
13:58	MP7539-MB1	7321
14:02	MP7539-B1	7214
14:09	F28669-3	7291
14:13	MP7539-D1	7386
14:23	MA4150-CCV4	7180
14:29	MA4150-CCB4	7300
14:33	MP7539-SD1	7493
14:37	MP7539-S1	7312
14:41	MP7539-S2	7351
14:48	ZZZZZZ	7480
14:52	ZZZZZZ	7307
14:56	ZZZZZZ	7383
14:59	ZZZZZZ	8044
15:03	ZZZZZZ	7270
15:07	ZZZZZZ	7545
15:11	ZZZZZZ	7360
15:15	MA4150-CCV5	7175
15:21	MA4150-CCB5	7317
15:24	ZZZZZZ	7441
15:28	ZZZZZZ	7411
15:32	ZZZZZZ	7424
15:36	ZZZZZZ	7454
15:40	ZZZZZZ	7367
15:44	ZZZZZZ	7078
15:47	ZZZZZZ	7431
15:51	ZZZZZZ	7255
15:55	ZZZZZZ	7320
15:59	ZZZZZZ	7255
16:03	MA4150-CCV6	7161

7.2.1

INTERNAL STANDARD SUMMARY

Login Number: F28849
Account: EEINCJX - EEI
Project: CSFF MCAS New River

File ID: IR122105.ASC Date Analyzed: 12/21/04 Methods: SW846 6010B
Analyst: SM Run ID: MA4150
Parameters: Se

Time	Sample Description	Istd#1
16:09	MA4150-CCB6	7326
16:13	ZZZZZZ	7385
16:16	MA4150-CRI2	7300
16:20	MA4150-CCV7	7100
16:26	MA4150-CCB7	7381

R = Reference for ISTD limits. ! = Outside limits.

LEGEND:

Istd#	Parameter	Limits
Istd#1	Yttrium	60-125 %

7.2.1

7

ACCUTEST.
F28849

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: F28849
Account: EEINCJX - EEI
Project: CSFF MCAS New River

File ID: IR122105.ASC Date Analyzed: 12/21/04 Methods: SW846 6010B
QC Limits: result < RL Run ID: MA4150 Units: ug/l

Time:			11:02		11:27		12:25	
Sample ID:			ICB1		CCB1		CCB2	
Metal	RL	IDL	raw	final	raw	final	raw	final
Aluminum	200	6.6	anr					
Antimony	5.0	1.5	anr					
Arsenic	10	2.8	anr					
Barium	200	.5	anr					
Beryllium	4.0	.3	anr					
Cadmium	5.0	.3	anr					
Calcium	1000	3.8	anr					
Chromium	10	.4	anr					
Cobalt	50	.5	anr					
Copper	25	.44	anr					
Iron	300	7.1	anr					
Lead	5.0	1.2	anr					
Magnesium	5000	9.9	anr					
Manganese	15	.16	anr					
Molybdenum	50	.75						
Nickel	40	1.1	anr					
Potassium	5000	14	anr					
Selenium	10	2	7.3	<10	-1.7	<10	-0.47	<10
Silver	10	.6	anr					
Sodium	5000	150	anr					
Thallium	10	1.5	anr					
Tin	50	1.5						
Vanadium	50	.47	anr					
Zinc	20	.59	anr					

(*) Outside of QC limits
(anr) Analyte not requested

7.2.2

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: F28849
Account: EEINCJX - EEI
Project: CSFF MCAS New River

File ID: IR122105.ASC Date Analyzed: 12/21/04 Methods: SW846 6010B
QC Limits: 90 to 110 % Recovery Run ID: MA4150 Units: ug/l

Time:		10:57			11:21			12:19	
Sample ID:	ICV	ICV1		CCV	CCV1		CCV	CCV2	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Cadmium	anr								
Calcium	anr								
Chromium	anr								
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	anr								
Magnesium	anr								
Manganese	anr								
Molybdenum									
Nickel	anr								
Potassium	anr								
Selenium	2000	2010	100.5	2000	1990	99.5	2000	2010	100.5
Silver	anr								
Sodium	anr								
Thallium	anr								
Tin									
Vanadium	anr								
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: F28849
Account: EEINCJX - EEI
Project: CSFF MCAS New River

File ID: IR122105.ASC Date Analyzed: 12/21/04 Methods: SW846 6010B
QC Limits: 70 to 130 % Recovery Run ID: MA4150 Units: ug/l

Time:			11:05	
Sample ID:	CRI	CRIA	CRI1	
Metal	True	True	Results	% Rec
Aluminum	400		anr	
Antimony	10		anr	
Arsenic	20		anr	
Barium	400		anr	
Beryllium	10		anr	
Cadmium	10		anr	
Calcium	2000		anr	
Chromium	20		anr	
Cobalt	100		anr	
Copper	50		anr	
Iron	600		anr	
Lead	10		anr	
Magnesium	10000		anr	
Manganese	30		anr	
Molybdenum	100			
Nickel	80		anr	
Potassium	10000		anr	
Selenium	10		8.0	80.0
Silver	20		anr	
Sodium	10000		anr	
Thallium	20		anr	
Tin	100			
Vanadium	100		anr	
Zinc	40		anr	

(*) Outside of QC limits
(anr) Analyte not requested

7.2.4

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: F28849
Account: EEINCJX - EEI
Project: CSFF MCAS New River

File ID: IR122105.ASC Date Analyzed: 12/21/04 Methods: SW846 6010B
QC Limits: 80 to 120 % Recovery Run ID: MA4150 Units: ug/l

Time:			11:17		11:18	
Sample ID:	ICSA	ICSAB	ICSA1		ICSAB1	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	500000	500000	476000	95.2	470000	94.0
Antimony		1000	0.030		960	96.0
Arsenic		1000	-0.59		977	97.7
Barium		500	0.38		511	102.2
Beryllium		500	-1.9		509	101.8
Cadmium		1000	3.0		965	96.5
Calcium	500000	500000	453000	90.6	444000	88.8
Chromium		500	4.0		490	98.0
Cobalt		500	0.72		480	96.0
Copper		500	2.2		543	108.6
Iron	200000	200000	192000	96.0	193000	96.5
Lead		1000	-3.2		947	94.7
Magnesium	500000	500000	483000	96.6	473000	94.6
Manganese		500	-0.47		502	100.4
Molybdenum		1000	-2.1		948	94.8
Nickel		1000	1.4		953	95.3
Potassium			-4.0		-370	
Selenium		1000	-6.8		953	95.3
Silver		1000	0.18		1080	108.0
Sodium			162		221	
Thallium		1000	-9.1		896	89.6
Tin		1000	-3.8		945	94.5
Vanadium		500	-4.5		484	96.8
Zinc		1000	3.8		972	97.2

(*) Outside of QC limits
(anr) Analyte not requested

7.2.5

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: F28849
Account: EEINCJX - EEI
Project: CSFF MCAS New River

QC Batch ID: MP7535
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date: 12/20/04

Metal	RL	IDL	MB raw	final
Aluminum	200	6.6		
Antimony	3.0	1.5		
Arsenic	10	2.8	-3.7	<10
Barium	200	.5	0.36	<200
Beryllium	4.0	.3	0.11	<4.0
Cadmium	5.0	.3	-0.68	<5.0
Calcium	1000	3.8		
Chromium	10	.4	-0.38	<10
Cobalt	50	.5		
Copper	25	.44		
Iron	300	7.1	10.4	<300
Lead	5.0	1.2	-1.2	<5.0
Magnesium	5000	9.9		
Manganese	15	.16	-0.59	<15
Molybdenum	50	.75		
Nickel	40	1.1		
Potassium	5000	14		
Selenium	10	2	-1.7	<10
Silver	10	.6		
Sodium	5000	150		
Thallium	10	1.5		
Tin	50	1.5		
Vanadium	50	.47		
Zinc	20	.59		

Associated samples MP7535: F28849-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: F28849
Account: EEINCJX - EEI
Project: CSFF MCAS New River

QC Batch ID: MP7535
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/L

Prep Date: 12/20/04 12/20/04

Metal	F28849-1 Original	DUP	RPD	QC Limits	F28849-1 Original	MS	Spikelot MPFLICP	% Rec	QC Limits
Aluminum									
Antimony									
Arsenic	5.4	0.0	200.0(a)	0-12	5.4	3580	4000	89.4	83-116
Barium	39.0	27.9	33.2 (a)	0-13	39.0	3500	4000	86.5	82-116
Beryllium	0.0	0.0	NC	0-12	0.0	90.6	100	90.6	86-119
Cadmium	0.0	0.0	NC	0-13	0.0	87.5	100	87.5	80-115
Calcium									
Chromium	1.3	0.0	200.0(a)	0-12	1.3	350	400	87.2	82-120
Cobalt									
Copper									
Iron	22.6	0.0	200.0(a)	0-14	22.6	24800	27000	91.8	76-125
Lead	3.5	0.0	200.0(a)	0-10	3.5	907	1000	90.4	84-118
Magnesium									
Manganese	5.0	2.7	59.7 (a)	0-13	5.0	911	1000	90.6	75-125
Molybdenum									
Nickel									
Potassium									
Selenium	2.7	0.0	200.0(a)	0-13	2.7	4090	4000	102.0	84-121
Silver									
Sodium									
Thallium									
Tin									
Vanadium									
Zinc									

Associated samples MP7535: F28849-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) RPD acceptable due to low duplicate and sample concentrations.

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: F28849
Account: EBINCJX - EEI
Project: CSFF MCAS New River

QC Batch ID: MP7535
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date: 12/20/04

Metal	F28849-1 Original	MSD	Spikelot MPFLICP	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony						
Arsenic	5.4	3700	4000	92.4	3.3	20
Barium	39.0	3570	4000	88.3	2.0	20
Beryllium	0.0	93.5	100	93.5	3.2	20
Cadmium	0.0	91.1	100	91.1	4.0	20
Calcium						
Chromium	1.3	363	400	90.4	3.6	20
Cobalt						
Copper						
Iron	22.6	25300	27000	93.6	2.0	20
Lead	3.5	935	1000	93.2	3.0	20
Magnesium						
Manganese	5.0	943	1000	93.8	3.5	20
Molybdenum						
Nickel						
Potassium						
Selenium	2.7	4200	4000	104.7	2.7	20
Silver						
Sodium						
Thallium						
Tin						
Vanadium						
Zinc						

Associated samples MP7535: F28849-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

7.3.2

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: F28849
Account: EEINCJX - EEI
Project: CSFF MCAS New River

QC Batch ID: MP7535
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date: 12/20/04

Metal	BSP Result	Spikelot MPFICP	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic	4000	4000	100.0	80-120
Barium	3910	4000	97.8	80-120
Beryllium	104	100	104.0	80-120
Cadmium	99.4	100	99.4	80-120
Calcium				
Chromium	395	400	98.8	80-120
Cobalt				
Copper				
Iron	26600	27000	98.5	80-120
Lead	1010	1000	101.0	80-120
Magnesium				
Manganese	1030	1000	103.0	80-120
Molybdenum				
Nickel				
Potassium				
Selenium	4600	4000	115.0	80-120
Silver				
Sodium				
Thallium				
Tin				
Vanadium				
Zinc				

Associated samples MP7535: F28849-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: F28849
Account: EEINCJX - EEI
Project: CSFF MCAS New River

QC Batch ID: MP7535
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date: 12/20/04

Metal	F28849-1 Original	SDL 1:5	RPD	QC Limits
Aluminum				
Antimony				
Arsenic	5.37	0.00	100.0(a)	0-10
Barium	39.0	36.4	6.6	0-10
Beryllium	0.00	0.00	NC	0-10
Cadmium	0.00	0.00	NC	0-10
Calcium				
Chromium	1.29	0.00	100.0(a)	0-10
Cobalt				
Copper				
Iron	22.6	0.00	100.0(a)	0-10
Lead	3.49	0.00	100.0(a)	0-10
Magnesium				
Manganese	5.00	2.17	56.6 (a)	0-10
Molybdenum				
Nickel				
Potassium				
Selenium	2.73	0.00	100.0(a)	0-10
Silver				
Sodium				
Thallium				
Tin				
Vanadium				
Zinc				

Associated samples MP7535: F28849-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

7.3.4

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: F28849
Account: EEINCCX - EEI
Project: CSFF MCAS New River

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Solids, Total Dissolved	GN16476	10	<10	mg/l				
Solids, Total Suspended	GN16475	4.0	<4.0	mg/l				

Associated Samples:
Batch GN16475: F28849-1
Batch GN16476: F28849-1

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: F28849
Account: EEINCJX - EEI
Project: CSFF MCAS New River

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Solids, Total Dissolved	GN16476	F28849-1	mg/l	347	332	4.4	0-29%
Solids, Total Suspended	GN16475	F28935-1	mg/l	<4.0	<4.0	0.0	0-33%

Associated Samples:
Batch GN16475: F28849-1
Batch GN16476: F28849-1

8.2
8

March 2005 Laboratory Reports

Southeast -
ACCUTEST.
Laboratories

12/08/05

Technical Report for

EEI

Camp Lejeune-Campbell St. Fuel Farm

CTO-015/LD03-016

Accutest Job Number: F30420

Sampling Dates: 03/15/05 - 03/16/05

Report to:

EEI

bmorris@eeimail.com

ATTN: Bill Morris

Total number of pages in report: 168

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Table of Contents

Sections: 1 2 3 4 5 6 7 8

Section 1: Sample Summary 4

Section 2: Case Narrative/Conformance Summary 6

Section 3: Sample Results 8

3.1: F30420-1: UST-CSFF-EFF 8

3.2: F30420-2: UST-CSFF-RWB1 12

3.3: F30420-3: UST-CSFF-RWB3 13

3.4: F30420-4: UST-CSFF-RWB4 14

3.5: F30420-5: UST-CSFF-RWC1 15

3.6: F30420-6: UST-122MW03 16

3.7: F30420-7: UST-122MW07 18

3.8: F30420-8: UST-122MW04 20

3.9: F30420-9: UST-122MW08 22

3.10: F30420-10: UST-122MW01 24

3.11: F30420-11: UST-13DW01 26

3.12: F30420-12: UST-122MW09 29

3.13: F30420-13: UST-CSFF-DW02 32

3.14: F30420-14: UST-CSFF-MW21 35

3.15: F30420-15: UST-CSFF-DW06 37

3.16: F30420-16: UST-CSFF-DUP 40

3.17: F30420-17: UST-CSFF-MW11 43

3.18: F30420-18: UST-CSFF-MW14 45

3.19: F30420-19: UST-CSFF-MW12 47

3.20: F30420-20: UST-CSFF-MW16 49

3.21: F30420-21: UST-CSFF-MW03 51

3.22: F30420-22: UST-CSFF-MW24 53

3.23: F30420-23: UST-122MW11 55

3.24: F30420-24: TRIP BLANK 57

Section 4: Misc. Forms 58

4.1: Chain of Custody 59

Section 5: GC Volatiles - QC Data Summaries 63

5.1: Method Blank Summary 64

5.2: Blank Spike Summary 70

5.3: Matrix Spike/Matrix Spike Duplicate Summary 77

5.4: Surrogate Recovery Summaries 81

5.5: GC Surrogate Retention Time Summaries 84

5.6: Initial and Continuing Calibration Summaries 97

Section 6: GC Semi-volatiles - QC Data Summaries 121

6.1: Method Blank Summary 122

6.2: Blank Spike Summary 125

6.3: Matrix Spike/Matrix Spike Duplicate Summary 127

6.4: Surrogate Recovery Summaries 129

6.5: GC Surrogate Retention Time Summaries 130

Table of Contents

6.6: Initial and Continuing Calibration Summaries 133
Section 7: Metals Analysis - QC Data Summaries 144
7.1: Inst QC MA4276: As,Ba,Cd,Cr,Fe,Pb,Mn,Se 145
7.2: Prep QC MP7857: As,Ba,Cd,Cr,Fe,Pb,Mn,Se 162
Section 8: General Chemistry - QC Data Summaries 166
8.1: Method Blank and Spike Results Summary 167
8.2: Duplicate Results Summary 168

Sample Summary

EEI

Job No: F30420

Camp Lejeune-Campbell St. Fuel Farm
Project No: CTO-015/LD03-016

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
F30420-1	03/16/05	13:40	TE	03/17/05	AQ	Ground Water	UST-CSFF-EFF
F30420-2	03/15/05	15:40	TE	03/17/05	AQ	Ground Water	UST-CSFF-RWB1
F30420-3	03/15/05	15:20	TE	03/17/05	AQ	Ground Water	UST-CSFF-RWB3
F30420-4	03/15/05	15:00	TE	03/17/05	AQ	Ground Water	UST-CSFF-RWB4
F30420-5	03/15/05	12:55	TE	03/17/05	AQ	Ground Water	UST-CSFF-RWC1
F30420-6	03/15/05	10:25	TE	03/17/05	AQ	Ground Water	UST-122MW03
F30420-7	03/15/05	10:50	TE	03/17/05	AQ	Ground Water	UST-122MW07
F30420-8	03/15/05	11:25	TE	03/17/05	AQ	Ground Water	UST-122MW04
F30420-9	03/15/05	11:50	TE	03/17/05	AQ	Ground Water	UST-122MW08
F30420-10	03/15/05	12:15	TE	03/17/05	AQ	Ground Water	UST-122MW01 (DUP)
F30420-11	03/15/05	12:45	TE	03/17/05	AQ	Ground Water	UST-13DW01
F30420-12	03/15/05	13:25	TE	03/17/05	AQ	Ground Water	UST-122MW09
F30420-13	03/15/05	14:30	TE	03/17/05	AQ	Ground Water	UST-CSFF-DW02

Sample Summary
(continued)

EEI

Job No: F30420

Camp Lejeune-Campbell St. Fuel Farm
Project No: CTO-015/LD03-016

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
F30420-14	03/15/05	14:50	TE	03/17/05	AQ	Ground Water	UST-CSFF-MW21
F30420-15	03/15/05	16:40	TE	03/17/05	AQ	Ground Water	UST-CSFF-DW06
F30420-16	03/15/05	00:00	TE	03/17/05	AQ	Ground Water	UST-CSFF-DUP
F30420-17	03/16/05	09:40	TE	03/17/05	AQ	Ground Water	UST-CSFF-MW11
F30420-18	03/16/05	10:20	TE	03/17/05	AQ	Ground Water	UST-CSFF-MW14
F30420-19	03/16/05	10:55	TE	03/17/05	AQ	Ground Water	UST-CSFF-MW12
F30420-20	03/16/05	11:15	TE	03/17/05	AQ	Ground Water	UST-CSFF-MW16
F30420-21	03/16/05	11:30	TE	03/17/05	AQ	Ground Water	UST-CSFF-MW03
F30420-22	03/16/05	12:00	TE	03/17/05	AQ	Ground Water	UST-CSFF-MW24
F30420-23	03/16/05	12:20	TE	03/17/05	AQ	Ground Water	UST-122MW11
F30420-24	03/16/05	16:00	TE	03/17/05	AQ	Trip Blank Water	TRIP BLANK

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: EEI **Job No:** F30420

Site: Camp Lejeune-Campbell St. Fuel Farm **Report Date:** 4/15/2005 8:17:56 AM

23 Samples and 1 Trip Blank were eolleeted on between 03/15/2005 and 03/16/2005 and were reeeived at Accutest on 03/17/2005 properly preserved, at 2.8 Deg. C and intaet. These Samples reeeived an Aceutest job number of F30420. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GC by Method EPA 601/602

Matrix: AQ **Batch ID:** GCD2417

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method speeific eriteria.

Samples F30420-19MS, F30420-19MSD were used as the QC samples indicated.

F30420-1: All hits confirmed by dual eolumn analysis.

F30420-9: All hits confirmed by dual column analysis.

F30420-10: All hits confirmed by dual column analysis.

Matrix: AQ **Batch ID:** GCD2419

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

F30420-3: All hits eonfirmed by dual column analysis.

F30420-20: All hits confirmed by dual eolumn analysis.

Matrix: AQ **Batch ID:** GCD2420

All samples were analyzed within the recommended method holding time.

Samples F30420-22MS, F30420-22MSD were used as the QC samples indieated.

All method blanks for this batch ineet method specific criteria.

Matrix Spike and Matrix Spike Duplicate Recoverys for Methyl Tert Butyl Ether are outside control limits. Probable cause due to matrix interferenee.

F30420-2: All hits confirmed by dual column analysis.

F30420-22: All hits confirmed by GC/MS.

Matrix: AQ **Batch ID:** GQQ116

All samples were analyzed within the reeommended method holding time.

All method blanks for this batch meet method specific criteria.

F30420-11: All hits eonfirmed by dual column analysis.

F30420-12: All hits eonfirmed by dual eolumn analysis.

F30420-12 for 1,2-Dichlorobenzene, 1,4-Dichlorobenzene: Elevated reporting limits due to matrix interference.

F30420-14: All hits confirmed by dual column analysis.

F30420-14 for 1,2-Diehlorobenzene: Elevated reporting limits due to matrix interference.

F30420-15: All hits confirmed by dual column analysis.

F30420-16: All hits confirmed by dual column analysis.

F30420-16 for 1,2-Dichlorobenzenc, 1,4-Diehlorobenzene: Elevated reporting limits due to matrix interferenee.

F30420-17: All hits confirmed by dual column analysis.

Matrix: AQ **Batch ID:** GQQ117

All method blanks for this bateh meet method speeific criteria.

The following sample was re-analyzed outside of holding time for method EPA 601/602: F30420-14. Sample analyzed beyond hold time; reported results are considered minimum values.

F30420-14: Sample analyzed beyond hold time; reported results are considered minimum values

Volatiles by GC by Method EPA 504.1

Matrix: AQ **Batch ID:** OP12750

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

Samples F30420-7MS, F30420-7MSD were used as the QC samples indicated.

All method blanks for this batch meet method specific criteria.

Extractables by GC by Method EPA 610

Matrix: AQ **Batch ID:** OP12753

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

Samples F30420-13MS, F30420-13MSD were used as the QC samples indicated.

All method blanks for this batch meet method specific criteria.

Sample F30420-11 has surrogates outside control limits. Probable cause: due to matrix interference.

F30420-11 for 2-Fluorobiphenyl, o-Terphenyl: Outside control limits due to dilution.

Matrix: AQ **Batch ID:** OP12766

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Samples F30420-12MS, F30420-12MSD were used as the QC samples indicated.

Metals by Method SW846 6010B

Matrix: AQ **Batch ID:** MP7857

All samples were digested within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Samples F30420-1DUP, F30420-1MS, F30420-1SDL, F30420-1MSD were used as the QC samples for metals.

RPDs for Duplicate for Chromium, Manganese are outside control limits for sample MP7857-D1. RPD acceptable due to low duplicate and sample concentrations.

RPDs for Serial Dilution for Chromium, Manganese, Selenium are outside control limits for sample MP7857-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

Wet Chemistry by Method EPA 160.1

Matrix: AQ **Batch ID:** GN16900

All method blanks for this batch meet method specific criteria.

All samples were analyzed within the recommended method holding time.

Sample F30065-1RDUP was used as the QC sample for Solids, Total Dissolved.

Wet Chemistry by Method EPA 160.2

Matrix: AQ **Batch ID:** GN16899

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample F30410-1DUP was used as the QC sample for Solids, Total Suspended.

Accutest Laboratories Southeast (ALSE) certifies that this report meets the project requirements for analytical data produced for the samples as received at ALSE and as stated on the COC. ALSE certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the ALSE Quality Manual except as noted above. This report is to be used in its entirety. ALSE is not responsible for any assumptions of data quality if partial data packages are used.

Narrative prepared by:

Date: April 15, 2005

Ellen Pampel, Inorganic QA (signature on file)

Friday, April 15, 2005

Report of Analysis

Client Sample ID:	UST-CSFF-EFF		
Lab Sample ID:	F30420-1	**Date Sampled:**	03/16/05
Matrix:	AQ - Ground Water	**Date Received:**	03/17/05
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	CD058712.D	1	03/18/05	AJ	n/a	n/a	GCD2417
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	24.7	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Diehlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	0.77	1.0	0.50	ug/l	J
1634-04-4	Methyl Tert Butyl Ether	23.9	1.0	0.50	ug/l	
108-88-3	Toluene	0.81	1.0	0.50	ug/l	J
1330-20-7	Xylenes (total)	1.9	3.0	1.0	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	92%		59-129%
98-08-8	aaa-Trifluorotoluene	96%		73-122%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indieates an estimated value
B = Indicates analyte found in assoeiated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST-CSFF-EFF		
Lab Sample ID:	F30420-1	**Date Sampled:**	03/16/05
Matrix:	AQ - Ground Water	**Date Received:**	03/17/05
Method:	EPA 610 EPA 610	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LL03129.D	1	03/23/05	AA	03/18/05	OP12753	GLL120
Run #2							

	Initial Volume	Final Volume
Run #1	1020 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	4.9	2.0	ug/l	
208-96-8	Acenaphthylene	ND	4.9	2.0	ug/l	
120-12-7	Anthracene	ND	4.9	2.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.9	2.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.9	2.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.9	2.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.9	2.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.9	2.0	ug/l	
218-01-9	Chrysene	ND	4.9	2.0	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.9	2.0	ug/l	
206-44-0	Fluoranthene	ND	4.9	2.0	ug/l	
86-73-7	Fluorene	ND	4.9	2.0	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.9	2.0	ug/l	
91-20-3	Naphthalene	ND	4.9	2.0	ug/l	
90-12-0	1-Methylnaphthalene	ND	4.9	2.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.9	2.0	ug/l	
85-01-8	Phenanthrene	ND	4.9	2.0	ug/l	
129-00-0	Pyrene	ND	4.9	2.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	90%		42-123%
84-15-1	o-Terphenyl	96%		51-123%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST-CSFF-EFF		
Lab Sample ID:	F30420-1	**Date Sampled:**	03/16/05
Matrix:	AQ - Ground Water	**Date Received:**	03/17/05
		Percent Solids:	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	< 10	10	ug/l	1	04/05/05	04/05/05	DM	SW846 6010B [1]	SM 3030C [2]
Barium	< 200	200	ug/l	1	04/05/05	04/05/05	DM	SW846 6010B [1]	SM 3030C [2]
Cadmium	< 5.0	5.0	ug/l	1	04/05/05	04/05/05	DM	SW846 6010B [1]	SM 3030C [2]
Chromium	< 10	10	ug/l	1	04/05/05	04/05/05	DM	SW846 6010B [1]	SM 3030C [2]
Iron	< 300	300	ug/l	1	04/05/05	04/05/05	DM	SW846 6010B [1]	SM 3030C [2]
Lead	< 5.0	5.0	ug/l	1	04/05/05	04/05/05	DM	SW846 6010B [1]	SM 3030C [2]
Manganese	< 15	15	ug/l	1	04/05/05	04/05/05	DM	SW846 6010B [1]	SM 3030C [2]
Selenium	< 10	10	ug/l	1	04/05/05	04/05/05	DM	SW846 6010B [1]	SM 3030C [2]

(1) Instrument QC Batch: MA4276
(2) Prep QC Batch: MP7857

RL = Reporting Limit

Report of Analysis

Client Sample ID:	UST-CSFF-EFF		
Lab Sample ID:	F30420-1	**Date Sampled:**	03/16/05
Matrix:	AQ - Ground Water	**Date Received:**	03/17/05
		Percent Solids:	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Hardness, Total as CaCO3	268	4.0	mg/l	1	04/12/05	DM	SW846 6010B/SM 2340B
Solids, Total Dissolved	378	10	mg/l	1	03/23/05	SR	EPA 160.1
Solids, Total Suspended	20.0	4.0	mg/l	1	03/23/05 10:00	SR	EPA 160.2

RL = Reporting Limit

Report of Analysis

Client Sample ID:	UST-CSFF-RWB1		
Lab Sample ID:	F30420-2	**Date Sampled:**	03/15/05
Matrix:	AQ - Ground Water	**Date Received:**	03/17/05
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	CD058783.D	1	03/22/05	AJ	n/a	n/a	GCD2420
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	21.0	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	0.94	1.0	0.50	ug/l	J
1634-04-4	Methyl Tert Butyl Ether	22.3	1.0	0.50	ug/l	
108-88-3	Toluene	0.93	1.0	0.50	ug/l	J
1330-20-7	Xylenes (total)	2.6	3.0	1.0	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	92%		59-129%
98-08-8	aaa-Trifluorotoluene	96%		73-122%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST-CSFF-RWB3		
Lab Sample ID:	F30420-3	**Date Sampled:**	03/15/05
Matrix:	AQ - Ground Water	**Date Received:**	03/17/05
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	CD058767.D	5	03/21/05	AJ	n/a	n/a	GCD2419
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	198	5.0	2.5	ug/l	
108-90-7	Chlorobenzene	ND	5.0	2.5	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.0	2.5	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	2.5	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	2.5	ug/l	
100-41-4	Ethylbenzene	42.7	5.0	2.5	ug/l	
1634-04-4	Methyl Tert Butyl Ether	43.4	5.0	2.5	ug/l	
108-88-3	Toluene	21.8	5.0	2.5	ug/l	
1330-20-7	Xylenes (total)	234	15	5.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	96%		59-129%
98-08-8	aaa-Trifluorotoluene	96%		73-122%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exeeeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a eompound

Report of Analysis

Client Sample ID:	UST-CSFF-RWB4		
Lab Sample ID:	F30420-4	**Date Sampled:**	03/15/05
Matrix:	AQ - Ground Water	**Date Received:**	03/17/05
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD058716.D	1	03/19/05	AJ	n/a	n/a	GCD2417
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	89%		59-129%
98-08-8	aaa-Trifluorotoluene	91%		73-122%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indieates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indieates presumptive evidenee of a compound

Report of Analysis

Client Sample ID:	UST-CSFF-RWC1		
Lab Sample ID:	F30420-5	**Date Sampled:**	03/15/05
Matrix:	AQ - Ground Water	**Date Received:**	03/17/05
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD058717.D	1	03/19/05	AJ	n/a	n/a	GCD2417
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	89%		59-129%
98-08-8	aaa-Trifluorotoluene	92%		73-122%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST-122MW03		
Lab Sample ID:	F30420-6	**Date Sampled:**	03/15/05
Matrix:	AQ - Ground Water	**Date Received:**	03/17/05
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD058718.D	1	03/19/05	AJ	n/a	n/a	GCD2417
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	91%		59-129%
98-08-8	aaa-Trifluorotoluene	92%		73-122%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidenee of a compound

Report of Analysis

Client Sample ID:	UST-122MW03		
Lab Sample ID:	F30420-6	**Date Sampled:**	03/15/05
Matrix:	AQ - Ground Water	**Date Reeeived:**	03/17/05
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD22735.D	1	03/18/05	AG	03/18/05	OP12750	GDD686
Run #2							

	Initial Volume	Final Volume
Run #1	37.1 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0094	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	82%		60-139%

ND = Not detected MDL - Method Deteetion Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST-122MW07		
Lab Sample ID:	F30420-7	**Date Sampled:**	03/15/05
Matrix:	AQ - Ground Water	**Date Received:**	03/17/05
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD058719.D	1	03/19/05	AJ	n/a	n/a	GCD2417
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	90%		59-129%
98-08-8	aaa-Trifluorotoluene	93%		73-122%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST-122MW07		
Lab Sample ID:	F30420-7	**Date Sampled:**	03/15/05
Matrix:	AQ - Ground Water	**Date Received:**	03/17/05
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD22736.D	1	03/18/05	AG	03/18/05	OP12750	GDD686
Run #2							

	Initial Volume	Final Volume
Run #1	37.3 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0094	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	95%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indieates value exceeds calibration range
J = Indicates an estimated value
B = Indieates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST-122MW04		
Lab Sample ID:	F30420-8	**Date Sampled:**	03/15/05
Matrix:	AQ - Ground Water	**Date Received:**	03/17/05
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD058720.D	1	03/19/05	AJ	n/a	n/a	GCD2417
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Diehlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	91%		59-129%
98-08-8	aaa-Trifluorotoluene	92%		73-122%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST-122MW04		
Lab Sample ID:	F30420-8	**Date Sampled:**	03/15/05
Matrix:	AQ - Ground Water	**Date Received:**	03/17/05
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD22739.D	1	03/18/05	AG	03/18/05	OP12750	GDD686
Run #2							

	Initial Volume	Final Volume
Run #1	36.4 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0096	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	90%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST-122MW08		
Lab Sample ID:	F30420-9	**Date Sampled:**	03/15/05
Matrix:	AQ - Ground Water	**Date Received:**	03/17/05
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	CD058721.D	1	03/19/05	AJ	n/a	n/a	GCD2417
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	1.6	3.0	1.0	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	94%		59-129%
98-08-8	aaa-Trifluorotoluene	93%		73-122%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST-122MW08		
Lab Sample ID:	F30420-9	**Date Sampled:**	03/15/05
Matrix:	AQ - Ground Water	**Date Received:**	03/17/05
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD22740.D	1	03/18/05	AG	03/18/05	OP12750	GDD686
Run #2							

	Initial Volume	Final Volume
Run #1	37.0 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0095	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	95%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST-122MW01	**Date Sampled:**	03/15/05
Lab Sample ID:	F30420-10	**Date Received:**	03/17/05
Matrix:	AQ - Ground Water	**Percent Solids:**	n/a
Method:	EPA 601/602		
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	CD058722.D	1	03/19/05	AJ	n/a	n/a	GCD2417
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	8.7	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	8.4	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	1.9	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	13.6	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	95%		59-129%
98-08-8	aaa-Trifluorotoluene	93%		73-122%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST-~~22~~MW01		
Lab Sample ID:	F30420-10	**Date Sampled:**	03/15/05
Matrix:	AQ - Ground Water	**Date Received:**	03/17/05
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD22741.D	1	03/18/05	AG	03/18/05	OP12750	GDD686
Run #2							

	Initial Volume	Final Volume
Run #1	37.5 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0093	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	96%		60-139%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST-13DW01		
Lab Sample ID:	F30420-11	**Date Sampled:**	03/15/05
Matrix:	AQ - Ground Water	**Date Received:**	03/17/05
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	QQ002601.D	1	03/29/05	AB	n/a	n/a	GQQ116
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	7.9	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	10.2	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	1.9	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	16.9	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	103%		59-129%
98-08-8	aaa-Trifluorotoluene	91%		73-122%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST-13DW01		
Lab Sample ID:	F30420-11	**Date Sampled:**	03/15/05
Matrix:	AQ - Ground Water	**Date Received:**	03/17/05
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD22743.D	1	03/18/05	AG	03/18/05	OP12750	GDD686
Run #2							

	Initial Volume	Final Volume
Run #1	37.0 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0095	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	98%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indieates presumptive evidenee of a compound

Report of Analysis

Client Sample ID:	UST-13DW01		
Lab Sample ID:	F30420-11	**Date Sampled:**	03/15/05
Matrix:	AQ - Ground Water	**Date Received:**	03/17/05
Method:	EPA 610 EPA 610	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LL03140.D	40	03/24/05	AA	03/18/05	OP12753	GLL121
Run #2							

	Initial Volume	Final Volume
Run #1	1030 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	84.2	190	78	ug/l	J
208-96-8	Acenaphthylene	ND	190	78	ug/l	
120-12-7	Anthracene	ND	190	78	ug/l	
56-55-3	Benzo(a)anthracene	ND	190	78	ug/l	
50-32-8	Benzo(a)pyrene	ND	190	78	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	190	78	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	190	78	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	190	78	ug/l	
218-01-9	Chrysene	ND	190	78	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	190	78	ug/l	
206-44-0	Fluoranthene	ND	190	78	ug/l	
86-73-7	Fluorene	ND	190	78	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	190	78	ug/l	
91-20-3	Naphthalene	1660	190	78	ug/l	
90-12-0	1-Methylnaphthalene	90.8	190	78	ug/l	J
91-57-6	2-Methylnaphthalene	145	190	78	ug/l	J
85-01-8	Phenanthrene	ND	190	78	ug/l	
129-00-0	Pyrene	ND	190	78	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	0% [a]		42-123%
84-15-1	o-Terphenyl	0% [a]		51-123%

(a) Outside control limits due to dilution.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exeeeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST-122MW09		
Lab Sample ID:	F30420-12	**Date Sampled:**	03/15/05
Matrix:	AQ - Ground Water	**Date Received:**	03/17/05
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	QQ002602.D	1	03/29/05	AB	n/a	n/a	GQQ116
Run #2	CD058724.D	1	03/19/05	AJ	n/a	n/a	GCD2417

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene [b]	ND	40	40	ug/l	
541-73-1	1,3-Dichlorobenzene	9.6	1.0	0.50	ug/l	
106-46-7	1,4-Diehlorobenzene [b]	ND	3.0	3.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	2.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	103%	90%	59-129%
98-08-8	aaa-Trifluorotoluene	90%	91%	73-122%

(a) All hits confirmed by dual column analysis.
(b) Elevated reporting limits due to matrix interference.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indieates an estimated value
B = Indicates analyte found in associated method blank
N = Indieates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST-122MW09		
Lab Sample ID:	F30420-12	**Date Sampled:**	03/15/05
Matrix:	AQ - Ground Water	**Date Received:**	03/17/05
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD22744.D	1	03/18/05	AG	03/18/05	OP12750	GDD686
Run #2							

	Initial Volume	Final Volume
Run #1	37.6 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0093	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	89%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST-122MW09		
Lab Sample ID:	F30420-12	**Date Sampled:**	03/15/05
Matrix:	AQ - Ground Water	**Date Received:**	03/17/05
Method:	EPA 610 EPA 610	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LL03123.D	1	03/23/05	AA	03/22/05	OP12766	GLL120
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.0	2.0	ug/l	
208-96-8	Acenaphthylene	ND	5.0	2.0	ug/l	
120-12-7	Anthracene	ND	5.0	2.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.0	2.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.0	2.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.0	2.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.0	2.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.0	2.0	ug/l	
218-01-9	Chrysene	ND	5.0	2.0	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.0	2.0	ug/l	
206-44-0	Fluoranthene	ND	5.0	2.0	ug/l	
86-73-7	Fluorene	ND	5.0	2.0	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.0	2.0	ug/l	
91-20-3	Naphthalene	36.5	5.0	2.0	ug/l	
90-12-0	1-Methylnaphthalene	33.0	5.0	2.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.0	2.0	ug/l	
85-01-8	Phenanthrene	ND	5.0	2.0	ug/l	
129-00-0	Pyrene	ND	5.0	2.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	95%		42-123%
84-15-1	o-Terphenyl	94%		51-123%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST-CSFF-DW02		
Lab Sample ID:	F30420-13	**Date Sampled:**	03/15/05
Matrix:	AQ - Ground Water	**Date Received:**	03/17/05
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD058784.D	1	03/22/05	AJ	n/a	n/a	GCD2420
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	93%		59-129%
98-08-8	aaa-Trifluorotoluene	94%		73-122%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST-CSFF-DW02		
Lab Sample ID:	F30420-13	**Date Sampled:**	03/15/05
Matrix:	AQ - Ground Water	**Date Received:**	03/17/05
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD22745.D	1	03/18/05	AG	03/18/05	OP12750	GDD686
Run #2							

	Initial Volume	Final Volume
Run #1	37.1 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0094	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	92%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indieates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST-CSFF-DW02		
Lab Sample ID:	F30420-13	**Date Sampled:**	03/15/05
Matrix:	AQ - Ground Water	**Date Received:**	03/17/05
Method:	EPA 610 EPA 610	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LL03141.D	1	03/24/05	AA	03/18/05	OP12753	GLL121
Run #2							

	Initial Volume	Final Volume
Run #1	970 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	24.2	5.2	2.1	ug/l	
208-96-8	Acenaphthylene	ND	5.2	2.1	ug/l	
120-12-7	Anthracene	ND	5.2	2.1	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.2	2.1	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.2	2.1	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.2	2.1	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.2	2.1	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.2	2.1	ug/l	
218-01-9	Chrysene	ND	5.2	2.1	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.2	2.1	ug/l	
206-44-0	Fluoranthene	ND	5.2	2.1	ug/l	
86-73-7	Fluorene	19.7	5.2	2.1	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.2	2.1	ug/l	
91-20-3	Naphthalene	26.8	5.2	2.1	ug/l	
90-12-0	1-Methylnaphthalene	2.3	5.2	2.1	ug/l	J
91-57-6	2-Methylnaphthalene	ND	5.2	2.1	ug/l	
85-01-8	Phenanthrene	ND	5.2	2.1	ug/l	
129-00-0	Pyrene	ND	5.2	2.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	95%		42-123%
84-15-1	o-Terphenyl	110%		51-123%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indieates value exceeds calibration range

J = Indicates an estimated value
B = Indieates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST-CSFF-MW21		
Lab Sample ID:	F30420-14	**Date Sampled:**	03/15/05
Matrix:	AQ - Ground Water	**Date Received:**	03/17/05
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	QQ002604.D	1	03/29/05	AB	n/a	n/a	GQQ116
Run #2	CD058727.D	1	03/19/05	AJ	n/a	n/a	GCD2417
Run #3 [b]	QQ002617.D	2	03/30/05	AB	n/a	n/a	GQQ117

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml
Run #3	5.0 ml

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	58.7	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene [c]	ND	20	20	ug/l	
541-73-1	1,3-Diehlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	33.6	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	102 [d]	2.0	1.0	ug/l	
108-88-3	Toluene	4.7	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	68.2	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Run# 3	Limits
460-00-4	4-Bromofluorobenzene	103%	90%	103%	59-129%
98-08-8	aaa-Trifluorotoluene	94%	92%	95%	73-122%

(a) All hits confirmed by dual column analysis.
(b) Sample analyzed beyond hold time; reported results are considered minimum values.
(c) Elevated reporting limits due to matrix interference.
(d) Result is from Run# 3

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST-CSFF-MW21		
Lab Sample ID:	F30420-14	**Date Sampled:**	03/15/05
Matrix:	AQ - Ground Water	**Date Received:**	03/17/05
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD22746.D	1	03/18/05	AG	03/18/05	OP12750	GDD686
Run #2							

	Initial Volume	Final Volume
Run #1	37.1 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0094	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	104%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds ealibration range
J = Indicates an estimated value
B = Indieates analyte found in assoeiated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST-CSFF-DW06		
Lab Sample ID:	F30420-15	**Date Sampled:**	03/15/05
Matrix:	AQ - Ground Water	**Date Received:**	03/17/05
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	QQ002605.D	1	03/29/05	AB	n/a	n/a	GQQ116
Run #2	CD058769.D	1	03/21/05	AJ	n/a	n/a	GCD2419

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	0.90	1.0	0.50	ug/l	J
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	99%	92%	59-129%
98-08-8	aaa-Trifluorotoluene	92%	92%	73-122%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST-CSFF-DW06		
Lab Sample ID:	F30420-15	**Date Sampled:**	03/15/05
Matrix:	AQ - Ground Water	**Date Received:**	03/17/05
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD22747.D	1	03/18/05	AG	03/18/05	OP12750	GDD686
Run #2							

	Initial Volume	Final Volume
Run #1	37.0 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0095	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	94%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST-CSFF-DW06		
Lab Sample ID:	F30420-15	**Date Sampled:**	03/15/05
Matrix:	AQ - Ground Water	**Date Reeeived:**	03/17/05
Method:	EPA 610 EPA 610	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LL03134.D	1	03/23/05	AA	03/18/05	OP12753	GLL120
Run #2							

	Initial Volume	Final Volume
Run #1	1040 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	4.8	1.9	ug/l	
208-96-8	Acenaphthylene	ND	4.8	1.9	ug/l	
120-12-7	Anthracene	ND	4.8	1.9	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.8	1.9	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.8	1.9	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.8	1.9	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.8	1.9	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.8	1.9	ug/l	
218-01-9	Chrysene	ND	4.8	1.9	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.8	1.9	ug/l	
206-44-0	Fluoranthene	ND	4.8	1.9	ug/l	
86-73-7	Fluorene	ND	4.8	1.9	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.8	1.9	ug/l	
91-20-3	Naphthalene	ND	4.8	1.9	ug/l	
90-12-0	1-Methylnaphthalene	ND	4.8	1.9	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.8	1.9	ug/l	
85-01-8	Phenanthrene	ND	4.8	1.9	ug/l	
129-00-0	Pyrene	ND	4.8	1.9	ug/l	

CAS No.	Surrogate Recoveries	Ruu# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	75%		42-123%
84-15-1	o-Terphenyl	91%		51-123%

ND = Not detcted MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associatcd method blank
N = Indicatcs presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST-CSFF-DUP		
Lab Sample ID:	F30420-16	**Date Sampled:**	03/15/05
Matrix:	AQ - Ground Water	**Date Received:**	03/17/05
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	QQ002606.D	1	03/29/05	AB	n/a	n/a	GQQ116
Run #2	CD058729.D	1	03/19/05	AJ	n/a	n/a	GCD2417

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene [b]	ND	30	30	ug/l	
541-73-1	1,3-Dichlorobenzene	6.1	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene [b]	ND	3.0	3.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	103%	91%	59-129%
98-08-8	aaa-Trifluorotoluene	89%	93%	73-122%

(a) All hits confirmed by dual column analysis.
(b) Elevated reporting limits due to matrix interferenee.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST-CSFF-DUP		
Lab Sample ID:	F30420-16	**Date Sampled:**	03/15/05
Matrix:	AQ - Ground Water	**Date Received:**	03/17/05
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD22748.D	1	03/18/05	AG	03/18/05	OP12750	GDD686
Run #2							

	Initial Volume	Final Volume
Run #1	37.0 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0095	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	88%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in assoeiated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST-CSFF-DUP		
Lab Sample ID:	F30420-16	**Date Sampled:**	03/15/05
Matrix:	AQ - Ground Water	**Date Received:**	03/17/05
Method:	EPA 610 EPA 610	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LL03135.D	1	03/23/05	AA	03/18/05	OP12753	GLL120
Run #2							

	Initial Volume	Fiual Volume
Run #1	980 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.1	2.0	ug/l	
208-96-8	Acenaphthylene	ND	5.1	2.0	ug/l	
120-12-7	Anthracene	ND	5.1	2.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.1	2.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.1	2.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.1	2.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.1	2.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.1	2.0	ug/l	
218-01-9	Chrysene	ND	5.1	2.0	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.1	2.0	ug/l	
206-44-0	Fluoranthene	ND	5.1	2.0	ug/l	
86-73-7	Fluorene	ND	5.1	2.0	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.1	2.0	ug/l	
91-20-3	Naphthalene	40.6	5.1	2.0	ug/l	
90-12-0	1-Methylnaphthalene	21.6	5.1	2.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.1	2.0	ug/l	
85-01-8	Phenanthrene	ND	5.1	2.0	ug/l	
129-00-0	Pyrene	ND	5.1	2.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	95%		42-123%
84-15-1	o-Terphenyl	96%		51-123%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value excceds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST-CSFF-MW11		
Lab Sample ID:	F30420-17	**Date Sampled:**	03/16/05
Matrix:	AQ - Ground Water	**Date Received:**	03/17/05
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	QQ002607.D	1	03/29/05	AB	n/a	n/a	GQQ116
Run #2	CD058730.D	1	03/19/05	AJ	n/a	n/a	GCD2417

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	0.82	1.0	0.50	ug/l	J
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	97%	90%	59-129%
98-08-8	aaa-Trifluorotoluene	91%	92%	73-122%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST-CSFF-MW11		
Lab Sample ID:	F30420-17	**Date Sampled:**	03/16/05
Matrix:	AQ - Ground Water	**Date Received:**	03/17/05
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD22749.D	1	03/18/05	AG	03/18/05	OP12750	GDD686
Run #2							

	Initial Volume	Final Volume
Run #1	36.5 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0096	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	90%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST-CSFF-MW14		
Lab Sample ID:	F30420-18	**Date Sampled:**	03/16/05
Matrix:	AQ - Ground Water	**Date Received:**	03/17/05
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD058731.D	1	03/19/05	AJ	n/a	n/a	GCD2417
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	90%		59-129%
98-08-8	aaa-Trifluorotoluene	92%		73-122%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST-CSFF-MW14		
Lab Sample ID:	F30420-18	**Date Sampled:**	03/16/05
Matrix:	AQ - Ground Water	**Date Received:**	03/17/05
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD22750.D	1	03/18/05	AG	03/18/05	OP12750	GDD686
Run #2							

	Initial Volume	Final Volume
Run #1	36.3 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0096	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	89%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indieates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST-CSFF-MW12		
Lab Sample ID:	F30420-19	**Date Sampled:**	03/16/05
Matrix:	AQ - Ground Water	**Date Received:**	03/17/05
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD058732.D	1	03/19/05	AJ	n/a	n/a	GCD2417
Run #2							

	Purge Volnme
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	92%		59-129%
98-08-8	aaa-Trifluorotoluene	93%		73-122%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST-CSFF-MW12		
Lab Sample ID:	F30420-19	**Date Sampled:**	03/16/05
Matrix:	AQ - Ground Water	**Date Received:**	03/17/05
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD22751.D	1	03/18/05	AG	03/18/05	OP12750	GDD686
Run #2							

	Initial Volume	Final Volume
Run #1	36.6 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0096	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	98%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indieates presumptive evidenee of a compound

Report of Analysis

Client Sample ID:	UST-CSFF-MW16		
Lab Sample ID:	F30420-20	**Date Sampled:**	03/16/05
Matrix:	AQ - Ground Water	**Date Received:**	03/17/05
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	CD058771.D	1	03/21/05	AJ	n/a	n/a	GCD2419
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	64.4	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Diehlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Diehlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	8.6	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	27.3	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobcnzene	98%		59-129%
98-08-8	aaa-Trifluorotoluene	101%		73-122%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a eompound

Report of Analysis

Client Sample ID:	UST-CSFF-MW16		
Lab Sample ID:	F30420-20	**Date Sampled:**	03/16/05
Matrix:	AQ - Ground Water	**Date Received:**	03/17/05
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD22752.D	1	03/18/05	AG	03/18/05	OP12750	GDD686
Run #2							

	Initial Volume	Final Volume
Run #1	36.5 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0096	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	97%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indieates value exceeds ealibration range
J = Indicates an estimated value
B = Indieates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST-CSFF-MW03		
Lab Sample ID:	F30420-21	**Date Sampled:**	03/16/05
Matrix:	AQ - Ground Water	**Date Received:**	03/17/05
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD058772.D	1	03/21/05	AJ	n/a	n/a	GCD2419
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	91%		59-129%
98-08-8	aaa-Trifluorotoluene	90%		73-122%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST-CSFF-MW03		
Lab Sample ID:	F30420-21	**Date Sampled:**	03/16/05
Matrix:	AQ - Ground Water	**Date Received:**	03/17/05
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD22754.D	1	03/18/05	AG	03/18/05	OP12750	GDD686
Run #2							

	Initial Volume	Final Volume
Run #1	36.1 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0097	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	99%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST-CSFF-MW24		
Lab Sample ID:	F30420-22	**Date Sampled:**	03/16/05
Matrix:	AQ - Ground Water	**Date Received:**	03/17/05
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Bateh	Analytical Batch
Run #1 [a]	CD058785.D	2	03/22/05	AJ	n/a	n/a	GCD2420
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	175	2.0	1.0	ug/l	
108-90-7	Chlorobenzene	ND	2.0	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	2.0	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	2.0	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	2.0	1.0	ug/l	
100-41-4	Ethylbenzene	79.4	2.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	36.9	2.0	1.0	ug/l	
108-88-3	Toluene	47.1	2.0	1.0	ug/l	
1330-20-7	Xylenes (total)	244	6.0	2.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	98%		59-129%
98-08-8	aaa-Trifluorotoluene	103%		73-122%

(a) All hits confirmed by GC/MS.

ND = Not detcctcd MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicatcs presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST-CSFF-MW24		
Lab Sample ID:	F30420-22	**Date Sampled:**	03/16/05
Matrix:	AQ - Ground Water	**Date Received:**	03/17/05
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD22755.D	1	03/18/05	AG	03/18/05	OP12750	GDD686
Run #2							

	Initial Volume	Final Volume
Run #1	36.8 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0095	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	108%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST-122MW11		
Lab Sample ID:	F30420-23	**Date Sampled:**	03/16/05
Matrix:	AQ - Ground Water	**Date Received:**	03/17/05
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytieal Batch
Run #1	CD058774.D	1	03/22/05	AJ	n/a	n/a	GCD2419
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	92%		59-129%
98-08-8	aaa-Trifluorotoluene	91%		73-122%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indieates analyte found in assoeiated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST-122MW11		
Lab Sample ID:	F30420-23	**Date Sampled:**	03/16/05
Matrix:	AQ - Ground Water	**Date Received:**	03/17/05
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD22756.D	1	03/18/05	AG	03/18/05	OP12750	GDD686
Run #2							

	Initial Volume	Final Volume
Run #1	36.9 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.019	0.0095	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	102%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exeeeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	F30420-24	**Date Sampled:**	03/16/05
Matrix:	AQ - Trip Blank Water	**Date Received:**	03/17/05
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD058775.D	1	03/22/05	AJ	n/a	n/a	GCD2419
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Diehlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoverics	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	91%		59-129%
98-08-8	aaa-Trifluorotoluene	92%		73-122%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

CHAIN OF CUSTODY

F30420

ACCUTEST Laboratories
4405 VINELAND ROAD • SUITE C-15
ORLANDO, FL 32811
TEL: 407-425-6700 • FAX: 407-425-0707

ACCUTEST JOB #

CLIENT INFORMATION

NAME: Engineering & Environment
ADDRESS: 824 Gumbranch Rd Ste S
CITY: Jacksonville STATE: NC ZIP: 28540
SEND REPORT TO: Bill Morris
PHONE #: (910) 450-9301

FACILITY INFORMATION

PROJECT NAME: Campbell Street Fuel Farm (CSFF)
LOCATION: MCAS New River
PROJECT NO.: CTO - 015
FAX #: (910) 450-9302
LD03-016

ANALYTICAL INFORMATION

ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	DATE	TIME	SAMPLED BY:	MATRIX	# OF BOTTLES	PRESERVATION: NO	HCL	H2SO4	HNO3	OTHER	LAB USE	EPA 602	EPA 610	6010 (Metals)	EDB (504.1)
(1)	UST-CSFF-EFF	3/16/05	1340	TE	GW	7	X		X		X		X	X	X	X
(2)	UST-CSFF-RWB1	3/16/05	1510			3	X						X			
(3)	UST-CSFF-RWB3	3/16/05	1520			3	X						X			
(4)	UST-CSFF-RWB4	3/16/05	1500			3	X						X			
(5)	UST-CSFF-RWC1	3/16/05	1255			3	X						X			
(6)	UST-122MW03	3/15/05	1085			6	X				X		X		X	
(7)	UST-122MW07	3/15/05	1050			6	X				X		X		X	
(8)	UST-122MW04	3/15/05	1105			6	X				X		X		X	
(9)	UST-122MW08	3/15/05	1150			6	X				X		X		X	
(10)	UST-122MW01 (DUP)	3/15/05	1245	↓	↓	6	X				X		X		X	
(11)	UST-130MW01 (MW)	3/15/05	1245	TE	GW	8	X			X	X		X	X	X	

MATRIX CODES

DW - DRINKING WATER
GW - GROUND WATER
WW - WASTE WATER
SO - SOIL
SL - SLUDGE
OL - OIL
LIQ - OTHER LIQUID
SOL - OTHER SOLID

LAB USE ONLY

DATA TURNAROUND INFORMATION

☒ STANDARD
☐ 48 HOUR RUSH
☐ 24 HOUR EMERGENCY
☐ OTHER _____
APPROVED BY:
EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED

DATA DELIVERABLE INFORMATION

☐ STANDARD
☐ COMMERCIAL "B"
☐ DISK DELIVERABLE
☐ STATE FORMS
☒ OTHER (SPECIFY) NEESA 4

COMMENTS/REMARKS

Pg 1 of 3

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY

RELINQUISHED BY: (COURIER) FED EX	DATE/TIME: 3/16/05	RECEIVED BY: 1. FX	RELINQUISHED BY: 2. FX	DATE/TIME: 3/17/05	RECEIVED BY: 2. Calie Ng
RELINQUISHED BY: 3.	DATE/TIME:	RECEIVED BY: 3.	RELINQUISHED BY: 4.	DATE/TIME:	RECEIVED BY: 4.
RELINQUISHED BY: 5.	DATE/TIME:	RECEIVED BY: 5.	SEAL #	PRESERVE WHERE APPLICABLE ☐	ON ICE ☐	TEMPERATURE °C

4.1 4

F30420: Chain of Custody
Page 1 of 4

CHAIN OF CUSTODY

ACCUTEST Laboratories

4405 VINELAND ROAD • SUITE C-15
ORLANDO, FL 32811
TEL: 407-425-6700 • FAX: 407-425-0707

ACCUTEST JOB #: F30420
ACCUTEST QUOTE #:

CLIENT INFORMATION

NAME: Engineering & Environment
ADDRESS: 324 Gumbranch Rd Ste 5
CITY: Jacksonville STATE: NC ZIP: 28540
SEND REPORT TO: Bill Morris
PHONE #: (910) 450-9301

FACILITY INFORMATION

PROJECT NAME: Campbell St Fuel Farm (CSFF)
LOCATION: MCAS New River
PROJECT NO.: CTO-015
P.O. #: 1003-016
FAX #: (910) 450-9302

ANALYTICAL INFORMATION

ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION DATE	TIME	SAMPLED BY:	MATRIX	# OF BOTTLES	PRESERVATION HCl	HNO3	H2SO4	NONE	MeOH	EPA 602	EDB (504.1)	EPA 610	LAB USE ONLY
12	UST-122MW09	3/15/05	1325	TE	GW	6	X			X		X	X		
13	UST-CSFF-DW02	3/15/05	1430	TE	GW	8	X			X	X	X	X	X	
14	UST-CSFF-MW21	3/15/05	1450	TE	GW	6	X			X		X	X		
15	UST-CSFF-DW06	3/15/05	1640	TE	GW	8	X			X	X	X	X	X	
16	UST-CSFF-DUP	3/15/05		TE	GW	8	X			X	X	X	X	X	
17	UST-CSFF-MW11	3/16/05	0940	TE	GW	6	X			X		X	X		
18	UST-CSFF-MW14	3/16/05	1020	TE	GW	6	X			X		X	X		
19	UST-CSFF-MW12	3/16/05	1055	TE	GW	6	X			X		X	X		
20	UST-CSFF-MW16	3/16/05	1115	TE	GW	6	X			X		X	X		
21	UST-CSFF-MW03	3/16/05	1130	TE	GW	6	X			X		X	X		
22	UST-CSFF-MW24	3/16/05	1200	TE	GW	6	X			X		X	X		

MATRIX CODES

DW - DRINKING WATER
GW - GROUND WATER
WW - WASTE WATER
SO - SOIL
SL - SLUDGE
OI - OIL
LIQ - OTHER LIQUID
SOL - OTHER SOLID

DATA TURNAROUND INFORMATION

☒ STANDARD
☐ 48 HOUR RUSH
☐ 24 HOUR EMERGENCY
☐ OTHER
APPROVED BY:

EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED

DATA DELIVERABLE INFORMATION

☐ STANDARD
☐ COMMERCIAL "B"
☐ DISK DELIVERABLE
☐ STATE FORMS
☒ OTHER (SPECIFY) NEESA 4

COMMENTS/REMARKS

pg 2 of 3

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESION, INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE TIME: 1700 3/16/05	RECEIVED BY: 1.	RELINQUISHED BY: 2.	DATE TIME: 3/17/05	RECEIVED BY: 2.
RELINQUISHED BY: 3.	DATE TIME:	RECEIVED BY: 3.	RELINQUISHED BY: 4.	DATE TIME:	RECEIVED BY: 4.
RELINQUISHED BY: 5.	DATE TIME:	RECEIVED BY: 6.	SEAL #	PRESERVE WHERE APPLICABLE ☐	ON ICE ☐	TEMPERATURE ____ C

4.1
4

F30420: Chain of Custody
Page 2 of 4

ACCUTEST Laboratories

CHAIN OF CUSTODY

4405 VINELAND ROAD • SUITE C-15
ORLANDO, FL 32811
TEL: 407-425-6700 , FAX: 407-425-0707

ACCUTEST JOB #: F30420

CLIENT INFORMATION

NAME: Engineering & Environ
ADDRESS: 3804 Gumbranch Rd Ste 5
CITY: Jacksonville STATE: NC ZIP: 28540
SEND REPORT TO: Bill Morris
PHONE #: (910) 450-9381

FACILITY INFORMATION

PROJECT NAME: Campbell St Fuel Farm (CSF)
LOCATION: MCAS New River
PROJECT NO.: CTO-015
FAX #: (910) 450-9302

ANALYTICAL INFORMATION

EPA 602
EDB (Soil)

MATRIX CODES

DW - DRINKING WATER
GW - GROUND WATER
WW - WASTE WATER
SO - SOIL
SL - SLUDGE
OI - OIL
LIQ - OTHER LIQUID
SOL - OTHER SOLID

ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION DATE	COLLECTION TIME	SAMPLED BY:	MATRIX	# OF BOTTLES	PRESERVATION HCl	PRESERVATION HNO3	PRESERVATION H2SO4	PRESERVATION NONE	PRESERVATION NaHSO4	EPA 602	EDB (Soil)	LAB USE ONLY
(23)	UST-122MW11	3/16/05	1220	TE	GW	6	X				X	X	X	
	TEMP BLANKS	"	1600	LAB	N	3				X				
(24)	TRIP BLANKS	"	1600	LAB		4	X					X		

DATA TURNAROUND INFORMATION

- [X] STANDARD
- [ ] 48 HOUR RUSH
- [ ] 24 HOUR EMERGENCY
- [ ] OTHER

APPROVED BY:

EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED

DATA DELIVERABLE INFORMATION

- [ ] STANDARD
- [ ] COMMERCIAL "B"
- [ ] DISK DELIVERABLE
- [ ] STATE FORMS
- [X] OTHER (SPECIFY) NEESA 4

COMMENTS/REMARKS

By 3 of 3

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE TIME:	RECEIVED BY:
1.	1700 3/16/05	1. FT
RELINQUISHED BY: 3.	DATE TIME:	RECEIVED BY: 3.
RELINQUISHED BY: 5.	DATE TIME:	RECEIVED BY: 5.

RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
2. FT	3/17/05	2.
RELINQUISHED BY: 4.	DATE TIME:	RECEIVED BY: 4.

SEAL # | PRESERVE WHERE APPLICABLE ☐ | ON ICE ☐ | TEMPERATURE ____ C

F30420: Chain of Custody
Page 3 of 4

ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: F30420 CLIENT: EA + EW,Ro PROJECT: Campbell St

DATE/TIME RECEIVED: 3/17/05 # OF COOLERS RECEIVED: 3 COOLER TEMPS: 2.6 2.8 2.4

METHOD OF DELIVERY: (FEDEX) UPS ACCUTEST COURIER GREYHOUND DELIVERY OTHER

AIRBILL NUMBERS: _____

COOLER INFORMATION

- [X] CUSTODY SEAL NOT PRESENT/INTACT
- [ ] NO COC RECEIVED
- [X] ANALYSES NOT MARKED ON COC
- [ ] ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- [ ] SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- [ ] TEMPERATURE CRITERIA NOT MET

TRIP BLANK INFORMATION

- [X] TRIP BLANK NOT PROVIDED
- [ ] TRIP BLANK NOT ON COC
- [ ] TRIP BLANK INTACT
- [ ] TRIP BLANK NOT INTACT
- [ ] RECEIVED WATER TRIP BLANK
- [ ] RECEIVED SOIL TRIP BLANK

SAMPLE INFORMATION

- [ ] SAMPLE LABELS PRESENT ON ALL BOTTLES
- [ ] CORRECT NUMBER OF CONTAINERS USED
- [ ] SAMPLE RECEIVED IMPROPERLY PRESERVED
- [ ] INSUFFICIENT VOLUME FOR ANALYSIS
- [ ] SAMPLE RECEIVED PAST HOLD TIME
- [ ] TIMES ON COC DON'T MATCH LABEL
- [ ] ID'S ON COC DON'T MATCH LABEL
- [ ] VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
- [X] BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
- [ ] NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
- [ ] UNCLEAR FILTERING INSTRUCTIONS
- [ ] UNCLEAR COMPOSITING INSTRUCTIONS
- [ ] SAMPLE(S) RECEIVED BROKEN
- [ ] % SOLIDS JAR NOT RECEIVED

SOIL INFORMATION

NUMBER OF ENCORES ? 0

NUMBER OF 5035 FIELD KITS ? 0

SUMMARY OF COMMENTS: UST-122MW09 @ 13:25 recieved 2 ambers for 610 not marked on COC (MSC)

TECHNICIAN SIGNATURE/DATE Carla B 3/17/05 TECHNICIAN SIGNATURE/DATE 3/17/05

ASBD02/04/05

4.1 4

F30420: Chain of Custody
Page 4 of 4

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: F30420
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GCD2417-MB	CD058710.D	1	03/18/05	AJ	n/a	n/a	GCD2417

The QC reported here applies to the following samples: **Method:** EPA 601/602

F30420-1, F30420-4, F30420-5, F30420-6, F30420-7, F30420-8, F30420-9, F30420-10, F30420-12, F30420-14, F30420-16, F30420-17, F30420-18, F30420-19

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Diehlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	90%	59-129%
98-08-8	aaa-Trifluorotoluene	94%	73-122%

Method Blank Summary

Job Number: F30420
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GCD2419-MB	CD058765.D	1	03/21/05	AJ	n/a	n/a	GCD2419

The QC reported here applies to the following samples: **Method:** EPA 601/602

F30420-15, F30420-20, F30420-21, F30420-23, F30420-24

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	91%	59-129%
98-08-8	aaa-Trifluorotoluene	92%	73-122%

Method Blank Summary

Job Number: F30420
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GCD2420-MB	CD058782.D	1	03/22/05	AJ	n/a	n/a	GCD2420

The QC reported here applies to the following samples: **Method:** EPA 601/602

F30420-22

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	91%	59-129%
98-08-8	aaa-Trifluorotoluene	92%	73-122%

Method Blank Summary

Job Number: F30420
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GQQ116-MB	QQ002583.D	1	03/29/05	AB	n/a	n/a	GQQ116

The QC reported here applies to the following samples: **Method:** EPA 601/602

F30420-11, F30420-12, F30420-14, F30420-15, F30420-16, F30420-17

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	97%	59-129%
98-08-8	aaa-Trifluorotoluene	96%	73-122%

Method Blank Summary

Job Number: F30420
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GQQ117-MB	QQ002613.D	1	03/30/05	AB	n/a	n/a	GQQ117

The QC reported here applies to the following samples: **Method:** EPA 601/602

F30420-14

CAS No.	Compound	Result	RL	MDL	Units	Q
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	97%	59-129%
98-08-8	aaa-Trifluorotoluene	96%	73-122%

Method Blank Summary

Job Number: F30420
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP12750-MB	DD22732.D	1	03/18/05	AG	03/18/05	OP12750	GDD686

The QC reported here applies to the following samples: **Method:** EPA 504.1

F30420-6, F30420-7, F30420-8, F30420-9, F30420-10, F30420-11, F30420-12, F30420-13, F30420-14, F30420-15, F30420-16, F30420-17, F30420-18, F30420-19, F30420-20, F30420-21, F30420-22, F30420-23

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.020	0.010	ug/l	

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	95%	60-139%

Blank Spike Summary

Job Number: F30420
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GCD2417-BS	CD058709.D	1	03/18/05	AJ	n/a	n/a	GCD2417

5.2

The QC reported here applies to the following samples: **Method:** EPA 601/602

F30420-1, F30420-4, F30420-5, F30420-6, F30420-7, F30420-8, F30420-9, F30420-10, F30420-12, F30420-14, F30420-16, F30420-17, F30420-18, F30420-19

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	20	18.4	92	86-121
108-90-7	Chlorobenzene	20	19.0	95	81-119
95-50-1	1,2-Dichlorobenzene	20	18.8	94	75-120
541-73-1	1,3-Dichlorobenzene	20	18.8	94	77-121
106-46-7	1,4-Dichlorobenzene	20	17.4	87	75-122
100-41-4	Ethylbenzene	20	18.1	91	81-126
1634-04-4	Methyl Tert Butyl Ether	20	16.6	83	76-117
108-88-3	Toluene	20	17.5	88	82-123
1330-20-7	Xylenes (total)	60	52.8	88	82-125

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	95%	59-129%
98-08-8	aaa-Trifluorotoluene	95%	73-122%

Blank Spike Summary

Job Number: F30420
Account: EEINCJX EE1
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GCD2419-BS	CD058764.D	1	03/21/05	AJ	n/a	n/a	GCD2419

The QC reported here applies to the following samples: **Method:** EPA 601/602

F30420-15, F30420-20, F30420-21, F30420-23, F30420-24

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	20	19.7	99	86-121
108-90-7	Chlorobenzene	20	20.4	102	81-119
95-50-1	1,2-Dichlorobeuzene	20	20.3	102	75-120
541-73-1	1,3-Dichlorobenzene	20	20.4	102	77-121
106-46-7	1,4-Dichlorobenzene	20	18.8	94	75-122
100-41-4	Ethylbenzene	20	19.4	97	81-126
1634-04-4	Methyl Tert Butyl Ether	20	19.3	97	76-117
108-88-3	Toluene	20	18.9	95	82-123
1330-20-7	Xylenes (total)	60	57.1	95	82-125

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	97%	59-129%
98-08-8	aaa-Trifluorotoluene	95%	73-122%

Blank Spike Summary

Job Number: F30420
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GCD2420-BS	CD058781.D	1	03/22/05	AJ	n/a	n/a	GCD2420

The QC reported here applies to the following samples: **Method:** EPA 601/602

F30420-22

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	20	18.8	94	86-121
108-90-7	Chlorobenzene	20	19.7	99	81-119
95-50-1	1,2-Dichlorobenzene	20	19.2	96	75-120
541-73-1	1,3-Dichlorobenzene	20	19.5	98	77-121
106-46-7	1,4-Dichlorobenzene	20	18.2	91	75-122
100-41-4	Ethylbenzene	20	18.6	93	81-126
1634-04-4	Methyl Tert Butyl Ether	20	16.9	85	76-117
108-88-3	Toluene	20	18.1	91	82-123
1330-20-7	Xylenes (total)	60	54.7	91	82-125

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	98%	59-129%
98-08-8	aaa-Trifluorotoluene	94%	73-122%

Blank Spike Summary

Job Number: F30420
Account: EEINCJX EE1
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GQQ116-BS	QQ002582.D	1	03/29/05	AB	n/a	n/a	GQQ116

The QC reported here applies to the following samples: **Method:** EPA 601/602

F30420-11, F30420-12, F30420-14, F30420-15, F30420-16, F30420-17

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	20	21.6	108	86-121
108-90-7	Chlorobenzene	20	22.2	111	81-119
95-50-1	1,2-Dichlorobenzene	20	21.1	106	75-120
541-73-1	1,3-Dichlorobenzene	20	21.6	108	77-121
106-46-7	1,4-Dichlorobenzene	20	20.3	102	75-122
100-41-4	Ethylbenzene	20	22.2	111	81-126
1634-04-4	Methyl Tert Butyl Ether	20	22.3	112	76-117
108-88-3	Toluene	20	21.9	110	82-123
1330-20-7	Xylenes (total)	60	65.6	109	82-125

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	97%	59-129%
98-08-8	aaa-Trifluorotoluene	95%	73-122%

Blank Spike Summary

Job Number: F30420
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GQQ117-BS	QQ002612.D	1	03/30/05	AB	n/a	n/a	GQQ117

The QC reported here applies to the following samples: **Method:** EPA 601/602

F30420-14

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
1634-04-4	Methyl Tert Butyl Ether	20	22.5	113	76-117

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	101%	59-129%
98-08-8	aaa-Trifluorotoluene	99%	73-122%

Blank Spike Summary

Job Number: F30420
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP12750-BS	DD22733.D	1	03/18/05	AG	03/18/05	OP12750	GDD686

The QC reported here applies to the following samples: **Method:** EPA 504.1

F30420-6, F30420-7, F30420-8, F30420-9, F30420-10, F30420-11, F30420-12, F30420-13, F30420-14, F30420-15, F30420-16, F30420-17, F30420-18, F30420-19, F30420-20, F30420-21, F30420-22, F30420-23

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
106-93-4	1,2-Dibromoethane	0.25	0.20	80	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	99%	60-139%

Blank Spike Summary

Job Number: F30420
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Bateh	Analytical Batch
OP12750-BS2	DD22734.D	1	03/18/05	AG	03/18/05	OP12750	GDD686

The QC reported here applies to the following samples: **Method:** EPA 504.1

F30420-6, F30420-7, F30420-8, F30420-9, F30420-10, F30420-11, F30420-12, F30420-13, F30420-14, F30420-15, F30420-16, F30420-17, F30420-18, F30420-19, F30420-20, F30420-21, F30420-22, F30420-23

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
106-93-4	1,2-Dibromoethane	0.25	0.21	84	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	95%	60-139%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F30420
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F30420-19MS	CD058733.D	1	03/19/05	AJ	n/a	n/a	GCD2417
F30420-19MSD	CD058734.D	1	03/19/05	AJ	n/a	n/a	GCD2417
F30420-19	CD058732.D	1	03/19/05	AJ	n/a	n/a	GCD2417

The QC reported here applies to the following samples: **Method:** EPA 601/602

F30420-1, F30420-4, F30420-5, F30420-6, F30420-7, F30420-8, F30420-9, F30420-10, F30420-12, F30420-14, F30420-16, F30420-17, F30420-18, F30420-19

CAS No.	Compound	F30420-19 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND		20	19.8	99	19.6	98	1	77-125/6
108-90-7	Chlorobenzene	ND		20	20.1	101	20.0	100	0	78-120/8
95-50-1	1,2-Dichlorobenzene	ND		20	20.9	105	20.7	104	1	69-125/7
541-73-1	1,3-Dichlorobenzene	ND		20	20.9	105	20.5	103	2	71-126/7
106-46-7	1,4-Dichlorobenzene	ND		20	23.4	117	23.0	115	2	67-129/7
100-41-4	Ethylbenzene	ND		20	19.0	95	18.6	93	2	74-127/6
1634-04-4	Methyl Tert Butyl Ether	ND		20	18.7	94	19.2	96	3	66-127/9
108-88-3	Toluene	ND		20	19.0	95	18.9	95	1	77-124/5
1330-20-7	Xylenes (total)	ND		60	56.2	94	55.1	92	2	76-125/5

CAS No.	Surrogate Recoveries	MS	MSD	F30420-19	Limits
460-00-4	4-Bromofluorobenzene	96%	97%	92%	59-129%
98-08-8	aaa-Trifluorotoluene	96%	97%	93%	73-122%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F30420
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F30420-2MS	CD058776.D	5	03/22/05	AJ	n/a	n/a	GCD2419
F30420-2MSD	CD058777.D	5	03/22/05	AJ	n/a	n/a	GCD2419

The QC reported here applies to the following samples: **Method:** EPA 601/602

F30420-15, F30420-20, F30420-21, F30420-23, F30420-24

CAS No.	Compound	ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene			100	112	93	112	93	0	77-125/6
108-90-7	Chlorobenzene			100	96.7	97	97.2	97	1	78-120/8
95-50-1	1,2-Dichlorobenzene			100	94.5	95	97.0	97	3	69-125/7
541-73-1	1,3-Dichlorobenzene			100	93.9	94	95.0	95	1	71-126/7
106-46-7	1,4-Dichlorobenzene			100	87.7	88	88.5	89	1	67-129/7
100-41-4	Ethylbenzene			100	90.0	90	90.9	91	1	74-127/6
1634-04-4	Methyl Tert Butyl Ether			100	114	91	120	97	5	66-127/9
108-88-3	Toluene			100	89.8	90	90.1	90	0	77-124/5
1330-20-7	Xylenes (total)			300	266	89	268	89	1	76-125/5

CAS No.	Surrogate Recoveries	MS	MSD	Limits
460-00-4	4-Bromofluorobenzene	95%	96%	59-129%
98-08-8	aaa-Trifluorotoluene	93%	94%	73-122%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F30420
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F30420-22MS	CD058786.D	2	03/22/05	AJ	n/a	n/a	GCD2420
F30420-22MSD	CD058787.D	2	03/22/05	AJ	n/a	n/a	GCD2420
F30420-22 [a]	CD058785.D	2	03/22/05	AJ	n/a	n/a	GCD2420

The QC reported here applies to the following samples: **Method:** EPA 601/602

F30420-22

CAS No.	Compound	F30420-22 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	175		40	216	103	213	95	1	77-125/6
108-90-7	Chlorobenzene	ND		40	40.5	101	40.0	100	1	78-120/8
95-50-1	1,2-Diehlorobenzene	ND		40	42.1	105	41.7	104	1	69-125/7
541-73-1	1,3-Diehlorobenzene	ND		40	42.8	107	42.8	107	0	71-126/7
106-46-7	1,4-Dichlorobenzene	ND		40	41.6	104	41.3	103	1	67-129/7
100-41-4	Ethylbenzene	79.4		40	116	92	116	92	0	74-127/6
1634-04-4	Methyl Tert Butyl Ether	36.9		40	60.8	60*	59.0	55*	3	66-127/9
108-88-3	Toluene	47.1		40	82.6	89	82.3	88	0	77-124/5
1330-20-7	Xylenes (total)	244		120	358	95	355	93	1	76-125/5

CAS No.	Surrogate Recoveries	MS	MSD	F30420-22	Limits
460-00-4	4-Bromofluorobenzene	99%	100%	98%	59-129%
98-08-8	aaa-Trifluorotoluene	102%	102%	103%	73-122%

(a) All hits confirmed by GC/MS.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F30420
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP12750-MS	DD22737.D	1	03/18/05	AG	03/18/05	OP12750	GDD686
OP12750-MSD	DD22738.D	1	03/18/05	AG	03/18/05	OP12750	GDD686
F30420-7	DD22736.D	1	03/18/05	AG	03/18/05	OP12750	GDD686

The QC reported here applies to the following samples: **Method:** EPA 504.1

F30420-6, F30420-7, F30420-8, F30420-9, F30420-10, F30420-11, F30420-12, F30420-13, F30420-14, F30420-15, F30420-16, F30420-17, F30420-18, F30420-19, F30420-20, F30420-21, F30420-22, F30420-23

CAS No.	Compound	F30420-7 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
106-93-4	1,2-Dibromoethane	ND		0.234	0.19	81	0.18	76	5	65-135/25

CAS No.	Surrogate Recoveries	MS	MSD	F30420-7	Limits
460-00-4	4-Bromofluorobenzene	94%	92%	95%	60-139%

Volatile Surrogate Recovery Summary

Job Number: F30420
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Method: EPA 601/602 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S2 [a]
F30420-1	CD058712.D	92.0	96.0
F30420-2	CD058783.D	92.0	96.0
F30420-3	CD058767.D	96.0	96.0
F30420-4	CD058716.D	89.0	91.0
F30420-5	CD058717.D	89.0	92.0
F30420-6	CD058718.D	91.0	92.0
F30420-7	CD058719.D	90.0	93.0
F30420-8	CD058720.D	91.0	92.0
F30420-9	CD058721.D	94.0	93.0
F30420-10	CD058722.D	95.0	93.0
F30420-11	QQ002601.D	103.0	91.0
F30420-12	QQ002602.D	103.0	90.0
F30420-12	CD058724.D	90.0	91.0
F30420-13	CD058784.D	93.0	94.0
F30420-14	QQ002604.D	103.0	94.0
F30420-14	QQ002617.D	103.0	95.0
F30420-14	CD058727.D	90.0	92.0
F30420-15	CD058769.D	92.0	92.0
F30420-15	QQ002605.D	99.0	92.0
F30420-16	QQ002606.D	103.0	89.0
F30420-16	CD058729.D	91.0	93.0
F30420-17	QQ002607.D	97.0	91.0
F30420-17	CD058730.D	90.0	92.0
F30420-18	CD058731.D	90.0	92.0
F30420-19	CD058732.D	92.0	93.0
F30420-20	CD058771.D	98.0	101.0
F30420-21	CD058772.D	91.0	90.0
F30420-22	CD058785.D	98.0	103.0
F30420-23	CD058774.D	92.0	91.0
F30420-24	CD058775.D	91.0	92.0
F30420-19MS	CD058733.D	96.0	96.0
F30420-19MSD	CD058734.D	97.0	97.0
F30420-22MS	CD058786.D	99.0	102.0
F30420-22MSD	CD058787.D	100.0	102.0
F30420-2MS	CD058776.D	95.0	93.0
F30420-2MSD	CD058777.D	96.0	94.0
GCD2417-BS	CD058709.D	95.0	95.0
GCD2417-MB	CD058710.D	90.0	94.0
GCD2419-BS	CD058764.D	97.0	95.0
GCD2419-MB	CD058765.D	91.0	92.0

Volatile Surrogate Recovery Summary

Job Number: F30420
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Method: EPA 601/602 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S2 [a]
GCD2420-BS	CD058781.D	98.0	94.0
GCD2420-MB	CD058782.D	91.0	92.0
GQQ116-BS	QQ002582.D	97.0	95.0
GQQ116-MB	QQ002583.D	97.0	96.0
GQQ117-BS	QQ002612.D	101.0	99.0
GQQ117-MB	QQ002613.D	97.0	96.0

Surrogate Compounds	Recovery Limits
S1 = 4-Bromofluorobenzene	59-129%
S2 = aaa-Trifluorotoluene	73-122%

(a) Reeovery from GC signal #2

Volatile Surrogate Recovery Summary

Job Number: F30420
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Method: EPA 504.1 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]
F30420-6	DD22735.D	82.0
F30420-7	DD22736.D	95.0
F30420-8	DD22739.D	90.0
F30420-9	DD22740.D	95.0
F30420-10	DD22741.D	96.0
F30420-11	DD22743.D	98.0
F30420-12	DD22744.D	89.0
F30420-13	DD22745.D	92.0
F30420-14	DD22746.D	104.0
F30420-15	DD22747.D	94.0
F30420-16	DD22748.D	88.0
F30420-17	DD22749.D	90.0
F30420-18	DD22750.D	89.0
F30420-19	DD22751.D	98.0
F30420-20	DD22752.D	97.0
F30420-21	DD22754.D	99.0
F30420-22	DD22755.D	108.0
F30420-23	DD22756.D	102.0
OP12750-BS	DD22733.D	99.0
OP12750-BS2	DD22734.D	95.0
OP12750-MB	DD22732.D	95.0
OP12750-MS	DD22737.D	94.0
OP12750-MSD	DD22738.D	92.0

Surrogate Compounds	Recovery Limits
S1 = 4-Bromofluorobenzene	60-139%

(a) Recovery from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F30420
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GCD2417-CC2404	**Injection Date:**	03/18/05
Lab File ID:	CD058715.D	**Injection Time:**	23:54
Instrument ID:	GCCD	**Method:**	EPA 601/602

	S1 [a] RT	S2 [a] RT
Cheek Std	10.39	5.01

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
F30420-4	CD058716.D	03/19/05	00:19	10.39	5.00
F30420-5	CD058717.D	03/19/05	00:43	10.39	5.01
F30420-6	CD058718.D	03/19/05	01:06	10.38	5.01
F30420-7	CD058719.D	03/19/05	01:31	10.39	5.00
F30420-8	CD058720.D	03/19/05	01:55	10.39	5.01
F30420-9	CD058721.D	03/19/05	02:19	10.39	5.01
F30420-10	CD058722.D	03/19/05	02:43	10.39	5.00
F30420-12	CD058724.D	03/19/05	03:31	10.39	5.01

Surrogate Compounds

S1 = 4-Bromofluorobenzene
S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F30420
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GCD2417-CC2404	**Injection Date:**	03/19/05
Lab File ID:	CD058726.D	**Injection Time:**	04:19
Instrument ID:	GCCD	**Method:**	EPA 601/602

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	10.90	10.39	5.95	5.01

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
F30420-14	CD058727.D	03/19/05	04:43		10.39		5.01
F30420-16	CD058729.D	03/19/05	05:31		10.39		5.00
F30420-17	CD058730.D	03/19/05	05:55		10.40		5.01
F30420-18	CD058731.D	03/19/05	06:19		10.39		5.01
F30420-19	CD058732.D	03/19/05	06:43		10.39		5.01
F30420-19MS	CD058733.D	03/19/05	07:07		10.39		5.01
F30420-19MSD	CD058734.D	03/19/05	07:31		10.39		5.01
GCD2417-ECC2404	CD058736.D	03/19/05	08:19	10.91	10.40	5.94	5.00

Surrogate Compounds

S1 = 4-Bromofluorobenzene
S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F30420
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GCD2419-CC2404	**Injection Date:**	03/21/05
Lab File ID:	CD058770.D	**Injection Time:**	23:01
Instrument ID:	GCCD	**Method:**	EPA 601/602

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	10.90	10.40	5.94	5.01

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
F30420-20	CD058771.D	03/21/05	23:25		10.39		5.01
F30420-21	CD058772.D	03/21/05	23:50		10.40		5.01
F30420-23	CD058774.D	03/22/05	00:38		10.40		5.01
F30420-24	CD058775.D	03/22/05	01:03		10.40		5.01
F30420-2MS	CD058776.D	03/22/05	01:27		10.39		5.01
F30420-2MSD	CD058777.D	03/22/05	01:51		10.39		5.01
GCD2419-ECC2404	CD058779.D	03/22/05	02:40	10.90	10.40	5.94	5.01

Surrogate Compounds

S1 = 4-Bromofluorobenzene
S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F30420
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GCD2420-CC2404	**Injection Date:**	03/22/05
Lab File ID:	CD058780.D	**Injection Time:**	09:04
Instrument ID:	GCCD	**Method:**	EPA 601/602

	S1 [a] RT	S2 [a] RT
Check Std	10.39	4.99

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
GCD2420-BS	CD058781.D	03/22/05	09:53	10.39	5.01
GCD2420-MB	CD058782.D	03/22/05	10:17	10.39	5.01
F30420-2	CD058783.D	03/22/05	10:42	10.39	5.00
F30420-13	CD058784.D	03/22/05	11:06	10.40	5.01
F30420-22	CD058785.D	03/22/05	11:35	10.39	5.00
F30420-22MS	CD058786.D	03/22/05	11:59	10.39	5.01
F30420-22MSD	CD058787.D	03/22/05	12:23	10.39	5.00

Surrogate Compounds

S1 = 4-Bromofluorobenzene
S2 = aaa-Trifluorotolucne

(a) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F30420
Account: EEINCJX EE1
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GQQ112-CC106	**Injection Date:**	03/29/05
Lab File ID:	QQ002603.D	**Injection Time:**	18:06
Instrument ID:	GCQQ	**Method:**	EPA 601/602

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	11.18	11.22	4.98	4.97

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
F30420-14	QQ002604.D	03/29/05	18:30		11.22		4.98
F30420-15	QQ002605.D	03/29/05	18:55		11.22		4.98
F30420-16	QQ002606.D	03/29/05	19:19		11.22		4.98
F30420-17	QQ002607.D	03/29/05	19:44		11.22		4.98
GQQ112-ECC106	QQ002609.D	03/29/05	20:34	11.18	11.22	4.98	4.97

Surrogate Compounds

S1 = 4-Bromofluorobenzene
S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F30420
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GDD686-ICC686	**Injection Date:**	03/18/05
Lab File ID:	DD22726.D	**Injection Time:**	10:26
Instrument ID:	GCDD	**Method:**	EPA 504.1

	SI [a] RT
Check Std	6.84

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	SI [a] RT
OP12750-MB	DD22732.D	03/18/05	12:53	6.83
OP12750-BS	DD22733.D	03/18/05	13:13	6.84
OP12750-BS2	DD22734.D	03/18/05	13:33	6.83
F30420-6	DD22735.D	03/18/05	13:53	6.84
F30420-7	DD22736.D	03/18/05	14:13	6.84
OP12750-MS	DD22737.D	03/18/05	14:33	6.84
OP12750-MSD	DD22738.D	03/18/05	14:53	6.84
F30420-8	DD22739.D	03/18/05	15:13	6.84
F30420-9	DD22740.D	03/18/05	15:33	6.84
F30420-10	DD22741.D	03/18/05	15:53	6.84

Surrogate Compounds

S1 = 4-Bromofluorobenzene

(a) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F30420
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GDD686-CC686	**Injection Date:**	03/18/05
Lab File ID:	DD22742.D	**Injection Time:**	16:13
Instrument ID:	GCDD	**Method:**	EPA 504.1

	S1 [a] RT
Check Std	6.84

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT
F30420-11	DD22743.D	03/18/05	16:33	6.83
F30420-12	DD22744.D	03/18/05	16:53	6.83
F30420-13	DD22745.D	03/18/05	17:13	6.84
F30420-14	DD22746.D	03/18/05	17:32	6.84
F30420-15	DD22747.D	03/18/05	17:52	6.84
F30420-16	DD22748.D	03/18/05	18:12	6.83
F30420-17	DD22749.D	03/18/05	18:32	6.84
F30420-18	DD22750.D	03/18/05	18:52	6.84
F30420-19	DD22751.D	03/18/05	19:12	6.84
F30420-20	DD22752.D	03/18/05	19:32	6.83

Surrogate Compounds

S1 = 4-Bromofluorobenzene

(a) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F30420
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GDD686-CC686	**Injection Date:**	03/18/05
Lab File ID:	DD22753.D	**Injection Time:**	19:52
Instrument ID:	GCDD	**Method:**	EPA 504.1

	S1 [a] RT	S1 [b] RT
Check Std	7.08	6.83

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
F30420-21	DD22754.D	03/18/05	20:12		6.84
F30420-22	DD22755.D	03/18/05	20:32		6.84
F30420-23	DD22756.D	03/18/05	20:52		6.84
GDD686-ECC686	DD22757.D	03/18/05	21:12	7.08	6.84

Surrogate Compounds

S1 = 4-Bromofluorobenzene

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F30420
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GCD2416-CC2404	**Injection Date:**	03/18/05
Lab File ID:	CD058704.D	**Injection Time:**	19:31
Instrument ID:	GCCD	**Method:**	EPA 601/602

	S1 [a] RT	S2 [a] RT
Check Std	10.38	5.00

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
ZZZZZZ	CD058705.D	03/18/05	19:55	10.38	5.00
ZZZZZZ	CD058706.D	03/18/05	20:19	10.38	5.01
ZZZZZZ	CD058707.D	03/18/05	20:42	10.39	5.00
ZZZZZZ	CD058708.D	03/18/05	21:06	10.39	5.01
GCD2417-BS	CD058709.D	03/18/05	21:31	10.39	5.00
GCD2417-MB	CD058710.D	03/18/05	21:55	10.39	5.01
ZZZZZZ	CD058711.D	03/18/05	22:19	10.39	5.00
F30420-1	CD058712.D	03/18/05	22:42	10.39	5.01

Surrogate Compounds

S1 = 4-Bromofluorobenzene
S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F30420
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GCD2418-CC2404	**Injection Date:**	03/21/05
Lab File ID:	CD058759.D	**Injection Time:**	18:33
Instrument ID:	GCCD	**Method:**	EPA 601/602

	S1 [a] RT	S2 [a] RT
Check Std	10.40	5.01

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
ZZZZZZ	CD058760.D	03/21/05	18:58	10.40	5.01
ZZZZZZ	CD058761.D	03/21/05	19:22	10.40	5.01
ZZZZZZ	CD058762.D	03/21/05	19:46	10.39	5.01
ZZZZZZ	CD058763.D	03/21/05	20:10	10.40	5.01
GCD2419-BS	CD058764.D	03/21/05	20:35	10.39	5.01
GCD2419-MB	CD058765.D	03/21/05	20:59	10.40	5.01
F30420-3	CD058767.D	03/21/05	21:48	10.40	5.01
F30420-15	CD058769.D	03/21/05	22:37	10.40	5.01

Surrogate Compounds

S1 = 4-Bromofluorobenzene
S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F30420
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GQQ112-CC106	**Injection Date:**	03/29/05
Lab File ID:	QQ002581.D	**Injection Time:**	08:42
Instrument ID:	GCQQ	**Method:**	EPA 601/602

	S1 [a] RT	S2 [a] RT
Check Std	11.22	4.97

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
GQQ112-BS	QQ002582.D	03/29/05	09:22	11.22	4.97
GQQ116-BS	QQ002582.D	03/29/05	09:22	11.22	4.97
GQQ112-MB	QQ002583.D	03/29/05	09:47	11.22	4.98
GQQ116-MB	QQ002583.D	03/29/05	09:47	11.22	4.98
ZZZZZZ	QQ002584.D	03/29/05	10:11	11.22	4.98
ZZZZZZ	QQ002586.D	03/29/05	11:05	11.22	4.97
ZZZZZZ	QQ002588.D	03/29/05	11:58	11.22	4.98
ZZZZZZ	QQ002589.D	03/29/05	12:23	11.22	4.98
ZZZZZZ	QQ002590.D	03/29/05	12:47	11.22	4.98
ZZZZZZ	QQ002591.D	03/29/05	13:11	11.22	4.98

Surrogate Compounds

S1 = 4-Bromofluorobenzene
S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F30420
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GQQ112-CC106	**Injection Date:**	03/29/05
Lab File ID:	QQ002592.D	**Injection Time:**	13:36
Instrument ID:	GCQQ	**Method:**	EPA 601/602

	S1 [a] RT	S2 [a] RT
Check Std	11.22	4.98

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
F30633-5	QQ002593.D	03/29/05	14:00	11.22	4.98
F30633-5MS	QQ002594.D	03/29/05	14:25	11.22	4.97
F30633-5MSD	QQ002595.D	03/29/05	14:50	11.22	4.98
ZZZZZZ	QQ002596.D	03/29/05	15:14	11.22	4.99
ZZZZZZ	QQ002597.D	03/29/05	15:39	11.22	4.98
ZZZZZZ	QQ002598.D	03/29/05	16:03	11.22	4.98
ZZZZZZ	QQ002599.D	03/29/05	16:28	11.22	4.98
F30420-11	QQ00260I.D	03/29/05	17:18	11.22	4.98
F30420-12	QQ002602.D	03/29/05	17:42	11.22	4.98

Surrogate Compounds

S1 = 4-Bromofluorobenzene
S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F30420
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GQQ113-CC106	**Injection Date:**	03/30/05
Lab File ID:	QQ002611.D	**Injection Time:**	09:54
Instrument ID:	GCQQ	**Method:**	EPA 601/602

	S1 [a] RT	S2 [a] RT
Check Std	11.22	4.97

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
GQQ113-BS	QQ002612.D	03/30/05	10:29	11.22	4.97
GQQ117-BS	QQ002612.D	03/30/05	10:29	11.22	4.97
GQQ113-MB	QQ002613.D	03/30/05	10:54	11.22	4.98
GQQ117-MB	QQ002613.D	03/30/05	10:54	11.22	4.98
ZZZZZZ	QQ002614.D	03/30/05	11:19	11.22	4.98
F30420-14	QQ002617.D	03/30/05	12:33	11.22	4.98
ZZZZZZ	QQ002620.D	03/30/05	13:52	11.22	4.97
ZZZZZZ	QQ002621.D	03/30/05	14:17	11.22	4.98

Surrogate Compounds

S1 = 4-Bromofluorobenzene
S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #2

Initial Calibration Summary

Job Number: F30420
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GCD2404-ICC2404
Lab FileID: CD058414.D

Response Factor Report VOA2

Method : C:\HPCHEM\1\METHODS\GCD0309.M (Chemstation Integrator)
Title : EPA 602/8021B
Last Update : Thu Mar 10 10:40:37 2005
Response via : Initial Calibration

Calibration Files
1 =CD058417.D 2 =CD058412.D 3 =CD058413.D 4 =CD058414.D
5 =CD058415.D 6 =CD058416.D

		Compound	1	2	3	4	5	6	Avg		%RSD
1)		Methyl tert Butyl E	8.332	7.202	7.283	7.319	7.320	7.221	7.446	E2	5.87
2)		Di-Isopropyl ether	1.223	1.120	1.195	1.183	1.216	1.189	1.188	E3	3.09
3)		BENZENE	3.319	3.015	3.078	3.010	3.130	3.081	3.105	E3	3.66
4)	S	a,a,a-TFT(S)	1.069	1.082	1.097	1.104	1.108	1.120	1.097	E3	1.68
5)		TOLUENE	3.625	3.177	3.044	2.957	3.089	3.032	3.154	E3	7.66
6)		CHLOROBENZENE	3.306	2.897	3.102	3.066	3.200	3.160	3.122	E3	4.43
7)		ETHYLBENZENE	2.957	2.613	2.718	2.676	2.774	2.723	2.744	E3	4.28
8)		m,p-XYLENE	3.364	2.931	2.973	2.933	3.045	2.985	3.039	E3	5.42
9)		o-XYLENE	2.945	2.682	2.767	2.726	2.807	2.769	2.783	E3	3.25
10)	S	BFB(S)	2.973	2.969	3.113	3.163	3.238	3.275	3.122	E3	4.16
11)		1,3-DICHLOROBENZENE	2.926	2.476	2.715	2.708	2.808	2.758	2.732	E3	5.44
12)		1,4-DICHLOROBENZENE	3.236	2.720	2.931	2.964	3.080	3.068	3.000	E3	5.80
13)		1,2-DICHLOROBENZENE	2.293	1.957	2.137	2.121	2.220	2.144	2.145	E3	5.26

Signal #2

1)		Methyl tert Butyl E	8.147	7.393	7.327	7.341	7.285	7.137	7.438	E2	4.81
2)		Di-Isopropyl ether	1.157	1.098	1.172	1.150	1.166	1.121	1.144	E3	2.52
3)		BENZENE	3.435	3.098	3.141	3.011	3.128	3.066	3.146	E3	4.73
4)	S	a,a,a-TFT(S)	1.035	1.055	1.062	1.073	1.085	1.084	1.066	E3	1.79
5)		TOLUENE	3.884	3.358	3.221	3.055	3.179	3.121	3.303	E3	9.15
6)		CHLOROBENZENE	3.615	3.160	3.354	3.287	3.378	3.328	3.354	E3	4.46
7)		ETHYLBENZENE	3.318	2.901	2.950	2.842	2.942	2.901	2.976	E3	5.79
8)		m,p-XYLENE	3.580	3.189	3.127	3.091	3.220	3.168	3.229	E3	5.51
9)		o-XYLENE	3.276	2.866	2.950	2.861	2.930	2.870	2.959	E3	5.40
10)	S	BFB(S)	3.306	3.349	3.440	3.457	3.563	3.597	3.452	E3	3.31
11)		1,3-DICHLOROBENZENE	3.270	2.767	2.958	2.933	3.052	3.005	2.998	E3	5.50
12)		1,4-DICHLOROBENZENE	3.597	3.014	3.230	3.218	3.372	3.312	3.291	E3	5.87
13)		1,2-DICHLOROBENZENE	2.482	2.152	2.330	2.310	2.415	2.342	2.338	E3	4.77

(#) = Out of Range

GCD0309.M Thu Mar 10 10:58:26 2005

Initial Calibration Verification

Job Number: F30420
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GCD2404-ICV2404
Lab FileID: CD058418.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\030905\CD058418.D\FID1A.CH Vial: 1
Signal #2 : C:\HPCHEM\1\DATA\030905\CD058418.D\FID2B.CH
Acq On : 9 Mar 2005 4:05 pm Operator: albertj
Sample : ICV2404-20 Inst : VOA2
Misc : gc4649,gcd2404,,,,, MultiplIr: 1.00
IntFile Signal #1: PID.E IntFile Signal #2: FID.E

Method : C:\HPCHEM\1\METHODS\GCD0309.M (Chemstation Integrator)
Title : EPA 602/8021B
Last Update : Thu Mar 10 10:40:37 2005
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	Methyl tert Butyl Ethe	20.000	18.858	5.7	96	0.00	2.90- 3.30
2	Di-Isopropyl ether	20.000	20.992	-5.0	104	0.00	3.44- 3.74
3	BENZENE	20.000	18.696	6.5	94	0.00	4.75- 5.05
4 S	a,a,a-TFT(S)	20.000	20.062	-0.3	100	0.00	5.79- 6.09
5	TOLUENE	20.000	17.977	10.1	93	0.00	7.20- 7.50
6	CHLOROBENZENE	20.000	19.563	2.2	98	0.00	9.01- 9.31
7	ETHYLBENZENE	20.000	18.500	7.5	93	0.00	9.36- 9.66
8	m,p-XYLENE	40.000	36.686	8.3	94	0.00	9.66- 9.96
9	o-XYLENE	20.000	18.357	8.2	92	0.00	10.19-10.49
10 S	BFB(S)	20.000	20.022	-0.1	100	0.00	10.75-11.05
11	1,3-DICHLOROBENZENE	20.000	19.531	2.3	98	0.00	12.65-12.85
12	1,4-DICHLOROBENZENE	20.000	17.890	10.5	92	0.00	12.77-12.97
13	1,2-DICHLOROBENZENE	20.000	19.060	4.7	96	-0.01	13.23-13.53
*****	Signal #2 *****						
1	Methyl tert Butyl Ethe	20.000	18.892	5.5	96	0.00	2.38- 2.78
2	Di-Isopropyl ether	20.000	21.046	-5.2	103	0.00	2.94- 3.24
3	BENZENE	20.000	18.639	6.8	93	0.00	4.12- 4.42
4 S	a,a,a-TFT(S)	20.000	20.005	-0.0	100	0.00	4.85- 5.15
5	TOLUENE	20.000	17.896	10.5	92	0.00	6.64- 6.94
6	CHLOROBENZENE	20.000	19.410	2.9	97	0.00	8.47- 8.77
7	ETHYLBENZENE	20.000	18.230	8.8	92	0.00	8.92- 9.22
8	m,p-XYLENE	40.000	35.871	10.3	93	0.00	9.22- 9.52
9	o-XYLENE	20.000	18.221	8.9	91	0.00	9.76-10.06
10 S	BFB(S)	20.000	19.794	1.0	99	0.00	10.22-10.52
11	1,3-DICHLOROBENZENE	20.000	19.300	3.5	98	0.00	12.37-12.57
12	1,4-DICHLOROBENZENE	20.000	17.804	11.0	91	-0.01	12.45-12.65
13	1,2-DICHLOROBENZENE	20.000	19.042	4.8	96	-0.01	12.91-13.15

(#) = Out of Range SPCC's out = 0 CCC's out = 0
CD058413.D GCD0309.M Thu Mar 10 10:58:11 2005

Continuing Calibration Summary

Job Number: F30420
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GCD2416-CC2404
Lab FileID: CD058704.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\031805\CD058704.D\FID1A.CH Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\031805\CD058704.D\FID2B.CH
Acq On : 18 Mar 2005 7:31 pm Operator: albertj
Sample : cc2404-20 Inst : VOA2
Misc : gc4703,gcd2416,,,,, Multiplr: 1.00
IntFile Signal #1: PID.E IntFile Signal #2: FID.E

Method : C:\HPCHEM\1\METHODS\GCD0309.M (Chemstation Integrator)
Title : EPA 602/8021B
Last Update : Thu Mar 10 10:40:37 2005
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	Methyl tert Butyl Ethe	20.000	19.378	3.1	99	0.00	2.90- 3.30
2	Di-Isopropyl ether	20.000	20.891	-4.5	104	0.00	3.44- 3.74
3	BENZENE	20.000	21.633	-8.2	109	0.00	4.75- 5.05
4 S	a,a,a-TFT(S)	20.000	19.510	2.4	97	0.00	5.79- 6.09
5	TOLUENE	20.000	20.801	-4.0	108	0.00	7.20- 7.50
6	CHLOROBENZENE	20.000	21.694	-8.5	109	-0.01	9.01- 9.31
7	ETHYLBENZENE	20.000	21.450	-7.2	108	-0.01	9.36- 9.66
8	m,p-XYLENE	40.000	42.315	-5.8	108	-0.01	9.66- 9.96
9	o-XYLENE	20.000	21.416	-7.1	108	-0.01	10.19-10.49
10 S	BFB(S)	20.000	19.524	2.4	98	-0.01	10.75-11.05
11	1,3-DICHLOROBENZENE	20.000	21.451	-7.3	108	0.00	12.65-12.85
12	1,4-DICHLOROBENZENE	20.000	21.167	-5.8	108	0.00	12.77-12.97
13	1,2-DICHLOROBENZENE	20.000	21.350	-6.8	107	-0.01	13.23-13.53
*****	Signal #2 *****						
1	Methyl tert Butyl Ethe	20.000	19.566	2.2	99	0.00	2.38- 2.78
2	Di-Isopropyl ether	20.000	21.117	-5.6	103	0.00	2.94- 3.24
3	BENZENE	20.000	21.266	-6.3	107	0.00	4.12- 4.42
4 S	a,a,a-TFT(S)	20.000	19.020	4.9	95	0.00	4.85- 5.15
5	TOLUENE	20.000	20.460	-2.3	105	0.00	6.64- 6.94
6	CHLOROBENZENE	20.000	21.395	-7.0	107	0.00	8.47- 8.77
7	ETHYLBENZENE	20.000	21.021	-5.1	106	0.00	8.92- 9.22
8	m,p-XYLENE	40.000	40.818	-2.0	105	0.00	9.22- 9.52
9	o-XYLENE	20.000	21.126	-5.6	106	0.00	9.76-10.06
10 S	BFB(S)	20.000	19.055	4.7	96	0.00	10.22-10.52
11	1,3-DICHLOROBENZENE	20.000	21.087	-5.4	107	0.00	12.37-12.57
12	1,4-DICHLOROBENZENE	20.000	20.853	-4.3	106	0.00	12.45-12.65
13	1,2-DICHLOROBENZENE	20.000	21.377	-6.9	107	0.00	12.91-13.15

(#) = Out of Range SPCC's out = 0 CCC's out = 0
CD058413.D GCD0309.M Mon Mar 21 09:01:53 2005

5.6

Continuing Calibration Summary

Job Number: F30420
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GCD2417-CC2404
Lab FileID: CD058715.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\031805\CD058715.D\FID1A.CH Vial: 33
Signal #2 : C:\HPCHEM\1\DATA\031805\CD058715.D\FID2B.CH
Acq On : 18 Mar 2005 11:54 pm Operator: albertj
Sample : CC2404-20 Inst : VOA2
Misc : gc4704,gcd2417,,,,, MultiplIr: 1.00
IntFile Signal #1: PID.E IntFile Signal #2: FID.E

Method : C:\HPCHEM\1\METHODS\GCD0309.M (Chemstation Integrator)
Title : EPA 602/8021B
Last Update : Thu Mar 10 10:40:37 2005
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	Methyl tert Butyl Ethe	20.000	16.985	15.1#	87	0.00	2.90- 3.30
2	Di-Isopropyl ether	20.000	18.537	7.3	92	0.00	3.44- 3.74
3	BENZENE	20.000	19.860	0.7	100	0.00	4.75- 5.05
4 S	a,a,a-TFT(S)	20.000	17.208	14.0	86	0.00	5.79- 6.09
5	TOLUENE	20.000	19.271	3.6	100	0.00	7.20- 7.50
6	CHLOROBENZENE	20.000	20.271	-1.4	102	0.00	9.01- 9.31
7	ETHYLBENZENE	20.000	20.629	-3.1	104	0.00	9.36- 9.66
8	m,p-XYLENE	40.000	42.191	-5.5	108	0.00	9.66- 9.96
9	o-XYLENE	20.000	21.330	-6.6	107	0.00	10.19-10.49
10 S	BFB(S)	20.000	18.894	5.5	95	0.00	10.75-11.05
11	1,3-DICHLOROBENZENE	20.000	20.728	-3.6	104	0.00	12.65-12.85
12	1,4-DICHLOROBENZENE	20.000	20.875	-4.4	107	0.00	12.77-12.97
13	1,2-DICHLOROBENZENE	20.000	21.547	-7.7	108	0.00	13.23-13.53
*****	Signal #2 *****						
1	Methyl tert Butyl Ethe	20.000	19.480	2.6	99	0.01	2.38- 2.78
2	Di-Isopropyl ether	20.000	20.978	-4.9	102	0.01	2.94- 3.24
3	BENZENE	20.000	21.574	-7.9	108	0.01	4.12- 4.42
4 S	a,a,a-TFT(S)	20.000	18.710	6.4	94	0.01	4.85- 5.15
5	TOLUENE	20.000	20.680	-3.4	106	0.01	6.64- 6.94
6	CHLOROBENZENE	20.000	21.476	-7.4	107	0.00	8.47- 8.77
7	ETHYLBENZENE	20.000	21.361	-6.8	108	0.00	8.92- 9.22
8	m,p-XYLENE	40.000	41.665	-4.2	108	0.01	9.22- 9.52
9	o-XYLENE	20.000	21.558	-7.8	108	0.01	9.76-10.06
10 S	BFB(S)	20.000	19.115	4.4	96	0.01	10.22-10.52
11	1,3-DICHLOROBENZENE	20.000	21.234	-6.2	108	0.00	12.37-12.57
12	1,4-DICHLOROBENZENE	20.000	21.075	-5.4	107	0.00	12.45-12.65
13	1,2-DICHLOROBENZENE	20.000	21.675	-8.4	109	0.00	12.91-13.15

(#) = Out of Range SPCC's out = 0 CCC's out = 0
CD058413.D GCD0309.M Mon Mar 21 09:00:44 2005

Continuing Calibration Summary

Job Number: F30420
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GCD2417-CC2404
Lab FileID: CD058726.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\031805\CD058726.D\FID1A.CH Vial: 44
Signal #2 : C:\HPCHEM\1\DATA\031805\CD058726.D\FID2B.CH
Acq On : 19 Mar 2005 4:19 am Operator: albertj
Sample : CC2404-20 Inst : VOA2
Misc : gc4704,gcd2417,,,,, Multiplr: 1.00
IntFile Signal #1: PID.E IntFile Signal #2: FID.E

Method : C:\HPCHEM\1\METHODS\GCD0309.M (Chemstation Integrator)
Title : EPA 602/8021B
Last Update : Thu Mar 10 10:40:37 2005
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	Methyl tert Butyl Ethe	20.000	17.065	14.7	87	0.00	2.90- 3.30
2	Di-Isopropyl ether	20.000	18.643	6.8	93	0.00	3.44- 3.74
3	BENZENE	20.000	19.101	4.5	96	0.00	4.75- 5.05
4 S	a,a,a-TFT(S)	20.000	17.826	10.9	89	0.00	5.79- 6.09
5	TOLUENE	20.000	18.543	7.3	96	0.00	7.20- 7.50
6	CHLOROBENZENE	20.000	19.820	0.9	100	0.00	9.01- 9.31
7	ETHYLBENZENE	20.000	19.413	2.9	98	0.00	9.36- 9.66
8	m,p-XYLENE	40.000	38.985	2.5	100	0.00	9.66- 9.96
9	o-XYLENE	20.000	20.269	-1.3	102	0.00	10.19-10.49
10 S	BFB(S)	20.000	19.088	4.6	96	0.00	10.75-11.05
11	1,3-DICHLOROBENZENE	20.000	19.798	1.0	100	0.00	12.65-12.85
12	1,4-DICHLOROBENZENE	20.000	19.722	1.4	101	0.00	12.77-12.97
13	1,2-DICHLOROBENZENE	20.000	20.499	-2.5	103	0.00	13.23-13.53
*****	Signal #2 *****						
1	Methyl tert Butyl Ethe	20.000	19.281	3.6	98	0.00	2.38- 2.78
2	Di-Isopropyl ether	20.000	20.699	-3.5	101	0.00	2.94- 3.24
3	BENZENE	20.000	20.196	-1.0	101	0.00	4.12- 4.42
4 S	a,a,a-TFT(S)	20.000	19.067	4.7	96	0.00	4.85- 5.15
5	TOLUENE	20.000	19.370	3.1	99	0.01	6.64- 6.94
6	CHLOROBENZENE	20.000	20.532	-2.7	103	0.02	8.47- 8.77
7	ETHYLBENZENE	20.000	19.805	1.0	100	0.02	8.92- 9.22
8	m,p-XYLENE	40.000	38.362	4.1	99	0.02	9.22- 9.52
9	o-XYLENE	20.000	20.171	-0.9	101	0.02	9.76-10.06
10 S	BFB(S)	20.000	19.012	4.9	95	0.02	10.22-10.52
11	1,3-DICHLOROBENZENE	20.000	20.085	-0.4	102	0.01	12.37-12.57
12	1,4-DICHLOROBENZENE	20.000	19.824	0.9	101	0.00	12.45-12.65
13	1,2-DICHLOROBENZENE	20.000	20.692	-3.5	104	0.00	12.91-13.15

(#) = Out of Range SPCC's out = 0 CCC's out = 0
CD058413.D GCD0309.M Mon Mar 21 09:00:45 2005

Continuing Calibration Summary

Job Number: F30420
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GCD2417-ECC2404
Lab FileID: CD058736.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\031805\CD058736.D\FID1A.CH Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\031805\CD058736.D\FID2B.CH
Acq On : 19 Mar 2005 8:19 am Operator: albertj
Sample : ECC2404-40 Inst : VOA2
Misc : gc4704,gcd2417,,,,, Multiplr: 1.00
IntFile Signal #1: PID.E IntFile Signal #2: FID.E

Method : C:\HPCHEM\1\METHODS\GCD0309.M (Chemstation Integrator)
Title : EPA 602/8021B
Last Update : Thu Mar 10 10:40:37 2005
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	Methyl tert Butyl Ethe	40.000	35.853	10.4	91	0.00	2.90- 3.30
2	Di-Isopropyl ether	40.000	39.445	1.4	99	0.00	3.44- 3.74
3	BENZENE	40.000	40.960	-2.4	106	0.00	4.75- 5.05
4 S	a,a,a-TFT(S)	20.000	19.068	4.7	95	0.00	5.79- 6.09
5	TOLUENE	40.000	39.425	1.4	105	0.00	7.20- 7.50
6	CHLOROBENZENE	40.000	41.406	-3.5	105	0.00	9.01- 9.31
7	ETHYLBENZENE	40.000	40.939	-2.3	105	0.01	9.36- 9.66
8	m,p-XYLENE	80.000	80.886	-1.1	105	0.01	9.66- 9.96
9	o-XYLENE	40.000	41.133	-2.8	105	0.01	10.19-10.49
10 S	BFB(S)	20.000	19.742	1.3	97	0.01	10.75-11.05
11	1,3-DICHLOROBENZENE	40.000	41.077	-2.7	104	0.00	12.65-12.85
12	1,4-DICHLOROBENZENE	40.000	40.954	-2.4	104	0.00	12.77-12.97
13	1,2-DICHLOROBENZENE	40.000	41.580	-3.9	105	0.00	13.23-13.53
*****	Signal #2 *****						
1	Methyl tert Butyl Ethe	40.000	37.971	5.1	96	0.01	2.38- 2.78
2	Di-Isopropyl ether	40.000	40.454	-1.1	101	0.00	2.94- 3.24
3	BENZENE	40.000	40.096	-0.2	105	0.00	4.12- 4.42
4 S	a,a,a-TFT(S)	20.000	19.246	3.8	96	0.00	4.85- 5.15
5	TOLUENE	40.000	38.486	3.8	104	0.00	6.64- 6.94
6	CHLOROBENZENE	40.000	40.640	-1.6	104	0.02	8.47- 8.77
7	ETHYLBENZENE	40.000	39.933	0.2	105	0.02	8.92- 9.22
8	m,p-XYLENE	80.000	79.369	0.8	104	0.02	9.22- 9.52
9	o-XYLENE	40.000	40.068	-0.2	104	0.02	9.76-10.06
10 S	BFB(S)	20.000	19.577	2.1	98	0.02	10.22-10.52
11	1,3-DICHLOROBENZENE	40.000	40.719	-1.8	104	0.01	12.37-12.57
12	1,4-DICHLOROBENZENE	40.000	40.364	-0.9	103	0.01	12.45-12.65
13	1,2-DICHLOROBENZENE	40.000	41.670	-4.2	105	0.01	12.91-13.15

(#) = Out of Range SPCC's out = 0 CCC's out = 0
CD058414.D GCD0309.M Mon Mar 21 09:01:25 2005

Continuing Calibration Summary

Job Number: F30420
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GCD2418-CC2404
Lab FileID: CD058759.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\032105\CD058759.D\FID1A.CH Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\032105\CD058759.D\FID2B.CH
Acq On : 21 Mar 2005 6:33 pm Operator: albertj
Sample : CC2404-20 Inst : V0A2
Misc : gc4710,gcd2418,,,,, Multiplr: 1.00
IntFile Signal #1: PID.E IntFile Signal #2: FID.E

Method : C:\HPCHEM\1\METHODS\GCD0309.M (Chemstation Integrator)
Title : EPA 602/8021B
Last Update : Thu Mar 10 10:40:37 2005
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1		Methyl tert Butyl Ethe	20.000	18.979	5.1	97	0.00	2.90- 3.30
2		Di-Isopropyl ether	20.000	20.152	-0.8	100	0.00	3.44- 3.74
3		BENZENE	20.000	20.805	-4.0	105	0.00	4.75- 5.05
4	S	a,a,a-TFT(S)	20.000	18.895	5.5	94	0.00	5.79- 6.09
5		TOLUENE	20.000	20.102	-0.5	104	0.00	7.20- 7.50
6		CHLOROBENZENE	20.000	21.128	-5.6	106	0.00	9.01- 9.31
7		ETHYLBENZENE	20.000	21.107	-5.5	107	0.00	9.36- 9.66
8		m,p-XYLENE	40.000	41.457	-3.6	106	0.00	9.66- 9.96
9		o-XYLENE	20.000	21.224	-6.1	107	0.00	10.19-10.49
10	S	BFB(S)	20.000	19.838	0.8	99	0.00	10.75-11.05
11		1,3-DICHLOROBENZENE	20.000	21.113	-5.6	106	0.00	12.65-12.85
12		1,4-DICHLOROBENZENE	20.000	20.812	-4.1	107	0.00	12.77-12.97
13		1,2-DICHLOROBENZENE	20.000	21.232	-6.2	107	0.00	13.23-13.53
*****		Signal #2 *****						
1		Methyl tert Butyl Ethe	20.000	19.955	0.2	101	0.01	2.38- 2.78
2		Di-Isopropyl ether	20.000	20.758	-3.8	101	0.01	2.94- 3.24
3		BENZENE	20.000	20.954	-4.8	105	0.01	4.12- 4.42
4	S	a,a,a-TFT(S)	20.000	18.942	5.3	95	0.01	4.85- 5.15
5		TOLUENE	20.000	20.132	-0.7	103	0.02	6.64- 6.94
6		CHLOROBENZENE	20.000	21.050	-5.3	105	0.02	8.47- 8.77
7		ETHYLBENZENE	20.000	20.766	-3.8	105	0.02	8.92- 9.22
8		m,p-XYLENE	40.000	40.413	-1.0	104	0.02	9.22- 9.52
9		o-XYLENE	20.000	20.744	-3.7	104	0.02	9.76-10.06
10	S	BFB(S)	20.000	19.446	2.8	98	0.02	10.22-10.52
11		1,3-DICHLOROBENZENE	20.000	20.796	-4.0	105	0.01	12.37-12.57
12		1,4-DICHLOROBENZENE	20.000	20.607	-3.0	105	0.01	12.45-12.65
13		1,2-DICHLOROBENZENE	20.000	21.135	-5.7	106	0.00	12.91-13.15

(#) = Out of Range SPCC's out = 0 CCC's out = 0
CD058413.D GCD0309.M Tue Mar 22 09:13:21 2005

Continuing Calibration Summary

Job Number: F30420
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GCD2419-CC2404
Lab FileID: CD058770.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\032105\CD058770.D\FID1A.CH Vial: 33
Signal #2 : C:\HPCHEM\1\DATA\032105\CD058770.D\FID2B.CH
Acq On : 21 Mar 2005 11:01 pm Operator: albertj
Sample : CC2404-20 Inst : VOA2
Misc : gc4704,gcd2419,,,,, MultiplIr: 1.00
IntFile Signal #1: PID.E IntFile Signal #2: FID.E

Method : C:\HPCHEM\1\METHODS\GCD0309.M (Chemstation Integrator)
Title : EPA 602/8021B
Last Update : Thu Mar 10 10:40:37 2005
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	Methyl tert Butyl Ethe	20.000	16.784	16.1#	86	0.00	2.90- 3.30
2	Di-Isopropyl ether	20.000	17.763	11.2	88	0.00	3.44- 3.74
3	BENZENE	20.000	18.146	9.3	92	0.00	4.75- 5.05
4 S	a,a,a-TFT(S)	20.000	18.932	5.3	95	0.00	5.79- 6.09
5	TOLUENE	20.000	17.468	12.7	91	0.00	7.20- 7.50
6	CHLOROBENZENE	20.000	18.397	8.0	93	0.00	9.01- 9.31
7	ETHYLBENZENE	20.000	18.148	9.3	92	0.00	9.36- 9.66
8	m,p-XYLENE	40.000	35.396	11.5	90	0.00	9.66- 9.96
9	o-XYLENE	20.000	18.212	8.9	92	0.00	10.19-10.49
10 S	BFB(S)	20.000	19.547	2.3	98	0.00	10.75-11.05
11	1,3-DICHLOROBENZENE	20.000	17.930	10.4	90	0.00	12.65-12.85
12	1,4-DICHLOROBENZENE	20.000	17.849	10.8	91	0.00	12.77-12.97
13	1,2-DICHLOROBENZENE	20.000	18.534	7.3	93	0.00	13.23-13.53
*****	Signal #2 *****						
1	Methyl tert Butyl Ethe	20.000	17.528	12.4	89	0.01	2.38- 2.78
2	Di-Isopropyl ether	20.000	18.356	8.2	90	0.00	2.94- 3.24
3	BENZENE	20.000	18.123	9.4	91	0.00	4.12- 4.42
4 S	a,a,a-TFT(S)	20.000	18.865	5.7	95	0.01	4.85- 5.15
5	TOLUENE	20.000	17.445	12.8	89	0.02	6.64- 6.94
6	CHLOROBENZENE	20.000	18.229	8.9	91	0.02	8.47- 8.77
7	ETHYLBENZENE	20.000	17.906	10.5	90	0.02	8.92- 9.22
8	m,p-XYLENE	40.000	35.286	11.8	91	0.02	9.22- 9.52
9	o-XYLENE	20.000	18.012	9.9	90	0.02	9.76-10.06
10 S	BFB(S)	20.000	19.391	3.0	97	0.02	10.22-10.52
11	1,3-DICHLOROBENZENE	20.000	17.835	10.8	90	0.02	12.37-12.57
12	1,4-DICHLOROBENZENE	20.000	17.774	11.1	91	0.02	12.45-12.65
13	1,2-DICHLOROBENZENE	20.000	18.550	7.2	93	0.01	12.91-13.15

(#) = Out of Range SPCC's out = 0 CCC's out = 0
CD058413.D GCD0309.M Tue Mar 22 09:13:22 2005

Continuing Calibration Summary

Job Number: F30420
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GCD2419-ECC2404
Lab FileID: CD058779.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\032105\CD058779.D\FID1A.CH Vial: 41
Signal #2 : C:\HPCHEM\1\DATA\032105\CD058779.D\FID2B.CH
Acq On : 22 Mar 2005 2:40 am Operator: albertj
Sample : ECC2404-40 Inst : VOA2
Misc : gc4711,gcd2419,,,,, Multiplr: 1.00
IntFile Signal #1: PID.E IntFile Signal #2: FID.E

Method : C:\HPCHEM\1\METHODS\GCD0309.M (Chemstation Integrator)
Title : EPA 602/8021B
Last Update : Thu Mar 10 10:40:37 2005
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1		Methyl tert 8utyl Ethe	40.000	38.022	4.9	97	0.00	2.90- 3.30
2		Di-Isopropyl ether	40.000	39.549	1.1	99	0.00	3.44- 3.74
3		BENZENE	40.000	39.837	0.4	103	0.00	4.75- 5.05
4	S	a,a,a-TFT(S)	20.000	19.296	3.5	96	0.00	5.79- 6.09
5		TOLUENE	40.000	38.756	3.1	103	0.00	7.20- 7.50
6		CHLOROBENZENE	40.000	40.888	-2.2	104	0.01	9.01- 9.31
7		ETHYLBENZENE	40.000	40.136	-0.3	103	0.01	9.36- 9.66
8		m,p-XYLENE	80.000	80.436	-0.5	104	0.01	9.66- 9.96
9		o-XYLENE	40.000	40.309	-0.8	103	0.00	10.19-10.49
10	S	BFB(S)	20.000	20.092	-0.5	99	0.00	10.75-11.05
11		1,3-DICHLOROBENZENE	40.000	40.210	-0.5	101	0.00	12.65-12.85
12		1,4-DICHLOROBENZENE	40.000	40.630	-1.6	103	0.00	12.77-12.97
13		1,2-DICHLOROBENZENE	40.000	40.962	-2.4	104	0.00	13.23-13.53
*****		Signal #2 *****						
1		Methyl tert Butyl Ethe	40.000	39.054	2.4	99	0.01	2.38- 2.78
2		Di-Isopropyl ether	40.000	40.192	-0.5	100	0.00	2.94- 3.24
3		BENZENE	40.000	39.024	2.4	102	0.01	4.12- 4.42
4	S	a,a,a-TFT(S)	20.000	19.207	4.0	95	0.02	4.85- 5.15
5		TOLUENE	40.000	37.913	5.2	102	0.02	6.64- 6.94
6		CHLOROBENZENE	40.000	39.942	0.1	102	0.03	8.47- 8.77
7		ETHYLBENZENE	40.000	39.280	1.8	103	0.03	8.92- 9.22
8		m,p-XYLENE	80.000	77.949	2.6	102	0.03	9.22- 9.52
9		o-XYLENE	40.000	39.697	0.8	103	0.03	9.76-10.06
10	S	BFB(S)	20.000	19.966	0.2	100	0.03	10.22-10.52
11		1,3-DICHLOROBENZENE	40.000	40.449	-1.1	103	0.01	12.37-12.57
12		1,4-DICHLOROBENZENE	40.000	39.967	0.1	102	0.01	12.45-12.65
13		1,2-DICHLOROBENZENE	40.000	41.204	-3.0	104	0.00	12.91-13.15

(#) = Out of Range SPCC's out = 0 CCC's out = 0
CD058414.D GCD0309.M Tue Mar 22 09:12:49 2005

5.6

Continuing Calibration Summary

Job Number: F30420
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GCD2420-CC2404
Lab FileID: CD058780.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\032205\CD058780.D\FID1A.CH Vial: 1
Signal #2 : C:\HPCHEM\1\DATA\032205\CD058780.D\FID2B.CH
Acq On : 22 Mar 2005 9:04 am Operator: albertj
Sample : CC2404-40 Inst : VOA2
Misc : gc4711,gcd2420,,,,, Multiplr: 1.00
IntFile Signal #1: PID.E IntFile Signal #2: FID.E

Method : C:\HPCHEM\1\METHODS\GCD0309.M (Chemstation Integrator)
Title : EPA 602/8021B
Last Update : Thu Mar 10 10:40:37 2005
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	Methyl tert Butyl Ethe	40.000	34.628	13.4	88	-0.01	2.90- 3.30
2	Di-Isopropyl ether	40.000	38.488	3.8	97	-0.02	3.44- 3.74
3	BENZENE	40.000	41.022	-2.6	106	-0.02	4.75- 5.05
4 S	a,a,a-TFT(S)	20.000	19.155	4.2	95	-0.01	5.79- 6.09
5	TOLUENE	40.000	40.440	-1.1	108	-0.01	7.20- 7.50
6	CHLOROBENZENE	40.000	42.842	-7.1	109	0.00	9.01- 9.31
7	ETHYLBENZENE	40.000	42.583	-6.5	109	0.00	9.36- 9.66
8	m,p-XYLENE	80.000	84.873	-6.1	110	0.00	9.66- 9.96
9	o-XYLENE	40.000	42.471	-6.2	108	0.00	10.19-10.49
10 S	BFB(S)	20.000	20.207	-1.0	100	0.00	10.75-11.05
11	1,3-DICHLOROBENZENE	40.000	42.941	-7.4	108	0.00	12.65-12.85
12	1,4-DICHLOROBENZENE	40.000	42.926	-7.3	109	0.00	12.77-12.97
13	1,2-DICHLOROBENZENE	40.000	42.512	-6.3	107	0.00	13.23-13.53
*****	Signal #2 *****						
1	Methyl tert Butyl Ethe	40.000	38.623	3.4	98	0.00	2.38- 2.78
2	Di-Isopropyl ether	40.000	40.689	-1.7	101	0.00	2.94- 3.24
3	BENZENE	40.000	41.279	-3.2	108	0.00	4.12- 4.42
4 S	a,a,a-TFT(S)	20.000	19.420	2.9	96	0.00	4.85- 5.15
5	TOLUENE	40.000	40.179	-0.4	109	0.00	6.64- 6.94
6	CHLOROBENZENE	40.000	42.107	-5.3	107	0.01	8.47- 8.77
7	ETHYLBENZENE	40.000	41.434	-3.6	108	0.01	8.92- 9.22
8	m,p-XYLENE	80.000	82.807	-3.5	108	0.01	9.22- 9.52
9	o-XYLENE	40.000	41.353	-3.4	107	0.02	9.76-10.06
10 S	BFB(S)	20.000	19.774	1.1	99	0.02	10.22-10.52
11	1,3-DICHLOROBENZENE	40.000	42.415	-6.0	108	0.00	12.37-12.57
12	1,4-DICHLOROBENZENE	40.000	41.724	-4.3	107	0.00	12.45-12.65
13	1,2-DICHLOROBENZENE	40.000	42.703	-6.8	108	0.00	12.91-13.15

(#) = Out of Range SPCC's out = 0 CCC's out = 0
CD058414.D GCD0309.M Wed Mar 23 09:01:54 2005

Continuing Calibration Summary

Job Number: F30420
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GCD2420-CC2404
Lab FileID: CD058789.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\032205\CD058789.D\FID1A.CH Vial: 9
Signal #2 : C:\HPCHEM\1\DATA\032205\CD058789.D\FID2B.CH
Acq On : 22 Mar 2005 2:56 pm Operator: albertj
Sample : cc2404-20 Inst : VOA2
Misc : gc4711,gcd2420,,,,, Multiplr: 1.00
IntFile Signal #1: PID.E IntFile Signal #2: FID.E

Method : C:\HPCHEM\1\METHODS\GCD0309.M (Chemstation Integrator)
Title : EPA 602/8021B
Last Update : Thu Mar 10 10:40:37 2005
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	Methyl tert Butyl Ethe	20.000	16.761	16.2#	86	0.00	2.90- 3.30
2	Di-Isopropyl ether	20.000	18.344	8.3	91	-0.01	3.44- 3.74
3	BENZENE	20.000	18.806	6.0	95	0.00	4.75- 5.05
4 S	a,a,a-TFT(S)	20.000	18.532	7.3	93	0.00	5.79- 6.09
5	TOLUENE	20.000	18.541	7.3	96	-0.01	7.20- 7.50
6	CHLOROBENZENE	20.000	19.903	0.5	100	-0.01	9.01- 9.31
7	ETHYLBENZENE	20.000	19.391	3.0	98	-0.01	9.36- 9.66
8	m,p-XYLENE	40.000	38.501	3.7	98	-0.01	9.66- 9.96
9	o-XYLENE	20.000	19.724	1.4	99	-0.01	10.19-10.49
10 S	BFB(S)	20.000	19.547	2.3	98	-0.01	10.75-11.05
11	1,3-DICHLOROBENZENE	20.000	19.805	1.0	100	0.00	12.65-12.85
12	1,4-DICHLOROBENZENE	20.000	19.867	0.7	102	-0.01	12.77-12.97
13	1,2-DICHLOROBENZENE	20.000	20.297	-1.5	102	-0.01	13.23-13.53
*****	Signal #2 *****						
1	Methyl tert Butyl Ethe	20.000	18.250	8.8	93	0.00	2.38- 2.78
2	Di-Isopropyl ether	20.000	19.797	1.0	97	0.00	2.94- 3.24
3	BENZENE	20.000	19.366	3.2	97	0.00	4.12- 4.42
4 S	a,a,a-TFT(S)	20.000	18.801	6.0	94	0.00	4.85- 5.15
5	TOLUENE	20.000	18.715	6.4	96	0.00	6.64- 6.94
6	CHLOROBENZENE	20.000	19.995	0.0	100	0.00	8.47- 8.77
7	ETHYLBENZENE	20.000	19.269	3.7	97	0.00	8.92- 9.22
8	m,p-XYLENE	40.000	37.155	7.1	96	0.00	9.22- 9.52
9	o-XYLENE	20.000	19.354	3.2	97	0.00	9.76-10.06
10 S	BFB(S)	20.000	19.113	4.4	96	0.00	10.22-10.52
11	1,3-DICHLOROBENZENE	20.000	19.627	1.9	99	0.00	12.37-12.57
12	1,4-DICHLOROBENZENE	20.000	19.569	2.2	100	0.00	12.45-12.65
13	1,2-DICHLOROBENZENE	20.000	19.978	0.1	100	0.00	12.91-13.15

(#) = Out of Range SPCC's out = 0 CCC's out = 0
CD058413.D GCD0309.M Wed Mar 23 09:02:23 2005

5.6

Initial Calibration Summary

Job Number: F30420
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GDD686-ICC686
Lab FileID: DD22726.D

Response Factor Report ECD 4

Method : C:\HPCHEM\2\METHODS\504_1.M (Chemstation Integrator)
Title : EDB/DBCP by EPA 504.1 or SW846 8011
Last Update : Fri Mar 18 12:44:19 2005
Response via : Initial Calibration

Calibration Files
.125=DD22725.D .250=DD22726.D .500=DD22727.D 0.75=DD22728.D
0.75 =DD22728.D 1.0 =DD22729.D

	Compound	.125	.250	.500	0.75	1.0	Avg		%RSD
1)	1,2-Dibromoethane	9.587	9.056	8.657	8.707	8.825	8.966	E5	4.23
2) S	4-Bromofluorobenzene	8.754	7.944	7.241	6.970	6.868	7.555	E4	10.47
3)	1,2,3-Trichloropropan	1.983	1.799	1.637	1.562	1.565	1.709	E5	10.58
4)	1,2-Dibromo-3-chlorop	2.259	2.181	2.163	2.129	2.191	2.185	E6	2.19

Signal #2

1)	1,2-Dibromoethane	2.683	2.451	2.282	2.269	2.300	2.397	E5	7.33
2) S	4-Bromofluorobenzene	2.373	2.230	1.992	1.961	1.960	2.103	E4	8.96
3)	1,2,3-Trichloropropan	5.677	5.201	5.110	4.875	4.820	5.136	E4	6.65
4)	1,2-Dibromo-3-chlorop	5.082	4.809	4.716	4.699	5.050	4.871	E5	3.76

(#) = Out of Range

504_1.M Mon Mar 21 13:28:39 2005

Initial Calibration Verification

Job Number: F30420
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GDD686-ICV686
Lab FileID: DD22731.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\0318EDB\DD22731.D\ECD1A.CH Vial: 8
Signal #2 : C:\HPCHEM\2\DATA\0318EDB\DD22731.D\ECD2B.CH
Acq On : 18 Mar 2005 12:07 pm Operator: ansleyg
Sample : icv686-0.25 Inst : ECD 4
Misc : op12717,gdd686,35.0,,,2,1,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\2\METHODS\504_1.M (Chemstation Integrator)
Title : EDB/DBCP by EPA 504.1 or SW846 8011
Last Update : Fri Mar 18 12:44:19 2005
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	1,2-Dibromoethane	0.250	0.224	10.4	89	0.00	5.65- 5.85
2 S	4-8romofluorobenzene	2.000	2.120	-6.0	101	0.00	6.98- 7.18
3	1,2,3-Trichloropropane	0.250	0.246	1.6	93	0.00	7.36- 7.56
4	1,2-Dibromo-3-chloropr	0.250	0.225	10.0	90	0.00	9.40- 9.60
*****	Signal #2 *****						
1	1,2-Dibromoethane	0.250	0.221	11.6	86	0.00	5.36- 5.56
2 S	4-Bromofluorobenzene	2.000	2.107	-5.4	99	0.00	6.74- 6.94
3	1,2,3-Trichloropropane	0.250	0.221	11.6	87	0.00	6.91- 7.11
4	1,2-Dibromo-3-chloropr	0.250	0.224	10.4	91	0.00	9.02- 9.22

(#) = Out of Range SPCC's out = 0 CCC's out = 0
DD22726.D 504_1.M Mon Mar 21 13:28:58 2005

5.6

Continuing Calibration Summary

Job Number: F30420
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GDD686-CC686
Lab FileID: DD22742.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\0318EDB\DD22742.D\ECD1A.CH Vial: 3
Signal #2 : C:\HPCHEM\2\DATA\0318EDB\DD22742.D\ECD2B.CH
Acq On : 18 Mar 2005 4:13 pm Operator: ansleyg
Sample : cc686-0.25 Inst : ECD 4
Misc : op12750,gdd686,35.0,,,2,1,water MultiplIr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\2\METHODS\504_1.M (Chemstation Integrator)
Title : ED8/D8CP by EPA 504.1 or SW846 8011
Last Update : Fri Mar 18 12:44:19 2005
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	1,2-Dibromoethane	0.250	0.245	2.0	97	0.00	5.65- 5.85
2 S	4-Bromofluorobenzene	2.000	1.992	0.4	95	0.00	6.98- 7.18
3	1,2,3-Trichloropropane	0.250	0.252	-0.8	96	0.00	7.36- 7.56
4	1,2-Dibromo-3-chloropr	0.250	0.236	5.6	95	0.00	9.40- 9.60
*****	Signal #2 *****						
1	1,2-Dibromoethane	0.250	0.244	2.4	95	0.00	5.36- 5.56
2 S	4-Bromofluorobenzene	2.000	1.990	0.5	94	0.00	6.74- 6.94
3	1,2,3-Trichloropropane	0.250	0.271	-8.4	107	0.00	6.91- 7.11
4	1,2-Dibromo-3-chloropr	0.250	0.246	1.6	100	0.00	9.02- 9.22

(#) = Out of Range SPCC's out = 0 CCC's out = 0
DD22726.D 504_1.M Mon Mar 21 13:28:59 2005

Continuing Calibration Summary

Job Number: F30420 **Sample:** GDD686-CC686
Account: EEINCJX EEI **Lab FileID:** DD22753.D
Project: Camp Lejeune-Campbell St. Fuel Farm

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\0318EDB\DD22753.D\ECD1A.CH Vial: 4
Signal #2 : C:\HPCHEM\2\DATA\0318EDB\DD22753.D\ECD2B.CH
Acq On : 18 Mar 2005 7:52 pm Operator: ansleyg
Sample : cc686-0.50 Inst : ECD 4
Misc : op12750,gdd686,35.0,,,2,1,water MultiplIr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\2\METHODS\504_1.M (Chemstation Integrator)
Title : EDB/DBCP by EPA 504.1 or SW846 8011
Last Update : Fri Mar 18 12:44:19 2005
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	1,2-Dibromoethane	0.500	0.458	8.4	95	0.00	5.65- 5.85
2 S	4-Bromofluorobenzene	4.000	3.752	6.2	98	0.00	6.98- 7.18
3	1,2,3-Trichloropropane	0.500	0.456	8.8	95	0.00	7.36- 7.56
4	1,2-Dibromo-3-chloropr	0.500	0.483	3.4	98	0.00	9.40- 9.60
*****	Signal #2 *****						
1	1,2-Dibromoethane	0.500	0.458	8.4	96	0.00	5.36- 5.56
2 S	4-Bromofluorobenzene	4.000	3.894	2.6	103	0.00	6.74- 6.94
3	1,2,3-Trichloropropane	0.500	0.419	16.2	84	0.00	6.91- 7.11
4	1,2-Dibromo-3-chloropr	0.500	0.490	2.0	101	0.00	9.02- 9.22

(#) = Out of Range SPCC's out = 0 CCC's out = 0
DD22727.D 504_1.M Mon Mar 21 13:29:28 2005

5.6

Continuing Calibration Summary

Job Number: F30420
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GDD686-ECC686
Lab FileID: DD22757.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\0318EDB\DD22757.D\ECD1A.CH Vial: 3
Signal #2 : C:\HPCHEM\2\DATA\0318EDB\DD22757.D\ECD2B.CH
Acq On : 18 Mar 2005 9:12 pm Operator: ansleyg
Sample : ecc686-0.25 Inst : ECD 4
Misc : op12750,gdd686,35.0,,,2,1,water MultiplIr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\2\METHODS\504_1.M (Chemstation Integrator)
Title : EDB/DBCP by EPA 504.1 or SW846 8011
Last Update : Fri Mar 18 12:44:19 2005
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	1,2-Dibromoethane	0.250	0.242	3.2	96	0.00	5.65- 5.85
2 S	4-Bromofluorobenzene	2.000	2.034	-1.7	97	0.00	6.98- 7.18
3	1,2,3-Trichloropropane	0.250	0.258	-3.2	98	0.00	7.36- 7.56
4	1,2-Dibromo-3-chloropr	0.250	0.246	1.6	98	0.00	9.40- 9.60
*****	Signal #2 *****						
1	1,2-Dibromoethane	0.250	0.244	2.4	95	0.00	5.36- 5.56
2 S	4-Bromofluorobenzene	2.000	2.014	-0.7	95	0.00	6.74- 6.94
3	1,2,3-Trichloropropane	0.250	0.217	13.2	86	0.00	6.91- 7.11
4	1,2-Dibromo-3-chloropr	0.250	0.239	4.4	97	0.00	9.02- 9.22

(#) = Out of Range SPCC's out = 0 CCC's out = 0
DD22726.D 504_1.M Mon Mar 21 13:29:00 2005

Initial Calibration Summary

Job Number: F30420
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GQQ106-ICC106
Lab FileID: QQ002414.D

Response Factor Report VOA7

Method : C:\MSDCHEM\2\METHODS\DUAL0321.M (Chemstation Integrator)
Title : EPA 602 & 5030B/8021B
Last Update : Tue Mar 22 08:04:11 2005
Response via : Initial Calibration

Calibration Files
1 =QQ002412.D 5 =QQ002413.D 20 =QQ002414.D 40 =QQ002415.D
70 =QQ002416.D 100 =QQ002417.D

		Compound	1	5	20	40	70	100	Avg		%RSD
1)		Methyl tert Butyl E	1.002	1.053	1.053	1.086	1.063	1.069	1.054	E3	2.70
2)		Di-Isopropyl ether	2.071	2.207	2.199	2.055	2.169	2.167	2.145	E3	3.05
3)		Benzene	4.643	4.928	4.935	4.881	4.865	4.801	4.842	E3	2.25
4)	S	a,a,a-TFT(S)	1.083	1.097	1.092	1.089	1.080	1.076	1.086	E3	0.73
5)		Toluene	3.193	3.440	3.462	3.510	3.494	3.482	3.430	E3	3.47
6)		Chlorobenzene	2.834	3.150	3.178	3.207	3.212	3.212	3.132	E3	4.73
7)		Ethylbenzene	2.434	2.612	2.661	2.699	2.703	2.704	2.636	E3	3.98
8)		m,p-Xylene	2.720	2.896	2.886	2.913	2.913	2.904	2.872	E3	2.61
9)		o-Xylene	2.947	3.135	3.097	3.117	3.080	3.091	3.078	E3	2.17
10)	S	BFB(S)	3.124	3.172	3.190	3.209	3.209	3.328	3.205	E3	2.11
11)		1,3-Dichlorobenzene	4.572	4.566	4.443	4.507	4.540	4.505	4.522	E3	1.06
12)		1,4-Dichlorobenzene	5.129	5.132	5.029	5.074	5.104	5.109	5.096	E3	0.77
13)		1,2-Dichlorobenzene	4.385	4.576	4.445	4.483	4.498	4.480	4.478	E3	1.41

Signal #2

1)		Methyl tert Butyl E	1.008	1.067	1.066	1.099	1.076	1.083	1.066	E3	2.90
2)		Di-Isopropyl ether	1.379	1.226	1.263	1.260	1.251	1.244	1.270	E3	4.31
3)		Benzene	4.542	4.811	4.823	4.786	4.769	4.708	4.740	E3	2.21
4)	S	a,a,a-TFT(S)	1.043	1.058	1.051	1.048	1.036	1.041	1.046	E3	0.74
5)		Toluene	3.045	3.327	3.356	3.406	3.415	3.407	3.326	E3	4.27
6)		Chlorobenzene	2.685	3.038	3.078	3.136	3.158	3.154	3.041	E3	5.95
7)		Ethylbenzene	2.432	2.623	2.630	2.665	2.663	2.666	2.613	E3	3.47
8)		m,p-Xylene	2.702	2.903	2.912	2.957	2.954	2.958	2.898	E3	3.41
9)		o-Xylene	2.524	2.737	2.727	2.739	2.761	2.750	2.706	E3	3.33
10)	S	BFB(S)	3.004	3.107	3.088	3.104	3.081	3.180	3.094	E3	1.83
11)		1,3-Dichlorobenzene	4.334	4.177	4.176	4.236	4.238	4.272	4.239	E3	1.41
12)		1,4-Dichlorobenzene	4.795	4.743	4.764	4.825	4.845	4.835	4.801	E3	0.85
13)		1,2-Dichlorobenzene	4.368	4.336	4.384	4.415	4.483	4.469	4.409	E3	1.31

(#) = Out of Range

DUAL0321.M Tue Mar 22 10:57:21 2005 GCHH

Initial Calibration Verification

Job Number: F30420
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GQQ106-ICV106
Lab FileID: QQ002418.D

Evaluate Continuing Calibration Report

Signal #1 : C:\MSDCHEM\2\DATA\032105\QQ002418.D\ELC1A.CH Vial: 19
Signal #2 : C:\MSDCHEM\2\DATA\032105\QQ002418.D\ELC2B.CH
Acq On : 3-21-05 07:30:25 PM Operator: AliciaL
Sample : ICV106-20 Inst : VOA7
Misc : gc4671,gqq106,,,,,1 MultiplIr: 1.00
IntFile Signal #1: AUTOINT1.E IntFile Signal #2: autoint2.e

Method : C:\MSDCHEM\2\METHODS\DUAL0321.M (Chemstation Integrator)
Title : EPA 602 & 5030B/8021B
Last Update : Tue Mar 22 08:04:11 2005
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	Methyl tert Butyl Ethe	20.000	21.722	-8.6	109	0.00	2.32- 2.52
2	Di-Isopropyl ether	20.000	23.653	-18.3#	115	0.00	2.68- 2.88
3	Benzene	20.000	21.984	-9.9	108	0.00	3.79- 3.99
4 S	a,a,a-TFT(S)	20.000	19.997	0.0	99	0.00	4.87- 5.07
5	Toluene	20.000	22.289	-11.4	110	0.00	6.48- 6.68
6	Chlorobenzene	20.000	22.717	-13.6	112	0.00	8.83- 9.03
7	Ethylbenzene	20.000	22.541	-12.7	112	0.00	9.36- 9.56
8	m,p-Xylene	40.000	44.544	-11.4	111	0.00	9.80-10.00
9	o-Xylene	20.000	21.903	-9.5	109	0.00	10.49-10.69
10 S	BFB(S)	20.000	19.868	0.7	100	0.00	11.08-11.28
11	1,3-Dichlorobenzene	20.000	22.784	-13.9	116	0.00	12.71-12.91
12	1,4-Dichlorobenzene	20.000	21.440	-7.2	109	0.00	12.79-12.99
13	1,2-Dichlorobenzene	20.000	22.238	-11.2	112	0.00	13.12-13.32
*****	Signal #2 *****						
1	Methyl tert Butyl Ethe	20.000	21.714	-8.6	109	0.00	2.22- 2.42
2	Di-Isopropyl ether	20.000	22.965	-14.8	115	0.00	2.53- 2.73
3	Benzene	20.000	21.877	-9.4	108	0.00	3.69- 3.89
4 S	a,a,a-TFT(S)	20.000	19.983	0.1	99	0.00	4.87- 5.07
5	Toluene	20.000	22.185	-10.9	110	0.00	6.26- 6.46
6	Chlorobenzene	20.000	22.612	-13.1	112	0.00	8.80- 9.00
7	Ethylbenzene	20.000	22.461	-12.3	112	0.00	9.11- 9.31
8	m,p-Xylene	40.000	44.793	-12.0	111	0.00	9.38- 9.58
9	o-Xylene	20.000	21.714	-8.6	108	0.00	10.19-10.39
10 S	BFB(S)	20.000	19.896	0.5	100	0.00	11.12-11.32
11	1,3-Dichlorobenzene	20.000	22.817	-14.1	116	0.00	12.64-12.84
12	1,4-Dichlorobenzene	20.000	21.309	-6.5	107	0.00	12.76-12.96
13	1,2-Dichlorobenzene	20.000	22.267	-11.3	112	0.00	13.13-13.33

(#) = Out of Range SPCC's out = 0 CCC's out = 0
QQ002414.D DUAL0321.M Tue Mar 22 09:03:38 2005 GCHH

Continuing Calibration Summary

Job Number: F30420 **Sample:** GQQ112-CC106
Account: EEINCJX EEI **Lab FileID:** QQ002581.D
Project: Camp Lejeune-Campbell St. Fuel Farm

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\2\DATA\032905\QQ002581.D\ELC1A.CH Vial: 1
Acq On : 3-29-05 08:42:53 AM Operator: AliciaL
Sample : CC106-40 Inst : VOA7
Misc : gc4737,gqq112,,,,,1 Multiplr: 1.00
IntFile : AUTOINT1.E

Data File : C:\MSDCHEM\2\DATA\032905\QQ002581.D\ELC2B.CH Vial: 1
Acq On : 3-29-05 08:42:54 AM Operator: AliciaL
Sample : CC106-40 Inst : VOA7
Misc : gc4737,gqq112,,,,,1 Multiplr: 1.00
IntFile : autoint2.e

Method : C:\MSDCHEM\2\METHODS\DUALO321.M (Chemstation Integrator)
Title : EPA 602 & 5030B/8021B
Last Update : Tue Mar 22 08:04:11 2005
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1		Methyl tert Butyl Ethe	40.000	40.009	-0.0	97	0.00	2.32- 2.52
2		Di-Isopropyl ether	40.000	41.593	-4.0	109	0.00	2.68- 2.88
3		Benzene	40.000	38.766	3.1	96	0.00	3.79- 3.99
4	S	a,a,a-TFT(S)	20.000	20.104	-0.5	100	0.00	4.87- 5.07
5		Toluene	40.000	39.924	0.2	98	0.00	6.48- 6.68
6		Chlorobenzene	40.000	39.557	1.1	97	0.00	8.83- 9.03
7		Ethylbenzene	40.000	40.980	-2.4	100	0.00	9.36- 9.56
8		m,p-Xylene	80.000	80.767	-1.0	100	0.00	9.80-10.00
9		o-Xylene	40.000	39.583	1.0	98	0.00	10.49-10.69
10	S	BFB(S)	20.000	21.353	-6.8	107	0.00	11.08-11.28
11		1,3-Dichlorobenzene	40.000	38.221	4.4	96	0.00	12.71-12.91
12		1,4-Dichlorobenzene	40.000	38.555	3.6	97	0.00	12.79-12.99
13		1,2-Dichlorobenzene	40.000	38.407	4.0	96	0.00	13.12-13.32
*****		Signal #2 *****						
1		Methyl tert Butyl Ethe	40.000	40.054	-0.1	97	0.00	2.22- 2.42
2		Di-Isopropyl ether	40.000	41.308	-3.3	104	0.00	2.53- 2.73
3		Benzene	40.000	38.676	3.3	96	0.00	3.69- 3.89
4	S	a,a,a-TFT(S)	20.000	20.110	-0.5	100	0.00	4.87- 5.07
5		Toluene	40.000	39.929	0.2	97	0.00	6.26- 6.46
6		Chlorobenzene	40.000	39.642	0.9	96	0.00	8.80- 9.00
7		Ethylbenzene	40.000	40.604	-1.5	100	0.00	9.11- 9.31
8		m,p-Xylene	80.000	81.106	-1.4	99	0.00	9.38- 9.58
9		o-Xylene	40.000	39.624	0.9	98	0.00	10.19-10.39
10	S	BFB(S)	20.000	21.231	-6.2	106	0.00	11.12-11.32
11		1,3-Dichlorobenzene	40.000	38.078	4.8	95	0.00	12.64-12.84
12		1,4-Dichlorobenzene	40.000	38.283	4.3	95	0.00	12.76-12.96
13		1,2-Dichlorobenzene	40.000	38.223	4.4	95	0.00	13.13-13.33

(#) = Out of Range SPCC's out = 0 CCC's out = 0
QQ002415.D DUALO321.M Wed Mar 30 08:30:55 2005 GCHH

Continuing Calibration Summary

Job Number: F30420
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GQQ112-CC106
Lab FileID: QQ002592.D

Evaluate Continuing Calibration Report

Signal #1 : C:\MSDCHEM\2\DATA\032905\QQ002592.D\ELC1A.CH Vial: 12
Signal #2 : C:\MSDCHEM\2\DATA\032905\QQ002592.D\ELC2B.CH
Acq On : 3-29-05 01:36:34 PM Operator: AliciaL
Sample : CC106-20 Inst : VOA7
Misc : gc4751,gqq112,,,,,1 MultiplIr: 1.00
IntFile Signal #1: AUTOINT1.E IntFile Signal #2: autoint2.e

Method : C:\MSDCHEM\2\METHODS\DUAL0321.M (Chemstation Integrator)
Title : EPA 602 & 5030B/8021B
Last Update : Tue Mar 22 08:04:11 2005
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	Methyl tert Butyl Ethe	20.000	20.995	-5.0	105	0.01	2.32- 2.52
2	Di-Isopropyl ether	20.000	20.625	-3.1	101	0.02	2.68- 2.88
3	Benzene	20.000	19.004	5.0	93	0.01	3.79- 3.99
4 S	a,a,a-TFT(S)	20.000	19.371	3.1	96	0.00	4.87- 5.07
5	Toluene	20.000	19.514	2.4	97	0.00	6.48- 6.68
6	Chlorobenzene	20.000	19.306	3.5	95	0.00	8.83- 9.03
7	Ethylbenzene	20.000	19.611	1.9	97	0.00	9.36- 9.56
8	m,p-Xylene	40.000	38.844	2.9	97	0.00	9.80-10.00
9	o-Xylene	20.000	19.312	3.4	96	0.00	10.49-10.69
10 S	BFB(S)	20.000	19.933	0.3	100	0.00	11.08-11.28
11	1,3-Dichlorobenzene	20.000	18.686	6.6	95	0.00	12.71-12.91
12	1,4-Dichlorobenzene	20.000	18.586	7.1	94	0.00	12.79-12.99
13	1,2-Dichlorobenzene	20.000	18.975	5.1	96	0.00	13.12-13.32
*****	Signal #2 *****						
1	Methyl tert Butyl Ethe	20.000	20.926	-4.6	105	0.01	2.22- 2.42
2	Di-Isopropyl ether	20.000	20.739	-3.7	104	0.02	2.53- 2.73
3	Benzene	20.000	19.042	4.8	94	0.01	3.69- 3.89
4 S	a,a,a-TFT(S)	20.000	19.444	2.8	97	0.00	4.87- 5.07
5	Toluene	20.000	19.457	2.7	96	0.00	6.26- 6.46
6	Chlorobenzene	20.000	19.352	3.2	96	0.00	8.80- 9.00
7	Ethylbenzene	20.000	19.516	2.4	97	0.00	9.11- 9.31
8	m,p-Xylene	40.000	38.872	2.8	97	0.00	9.38- 9.58
9	o-Xylene	20.000	19.319	3.4	96	0.00	10.19-10.39
10 S	BFB(S)	20.000	20.099	-0.5	101	0.00	11.12-11.32
11	1,3-Dichlorobenzene	20.000	18.649	6.8	95	0.00	12.64-12.84
12	1,4-Dichlorobenzene	20.000	18.709	6.5	94	0.00	12.76-12.96
13	1,2-Dichlorobenzene	20.000	18.887	5.6	95	0.00	13.13-13.33

(#) = Out of Range SPCC's out = 0 CCC's out = 0
QQ002414.D DUAL0321.M Wed Mar 30 08:31:37 2005 GCHH

Continuing Calibration Summary

Job Number: F30420
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GQQ112-CC106
Lab FileID: QQ002603.D

Evaluate Continuing Calibration Report

Signal #1 : C:\MSDCHEM\2\DATA\032905\QQ002603.D\ELC1A.CH Vial: 22
Signal #2 : C:\MSDCHEM\2\DATA\032905\QQ002603.D\ELC2B.CH
Acq On : 3-29-05 06:06:39 PM Operator: AliciaL
Sample : cc106-20 Inst : VOA7
Misc : gc4704,gqq112,,,,,1 MultiplIr: 1.00
IntFile Signal #1: AUTOINT1.E IntFile Signal #2: autoint2.e

Method : C:\MSDCHEM\2\METHODS\DUAL0321.M (Chemstation Integrator)
Title : EPA 602 & 5030B/8021B
Last Update : Tue Mar 22 08:04:11 2005
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1		Methyl tert Butyl Ethe	20.000	20.675	-3.4	103	0.00	2.32- 2.52
2		Di-Isopropyl ether	20.000	19.962	0.2	97	0.01	2.68- 2.88
3		Benzene	20.000	17.544	12.3	86	0.00	3.79- 3.99
4	S	a,a,a-TFT(S)	20.000	19.142	4.3	95	0.00	4.87- 5.07
5		Toluene	20.000	19.048	4.8	94	0.00	6.48- 6.68
6		Chlorobenzene	20.000	19.243	3.8	95	0.00	8.83- 9.03
7		Ethylbenzene	20.000	19.783	1.1	98	0.00	9.36- 9.56
8		m,p-Xylene	40.000	39.366	1.6	98	0.00	9.80-10.00
9		o-Xylene	20.000	19.235	3.8	96	0.00	10.49-10.69
10	S	BFB(S)	20.000	20.535	-2.7	103	0.00	11.08-11.28
11		1,3-Dichlorobenzene	20.000	20.324	-1.6	103	0.00	12.71-12.91
12		1,4-Dichlorobenzene	20.000	19.569	2.2	99	0.00	12.79-12.99
13		1,2-Dichlorobenzene	20.000	20.762	-3.8	105	0.00	13.12-13.32
*****		Signal #2 *****						
1		Methyl tert Butyl Ethe	20.000	20.846	-4.2	104	0.00	2.22- 2.42
2		Di-Isopropyl ether	20.000	19.958	0.2	100	0.01	2.53- 2.73
3		Benzene	20.000	17.609	12.0	87	0.00	3.69- 3.89
4	S	a,a,a-TFT(S)	20.000	19.328	3.4	96	0.00	4.87- 5.07
5		Toluene	20.000	19.069	4.7	94	0.00	6.26- 6.46
6		Chlorobenzene	20.000	19.249	3.8	95	0.00	8.80- 9.00
7		Ethylbenzene	20.000	19.689	1.6	98	0.00	9.11- 9.31
8		m,p-Xylene	40.000	39.447	1.4	98	0.00	9.38- 9.58
9		o-Xylene	20.000	19.241	3.8	95	0.00	10.19-10.39
10	S	BFB(S)	20.000	20.737	-3.7	104	0.00	11.12-11.32
11		1,3-Dichlorobenzene	20.000	18.782	6.1	95	0.00	12.64-12.84
12		1,4-Dichlorobenzene	20.000	18.968	5.2	96	0.00	12.76-12.96
13		1,2-Dichlorobenzene	20.000	20.129	-0.6	101	0.00	13.13-13.33

(#) = Out of Range SPCC's out = 0 CCC's out = 0
QQ002414.D DUAL0321.M Wed Mar 30 08:31:39 2005 GCHH

5.6

Continuing Calibration Summary

Job Number: F30420
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GQQ112-ECC106
Lab FileID: QQ002609.D

Evaluate Continuing Calibration Report

Signal #1 : C:\MSDCHEM\2\DATA\032905\QQ002609.D\ELC1A.CH Vial: 28
Signal #2 : C:\MSDCHEM\2\DATA\032905\QQ002609.D\ELC2B.CH
Acq On : 3-29-05 08:34:02 PM Operator: AliciaL
Sample : ecc106-40 Inst : V0A7
Misc : gc4704,gqq112,,,,,1 MultiplIr: 1.00
IntFile Signal #1: AUTOINT1.E IntFile Signal #2: autoint2.e

Method : C:\MSDCHEM\2\METHODS\DUAL0321.M (Chemstation Integrator)
Title : EPA 602 & 5030B/8021B
Last Update : Tue Mar 22 08:04:11 2005
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	Methyl tert Butyl Ethe	40.000	42.134	-5.3	102	0.00	2.32- 2.52
2	Di-Isopropyl ether	40.000	40.415	-1.0	105	0.00	2.68- 2.88
3	Benzene	40.000	35.816	10.5	89	0.00	3.79- 3.99
4 S	a,a,a-TFT(S)	20.000	18.548	7.3	93	0.00	4.87- 5.07
5	Toluene	40.000	38.224	4.4	93	0.00	6.48- 6.68
6	Chlorobenzene	40.000	38.506	3.7	94	0.00	8.83- 9.03
7	Ethylbenzene	40.000	38.971	2.6	95	0.00	9.36- 9.56
8	m,p-Xylene	80.000	77.404	3.2	95	0.00	9.80-10.00
9	o-Xylene	40.000	38.247	4.4	94	0.00	10.49-10.69
10 S	BFB(S)	20.000	20.081	-0.4	100	0.00	11.08-11.28
11	1,3-Dichlorobenzene	40.000	38.114	4.7	96	0.00	12.71-12.91
12	1,4-Dichlorobenzene	40.000	37.859	5.4	95	0.00	12.79-12.99
13	1,2-Dichlorobenzene	40.000	38.580	3.6	96	0.00	13.12-13.32
*****	Signal #2 *****						
1	Methyl tert Butyl Ethe	40.000	42.129	-5.3	102	0.00	2.22- 2.42
2	Di-Isopropyl ether	40.000	40.243	-0.6	101	0.00	2.53- 2.73
3	Benzene	40.000	35.825	10.4	89	0.00	3.69- 3.89
4 S	a,a,a-TFT(S)	20.000	18.661	6.7	93	0.00	4.87- 5.07
5	Toluene	40.000	38.358	4.1	94	0.00	6.26- 6.46
6	Chlorobenzene	40.000	38.731	3.2	94	0.00	8.80- 9.00
7	Ethylbenzene	40.000	38.933	2.7	95	0.00	9.11- 9.31
8	m,p-Xylene	80.000	77.617	3.0	95	0.00	9.38- 9.58
9	o-Xylene	40.000	38.450	3.9	95	0.00	10.19-10.39
10 S	BFB(S)	20.000	20.260	-1.3	101	0.00	11.12-11.32
11	1,3-Dichlorobenzene	40.000	37.456	6.4	94	0.00	12.64-12.84
12	1,4-Dichlorobenzene	40.000	37.816	5.5	94	0.00	12.76-12.96
13	1,2-Dichlorobenzene	40.000	38.382	4.0	96	0.00	13.13-13.33

(#) = Out of Range SPCC's out = 0 CCC's out = 0
QQ002415.D DUAL0321.M Wed Mar 30 08:30:56 2005 GCHH

Continuing Calibration Summary

Job Number: F30420 **Sample:** GQQ113-CC106
Account: EEINCJX EEI **Lab FileID:** QQ002611.D
Project: Camp Lejeune-Campbell St. Fuel Farm

Evaluate Continuing Calibration Report

Signal #1 : C:\MSDCHEM\2\DATA\033005\QQ002611.D\ELC1A.CH Vial: 2
Signal #2 : C:\MSDCHEM\2\DATA\033005\QQ002611.D\ELC2B.CH
Acq On : 3-30-05 09:54:21 AM Operator: AliciaL
Sample : CC106-40 Inst : VOA7
Misc : gc4751,gqq113,,,,,1 MultiplIr: 1.00
IntFile Signal #1: AUTOINT1.E IntFile Signal #2: autoint2.e

Method : C:\MSDCHEM\2\METHODS\DUALO321.M (Chemstation Integrator)
Title : EPA 602 & 5030B/8021B
Last Update : Tue Mar 22 08:04:11 2005
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1		Methyl tert Butyl Ethe	40.000	40.162	-0.4	97	0.00	2.32- 2.52
2		Di-Isopropyl ether	40.000	41.614	-4.0	109	0.00	2.68- 2.88
3		Benzene	40.000	38.992	2.5	97	0.00	3.79- 3.99
4	S	a,a,a-TFT(S)	20.000	18.341	8.3	91	0.00	4.87- 5.07
5		Toluene	40.000	39.326	1.7	96	0.00	6.48- 6.68
6		Chlorobenzene	40.000	39.100	2.2	95	0.00	8.83- 9.03
7		Ethylbenzene	40.000	39.591	1.0	97	0.00	9.36- 9.56
8		m,p-Xylene	80.000	78.098	2.4	96	0.00	9.80-10.00
9		o-Xylene	40.000	38.733	3.2	96	0.00	10.49-10.69
10	S	BFB(S)	20.000	18.827	5.9	94	0.00	11.08-11.28
11		1,3-Dichlorobenzene	40.000	37.727	5.7	95	0.00	12.71-12.91
12		1,4-Dichlorobenzene	40.000	37.624	5.9	94	0.00	12.79-12.99
13		1,2-Dichlorobenzene	40.000	37.696	5.8	94	0.00	13.12-13.32
*****		Signal #2 *****						
1		Methyl tert Butyl Ethe	40.000	39.905	0.2	97	0.00	2.22- 2.42
2		Di-Isopropyl ether	40.000	41.180	-2.9	104	0.00	2.53- 2.73
3		Benzene	40.000	38.783	3.0	96	0.00	3.69- 3.89
4	S	a,a,a-TFT(S)	20.000	18.308	8.5	91	0.00	4.87- 5.07
5		Toluene	40.000	39.312	1.7	96	0.00	6.26- 6.46
6		Chlorobenzene	40.000	39.107	2.2	95	0.00	8.80- 9.00
7		Ethylbenzene	40.000	39.062	2.3	96	0.00	9.11- 9.31
8		m,p-Xylene	80.000	78.486	1.9	96	0.00	9.38- 9.58
9		o-Xylene	40.000	38.518	3.7	95	0.00	10.19-10.39
10	S	BFB(S)	20.000	18.819	5.9	94	0.00	11.12-11.32
11		1,3-Dichlorobenzene	40.000	37.280	6.8	93	0.00	12.64-12.84
12		1,4-Dichlorobenzene	40.000	37.797	5.5	94	0.00	12.76-12.96
13		1,2-Dichlorobenzene	40.000	37.367	6.6	93	0.00	13.13-13.33

(#) = Out of Range SPCC's out = 0 CCC's out = 0
QQ002415.D DUALO321.M Thu Mar 31 08:04:27 2005 GCHH

Continuing Calibration Summary

Job Number: F30420
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GQQ113-CC106
Lab FileID: QQ002622.D

Evaluate Continuing Calibration Report

Signal #1 : C:\MSDCHEM\2\DATA\033005\QQ002622.D\ELC1A.CH Vial: 13
Signal #2 : C:\MSDCHEM\2\DATA\033005\QQ002622.D\ELC2B.CH
Acq On : 3-30-05 02:41:28 PM Operator: AliciaL
Sample : CC106-20 Inst : VOA7
Misc : gc4751,gqq113,,,,,1 Multiplr: 1.00
IntFile Signal #1: AUTOINT1.E IntFile Signal #2: autoint2.e

Method : C:\MSDCHEM\2\METHODS\DUAL0321.M (Chemstation Integrator)
Title : EPA 602 & 5030B/8021B
Last Update : Tue Mar 22 08:04:11 2005
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	Methyl tert Butyl Ethe	20.000	20.353	-1.8	102	0.02	2.32- 2.52
2	Di-Isopropyl ether	20.000	20.901	-4.5	102	0.02	2.68- 2.88
3	Benzene	20.000	19.852	0.7	97	0.01	3.79- 3.99
4 S	a,a,a-TFT(S)	20.000	19.390	3.0	96	0.01	4.87- 5.07
5	Toluene	20.000	19.582	2.1	97	0.00	6.48- 6.68
6	Chlorobenzene	20.000	19.385	3.1	96	0.00	8.83- 9.03
7	Ethylbenzene	20.000	19.735	1.3	98	0.00	9.36- 9.56
8	m,p-Xylene	40.000	38.830	2.9	97	0.00	9.80-10.00
9	o-Xylene	20.000	19.274	3.6	96	0.00	10.49-10.69
10 S	BFB(S)	20.000	19.924	0.4	100	0.00	11.08-11.28
11	1,3-Dichlorobenzene	20.000	18.870	5.6	96	0.00	12.71-12.91
12	1,4-Dichlorobenzene	20.000	18.765	6.2	95	0.00	12.79-12.99
13	1,2-Dichlorobenzene	20.000	18.958	5.2	95	0.00	13.12-13.32
*****	Signal #2 *****						
1	Methyl tert Butyl Ethe	20.000	20.496	-2.5	103	0.02	2.22- 2.42
2	Di-Isopropyl ether	20.000	21.191	-6.0	107	0.02	2.53- 2.73
3	Benzene	20.000	19.866	0.7	98	0.01	3.69- 3.89
4 S	a,a,a-TFT(S)	20.000	19.440	2.8	97	0.01	4.87- 5.07
5	Toluene	20.000	19.626	1.9	97	0.00	6.26- 6.46
6	Chlorobenzene	20.000	19.346	3.3	96	0.00	8.80- 9.00
7	Ethylbenzene	20.000	19.537	2.3	97	0.00	9.11- 9.31
8	m,p-Xylene	40.000	39.182	2.0	97	0.00	9.38- 9.58
9	o-Xylene	20.000	19.380	3.1	96	0.00	10.19-10.39
10 S	BFB(S)	20.000	20.019	-0.1	100	0.00	11.12-11.32
11	1,3-Dichlorobenzene	20.000	18.548	7.3	94	0.00	12.64-12.84
12	1,4-Dichlorobenzene	20.000	18.951	5.2	95	0.00	12.76-12.96
13	1,2-Dichlorobenzene	20.000	19.166	4.2	96	0.00	13.13-13.33

(#) = Out of Range SPCC's out = 0 CCC's out = 0
QQD02414.D DUAL0321.M Thu Mar 31 08:05:08 2005 GCHH

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: F30420
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP12753-MB	LL03128.D	1	03/23/05	AA	03/18/05	OP12753	GLL120

The QC reported here applies to the following samples: **Method:** EPA 610

F30420-1, F30420-11, F30420-13, F30420-15, F30420-16

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Aeenaphthene	ND	5.0	2.0	ug/l	
208-96-8	Aeenaphthylene	ND	5.0	2.0	ug/l	
120-12-7	Anthracene	ND	5.0	2.0	ug/l	
56-55-3	Benzo(a)anthraeene	ND	5.0	2.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.0	2.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.0	2.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.0	2.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.0	2.0	ug/l	
218-01-9	Chrysene	ND	5.0	2.0	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.0	2.0	ug/l	
206-44-0	Fluoranthene	ND	5.0	2.0	ug/l	
86-73-7	Fluorene	ND	5.0	2.0	ug/l	
193-39-5	Indeno(1,2,3-ed)pyrene	ND	5.0	2.0	ug/l	
91-20-3	Naphthalcne	ND	5.0	2.0	ug/l	
90-12-0	1-Methylnaphthalenc	ND	5.0	2.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.0	2.0	ug/l	
85-01-8	Phenanthrene	ND	5.0	2.0	ug/l	
129-00-0	Pyrene	ND	5.0	2.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
321-60-8	2-Fluorobiphenyl	81%	42-123%
84-15-1	o-Terphenyl	88%	51-123%

Method Blank Summary

Job Number: F30420
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP12753-MB	LL03138.D	1	03/24/05	AA	03/18/05	OP12753	GLL121

The QC reported here applies to the following samples: **Method:** EPA 610

F30420-1, F30420-11, F30420-13, F30420-15, F30420-16

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.0	2.0	ug/l	
208-96-8	Acenaphthylene	ND	5.0	2.0	ug/l	
120-12-7	Anthracene	ND	5.0	2.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.0	2.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.0	2.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.0	2.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.0	2.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.0	2.0	ug/l	
218-01-9	Chrysene	ND	5.0	2.0	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.0	2.0	ug/l	
206-44-0	Fluoranthene	ND	5.0	2.0	ug/l	
86-73-7	Fluorene	ND	5.0	2.0	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.0	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.0	ug/l	
90-12-0	1-Methylnaphthalene	ND	5.0	2.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.0	2.0	ug/l	
85-01-8	Phenanthrene	ND	5.0	2.0	ug/l	
129-00-0	Pyrene	ND	5.0	2.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
321-60-8	2-Fluorobiphenyl	79%	42-123%
84-15-1	o-Terphenyl	86%	51-123%

Method Blank Summary

Job Number: F30420
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP12766-MB	LL03122.D	1	03/23/05	AA	03/22/05	OP12766	GLL120

The QC reported here applies to the following samples: **Method:** EPA 610

F30420-12

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.0	2.0	ug/l	
208-96-8	Acenaphthylene	ND	5.0	2.0	ug/l	
120-12-7	Anthracene	ND	5.0	2.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.0	2.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.0	2.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.0	2.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.0	2.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.0	2.0	ug/l	
218-01-9	Chrysene	ND	5.0	2.0	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.0	2.0	ug/l	
206-44-0	Fluoranthene	ND	5.0	2.0	ug/l	
86-73-7	Fluorene	ND	5.0	2.0	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.0	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.0	ug/l	
90-12-0	1-Methylnaphthalene	ND	5.0	2.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.0	2.0	ug/l	
85-01-8	Phenanthrene	ND	5.0	2.0	ug/l	
129-00-0	Pyrene	ND	5.0	2.0	ug/l	

CAS No.	Surrogate Reeoveries		Limits
321-60-8	2-Fluorobiphenyl	82%	42-123%
84-15-1	o-Terphenyl	92%	51-123%

Blank Spike Summary

Job Number: F30420
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP12753-BS	LL03127.D	1	03/23/05	AA	03/18/05	OP12753	GLL120

The QC reported here applies to the following samples: **Method:** EPA 610

F30420-1, F30420-11, F30420-13, F30420-15, F30420-16

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
83-32-9	Acenaphthene	25	20.4	82	71-113
208-96-8	Acenaphthylene	25	20.3	81	63-102
120-12-7	Anthracene	25	21.2	85	71-110
56-55-3	Benzo(a)anthracene	25	21.8	87	70-114
50-32-8	Benzo(a)pyrene	25	21.4	86	67-114
205-99-2	Benzo(b)fluoranthene	25	22.5	90	69-115
191-24-2	Benzo(g,h,i)perylene	25	21.6	86	61-117
207-08-9	Benzo(k)fluoranthene	25	21.7	87	69-111
218-01-9	Chrysene	25	21.5	86	70-114
53-70-3	Dibenzo(a,h)anthracene	25	21.8	87	64-114
206-44-0	Fluoranthene	25	22.3	89	71-114
86-73-7	Fluorene	25	21.3	85	69-111
193-39-5	Indeno(1,2,3-cd)pyrene	25	22.2	89	63-112
91-20-3	Naphthalene	25	18.3	73	66-105
90-12-0	1-Methylnaphthalene	25	19.6	78	71-112
91-57-6	2-Methylnaphthalene	25	19.8	79	65-106
85-01-8	Phenanthrene	25	22.0	88	69-112
129-00-0	Pyrene	25	22.5	90	70-114

CAS No.	Surrogate Recoveries	BSP	Limits
321-60-8	2-Fluorobiphenyl	77%	42-123%
84-15-1	o-Terphenyl	90%	51-123%

Blank Spike Summary

Job Number: F30420
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP12766-BS	LL03121.D	1	03/23/05	AA	03/22/05	OP12766	GLL120

The QC reported here applies to the following samples: **Method:** EPA 610

F30420-12

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
83-32-9	Acenaphthene	25	24.2	97	71-113
208-96-8	Acenaphthylene	25	24.8	99	63-102
120-12-7	Anthracene	25	24.9	100	71-110
56-55-3	Benzo(a)anthraeene	25	23.9	96	70-114
50-32-8	Benzo(a)pyrene	25	22.8	91	67-114
205-99-2	Benzo(b)fluoranthene	25	24.1	96	69-115
191-24-2	Benzo(g,h,i)perylene	25	20.9	84	61-117
207-08-9	Benzo(k)fluoranthene	25	22.7	91	69-111
218-01-9	Chrysene	25	23.6	94	70-114
53-70-3	Dibenzo(a,h)anthraccne	25	21.3	85	64-114
206-44-0	Fluoranthene	25	24.8	99	71-114
86-73-7	Fluorene	25	25.2	101	69-111
193-39-5	Indeno(1,2,3-cd)pyrene	25	21.7	87	63-112
91-20-3	Naphthalene	25	23.2	93	66-105
90-12-0	1-Methylnaphthalene	25	24.3	97	71-112
91-57-6	2-Methylnaphthalene	25	24.7	99	65-106
85-01-8	Phenanthrene	25	24.9	100	69-112
129-00-0	Pyrene	25	24.9	100	70-114

CAS No.	Surrogate Recoveries	BSP	Limits
321-60-8	2-Fluorobiphenyl	96%	42-123%
84-15-1	o-Terphenyl	101%	51-123%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F30420
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP12753-MS	LL03132.D	1	03/23/05	AA	03/18/05	OP12753	GLL120
OP12753-MSD	LL03133.D	1	03/23/05	AA	03/18/05	OP12753	GLL120
F30420-13	LL03141.D	1	03/24/05	AA	03/18/05	OP12753	GLL121

The QC reported here applies to the following samples: **Method:** EPA 610

F30420-1, F30420-11, F30420-13, F30420-15, F30420-16

CAS No.	Compound	F30420-13 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	24.2		48.1	74.1	104	70.2	96	5	59-123/20
208-96-8	Acenaphthylene	ND		48.1	49.5	103	47.1	98	5	51-114/20
120-12-7	Anthracene	ND		48.1	48.3	100	48.6	101	1	64-114/17
56-55-3	Benzo(a)anthracene	ND		48.1	48.4	101	48.4	101	0	66-115/17
50-32-8	Benzo(a)pyrene	ND		48.1	45.9	95	46.2	96	1	62-118/17
205-99-2	Benzo(b)fluoranthene	ND		48.1	49.1	102	49.2	102	0	66-117/17
191-24-2	Benzo(g,h,i)perylene	ND		48.1	45.5	95	45.2	94	1	59-120/17
207-08-9	Benzo(k)fluoranthene	ND		48.1	46.1	96	45.8	95	1	64-116/16
218-01-9	Chrysene	ND		48.1	45.8	95	45.7	95	0	66-117/16
53-70-3	Dibenzo(a,h)anthracene	ND		48.1	45.7	95	45.9	95	0	57-124/18
206-44-0	Fluoranthene	ND		48.1	49.3	103	49.3	103	0	67-116/17
86-73-7	Fluorene	19.7		48.1	71.1	107	68.9	102	3	58-122/19
193-39-5	Indeno(1,2,3-cd)pyrene	ND		48.1	47.2	98	47.2	98	0	59-116/18
91-20-3	Naphthalene	26.8		48.1	75.1	100	68.9	88	9	47-114/20
90-12-0	1-Methylnaphthalene	2.3	J	48.1	49.5	98	46.0	91	7	55-128/21
91-57-6	2-Methylnaphthalene	ND		48.1	48.9	102	45.5	95	7	51-117/21
85-01-8	Phenanthrene	ND		48.1	49.3	103	49.2	102	0	63-116/18
129-00-0	Pyrene	ND		48.1	49.1	102	49.0	102	0	67-116/17

CAS No.	Surrogate Recoveries	MS	MSD	F30420-13	Limits
321-60-8	2-Fluorobiphenyl	94%	88%	95%	42-123%
84-15-1	o-Terphenyl	105%	104%	110%	51-123%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F30420
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP12766-MS	LL03124.D	1	03/23/05	AA	03/22/05	OP12766	GLL120
OP12766-MSD	LL03125.D	1	03/23/05	AA	03/22/05	OP12766	GLL120
F30420-12	LL03123.D	1	03/23/05	AA	03/22/05	OP12766	GLL120

The QC reported here applies to the following samples: **Method:** EPA 610

F30420-12

CAS No.	Compound	F30420-12 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	ND		50	46.3	93	49.3	99	6	59-123/20
208-96-8	Acenaphthylene	ND		50	43.4	87	48.5	97	11	51-114/20
120-12-7	Anthracene	ND		50	48.1	96	51.6	103	7	64-114/17
56-55-3	Benzo(a)anthracene	ND		50	46.6	93	49.4	99	6	66-115/17
50-32-8	Benzo(a)pyrene	ND		50	46.2	92	48.2	96	4	62-118/17
205-99-2	Benzo(b)fluoranthene	ND		50	49.0	98	51.4	103	5	66-117/17
191-24-2	Benzo(g,h,i)perylene	ND		50	46.7	93	48.4	97	4	59-120/17
207-08-9	Benzo(k)fluoranthene	ND		50	46.4	93	48.1	96	4	64-116/16
218-01-9	Chrysene	ND		50	45.8	92	48.8	98	6	66-117/16
53-70-3	Dibenzo(a,h)anthracene	ND		50	47.7	95	49.1	98	3	57-124/18
206-44-0	Fluoranthene	ND		50	47.3	95	50.4	101	6	67-116/17
86-73-7	Fluorene	ND		50	48.7	97	52.9	106	8	58-122/19
193-39-5	Indeno(1,2,3-cd)pyrene	ND		50	48.4	97	50.1	100	3	59-116/18
91-20-3	Naphthalene	36.5		50	70.9	69	82.1	91	15	47-114/20
90-12-0	1-Methylnaphthalene	33.0		50	69.2	72	76.2	86	10	55-128/21
91-57-6	2-Methylnaphthalene	ND		50	39.8	80	46.7	93	16	51-117/21
85-01-8	Phenanthrene	ND		50	50.1	100	51.2	102	2	63-116/18
129-00-0	Pyrene	ND		50	47.6	95	50.8	102	7	67-116/17

CAS No.	Surrogate Recoveries	MS	MSD	F30420-12	Limits
321-60-8	2-Fluorobiphenyl	85%	99%	95%	42-123%
84-15-1	o-Terphenyl	96%	104%	94%	51-123%

Semivolatile Surrogate Recovery Summary

Job Number: F30420
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Method: EPA 610 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S2 [a]
F30420-1	LL03129.D	90.0	96.0
F30420-11	LL03140.D	0.0* [b]	0.0* [b]
F30420-12	LL03123.D	95.0	94.0
F30420-13	LL03141.D	95.0	110.0
F30420-15	LL03134.D	75.0	91.0
F30420-16	LL03135.D	95.0	96.0
OP12753-BS	LL03127.D	77.0	90.0
OP12753-MB	LL03128.D	81.0	88.0
OP12753-MB	LL03138.D	79.0	86.0
OP12753-MS	LL03132.D	94.0	105.0
OP12753-MSD	LL03133.D	88.0	104.0
OP12766-BS	LL03121.D	96.0	101.0
OP12766-MB	LL03122.D	82.0	92.0
OP12766-MS	LL03124.D	85.0	96.0
OP12766-MSD	LL03125.D	99.0	104.0

Surrogate Compounds	Recovery Limits
S1 = 2-Fluorobiphenyl	42-123%
S2 = o-Terphenyl	51-123%

(a) Recovery from GC signal #1
(b) Outside control limits due to dilution.

6.4

GC Surrogate Retention Time Summary

Job Number: F30420
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GLL120-ICC120	**Injection Date:**	03/23/05
Lab File ID:	LL03116.D	**Injection Time:**	11:35
Instrument ID:	GCLL	**Method:**	EPA 610

	S1 [a] RT	S2 [a] RT
Check Std	6.48	12.00

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
OP12766-BS	LL03121.D	03/23/05	14:35	6.48	12.00
OP12766-MB	LL03122.D	03/23/05	15:06	6.48	12.00
F30420-12	LL03123.D	03/23/05	15:36	6.49	12.00
OP12766-MS	LL03124.D	03/23/05	16:06	6.48	12.00
OP12766-MSD	LL03125.D	03/23/05	16:36	6.48	12.00

Surrogate Compounds

S1 = 2-Fluorobiphenyl
S2 = o-Terphenyl

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: F30420
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GLL120-CC120	**Injection Date:**	03/23/05
Lab File ID:	LL03126.D	**Injection Time:**	17:07
Instrument ID:	GCLL	**Method:**	EPA 610

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	6.48	5.66	12.00	10.53

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	SI [b] RT	S2 [a] RT	S2 [b] RT
OP12753-BS	LL03127.D	03/23/05	17:37	6.48		12.00	
OP12753-MB	LL03128.D	03/23/05	18:07	6.48		12.00	
F30420-1	LL03129.D	03/23/05	18:38	6.49		12.00	
OP12753-MS	LL03132.D	03/23/05	20:09	6.49		12.00	
OP12753-MSD	LL03133.D	03/23/05	20:39	6.48		12.00	
F30420-15	LL03134.D	03/23/05	21:09	6.48		12.00	
F30420-16	LL03135.D	03/23/05	21:39	6.49		12.00	
GLL120-ECC120	LL03136.D	03/23/05	22:10	6.49	5.66	12.00	10.53

Surrogate Compounds

S1 = 2-Fluorobiphenyl
S2 = o-Terphenyl

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F30420
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GLL121-CC120	**Injection Date:**	03/24/05
Lab File ID:	LL03137.D	**Injection Time:**	08:49
Instrument ID:	GCLL	**Method:**	EPA 610

	S1 [a] RT	S2 [a] RT
Check Std	6.48	11.99

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
OP12753-MB	LL03138.D	03/24/05	09:27	6.48	11.99
F30420-11	LL03140.D	03/24/05	10:35	0.00	0.00
F30420-13	LL03141.D	03/24/05	11:06	6.48	12.00

Surrogate Compounds

S1 = 2-Fluorobiphenyl
S2 = o-Terphenyl

(a) Retention time from GC signal #1

Initial Calibration Summary

Job Number: F30420
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GLL120-ICC120
Lab FileID: LL03116.D

Response Factor Report FLGSLL

Method : C:\MSDCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title : PAH's BY EPA 610 OR 8100
Last Update : Wed Mar 23 13:32:01 2005
Response via : Initial Calibration

Calibration Files
5 =LL03114.D 10 =LL03115.D 20 =LL03116.D 30 =LL03117.D
40 =LL03118.D 50 =LL03119.D

		Compound	5	10	20	30	40	50	Avg		%RSD
1)		Naphthalene	2.592	2.549	2.617	2.596	2.604	2.780	2.623	E4	3.06
2)		2-Methyl Naphthalen	2.318	2.308	2.385	2.371	2.388	2.566	2.389	E4	3.90
3)		1-Methyl Naphthalen	2.371	2.361	2.431	2.419	2.441	2.626	2.442	E4	3.93
4)	S	2-Fluorobiphenyl	2.175	2.141	2.195	2.183	2.196	2.360	2.208	E4	3.49
5)		Acenaphthylene	2.114	2.105	2.217	2.215	2.223	2.400	2.212	E4	4.81
6)		Acenaphthene	2.356	2.376	2.454	2.457	2.491	2.695	2.471	E4	4.90
7)		Fluorene	2.036	2.095	2.195	2.215	2.257	2.459	2.209	E4	6.65
8)		Phenanthrene	2.117	2.140	2.239	2.212	2.255	2.464	2.238	E4	5.52
9)		Anthracene	2.010	2.028	2.148	2.177	2.154	2.347	2.144	E4	5.67
10)	S	O-Terphenyl	2.218	2.233	2.300	2.285	2.300	2.501	2.306	E4	4.41
11)		Fluoranthene	2.140	2.138	2.222	2.202	2.209	2.414	2.221	E4	4.56
12)		Pyrene	2.153	2.173	2.243	2.216	2.222	2.431	2.240	E4	4.44
13)		Benzo(a)Anthracene	2.218	2.216	2.256	2.202	2.220	2.428	2.257	E4	3.81
14)		Chrysene	2.415	2.335	2.344	2.261	2.275	2.482	2.352	E4	3.57
15)		Benzo(b)Fluoranthen	2.212	2.300	2.443	2.460	2.479	2.741	2.439	E4	7.42
16)		Benzo(k)Fluoranthen	2.612	2.567	2.599	2.535	2.529	2.750	2.599	E4	3.12
17)		Benzo(a) Pyrene	2.500	2.507	2.598	2.537	2.559	2.759	2.577	E4	3.74
18)		Indeno(1,2,3-cd)pyr	2.556	2.640	2.711	2.682	2.702	2.922	2.702	E4	4.51
19)		Dibenzo(a,h)anthrac	2.642	2.660	2.717	2.654	2.643	2.799	2.686	E4	2.30
20)		Benzo(g,h,i) Peryle	2.650	2.630	2.728	2.693	2.702	2.892	2.716	E4	3.44

Signal #2

1)		Naphthalene	2.488	2.443	2.539	2.484	2.568	2.827	2.558	E4	5.43
2)		2-Methyl Naphthalen	2.371	2.287	2.348	2.293	2.384	2.644	2.388	E4	5.51
3)		1-Methyl Naphthalen	2.483	2.388	2.444	2.383	2.464	2.710	2.479	E4	4.86
4)	S	2-Fluorobiphenyl	2.168	2.097	2.160	2.110	2.195	2.424	2.192	E4	5.45
5)		Acenaphthylene	2.222	2.160	2.229	2.188	2.290	2.583	2.279	E4	6.82
6)		Acenaphthene	2.553	2.462	2.528	2.468	2.563	2.817	2.565	E4	5.10
7)		Fluorene	2.344	2.267	2.353	2.306	2.401	2.652	2.387	E4	5.75
8)		Phenanthrene	2.300	2.208	2.308	2.277	2.377	2.618	2.348	E4	6.10
9)		Anthracene	2.200	2.101	2.198	2.169	2.276	2.543	2.248	E4	6.92
10)	S	O-Terphenyl	2.624	2.510	2.570	2.500	2.560	2.743	2.585	E4	3.47
11)		Fluoranthene	2.311	2.187	2.282	2.257	2.364	2.587	2.331	E4	5.93
12)		Pyrene	2.360	2.212	2.289	2.257	2.363	2.585	2.345	E4	5.62
13)		Benzo(a)Anthracene	2.280	2.156	2.199	2.161	2.299	2.482	2.263	E4	5.44
14)		Chrysene	2.330	2.196	2.238	2.195	2.331	2.511	2.300	E4	5.21
15)		Benzo(b)Fluoranthen	2.469	2.385	2.440	2.382	2.524	2.668	2.478	E4	4.34
16)		Benzo(k)Fluoranthen	2.523	2.421	2.415	2.360	2.456	2.614	2.465	E4	3.67
17)		Benzo(a) Pyrene	2.464	2.384	2.405	2.349	2.457	2.608	2.444	E4	3.73
18)		Indeno(1,2,3-cd)pyr	2.561	2.484	2.512	2.440	2.524	2.694	2.536	E4	3.44
19)		Dibenzo(a,h)anthrac	2.573	2.493	2.519	2.437	2.520	2.683	2.537	E4	3.30
20)		Benzo(g,h,i) Peryle	2.646	2.581	2.605	2.521	2.597	2.788	2.623	E4	3.44

(#) = Out of Range

8100_H2.M Thu Mar 24 08:07:29 2005

Initial Calibration Verification

Job Number: F30420
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GLL120-ICV120
Lab FileID: LL03120.D

Evaluate Continuing Calibration Report

Signal #1 : C:\MSDCHEM\1\DATA\0323PAH\LL03120.D\FID1B.CH Vial: 7
Signal #2 : C:\MSDCHEM\1\DATA\0323PAH\LL03120.D\FID2A.CH
Acq On : 3-23-05 01:52:37 PM Operator: aubreya
Sample : icv120-20 Inst : FLGSLL
Misc : OP12766,GLL120,1000,,,1,1,WATER Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : C:\MSDCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title : PAH's BY EPA 610 OR 8100
Last Update : Wed Mar 23 13:32:01 2005
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1		Naphthalene	20.000	19.597	2.0	98	0.00	4.65- 4.85
2		2-Methyl Naphthalene	20.000	20.832	-4.2	104	0.00	5.57- 5.77
3		1-Methyl Naphthalene	20.000	20.471	-2.4	103	0.00	5.84- 6.04
4	S	2-Fluorobiphenyl		----------NA----------				
5		Acenaphthylene	20.000	20.554	-2.8	103	0.00	7.55- 7.75
6		Acenaphthene	20.000	19.969	0.2	101	0.00	7.81- 8.01
7		Fluorene	20.000	20.173	-0.9	102	0.00	8.74- 8.94
8		Phenanthrene	20.000	19.832	0.8	99	0.00	10.92-11.12
9		Anthracene	20.000	20.476	-2.4	102	0.00	10.96-11.16
10	S	O-Terphenyl		----------NA----------				
11		Fluoranthene	20.000	20.137	-0.7	101	0.00	13.47-13.67
12		Pyrene	20.000	20.444	-2.2	102	0.00	14.05-14.25
13		Benzo(a)Anthracene	20.000	21.754	-8.8	109	0.00	16.60-16.80
14		Chrysene	20.000	21.231	-6.2	107	0.00	16.79-16.99
15		Benzo(b)Fluoranthene	20.000	22.274	-11.4	111	0.00	18.82-19.02
16		Benzo(k)Fluoranthene	20.000	21.788	-8.9	109	0.00	18.87-19.07
17		Benzo(a) Pyrene	20.000	21.539	-7.7	107	0.00	19.59-19.79
18		Indeno(1,2,3-cd)pyrene	20.000	20.809	-4.0	104	0.00	21.45-21.65
19		Dibenzo(a,h)anthracene	20.000	20.986	-4.9	104	0.00	21.52-21.72
20		Benzo(g,h,i) Perylene	20.000	20.276	-1.4	101	0.00	22.03-22.23
*****		Signal #2 *****						
1		Naphthalene	20.000	20.511	-2.6	103	0.00	3.97- 4.17
2		2-Methyl Naphthalene	20.000	22.188	-10.9	113	0.00	4.90- 5.10
3		1-Methyl Naphthalene	20.000	21.633	-8.2	110	0.00	5.05- 5.25
4	S	2-Fluorobiphenyl		----------NA----------				
5		Acenaphthylene	20.000	22.132	-10.7	113	0.00	6.31- 6.51
6		Acenaphthene	20.000	21.000	-5.0	107	0.00	6.65- 6.85
7		Fluorene	20.000	21.674	-8.4	110	0.00	7.58- 7.78
8		Phenanthrene	20.000	21.284	-6.4	108	0.00	9.38- 9.58
9		Anthracene	20.000	22.086	-10.4	113	0.00	9.47- 9.67
10	S	O-Terphenyl		----------NA----------				
11		Fluoranthene	20.000	21.232	-6.2	108	0.00	11.76-11.96
12		Pyrene	20.000	21.319	-6.6	109	0.00	12.16-12.36
13		Benzo(a)Anthracene	20.000	21.115	-5.6	109	0.00	14.68-14.88
14		Chrysene	20.000	20.871	-4.4	107	0.00	14.75-14.95
15		Benzo(b)Fluoranthene	20.000	20.014	-0.1	102	0.00	16.75-16.95
16		Benzo(k)Fluoranthene	20.000	20.233	-1.2	103	0.00	16.80-17.00
17		Benzo(a) Pyrene	20.000	19.858	0.7	101	0.00	17.28-17.48
18		Indeno(1,2,3-cd)pyrene	20.000	19.584	2.1	99	0.00	19.11-19.31

Initial Calibration Verification

Job Number: F30420
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GLL120-ICV120
Lab FileID: LL03120.D

19	Dibenzo(a,h)anthracene	20.000	19.544	2.3	98	0.00	19.20-19.40
20	Benzo(g,h,i) Perylene	20.000	19.073	4.6	96	0.00	19.46-19.66

(#) = Out of Range SPCC's out = 0 CCC's out = 0
LL03116.D 8100_H2.M Thu Mar 24 08:07:56 2005

6.9

Continuing Calibration Summary

Job Number: F30420 **Sample:** GLL120-CC120
Account: EEINCJX EEI **Lab FileID:** LL03126.D
Project: Camp Lejeune-Campbell St. Fuel Farm

Evaluate Continuing Calibration Report

Signal #1 : C:\MSDCHEM\1\DATA\0323PAH\LL03126.D\FID1B.CH Vial: 13
Signal #2 : C:\MSDCHEM\1\DATA\0323PAH\LL03126.D\FID2A.CH
Acq On : 3-23-05 05:07:14 PM Operator: aubreya
Sample : cc120-20 Inst : FLGSLL
Misc : OP12766,GLL120,1000,,,1,1,WATER Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : C:\MSDCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title : PAH's BY EPA 610 OR 8100
Last Update : Wed Mar 23 13:32:01 2005
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1		Naphthalene	20.000	20.824	-4.1	104	0.00	4.65- 4.85
2		2-Methyl Naphthalene	20.000	20.797	-4.0	104	0.00	5.57- 5.77
3		1-Methyl Naphthalene	20.000	20.847	-4.2	105	0.00	5.84- 6.04
4	S	2-Fluorobiphenyl	20.000	20.831	-4.2	105	0.00	6.38- 6.58
5		Acenaphthylene	20.000	21.310	-6.5	106	0.00	7.55- 7.75
6		Acenaphthene	20.000	21.003	-5.0	106	0.00	7.81- 8.01
7		Fluorene	20.000	20.440	-2.2	103	0.00	8.74- 8.94
8		Phenanthrene	20.000	20.789	-3.9	104	0.00	10.92-11.12
9		Anthracene	20.000	20.744	-3.7	104	0.00	10.96-11.16
10	S	O-Terphenyl	20.000	20.925	-4.6	105	0.00	11.90-12.10
11		Fluoranthene	20.000	20.571	-2.9	103	0.00	13.47-13.67
12		Pyrene	20.000	20.698	-3.5	103	0.00	14.05-14.25
13		Benzo(a)Anthracene	20.000	20.171	-0.9	101	0.00	16.60-16.80
14		Chrysene	20.000	20.236	-1.2	102	0.00	16.79-16.99
15		Benzo(b)Fluoranthene	20.000	20.510	-2.6	102	0.00	18.82-19.02
16		Benzo(k)Fluoranthene	20.000	20.097	-0.5	100	0.00	18.87-19.07
17		Benzo(a) Pyrene	20.000	20.040	-0.2	99	0.00	19.59-19.79
18		Indeno(1,2,3-cd)pyrene	20.000	20.824	-4.1	104	0.00	21.45-21.65
19		Dibenzo(a,h)anthracene	20.000	20.338	-1.7	101	0.00	21.52-21.72
20		Benzo(g,h,i) Perylene	20.000	20.349	-1.7	101	0.00	22.03-22.23
*****		Signal #2 *****						
1		Naphthalene	20.000	21.131	-5.7	106	0.00	3.97- 4.17
2		2-Methyl Naphthalene	20.000	20.846	-4.2	106	0.00	4.90- 5.10
3		1-Methyl Naphthalene	20.000	20.589	-2.9	104	0.00	5.05- 5.25
4	S	2-Fluorobiphenyl	20.000	20.740	-3.7	105	0.00	5.56- 5.76
5		Acenaphthylene	20.000	20.878	-4.4	107	0.00	6.31- 6.51
6		Acenaphthene	20.000	20.589	-2.9	104	0.00	6.65- 6.85
7		Fluorene	20.000	20.749	-3.7	105	0.00	7.58- 7.78
8		Phenanthrene	20.000	20.703	-3.5	105	0.00	9.38- 9.58
9		Anthracene	20.000	20.703	-3.5	106	0.00	9.47- 9.67
10	S	O-Terphenyl	20.000	20.515	-2.6	103	0.00	10.43-10.63
11		Fluoranthene	20.000	20.636	-3.2	105	0.00	11.76-11.96
12		Pyrene	20.000	20.516	-2.6	105	0.00	12.16-12.36
13		Benzo(a)Anthracene	20.000	20.512	-2.6	106	0.00	14.68-14.88
14		Chrysene	20.000	20.519	-2.6	105	0.00	14.75-14.95
15		Benzo(b)Fluoranthene	20.000	20.364	-1.8	103	0.00	16.75-16.95
16		Benzo(k)Fluoranthene	20.000	20.517	-2.6	105	0.00	16.80-17.00
17		Benzo(a) Pyrene	20.000	20.401	-2.0	104	0.00	17.28-17.48
18		Indeno(1,2,3-cd)pyrene	20.000	20.309	-1.5	102	0.00	19.11-19.31

Continuing Calibration Summary

Job Number: F30420
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GLL120-CC120
Lab FileID: LL03126.D

19	Dibenzo(a,h)anthracene	20.000	20.312	-1.6	102	0.00	19.20-19.40
20	Benzo(g,h,i) Perylene	20.000	20.349	-1.7	102	0.00	19.46-19.66

(#) = Out of Range SPCC's out = 0 CCC's out = 0
LL03116.D 8100_H2.M Thu Mar 24 08:07:57 2005

Continuing Calibration Summary

Job Number: F30420
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GLL120-ECC120
Lab FileID: LL03136.D

Evaluate Continuing Calibration Report

Signal #1 : C:\MSDCHEM\1\DATA\0323PAH\LL03136.D\FID1B.CH Vial: 23
Signal #2 : C:\MSDCHEM\1\DATA\0323PAH\LL03136.D\FID2A.CH
Acq On : 23 Mar 2005 10:10 pm Operator: aubreya
Sample : ecc120-30 Inst : FLGSLL
Misc : OP12753,GLL120,980,,,1,1,WATER Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : C:\MSDCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title : PAH's BY EPA 610 OR 8100
Last Update : Wed Mar 23 13:32:01 2005
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1		Naphthalene	30.000	31.966	-6.6	108	0.00	4.65- 4.85
2		2-Methyl Naphthalene	30.000	32.176	-7.3	108	0.00	5.57- 5.77
3		1-Methyl Naphthalene	30.000	32.097	-7.0	108	0.00	5.84- 6.04
4	S	2-Fluorobiphenyl	30.000	32.112	-7.0	108	0.00	6.38- 6.58
5		Acenaphthylene	30.000	33.476	-11.6	111	0.00	7.55- 7.75
6		Acenaphthene	30.000	32.520	-8.4	109	0.00	7.81- 8.01
7		Fluorene	30.000	32.039	-6.8	107	0.00	8.74- 8.94
8		Phenanthrene	30.000	32.119	-7.1	108	0.00	10.92-11.12
9		Anthracene	30.000	32.541	-8.5	107	0.00	10.96-11.16
10	S	O-Terphenyl	30.000	32.712	-9.0	110	0.00	11.90-12.10
11		Fluoranthene	30.000	31.927	-6.4	107	0.00	13.47-13.67
12		Pyrene	30.000	31.915	-6.4	107	0.00	14.05-14.25
13		Benzo(a)Anthracene	30.000	31.219	-4.1	107	0.00	16.60-16.80
14		Chrysene	30.000	30.906	-3.0	107	0.00	16.79-16.99
15		Benzo(b)Fluoranthene	30.000	31.938	-6.5	106	0.00	18.82-19.02
16		Benzo(k)Fluoranthene	30.000	30.802	-2.7	105	0.00	18.87-19.07
17		Benzo(a) Pyrene	30.000	30.754	-2.5	104	0.00	19.59-19.79
18		Indeno(1,2,3-cd)pyrene	30.000	32.038	-6.8	108	0.00	21.45-21.65
19		Dibenzo(a,h)anthracene	30.000	31.150	-3.8	105	0.00	21.52-21.72
20		Benzo(g,h,i) Perylene	30.000	31.438	-4.8	106	0.00	22.03-22.23
*****		Signal #2 *****						
1		Naphthalene	30.000	33.016	-10.1	113	0.00	3.97- 4.17
2		2-Methyl Naphthalene	30.000	32.734	-9.1	114	0.00	4.90- 5.10
3		1-Methyl Naphthalene	30.000	32.185	-7.3	112	0.00	5.05- 5.25
4	S	2-Fluorobiphenyl	30.000	32.519	-8.4	113	0.00	5.56- 5.76
5		Acenaphthylene	30.000	33.372	-11.2	116	0.00	6.31- 6.51
6		Acenaphthene	30.000	32.044	-6.8	111	0.00	6.65- 6.85
7		Fluorene	30.000	32.397	-8.0	112	0.00	7.58- 7.78
8		Phenanthrene	30.000	32.320	-7.7	111	0.00	9.38- 9.58
9		Anthracene	30.000	32.518	-8.4	112	0.00	9.47- 9.67
10	S	O-Terphenyl	30.000	31.287	-4.3	108	0.00	10.43-10.63
11		Fluoranthene	30.000	32.367	-7.9	111	0.00	11.76-11.96
12		Pyrene	30.000	32.204	-7.3	111	0.00	12.16-12.36
13		Benzo(a)Anthracene	30.000	31.560	-5.2	110	0.00	14.68-14.88
14		Chrysene	30.000	31.480	-4.9	110	0.00	14.75-14.95
15		Benzo(b)Fluoranthene	30.000	31.578	-5.3	110	0.00	16.75-16.95
16		Benzo(k)Fluoranthene	30.000	30.934	-3.1	108	0.00	16.80-17.00
17		Benzo(a) Pyrene	30.000	31.326	-4.4	109	0.00	17.28-17.48
18		Indeno(1,2,3-cd)pyrene	30.000	31.544	-5.1	109	0.00	19.11-19.31

Continuing Calibration Summary

Job Number: F30420
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GLL120-ECC120
Lab FileID: LL03136.D

19	Dibenzo(a,h)anthracene	30.000	31.466	-4.9	109	0.00	19.20-19.40
20	Benzo(g,h,i) Perylene	30.000	31.555	-5.2	109	0.00	19.46-19.66

(#) = Out of Range SPCC's out = 0 CCC's out = 0
LL03117.D 8100_H2.M Thu Mar 24 08:08:18 2005

6.6

Continuing Calibration Summary

Job Number: F30420 **Sample:** GLL121-CC120
Account: EEINCJX EEI **Lab FileID:** LL03137.D
Project: Camp Lejeune-Campbell St. Fuel Farm

Evaluate Continuing Calibration Report

Signal #1 : C:\MSDCHEM\1\DATA\0324PAH\LL03137.D\FID1B.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\0324PAH\LL03137.D\FID2A.CH
Acq On : 3-24-05 08:49:24 AM Operator: aubreya
Sample : cc120-20 Inst : FLGSLL
Misc : OP12753,GLL121,1000,,,1,1,WATER Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : C:\MSDCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title : PAH's BY EPA 610 OR 8100
Last Update : Wed Mar 23 13:32:01 2005
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1		Naphthalene	20.000	20.457	-2.3	103	0.00	4.65- 4.85
2		2-Methyl Naphthalene	20.000	20.561	-2.8	103	0.00	5.57- 5.77
3		1-Methyl Naphthalene	20.000	20.652	-3.3	104	0.00	5.84- 6.04
4	S	2-Fluorobiphenyl	20.000	20.564	-2.8	103	0.00	6.38- 6.58
5		Acenaphthylene	20.000	20.611	-3.1	103	0.00	7.55- 7.75
6		Acenaphthene	20.000	20.865	-4.3	105	0.00	7.81- 8.01
7		Fluorene	20.000	20.380	-1.9	103	0.00	8.74- 8.94
8		Phenanthrene	20.000	20.514	-2.6	103	0.00	10.92-11.12
9		Anthracene	20.000	20.552	-2.8	103	0.00	10.96-11.16
10	S	O-Terphenyl	20.000	20.759	-3.8	104	0.00	11.90-12.10
11		Fluoranthene	20.000	20.235	-1.2	101	0.00	13.47-13.67
12		Pyrene	20.000	20.314	-1.6	101	0.00	14.05-14.25
13		Benzo(a)Anthracene	20.000	19.952	0.2	100	0.00	16.60-16.80
14		Chrysene	20.000	19.994	0.0	100	0.00	16.79-16.99
15		Benzo(b)Fluoranthene	20.000	19.777	1.1	99	0.00	18.82-19.02
16		Benzo(k)Fluoranthene	20.000	20.355	-1.8	102	0.00	18.87-19.07
17		Benzo(a) Pyrene	20.000	19.407	3.0	96	0.00	19.59-19.79
18		Indeno(1,2,3-cd)pyrene	20.000	19.889	0.6	99	0.00	21.45-21.65
19		Dibenzo(a,h)anthracene	20.000	20.099	-0.5	99	0.00	21.52-21.72
20		Benzo(g,h,i) Perylene	20.000	20.179	-0.9	100	0.00	22.03-22.23
*****		Signal #2 *****						
1		Naphthalene	20.000	21.107	-5.5	106	0.00	3.97- 4.17
2		2-Methyl Naphthalene	20.000	20.882	-4.4	106	0.00	4.90- 5.10
3		1-Methyl Naphthalene	20.000	20.761	-3.8	105	0.00	5.05- 5.25
4	S	2-Fluorobiphenyl	20.000	20.813	-4.1	106	0.00	5.56- 5.76
5		Acenaphthylene	20.000	20.481	-2.4	105	0.00	6.31- 6.51
6		Acenaphthene	20.000	20.736	-3.7	105	0.00	6.65- 6.85
7		Fluorene	20.000	20.628	-3.1	105	0.00	7.58- 7.78
8		Phenanthrene	20.000	20.312	-1.6	103	0.00	9.38- 9.58
9		Anthracene	20.000	20.409	-2.0	104	0.00	9.47- 9.67
10	S	O-Terphenyl	20.000	20.411	-2.1	103	0.00	10.43-10.63
11		Fluoranthene	20.000	20.439	-2.2	104	0.00	11.76-11.96
12		Pyrene	20.000	20.420	-2.1	105	0.00	12.16-12.36
13		Benzo(a)Anthracene	20.000	20.633	-3.2	106	0.00	14.68-14.88
14		Chrysene	20.000	20.625	-3.1	106	0.00	14.75-14.95
15		Benzo(b)Fluoranthene	20.000	20.449	-2.2	104	0.00	16.75-16.95
16		Benzo(k)Fluoranthene	20.000	20.298	-1.5	104	0.00	16.80-17.00
17		Benzo(a) Pyrene	20.000	20.373	-1.9	104	0.00	17.28-17.48
18		Indeno(1,2,3-cd)pyrene	20.000	20.339	-1.7	103	0.00	19.11-19.31

Continuing Calibration Summary

Job Number: F30420
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GLL121-CC120
Lab FileID: LL03137.D

19	Dibenzo(a,h)anthracene	20.000	20.341	-1.7	102	0.00	19.20-19.40
20	Benzo(g,h,i) Perylene	20.000	20.352	-1.8	102	0.00	19.46-19.66

(#) = Out of Range SPCC's out = 0 CCC's out = 0
LL03116.D 8100_H2.M Fri Mar 25 07:39:02 2005

Continuing Calibration Summary

Job Number: F30420 **Sample:** GLL121-CC120
Account: EEINCJX EEI **Lab FileID:** LL03142.D
Project: Camp Lejeune-Campbell St. Fuel Farm

Evaluate Continuing Calibration Report

Signal #1 : C:\MSDCHEM\1\DATA\0324PAH\LL03142.D\FID1B.CH Vial: 6
Signal #2 : C:\MSDCHEM\1\DATA\0324PAH\LL03142.D\FID2A.CH
Acq On : 24 Mar 2005 11:36 am Operator: aubreya
Sample : cc120-30 Inst : FLGSLL
Misc : OP12753,GLL121,970,,,1,1,WATER Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : C:\MSDCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title : PAH's BY EPA 610 OR 8100
Last Update : Wed Mar 23 13:32:01 2005
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1		Naphthalene	30.000	31.842	-6.1	107	0.00	4.65- 4.85
2		2-Methyl Naphthalene	30.000	32.313	-7.7	109	0.00	5.57- 5.77
3		1-Methyl Naphthalene	30.000	32.180	-7.3	108	0.00	5.84- 6.04
4	S	2-Fluorobiphenyl	30.000	32.140	-7.1	108	0.00	6.38- 6.58
5		Acenaphthylene	30.000	33.441	-11.5	111	0.00	7.55- 7.75
6		Acenaphthene	30.000	32.643	-8.8	109	0.00	7.81- 8.01
7		Fluorene	30.000	32.539	-8.5	108	0.00	8.74- 8.94
8		Phenanthrene	30.000	32.465	-8.2	109	0.00	10.92-11.12
9		Anthracene	30.000	33.060	-10.2	109	0.00	10.96-11.16
10	S	O-Terphenyl	30.000	32.564	-8.5	110	0.00	11.90-12.10
11		Fluoranthene	30.000	32.025	-6.7	108	0.00	13.47-13.67
12		Pyrene	30.000	31.915	-6.4	107	0.00	14.05-14.25
13		Benzo(a)Anthracene	30.000	31.223	-4.1	107	0.00	16.60-16.80
14		Chrysene	30.000	30.908	-3.0	107	0.00	16.79-16.99
15		Benzo(b)Fluoranthene	30.000	32.110	-7.0	106	0.00	18.82-19.02
16		Benzo(k)Fluoranthene	30.000	30.715	-2.4	105	0.00	18.87-19.07
17		Benzo(a) Pyrene	30.000	30.775	-2.6	104	0.00	19.59-19.79
18		Indeno(1,2,3-cd)pyrene	30.000	31.459	-4.9	106	0.00	21.45-21.65
19		Dibenzo(a,h)anthracene	30.000	31.194	-4.0	105	0.00	21.52-21.72
20		Benzo(g,h,i) Perylene	30.000	31.422	-4.7	106	0.00	22.03-22.23
*****		Signal #2 *****						
1		Naphthalene	30.000	32.193	-7.3	111	0.00	3.97- 4.17
2		2-Methyl Naphthalene	30.000	31.994	-6.6	111	0.00	4.90- 5.10
3		1-Methyl Naphthalene	30.000	31.481	-4.9	109	0.00	5.05- 5.25
4	S	2-Fluorobiphenyl	30.000	31.817	-6.1	110	0.00	5.56- 5.76
5		Acenaphthylene	30.000	32.027	-6.8	111	0.00	6.31- 6.51
6		Acenaphthene	30.000	31.519	-5.1	109	0.00	6.65- 6.85
7		Fluorene	30.000	31.608	-5.4	109	0.00	7.58- 7.78
8		Phenanthrene	30.000	31.415	-4.7	108	0.00	9.38- 9.58
9		Anthracene	30.000	31.626	-5.4	109	0.00	9.47- 9.67
10	S	O-Terphenyl	30.000	30.804	-2.7	106	0.00	10.43-10.63
11		Fluoranthene	30.000	31.417	-4.7	108	0.00	11.76-11.96
12		Pyrene	30.000	31.320	-4.4	108	0.00	12.16-12.36
13		Benzo(a)Anthracene	30.000	31.109	-3.7	109	0.00	14.68-14.88
14		Chrysene	30.000	31.054	-3.5	108	0.00	14.75-14.95
15		Benzo(b)Fluoranthene	30.000	30.605	-2.0	106	0.00	16.75-16.95
16		Benzo(k)Fluoranthene	30.000	30.678	-2.3	107	0.00	16.80-17.00
17		Benzo(a) Pyrene	30.000	30.588	-2.0	106	0.00	17.28-17.48
18		Indeno(1,2,3-cd)pyrene	30.000	30.664	-2.2	106	0.00	19.11-19.31

Continuing Calibration Summary

Job Number: F30420
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GLL121-CC120
Lab FileID: LL03142.D

19	Dibenzo(a,h)anthracene	30.000	30.611	-2.0	106	0.00	19.20-19.40
20	Benzo(g,h,i) Perylene	30.000	30.644	-2.1	106	0.00	19.46-19.66

(#) = Out of Range SPCC's out = 0 CCC's out = 0
LL03117.D 8100_H2.M Fri Mar 25 07:39:23 2005

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Instrument Runlogs
- Initial and Continuing Calibration Blanks
- Initial and Continuing Calibration Checks
- High and Low Check Standards
- Interfering Element Cheek Standards
- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: F30420
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR040505.ASC Date Analyzed: 04/05/05 Methods: SW846 6010B
Analyst: DM Run ID: MA4276
Parameters: As,Ba,Cd,Cr,Fe,Pb,Mn,Se

Time	Sample Description	Dilution Factor	PS Recov	Comments
09:20	MA4276-ICV1	1		
09:24	MA4276-ICB1	1		
09:27	MA4276-CRIA1	1		
09:30	MA4276-CRI1	1		
09:33	MA4276-ICSA1	1		
09:36	MA4276-ICSAB1	1		
09:39	MA4276-CCV1	1		
09:44	MA4276-CCB1	1		
09:48	ZZZZZZ	1		
09:52	MP7855-MB1	1		
09:55	MP7855-B1	1		
10:01	F30675-11R	1		(sample used for QC only; not part of login F30420)
10:05	MP7855-D1	1		
10:09	MP7855-SD1	5		
10:13	MP7855-S1	1		
10:18	ZZZZZZ	1		
10:22	ZZZZZZ	1		
10:25	ZZZZZZ	1		
10:29	MA4276-CCV2	1		
10:34	MA4276-CCB2	1		
10:38	ZZZZZZ	1		
10:42	MP7852-MB1	1		
10:46	MP7852-B1	1		
10:52	F30640-1	1		(sample used for QC only; not part of login F30420)
10:56	MP7852-D1	1		
10:59	MP7852-SD1	5		
11:03	MP7852-S1	1		
11:07	MP7852-S2	1		
11:13	ZZZZZZ	1		
11:17	ZZZZZZ	1		
11:21	MA4276-CCV3	1		
11:26	MA4276-CCB3	1		
11:29	ZZZZZZ	1		

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: F30420
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR040505.ASC Date Analyzed: 04/05/05 Methods: SW846 6010B
Analyst: DM Run ID: MA4276
Parameters: As,Ba,Cd,Cr,Fe,Pb,Mn,Se

Time	Sample Description	Dilution Factor	PS Recov	Comments
11:33	ZZZZZZ	1		
11:37	ZZZZZZ	1		
11:41	ZZZZZZ	1		
11:45	ZZZZZZ	1		
11:48	ZZZZZZ	1		
11:52	ZZZZZZ	1		
11:56	ZZZZZZ	1		
12:00	ZZZZZZ	1		
12:04	ZZZZZZ	1		
12:08	MA4276-CCV4	1		
12:13	MA4276-CCB4	1		
12:16	ZZZZZZ	1		
12:20	ZZZZZZ	1		
12:24	ZZZZZZ	1		
12:28	ZZZZZZ	1		
12:32	ZZZZZZ	1		
12:35	MP7850-MB1	1		
12:39	MP7850-B1	1		
12:45	F30547-6	1		(sample used for QC only; not part of login F30420)
12:49	MP7850-D1	1		
12:53	MP7850-SD1	5		
12:57	MA4276-CCV5	1		
13:02	MA4276-CCB5	1		
13:06	MP7850-S1	1		
13:09	MP7850-S2	1		
13:15	ZZZZZZ	1		
13:19	ZZZZZZ	1		
13:23	ZZZZZZ	1		
13:27	ZZZZZZ	1		
13:31	ZZZZZZ	1		
13:34	ZZZZZZ	1		
13:38	ZZZZZZ	1		
13:42	ZZZZZZ	1		

7.1
7

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: F30420
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: 1R040505.ASC Date Analyzed: 04/05/05 Methods: SW846 6010B
Analyst: DM Run ID: MA4276
Parameters: As,Ba,Cd,Cr,Fe,Pb,Mn,Se

Time	Sample Description	Dilution Factor	PS Recov	Comments
13:46	MA4276-CCV6	1		
13:51	MA4276-CCB6	1		
13:55	ZZZZZZ	1		
13:59	ZZZZZZ	1		
14:02	ZZZZZZ	1		
14:06	ZZZZZZ	1		
14:10	ZZZZZZ	1		
14:14	ZZZZZZ	1		
14:18	ZZZZZZ	1		
14:21	ZZZZZZ	1		
14:25	ZZZZZZ	1		
14:29	ZZZZZZ	1		
14:33	MA4276-CCV7	1		
14:38	MA4276-CCB7	1		
14:42	MP7850-MB2	1		
14:45	MP7849-MB1	1		
14:49	MP7849-B1	1		
14:55	F30728-1	1		(sample used for QC only; not part of login F30420)
14:59	MP7849-D1	1		
15:03	MP7849-SD1	5		
15:07	MP7849-S1	1		
15:11	MP7849-S2	1		
15:17	MP7849-MB2	1		
15:21	MP7849-B2	1		
15:27	MA4276-CCV8	1		
15:32	MA4276-CCB8	1		
15:39	MP7859-MB1	1		
15:43	MP7859-B1	1		
15:49	F30825-1	1		(sample used for QC only; not part of login F30420)
15:53	MP7859-D1	1		
15:56	MP7859-SD1	5		
16:00	MP7859-S1	1		
16:06	MP7860-MB1	1		

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: F30420
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR040505.ASC Date Analyzed: 04/05/05 Methods: SW846 6010B
Analyst: DM Run ID: MA4276
Parameters: As,Ba,Cd,Cr,Fe,Pb,Mn,Se

Time	Sample Description	Dilution Factor	PS Recov	Comments
16:10	MP7860-B1	1		
16:16	F30812-1	1		(sample used for QC only; not part of login F30420)
16:20	MP7860-D1	1		
16:24	MA4276-CCV9	1		
16:29	MA4276-CCB9	1		
16:33	MP7860-SD1	5		
16:36	MP7860-S1	1		
16:42	MP7860-MB2	1		
16:46	MP7860-B2	1		
16:52	MP7857-MB1	1		
16:56	MP7857-B1	1		
17:02	F30420-1	1		
17:06	MP7857-D1	1		
17:10	MP7857-SD1	5		
17:14	MP7857-S1	1		
---------->	Last reportable sample/prep for job F30420			
17:19	MA4276-CCV10	1		
17:24	MA4276-CCB10	1		
---------->	Last reportable CCB for job F30420			
17:27	MP7861-MB1	1		
17:31	MP7861-B1	1		
17:37	F30804-3	1		(sample used for QC only; not part of login F30420)
17:41	MP7861-D1	1		
17:45	MP7861-SD1	5		
17:49	MP7861-S1	1		
17:55	MP7861-MB2	1		
17:59	MP7861-B2	1		
18:05	MA4276-CRI2	1		
18:09	MA4276-CCV11	1		
18:14	MA4276-CCB11	1		

Refer to raw data for calibration curve and standards.

7.1
7

INTERNAL STANDARD SUMMARY

Login Number: F30420
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR040505.ASC Date Analyzed: 04/05/05 Methods: SW846 6010B
Analyst: DM Run ID: MA4276
Parameters: As,Ba,Cd,Cr,Fe,Pb,Mn,Se

Time	Sample Description	Istd#1
09:20	MA4276-ICV1	7234
09:24	MA4276-ICB1	7403 R
09:27	MA4276-CRIA1	7354
09:30	MA4276-CRI1	7469
09:33	MA4276-ICSA1	6618
09:36	MA4276-ICSAB1	6593
09:39	MA4276-CCV1	7182
09:44	MA4276-CCB1	7513
09:48	ZZZZZZ	8993
09:52	MP7855-MB1	7511
09:55	MP7855-B1	7171
10:01	F30675-11R	6907
10:05	MP7855-D1	7001
10:09	MP7855-SD1	7174
10:13	MP7855-S1	6919
10:18	ZZZZZZ	7833
10:22	ZZZZZZ	7338
10:25	ZZZZZZ	7302
10:29	MA4276-CCV2	7360
10:34	MA4276-CCB2	7542
10:38	ZZZZZZ	7429
10:42	MP7852-MB1	7405
10:46	MP7852-B1	7197
10:52	F30640-1	9798 !
10:56	MP7852-D1	8877
10:59	MP7852-SD1	7967
11:03	MP7852-S1	10048 !
11:07	MP7852-S2	8794
11:13	ZZZZZZ	7468
11:17	ZZZZZZ	7341
11:21	MA4276-CCV3	7249
11:26	MA4276-CCB3	7602
11:29	ZZZZZZ	7378

7.1.1

INTERNAL STANDARD SUMMARY

Login Number: F30420
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR040505.ASC Date Analyzed: 04/05/05 Methods: SW846 6010B
Analyst: DM Run ID: MA4276
Parameters: As,Ba,Cd,Cr,Fe,Pb,Mn,Se

Time	Sample Description	Istd#1
11:33	ZZZZZZ	7516
11:37	ZZZZZZ	7403
11:41	ZZZZZZ	7526
11:45	ZZZZZZ	7429
11:48	ZZZZZZ	7390
11:52	ZZZZZZ	7452
11:56	ZZZZZZ	7304
12:00	ZZZZZZ	6677
12:04	ZZZZZZ	6943
12:08	MA4276-CCV4	7376
12:13	MA4276-CCB4	7577
12:16	ZZZZZZ	6904
12:20	ZZZZZZ	7102
12:24	ZZZZZZ	7024
12:28	ZZZZZZ	7185
12:32	ZZZZZZ	7013
12:35	MP7850-MB1	7583
12:39	MP7850-B1	7262
12:45	F30547-6	7148
12:49	MP7850-D1	7264
12:53	MP7850-SD1	7456
12:57	MA4276-CCV5	7289
13:02	MA4276-CCB5	7423
13:06	MP7850-S1	7091
13:09	MP7850-S2	7114
13:15	ZZZZZZ	7144
13:19	ZZZZZZ	7266
13:23	ZZZZZZ	7474
13:27	ZZZZZZ	7363
13:31	ZZZZZZ	7349
13:34	ZZZZZZ	7796
13:38	ZZZZZZ	7583
13:42	ZZZZZZ	8236

7.1.1

INTERNAL STANDARD SUMMARY

Login Number: F30420
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR040505.ASC Date Analyzed: 04/05/05 Methods: SW846 6010B
Analyst: DM Run ID: MA4276
Parameters: As,Ba,Cd,Cr,Fe,Pb,Mn,Se

Time	Sample Description	Istd#1
13:46	MA4276-CCV6	7366
13:51	MA4276-CCB6	7454
13:55	ZZZZZZ	7361
13:59	ZZZZZZ	7157
14:02	ZZZZZZ	7197
14:06	ZZZZZZ	7171
14:10	ZZZZZZ	7229
14:14	ZZZZZZ	7506
14:18	ZZZZZZ	7447
14:21	ZZZZZZ	7251
14:25	ZZZZZZ	7398
14:29	ZZZZZZ	7487
14:33	MA4276-CCV7	7209
14:38	MA4276-CCB7	7631
14:42	MP7850-MB2	7402
14:45	MP7849-MB1	7472
14:49	MP7849-B1	7385
14:55	F30728-1	7197
14:59	MP7849-D1	6932
15:03	MP7849-SD1	7306
15:07	MP7849-S1	6928
15:11	MP7849-S2	6720
15:17	MP7849-MB2	7046
15:21	MP7849-B2	6688
15:27	MA4276-CCV8	7300
15:32	MA4276-CCB8	7539
15:39	MP7859-MB1	7224
15:43	MP7859-B1	7227
15:49	F30825-1	7327
15:53	MP7859-D1	7410
15:56	MP7859-SD1	7595
16:00	MP7859-S1	7192
16:06	MP7860-MB1	7385

INTERNAL STANDARD SUMMARY

Login Number: F30420
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR040505.ASC Date Analyzed: 04/05/05 Methods: SW846 6010B
Analyst: DM Run ID: MA4276
Parameters: As,Ba,Cd,Cr,Fe,Pb,Mn,Se

Time	Sample Description	Istd#1
16:10	MP7860-B1	7441
16:16	F30812-1	7694
16:20	MP7860-D1	7519
16:24	MA4276-CCV9	7411
16:29	MA4276-CCB9	7650
16:33	MP7860-SD1	7577
16:36	MP7860-S1	7264
16:42	MP7860-MB2	7529
16:46	MP7860-B2	7212
16:52	MP7857-MB1	7385
16:56	MP7857-B1	7352
17:02	F30420-1	7277
17:06	MP7857-D1	7286
17:10	MP7857-SD1	7452
17:14	MP7857-S1	7260
17:19	MA4276-CCV10	7175
17:24	MA4276-CCB10	7484
17:27	MP7861-MB1	7435
17:31	MP7861-B1	7261
17:37	F30804-3	6610
17:41	MP7861-D1	6701
17:45	MP7861-SD1	7142
17:49	MP7861-S1	6761
17:55	MP7861-MB2	6638
17:59	MP7861-B2	7002
18:05	MA4276-CRI2	7395
18:09	MA4276-CCV11	7151
18:14	MA4276-CCB11	7470

R = Reference for ISTD limits. ! = Outside limits.

LEGEND:

Istd#	Parameter	Limits
Istd#1	Yttrium	60-125 %

7.1.1

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: F30420
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR040505.ASC Date Analyzed: 04/05/05 Methods: SW846 6010B
QC Limits: result < RL Run ID: MA4276 Units: ug/l

Time:			09:24		09:44		10:34		11:26	
Sample ID:			ICB1		CCB1		CCB2		CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	6.6								
Antimony	5.0	1.5	anr							
Arsenic	10	2.8	3.6	<10	1.6	<10	3.5	<10	2.2	<10
Barium	200	.5	0.39	<200	0.45	<200	0.64	<200	0.62	<200
Beryllium	4.0	.3	anr							
Cadmium	5.0	.3	0.19	<5.0	0.0	<5.0	0.24	<5.0	0.19	<5.0
Calcium	1000	3.8								
Chromium	10	.4	0.33	<10	0.13	<10	0.57	<10	0.32	<10
Cobalt	50	.5								
Copper	25	.44	anr							
Iron	300	7.1	11.2	<300	15.4	<300	21.2	<300	9.4	<300
Lead	5.0	1.2	1.7	<5.0	1.8	<5.0	2.1	<5.0	1.4	<5.0
Magnesium	5000	9.9								
Manganese	15	.16	0.21	<15	0.26	<15	0.52	<15	0.41	<15
Molybdenum	50	.75								
Nickel	40	1.1	anr							
Potassium	5000	14								
Selenium	10	2	5.9	<10	7.3	<10	5.8	<10	7.8	<10
Silver	10	.6	anr							
Sodium	5000	150								
Thallium	10	1.5	anr							
Tin	50	1.5								
Vanadium	50	.47	anr							
Zinc	20	.59	anr							

(*) Outside of QC limits
(anr) Analyte not requested

7.1.2

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: F30420
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR040505.ASC
QC Limits: result < RL

Date Analyzed: 04/05/05
Run ID: MA4276

Methods: SW846 6010B
Units: ug/l

Time: / Sample ID: / Metal	RL	IDL	12:13 CCB4 raw	final	13:02 CCB5 raw	final	13:51 CCB6 raw	final	14:38 CCB7 raw	final
Aluminum	200	6.6								
Antimony	5.0	1.5	anr							
Arsenic	10	2.8	5.5	<10	3.0	<10	2.0	<10	2.2	<10
Barium	200	.5	0.68	<200	0.84	<200	1.0	<200	0.93	<200
Beryllium	4.0	.3	anr							
Cadmium	5.0	.3	0.28	<5.0	0.34	<5.0	0.68	<5.0	0.69	<5.0
Calcium	1000	3.8								
Chromium	10	.4	0.43	<10	0.63	<10	0.74	<10	0.82	<10
Cobalt	50	.5								
Copper	25	.44	anr							
Iron	300	7.1	15.7	<300	23.5	<300	29.0	<300	27.8	<300
Lead	5.0	1.2	2.3	<5.0	1.8	<5.0	2.1	<5.0	2.8	<5.0
Magnesium	5000	9.9								
Manganese	15	.16	0.52	<15	0.67	<15	0.87	<15	0.80	<15
Molybdenum	50	.75								
Nickel	40	1.1	anr							
Potassium	5000	14								
Selenium	10	2	7.2	<10	7.1	<10	6.6	<10	6.5	<10
Silver	10	.6	anr							
Sodium	5000	150								
Thallium	10	1.5	anr							
Tin	50	1.5								
Vanadium	50	.47	anr							
Zinc	20	.59	anr							

(*) Outside of QC limits
(anr) Analyte not requested

7.1.2

ACCUTEST.
F30420

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: F30420
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR040505.ASC Date Analyzed: 04/05/05 Methods: SW846 601UB
QC Limits: result < RL Run ID: MA4276 Units: ug/l

Time:			15:32		16:29		17:24	
Sample ID:			CCB8		CCB9		CCB10	
Metal	RL	IDL	raw	final	raw	final	raw	final
Aluminum	200	6.6						
Antimony	5.0	1.5	anr					
Arsenic	10	2.8	4.8	<10	3.0	<10	4.6	<10
Barium	200	.5	0.50	<200	0.77	<200	0.86	<200
Beryllium	4.0	.3	anr					
Cadmium	5.0	.3	0.15	<5.0	0.37	<5.0	0.46	<5.0
Calcium	1000	3.8						
Chromium	10	.4	0.080	<10	0.37	<10	0.38	<10
Cobalt	50	.5						
Copper	25	.44	anr					
Iron	300	7.1	8.8	<300	24.9	<300	30.4	<300
Lead	5.0	1.2	1.8	<5.0	1.4	<5.0	2.1	<5.0
Magnesium	5000	9.9						
Manganese	15	.16	0.31	<15	0.50	<15	0.63	<15
Molybdenum	50	.75						
Nickel	40	1.1	anr					
Potassium	5000	14						
Selenium	10	2	6.9	<10	9.6	<10	10.4	* (a)
Silver	10	.6	anr					
Sodium	5000	150						
Thallium	10	1.5	anr					
Tin	50	1.5						
Vanadium	50	.47	anr					
Zinc	20	.59	anr					

(*) Outside of QC limits
(anr) Analyte not requested
(a) Possible positive bias, but all sample results < DL.

7.1.2
7

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: F30420
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR040505.ASC Date Analyzed: 04/05/05 Methods: SW846 6010B
QC Limits: 90 to 110 % Recovery Run ID: MA4276 Units: ug/l

Time:		09:20			09:39			10:29	
Sample ID:	ICV	ICV1		CCV	CCV1		CCV	CCV2	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum									
Antimony	anr								
Arsenic	2000	1950	97.5	2000	1900	95.0	2000	1910	95.5
Barium	2000	2020	101.0	2000	2020	101.0	2000	1980	99.0
Beryllium	anr								
Cadmium	2000	2030	101.5	2000	1970	98.5	2000	1990	99.5
Calcium									
Chromium	2000	1950	97.5	2000	1900	95.0	2000	1920	96.0
Cobalt									
Copper	anr								
Iron	40000	40900	102.3	40000	39700	99.3	40000	39900	99.8
Lead	2000	1990	99.5	2000	1940	97.0	2000	1950	97.5
Magnesium									
Manganese	2000	2050	102.5	2000	2000	100.0	2000	2010	100.5
Molybdenum									
Nickel	anr								
Potassium									
Selenium	2000	2030	101.5	2000	1980	99.0	2000	1980	99.0
Silver	anr								
Sodium									
Thallium	anr								
Tin									
Vanadium	anr								
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

7.1.3

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: F30420
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR040505.ASC Date Analyzed: 04/05/05 Methods: SW846 6010B
QC Limits: 90 to 110 % Recovery Run ID: MA4276 Units: ug/l

Time:		11:21			12:08			12:57	
Sample ID:	CCV	CCV3		CCV	CCV4		CCV	CCV5	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum									
Antimony	anr								
Arsenic	2000	1930	96.5	2000	1890	94.5	2000	1910	95.5
Barium	2000	2010	100.5	2000	1970	98.5	2000	2010	100.5
Beryllium	anr								
Cadmium	2000	2010	100.5	2000	1970	98.5	2000	1970	98.5
Calcium									
Chromium	2000	1930	96.5	2000	1890	94.5	2000	1910	95.5
Cobalt									
Copper	anr								
Iron	40000	40100	100.3	40000	39200	98.0	40000	39400	98.5
Lead	2000	1970	98.5	2000	1930	96.5	2000	1930	96.5
Magnesium									
Manganese	2000	2020	101.0	2000	1980	99.0	2000	2010	100.5
Molybdenum									
Nickel	anr								
Potassium									
Selenium	2000	2010	100.5	2000	1960	98.0	2000	1980	99.0
Silver	anr								
Sodium									
Thallium	anr								
Tin									
Vanadium	anr								
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

7.1.3

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: F30420
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR040505.ASC Date Analyzed: 04/05/05 Methods: SW846 6010B
QC Limits: 90 to 110 % Recovery Run ID: MA4276 Units: ug/L

Time:		13:46			14:33			15:27	
Sample ID:	CCV	CCV6		CCV	CCV7		CCV	CCV8	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum									
Antimony	anr								
Arsenic	2000	1920	96.0	2000	1930	96.5	2000	1870	93.5
Barium	2000	2010	100.5	2000	2020	101.0	2000	1970	98.5
Beryllium	anr								
Cadmium	2000	1980	99.0	2000	2000	100.0	2000	1930	96.5
Calcium									
Chromium	2000	1910	95.5	2000	1920	96.0	2000	1860	93.0
Cobalt									
Copper	anr								
Iron	40000	39700	99.3	40000	39900	99.8	40000	38700	96.8
Lead	2000	1950	97.5	2000	1960	98.0	2000	1910	95.5
Magnesium									
Manganese	2000	2010	100.5	2000	2020	101.0	2000	1960	98.0
Molybdenum									
Nickel	anr								
Potassium									
Selenium	2000	1990	99.5	2000	2000	100.0	2000	1980	99.0
Silver	anr								
Sodium									
Thallium	anr								
Tin									
Vanadium	anr								
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

7.1.3

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: F30420
Account: EEINCJX - EE1
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR040505.ASC Date Analyzed: 04/05/05 Methods: SW846 6010B
QC Limits: 90 to 110 % Recovery Run ID: MA4276 Units: ug/l

Time:		16:24			17:19	
Sample ID:	CCV	CCV9		CCV	CCV10	
Metal	True	Results	% Rec	True	Results	% Rec
Aluminum						
Antimony	anr					
Arsenic	2000	1920	96.0	2000	1880	94.0
Barium	2000	1990	99.5	2000	1970	98.5
Beryllium	anr					
Cadmium	2000	1990	99.5	2000	1940	97.0
Calcium						
Chromium	2000	1910	95.5	2000	1870	93.5
Cobalt						
Copper	anr					
Iron	40000	39800	99.5	40000	38800	97.0
Lead	2000	1950	97.5	2000	1920	96.0
Magnesium						
Manganese	2000	2010	100.5	2000	1960	98.0
Molybdenum						
Nickel	anr					
Potassium						
Selenium	2000	2000	100.0	2000	1990	99.5
Silver	anr					
Sodium						
Thallium	anr					
Tin						
Vanadium	anr					
Zinc	anr					

(*) Outside of QC limits
(anr) Analyte not requested

7.1.3

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: F30420
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR040505.ASC Date Analyzed: 04/05/05 Methods: SW846 6010B
QC Limits: 70 to 130 % Recovery Run ID: MA4276 Units: ug/l

Time:			09:27		09:30	
Sample ID:	CRI	CRIA	CRIA1		CRI1	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	400	200				
Antimony	10	5.0				
Arsenic	20	10			23.3	116.5
Barium	400	200			408	102.0
Beryllium	10	5.0				
Cadmium	10	5.0			10.5	105.0
Calcium	2000	1000				
Chromium	20	10			21.3	106.5
Cobalt	100	50				
Copper	50	25				
Iron	600	300			541	90.2
Lead	10	5.0			12.2	122.0
Magnesium	10000	5000				
Manganese	30	15			33.0	110.0
Molybdenum	100	50				
Nickel	80	40				
Potassium	10000	5000				
Selenium	10	5.0			12.2	122.0
Silver	20	10				
Sodium	10000	5000				
Thallium	20	10				
Tin	100	50				
Vanadium	100	50				
Zinc	40	20				

(*) Outside of QC limits
(anr) Analyte not requested

7.1.4

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: F30420
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR040505.ASC Date Analyzed: 04/05/05 Methods: SW846 6010B
QC Limits: 80 to 120 % Recovery Run ID: MA4276 Units: ug/l

Time:			09:33		09:36	
Sample ID:	ICSA	ICSAB	ICSA1		ICSAB1	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	500000	500000	467000	93.4	472000	94.4
Antimony		1000	-2.7		1010	101.0
Arsenic		1000	2.0		999	99.9
Barium		500	1.1		521	104.2
Beryllium		500	-0.14		493	98.6
Cadmium		1000	2.0		923	92.3
Calcium	500000	500000	442000	88.4	439000	87.8
Chromium		500	4.3		478	95.6
Cobalt		500	1.3		466	93.2
Copper		500	1.1		545	109.0
Iron	200000	200000	184000	92.0	189000	94.5
Lead		1000	2.4		919	91.9
Magnesium	500000	500000	479000	95.8	477000	95.4
Manganese		500	0.34		493	98.6
Molybdenum		1000	5.1		949	94.9
Nickel		1000	1.1		921	92.1
Potassium			41.7		-340	
Selenium		1000	-3.2		989	98.9
Silver		1000	0.0		1080	108.0
Sodium			147		178	
Thallium		1000	4.5		932	93.2
Tin		1000	-2.5		912	91.2
Vanadium		500	-2.8		474	94.8
Zinc		1000	2.3		929	92.9

(*) Outside of QC limits
(anr) Analyte not requested

7.1.5

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: F30420
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

QC Batch ID: MP7857
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date: 04/05/05

Metal	RL	IDL	MB raw	final
Aluminum	200	6.6		
Antimony	5.0	1.5		
Arsenic	10	2.8	4.7	<10
Barium	200	.5	0.29	<200
Beryllium	4.0	.3		
Cadmium	5.0	.3	-0.34	<5.0
Calcium	1000	3.8		
Chromium	10	.4	0.030	<10
Cobalt	50	.5		
Copper	25	.44		
Iron	300	7.1	3.0	<300
Lead	5.0	1.2	0.53	<5.0
Magnesium	5000	9.9		
Manganese	15	.16	0.63	<15
Molybdenum	30	.75		
Nickel	40	1.1		
Potassium	5000	14		
Selenium	10	2	9.4	<10
Silver	10	.6		
Sodium	5000	150		
Thallium	10	1.5		
Tin	50	1.5		
Vanadium	50	.47		
Zinc	20	.59		

Associated samples MP7857: F30420-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

7.2.1

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: F30420
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

QC Batch ID: MP7857
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date: 04/05/05 04/05/05

Metal	F30420-1 Original	DUP	RPD	QC Limits	F30420-1 Original	MS	Spikelot MPFLICP	% Rec	QC Limits
Aluminum									
Antimony									
Arsenic	0.0	0.0	NC	0-12	0.0	3690	4000	92.3	83-116
Barium	35.4	35.7	0.8	0-13	35.4	3580	4000	88.6	82-116
Beryllium									
Cadmium	0.0	0.0	NC	0-13	0.0	89.3	100	89.3	80-115
Calcium									
Chromium	0.42	0.0	200.0(a)	0-12	0.42	357	400	89.1	82-120
Cobalt									
Copper									
Iron	0.0	0.0	NC	0-14	0.0	24800	27000	91.9	76-125
Lead	0.0	0.0	NC	0-10	0.0	923	1000	92.3	84-118
Magnesium									
Manganese	3.5	0.63	139.0(a)	0-13	3.5	928	1000	92.5	75-125
Molybdenum									
Nickel									
Potassium									
Selenium	10	0.0	0.0	0-13	10	4340	4000	108.3	84-121
Silver									
Sodium									
Thallium									
Tin									
Vanadium									
Zinc									

Associated samples MP7857: F30420-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) RPD acceptable due to low duplicate and sample concentrations.

7.2.2

7

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: F30420
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

QC Batch ID: MP7857
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date: 04/05/05

Metal	BSP Result	Spikelot MPFLICP	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic	3610	4000	90.3	80-120
Barium	3540	4000	88.5	80-120
Beryllium				
Cadmium	89.8	100	89.8	80-120
Calcium				
Chromium	357	400	89.3	80-120
Cobalt				
Copper				
Iron	25000	27000	92.6	80-120
Lead	920	1000	92.0	80-120
Magnesium				
Manganese	929	1000	92.9	80-120
Molybdenum				
Nickel				
Potassium				
Selenium	4250	4000	106.3	80-120
Silver				
Sodium				
Thallium				
Tin				
Vanadium				
Zinc				

Associated samples MP7857: F30420-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

7.2.3

SERIAL DILUTION RESULTS SUMMARY

Login Number: F30420
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

QC Batch ID: MP7857
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date: 04/05/05

Metal	F30420-1 Original	SDL 1:5	RPD	QC Limits
Aluminum				
Antimony				
Arsenic	0.00	0.00	NC	0-10
Barium	35.4	34.7	2.0	0-10
Beryllium				
Cadmium	0.00	0.00	NC	0-10
Calcium				
Chromium	0.420	0.00	100.0(a)	0-10
Cobalt				
Copper				
Iron	0.00	0.00	NC	0-10
Lead	0.00	7.14		0-10
Magnesium				
Manganese	3.45	2.15	37.7 (a)	0-10
Molybdenum				
Nickel				
Potassium				
Selenium	9.97	0.00	100.0(a)	0-10
Silver				
Sodium				
Thallium				
Tin				
Vanadium				
Zinc				

Associated samples MP7857: F30420-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

7.2.4

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: F30420
Account: EEINCGX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Solids, Total Dissolved	GN16900	10	<10	mg/l				
Solids, Total Suspended	GN16899	4.0	<4.0	mg/l				

Associated Samples:
Batch GN16899: F30420-1
Batch GN16900: F30420-1

8.1

8

ACCUTEST
F30420

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: F30420
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Solids, Total Dissolved	GN16900	F30065-1R	mg/l	23.0	24.0	4.3	0-29%
Solids, Total Suspended	GN16899	F30410-1	mg/l	37.0	39.0	5.3	0-33%

Associated Samples:
Batch GN16899: F30420-1
Batch GN16900: F30420-1

8.2
8

Southeast
ACCUTEST.
Laboratories

12/08/05

Technical Report for

EEI

CSFF MCAS New River

LD03-016/ CTO 015

Accutest Job Number: F31531

Sampling Date: 04/29/05

Report to:

EEI

bmorris@eeimail.com

ATTN: Bill Morris

Total number of pages in report: 28

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Sections: 1 2 3 4 5

Table of Contents

Section 1: Sample Summary **3**
Section 2: Case Narrative/Conformance Summary **4**
Section 3: Sample Results **5**
3.1: F31531-1: USTCSFF-ASE 5
3.2: F31531-2: USTCSFF-EFF 6
3.3: F31531-3: TRIP BLANK 7
Section 4: Misc. Forms **8**
4.1: Chain of Custody 9
Section 5: GC Volatiles - QC Data Summaries **11**
5.1: Method Blank Summary 12
5.2: Blank Spike Summary 14
5.3: Matrix Spike/Matrix Spike Duplicate Summary 16
5.4: Surrogate Recovery Summaries 18
5.5: GC Surrogate Retention Time Summaries 19
5.6: Initial and Continuing Calibration Summaries 22

Sample Summary

EEI

Job No: F31531

CSFF MCAS New River
Project No: LD03-016/ CTO 015

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
F31531-1	04/29/05	10:45	TE	04/30/05	AQ	Ground Water	USTCSFF-ASE
F31531-2	04/29/05	11:15	TE	04/30/05	AQ	Ground Water	USTCSFF-EFF
F31531-3	04/29/05	00:00	TE	04/30/05	AQ	Trip Blank Water	TRIP BLANK

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: EEI **Job No:** F31531

Site: CSFF MCAS New River **Report Date:** 5/12/2005 8:43:01 AM

2 Samples and 1 Trip Blank were collected on 04/29/2005 and were received at Accutest on 04/30/2005 properly preserved, at 3.2 Deg. C and intact. These Samples received an Accutest job number of F31531. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GC by Method EPA 601/602

Matrix: AQ **Batch ID:** GCD2485

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Samples F31531-2MS, F31531-2MSD were used as the QC samples indicated.

F31531-2: All hits confirmed by dual column analysis.

Matrix: AQ **Batch ID:** GCD2487

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Samples F31592-13MS, F31592-13MSD were used as the QC samples indicated.

Accutest Laboratories Southeast (ALSE) certifies that this report meets the project requirements for analytical data produced for the samples as received at ALSE and as stated on the COC. ALSE certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the ALSE Quality Manual except as noted above. This report is to be used in its entirety. ALSE is not responsible for any assumptions of data quality if partial data packages are used.

Narrative prepared by:

Date: May 12, 2005

Ellen Pampel, Inorganic QA (signature on file)

Thursday, May 12, 2005

Report of Analysis

Client Sample ID:	USTCSFF-ASE		
Lab Sample ID:	F31531-1	**Date Sampled:**	04/29/05
Matrix:	AQ - Ground Water	**Date Received:**	04/30/05
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD060241.D	1	05/06/05	KK	n/a	n/a	GCD2485
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	96%		71-130%
98-08-8	aaa-Trifluorotoluene	96%		71-124%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-EFF		
Lab Sample ID:	F31531-2	**Date Sampled:**	04/29/05
Matrix:	AQ - Ground Water	**Date Received:**	04/30/05
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	CD060238.D	1	05/06/05	KK	n/a	n/a	GCD2485
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.89	1.0	0.50	ug/l	J
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	96%		71-130%
98-08-8	aaa-Trifluorotoluene	94%		71-124%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	F31531-3	**Date Sampled:**	04/29/05
Matrix:	AQ - Trip Blank Water	**Date Received:**	04/30/05
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	CSFF MCAS New River		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD060286.D	1	05/09/05	KK	n/a	n/a	GCD2487
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	94%		71-130%
98-08-8	aaa-Trifluorotoluene	90%		71-124%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

CHAIN OF CUSTODY

ACCUTEST Laboratories

4405 VINELAND ROAD • SUITE C-15
ORLANDO, FL 32811
TEL: 407-425-6700 • FAX: 407-425-0707

ACCUTEST JOB #: F31531
QUOTE #:

CLIENT INFORMATION

NAME: ENGINEERING & ENVIRONMENT
ADDRESS: Bldg 626 Piney Green Rd
CITY: Camp Lejeune STATE: NC ZIP: 28547
SEND REPORT TO: Bill Morris
PHONE #: (910) 389-3214

FACILITY INFORMATION

PROJECT NAME: UST CSFF-
LOCATION: NEW RIVER AIR STATION
PROJECT NO.: LD03-016
FAX #: (910) 389-3341
P.O. #: CTO-015

ANALYTICAL INFORMATION

602 w/MTBE

MATRIX CODES

DW - DRINKING WATER
GW - GROUND WATER
WW - WASTE WATER
SO - SOIL
SL - SLUDGE
OI - OIL
LIQ - OTHER LIQUID
SOL - OTHER SOLID

ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION DATE	COLLECTION TIME	SAMPLED BY:	MATRIX	# OF BOTTLES	PRESERVATION: HCl	HNO3	H2SO4	NONE	LAB USE ONLY
1	UST CSFF-ASE	4/29/05	1045	TE	GW	3	X				
2	UST CSFF-EFF	4/29/05	1115	TE	GW	3	X				
3	TRIP BLANKS	4/29/05	LAB	LAB	W	2	X				
	TEMP BLANK	4/29/05	LAB	LAB	W	1				X	

DATA TURNAROUND INFORMATION

- [x] STANDARD
- [ ] 48 HOUR RUSH
- [ ] 24 HOUR EMERGENCY
- [ ] OTHER

APPROVED BY:

EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED

DATA DELIVERABLE INFORMATION

- [ ] STANDARD
- [ ] COMMERCIAL "B"
- [ ] DISK DELIVERABLE
- [ ] STATE FORMS
- [x] OTHER (SPECIFY) NEESA 4

COMMENTS/REMARKS

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESION, INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
1. THERESA ELLERMAN	4/29/05 1850	1.	2.		2.
3.		3.	4.		4.
5.		5.	SEAL #	PRESERVE WHERE APPLICABLE ☐	ON ICE ☐ TEMPERATURE

4.1 4

F31531: Chain of Custody
Page 1 of 2

ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: F31531 CLIENT: E+E PROJECT: UST CSEE-New River Discharge

DATE/TIME RECEIVED: 4/30/05 9:00 # OF COOLERS RECEIVED: 1 COOLER TEMPS: 32

METHOD OF DELIVERY: FEDEX UPS ACCUTEST COURIER GREYHOUND DELIVERY OTHER

AIRBILL NUMBERS: 8508 6149 4439

COOLER INFORMATION

- [ ] CUSTODY SEAL NOT PRESENT/INTACT
- [ ] NO COC RECEIVED
- [ ] ANALYSES NOT MARKED ON COC
- [ ] ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- [ ] SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- [ ] TEMPERATURE CRITERIA NOT MET

TRIP BLANK INFORMATION

- [ ] TRIP BLANK NOT PROVIDED
- [ ] TRIP BLANK NOT ON COC
- [x] TRIP BLANK INTACT
- [ ] TRIP BLANK NOT INTACT
- [x] RECEIVED WATER TRIP BLANK
- [ ] RECEIVED SOIL TRIP BLANK

SAMPLE INFORMATION

- [ ] SAMPLE LABELS PRESENT ON ALL BOTTLES
- [ ] CORRECT NUMBER OF CONTAINERS USED
- [ ] SAMPLE RECEIVED IMPROPERLY PRESERVED
- [ ] INSUFFICIENT VOLUME FOR ANALYSIS
- [ ] SAMPLE RECEIVED PAST HOLD TIME
- [ ] TIMES ON COC DON'T MATCH LABEL
- [ ] ID'S ON COC DON'T MATCH LABEL
- [ ] VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
- [ ] BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
- [ ] NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
- [ ] UNCLEAR FILTERING INSTRUCTIONS
- [ ] UNCLEAR COMPOSITING INSTRUCTIONS
- [ ] SAMPLE(S) RECEIVED BROKEN
- [ ] % SOLIDS JAR NOT RECEIVED

SOIL INFORMATION

NUMBER OF ENCORES ? 0

NUMBER OF 5035 FIELD KITS ? 0

SUMMARY OF COMMENTS:

TECHNICIAN SIGNATURE/DATE: 4/30/05

TECHNICIAN SIGNATURE/DATE:

ASB002rev.ins

4.1

F31531: Chain of Custody
Page 2 of 2

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: F31531
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GCD2485-MB	CD060237.D	1	05/06/05	KK	n/a	n/a	GCD2485

The QC reported here applies to the following samples: **Method:** EPA 601/602

F31531-1, F31531-2

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	96%	71-130%
98-08-8	aaa-Trifluorotoluene	95%	71-124%

Method Blank Summary

Job Number: F31531
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GCD2487-MB	CD060284.D	1	05/09/05	KK	n/a	n/a	GCD2487

The QC reported here applies to the following samples: **Method:** EPA 601/602

F31531-3

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Diehlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Diehlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Diehlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	95%	71-130%
98-08-8	aaa-Trifluorotoluene	90%	71-124%

Blank Spike Summary

Job Number: F31531
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GCD2485-BS	CD060236.D	1	05/06/05	KK	n/a	n/a	GCD2485

The QC reported here applies to the following samples: **Method:** EPA 601/602

F31531-1, F31531-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	20	22.3	112	81-121
108-90-7	Chlorobenzene	20	22.9	115	76-120
95-50-1	1,2-Dichlorobenzene	20	24.3	122	63-127
541-73-1	1,3-Dichlorobenzene	20	24.0	120	70-124
106-46-7	1,4-Dichlorobenzene	20	22.4	112	68-121
100-41-4	Ethylbenzene	20	22.6	113	79-124
1634-04-4	Methyl Tert Butyl Ether	20	23.1	116	73-118
108-88-3	Toluene	20	22.5	113	79-122
1330-20-7	Xylenes (total)	60	66.6	111	79-121

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	105%	71-130%
98-08-8	aaa-Trifluorotoluene	98%	71-124%

Blank Spike Summary

Job Number: F31531
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GCD2487-BS	CD060283.D	1	05/09/05	KK	n/a	n/a	GCD2487

The QC reported bere applies to the following samples: **Method:** EPA 601/602

F31531-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	20	20.3	102	81-121
108-90-7	Chlorobenzene	20	20.7	104	76-120
95-50-1	1,2-Dichlorobenzene	20	21.5	108	63-127
541-73-1	1,3-Dichlorobenzene	20	20.9	105	70-124
106-46-7	1,4-Dichlorobenzene	20	19.4	97	68-121
100-41-4	Ethylbenzene	20	20.1	101	79-124
1634-04-4	Methyl Tert Butyl Ether	20	20.7	104	73-118
108-88-3	Toluene	20	20.3	102	79-122
1330-20-7	Xylenes (total)	60	59.1	99	79-121

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	102%	71-130%
98-08-8	aaa-Trifluorotoluene	94%	71-124%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F31531
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F31531-2MS	CD060239.D	1	05/06/05	KK	n/a	n/a	GCD2485
F31531-2MSD	CD060240.D	1	05/06/05	KK	n/a	n/a	GCD2485
F31531-2 [a]	CD060238.D	1	05/06/05	KK	n/a	n/a	GCD2485

The QC reported here applies to the following samples: **Method:** EPA 601/602

F31531-1, F31531-2

CAS No.	Compound	F31531-2 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND		20	22.0	110	21.0	105	5	74-126/11
108-90-7	Chlorobenzene	ND		20	22.6	113	21.7	109	4	72-124/8
95-50-1	1,2-Diehlorobenzene	ND		20	23.5	118	22.4	112	5	55-136/13
541-73-1	1,3-Diehlorobenzene	ND		20	23.1	116	22.1	111	4	65-132/16
106-46-7	1,4-Diehlorobenzene	ND		20	21.4	107	20.6	103	4	61-133/11
100-41-4	Ethylbenzene	ND		20	21.9	110	20.9	105	5	71-131/8
1634-04-4	Methyl Tert Butyl Ether	0.89	J	20	24.1	116	24.0	116	0	63-130/11
108-88-3	Toluene	ND		20	22.0	110	21.1	106	4	69-132/7
1330-20-7	Xylenes (total)	ND		60	64.7	108	61.6	103	5	71-127/8

CAS No.	Surrogate Recoveries	MS	MSD	F31531-2	Limits
460-00-4	4-Bromofluorobenzene	104%	103%	96%	71-130%
98-08-8	aaa-Trifluorotoluene	99%	98%	94%	71-124%

(a) All hits confirmed by dual column analysis.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F31531
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F31592-13MS	CD060295.D	250	05/09/05	KK	n/a	n/a	GCD2487
F31592-13MSD	CD060296.D	250	05/09/05	KK	n/a	n/a	GCD2487
F31592-13	CD060294.D	250	05/09/05	KK	n/a	n/a	GCD2487

5.3

The QC reported here applies to the following samples: **Method:** EPA 601/602

F31531-3

CAS No.	Compound	F31592-13 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	3180		5000	8230	101	8180	100	1	74-126/11
108-90-7	Chlorobenzene	ND		5000	5490	110	5410	108	1	72-124/8
95-50-1	1,2-Diehlorobenzene	ND		5000	5720	114	5740	115	0	55-136/13
541-73-1	1,3-Diehlorobenzene	ND		5000	5700	114	5650	113	1	65-132/16
106-46-7	1,4-Dichlorobenzene	ND		5000	5250	105	5210	104	1	61-133/11
100-41-4	Ethylbenzene	1440		5000	6690	105	6600	103	1	71-131/8
1634-04-4	Methyl Tert Butyl Ether	24300		5000	29800	110	28900	92	3	63-130/11
108-88-3	Toluene	5480		5000	10500	100	10400	98	1	69-132/7
1330-20-7	Xylenes (total)	9880		15000	25300	103	25000	101	1	71-127/8

CAS No.	Surrogate Recoveries	MS	MSD	F31592-13	Limits
460-00-4	4-Bromofluorobenzene	102%	101%	98%	71-130%
98-08-8	aaa-Trifluorotoluene	92%	92%	92%	71-124%

Volatile Surrogate Recovery Summary

Job Number: F31531
Account: EEINCJX EEI
Project: CSFF MCAS New River

Method: EPA 601/602 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S2 [a]
F31531-1	CD060241.D	96.0	96.0
F31531-2	CD060238.D	96.0	94.0
F31531-3	CD060286.D	94.0	90.0
F31531-2MS	CD060239.D	104.0	99.0
F31531-2MSD	CD060240.D	103.0	98.0
F31592-13MS	CD060295.D	102.0	92.0
F31592-13MSD	CD060296.D	101.0	92.0
GCD2485-BS	CD060236.D	105.0	98.0
GCD2485-MB	CD060237.D	96.0	95.0
GCD2487-BS	CD060283.D	102.0	94.0
GCD2487-MB	CD060284.D	95.0	90.0

Surrogate Compounds	Recovery Limits
S1 = 4-Bromofluorobenzene	71-130%
S2 = aaa-Trifluorotoluene	71-124%

(a) Recovery from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F31531
Account: EEINCJX EEI
Project: CSFF MCAS New River

Check Std:	GCD2485-CC2463	**Injection Date:**	05/06/05
Lab File ID:	CD060235.D	**Injection Time:**	08:43
Instrument ID:	GCCD	**Method:**	EPA 601/602

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	11.03	11.06	6.02	5.59

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
GCD2485-BS	CD060236.D	05/06/05	09:32		11.06		5.60
GCD2485-MB	CD060237.D	05/06/05	09:56		11.05		5.60
F31531-2	CD060238.D	05/06/05	10:20		11.06		5.61
F31531-2MS	CD060239.D	05/06/05	10:44		11.06		5.60
F31531-2MSD	CD060240.D	05/06/05	11:53		11.06		5.60
F31531-1	CD060241.D	05/06/05	12:17		11.07		5.61
ZZZZZZ	CD060242.D	05/06/05	12:41		11.06		5.60
ZZZZZZ	CD060243.D	05/06/05	13:05		11.06		5.60
ZZZZZZ	CD060244.D	05/06/05	13:29		11.06		5.60
ZZZZZZ	CD060245.D	05/06/05	13:54		11.06		5.60
GCD2485-ECC2634	CD060246.D	05/06/05	14:18	11.03	11.06	6.03	5.61

Surrogate Compounds

S1 = 4-Bromofluorobenzene
S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F31531
Account: EEINCJX EEI
Project: CSFF MCAS New River

Check Std:	GCD2487-CC2463	**Injection Date:**	05/09/05
Lab File ID:	CD060282.D	**Injection Time:**	10:47
Instrument ID:	GCCD	**Method:**	EPA 601/602

	S1 [a] RT	S2 [a] RT
Check Std	11.01	5.55

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
GCD2487-BS	CD060283.D	05/09/05	11:44	11.01	5.55
GCD2487-MB	CD060284.D	05/09/05	12:09	10.99	5.55
ZZZZZZ	CD060285.D	05/09/05	12:33	11.00	5.55
F31531-3	CD060286.D	05/09/05	12:57	10.99	5.55
ZZZZZZ	CD060287.D	05/09/05	13:21	11.00	5.55
ZZZZZZ	CD060288.D	05/09/05	13:46	11.00	5.55
ZZZZZZ	CD060289.D	05/09/05	14:10	11.00	5.55
ZZZZZZ	CD060290.D	05/09/05	14:34	11.00	5.55
ZZZZZZ	CD060291.D	05/09/05	14:58	11.00	5.55
ZZZZZZ	CD060292.D	05/09/05	15:23	11.00	5.55

Surrogate Compounds

S1 = 4-Bromofluorobenzene
S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F31531
Account: EEINCJX EEI
Project: CSFF MCAS New River

Check Std:	GCD2487-CC2634	**Injection Date:**	05/09/05
Lab File ID:	CD060293.D	**Injection Time:**	15:47
Instrument ID:	GCCD	**Method:**	EPA 601/602

	S1 [a] RT	S2 [a] RT
Check Std	11.00	5.55

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
F31592-13	CD060294.D	05/09/05	16:11	11.00	5.56
F31592-13MS	CD060295.D	05/09/05	16:35	11.00	5.56
F31592-13MSD	CD060296.D	05/09/05	16:59	11.00	5.56
ZZZZZZ	CD060297.D	05/09/05	17:24	11.01	5.55
ZZZZZZ	CD060298.D	05/09/05	17:48	11.00	5.56
ZZZZZZ	CD060299.D	05/09/05	18:12	11.00	5.55
ZZZZZZ	CD060300.D	05/09/05	18:36	11.00	5.56
ZZZZZZ	CD060301.D	05/09/05	19:00	11.01	5.55
ZZZZZZ	CD060302.D	05/09/05	19:25	11.00	5.56
ZZZZZZ	CD060303.D	05/09/05	19:49	11.01	5.55

Surrogate Compounds

S1 = 4-Bromofluorobenzene
S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #2

Initial Calibration Summary

Job Number: F31531
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GCD2463-ICC2463
Lab FileID: CD059750.D

Response Factor Report VOA2

Method : C:\HPCHEM\1\METHODS\GCD0421.M (Chemstation Integrator)
Title : EPA 602/8021B
Last Update : Thu Apr 21 15:48:07 2005
Response via : Initial Calibration

Calibration Files
1 =CD059753.D 2 =CD059754.D 3 =CD059749.D 4 =CD059750.D
5 =CD059751.D 6 =CD059752.D

		Compound	1	2	3	4	5	6	Avg		%RSD
1)		Methyl tert Butyl E	0.813	1.068	0.968	0.991	1.043	1.016	0.983	E3	9.19
2)		Di-Isopropyl ether	1.598	1.827	1.801	1.816	1.891	1.892	1.804	E3	5.98
3)		BENZENE	4.668	4.720	4.649	4.674	4.844	4.885	4.740	E3	2.11
4)	S	a,a,a-TFT(S)	1.561		1.912	1.951	1.963	1.951	1.868	E3	9.23
5)		TOLUENE	4.724	4.763	4.723	4.699	4.858	4.913	4.780	E3	1.80
6)		CHLOROBENZENE	4.697	4.971	4.925	4.899	5.095	5.152	4.956	E3	3.25
7)		ETHYLBENZENE	4.225	4.319	4.250	4.260	4.377	4.419	4.309	E3	1.79
8)		m,p-XYLENE	4.785	4.688	4.686	4.653	4.773	4.771	4.726	E3	1.20
9)		o-XYLENE	4.195	4.385	4.358	4.326	4.459	4.435	4.360	E3	2.16
10)	S	BFB(S)		4.555	5.078	5.240	5.412	5.405	5.138	E3	6.88
11)		1,3-DICHLOROBENZENE	4.366	4.053	4.043	4.123	4.344	4.361	4.215	E3	3.75
12)		1,4-DICHLOROBENZENE	4.817	4.488	4.440	4.528	4.807	4.858	4.656	E3	4.08
13)		1,2-DICHLOROBENZENE	3.670	3.202	3.222	3.260	3.468	3.491	3.386	E3	5.53

Signal #2

1)		Methyl tert Butyl E	8.019	9.502	8.113	7.882	8.214	8.208	8.323	E2	7.10
2)		Di-Isopropyl ether	1.395	1.561	1.421	1.373	1.394	1.400	1.424	E3	4.85
3)		BENZENE	4.085	4.207	3.735	3.575	3.685	3.791	3.846	E3	6.39
4)	S	a,a,a-TFT(S)	1.355	1.433	1.434	1.437	1.462	1.463	1.431	E3	2.75
5)		TOLUENE	4.333	4.316	3.848	3.706	3.837	3.937	3.996	E3	6.63
6)		CHLOROBENZENE	4.545	4.536	4.084	3.964	4.131	4.217	4.246	E3	5.71
7)		ETHYLBENZENE	4.179	4.006	3.570	3.477	3.609	3.653	3.749	E3	7.41
8)		m,p-XYLENE	4.568	4.240	3.697	3.706	3.847	3.896	3.992	E3	8.62
9)		o-XYLENE	3.991	3.942	3.559	3.472	3.592	3.632	3.698	E3	5.82
10)	S	BFB(S)	4.027	4.258	4.354	4.460	4.554	4.607	4.377	E3	4.88
11)		1,3-DICHLOROBENZENE	4.472	3.741	3.447	3.435	3.627	3.663	3.731	E3	10.26
		---- Linear regr., Force(0,0) ---- Coefficient = 0.9993									
		Response Ratio = 0.00000 + 3626.28701 *A									
12)		1,4-DICHLOROBENZENE	4.940	4.152	3.708	3.723	4.017	4.062	4.100	E3	10.97
		---- Linear regr., Force(0,0) ---- Coefficient = 0.9987									
		Response Ratio = 0.00000 + 4008.60198 *A									
13)		1,2-DICHLOROBENZENE	3.475	2.980	2.717	2.731	2.904	2.957	2.961	E3	9.32

(#) = Out of Range

GCD0421.M Fri Apr 22 09:00:19 2005

Initial Calibration Verification

Job Number: F31531
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GCD2463-ICV2463
Lab FileID: CD059755.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\042105\CD059755.D\FID1A.CH Vial: 1
Signal #2 : C:\HPCHEM\1\DATA\042105\CD059755.D\FID2B.CH
Acq On : 21 Apr 2005 4:05 pm Operator: albertj
Sample : icv2463-20 Inst : VOA2
Misc : gc4841,gcd2463,,,,, Multiplr: 1.00
IntFile Signal #1: PID.E IntFile Signal #2: FID.E

Method : C:\HPCHEM\1\METHODS\GCD0421.M (Chemstation Integrator)
Title : EPA 602/8021B
Last Update : Thu Apr 21 15:48:07 2005
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	Methyl tert Butyl Ethe	20.000	21.572	-7.9	110	0.00	2.95- 3.35
2	Di-Isopropyl ether	20.000	20.474	-2.4	103	0.00	3.49- 3.79
3	BENZENE	20.000	20.793	-4.0	106	0.00	4.81- 5.11
4 S	a,a,a-TFT(S)	20.000	19.706	1.5	96	0.00	5.85- 6.15
5	TOLUENE	20.000	21.121	-5.6	107	0.00	7.28- 7.58
6	CHLOROBENZENE	20.000	22.114	-10.6	111	0.01	9.11- 9.41
7	ETHYLBENZENE	20.000	21.471	-7.4	109	0.01	9.45- 9.75
8	m,p-XYLENE	40.000	43.502	-8.8	110	0.01	9.76-10.06
9	o-XYLENE	20.000	21.810	-9.0	109	0.01	10.30-10.60
10 S	BFB(S)	20.000	20.336	-1.7	103	0.01	10.86-11.16
11	1,3-DICHLOROBENZENE	20.000	22.523	-12.6	117	0.00	12.78-12.98
12	1,4-DICHLOROBENZENE	20.000	20.934	-4.7	110	0.00	12.90-13.10
13	1,2-DICHLOROBENZENE	20.000	22.161	-10.8	116	0.00	13.36-13.66
*****	Signal #2 *****						
1	Methyl tert Butyl Ethe	20.000	22.335	-11.7	115	0.00	2.84- 3.24
2	Di-Isopropyl ether	20.000	21.589	-7.9	108	0.00	3.43- 3.73
3	BENZENE	20.000	21.537	-7.7	111	0.00	4.69- 4.99
4 S	a,a,a-TFT(S)	20.000	20.422	-2.1	102	0.00	5.43- 5.73
5	TOLUENE	20.000	21.130	-5.6	110	0.00	7.28- 7.58
6	CHLOROBENZENE	20.000	21.923	-9.6	114	0.01	9.13- 9.43
7	ETHYLBENZENE	20.000	20.885	-4.4	110	0.01	9.58- 9.88
8	m,p-XYLENE	40.000	41.047	-2.6	111	0.01	9.88-10.18
9	o-XYLENE	20.000	20.889	-4.4	109	0.00	10.42-10.72
10 S	BF8(S)	20.000	20.316	-1.6	102	0.00	10.89-11.19
	Amount	Calc.	%Drift				
11	1,3-DICHLOROBENZENE	20.000	21.886	-9.4	115	0.00	13.04-13.24
12	1,4-DICHLOROBENZENE	20.000	20.161	-0.8	109	0.00	13.12-13.32
	Amount	Calc.	%Drift				
13	1,2-DICHLOROBENZENE	20.000	21.217	-6.1	116	0.00	13.57-13.81

(#) = Out of Range SPCC's out = 0 CCC's out = 0
CD059749.D GCD0421.M Fri Apr 22 08:59:41 2005

5.6

Continuing Calibration Summary

Job Number: F31531
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GCD2485-CC2463
Lab FileID: CD060235.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\050605\CD060235.D\FID1A.CH Vial: 1
Signal #2 : C:\HPCHEM\1\DATA\050605\CD060235.D\FID2B.CH
Acq On : 6 May 2005 8:43 am Operator: KelliK
Sample : cc2463-40 Inst : VOA2
Misc : gc4898,gcd2485,,,,,1 Multiplr: 1.00
IntFile Signal #1: PID.E IntFile Signal #2: FID.E

Method : C:\HPCHEM\1\METHODS\GCD0421.M (Chemstation Integrator)
Title : EPA 602/8021B
Last Update : Mon May 09 07:58:25 2005
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	Methyl tert Butyl Ethe	40.000	43.542	-8.9	108	0.00	2.98- 3.38
2	Di-Isopropyl ether	40.000	40.054	-0.1	99	0.00	3.51- 3.81
3	BENZENE	40.000	40.941	-2.4	104	0.00	4.84- 5.14
4 S	a,a,a-TFT(S)	20.000	18.830	5.9	90	-0.01	5.88- 6.18
5	TOLUENE	40.000	41.372	-3.4	105	-0.01	7.31- 7.61
6	CHLOROBENZENE	40.000	42.901	-7.3	109	0.00	9.13- 9.43
7	ETHYLBENZENE	40.000	43.498	-8.7	110	0.00	9.48- 9.78
8	m,p-XYLENE	80.000	87.672	-9.6	111	0.00	9.78-10.08
9	o-XYLENE	40.000	43.996	-10.0	111	0.00	10.32-10.62
10 S	BFB(S)	20.000	21.063	-5.3	103	0.02	10.86-11.16
11	1,3-DICHLOROBENZENE	40.000	45.518	-13.8	116	0.02	12.78-12.98
12	1,4-DICHLOROBENZENE	40.000	45.715	-14.3	118	0.02	12.90-13.10
13	1,2-DICHLOROBENZENE	40.000	45.730	-14.3	119	0.02	13.36-13.66
*****	Signal #2 *****						
1	Methyl tert Butyl Ethe	40.000	43.532	-8.8	115	0.00	2.85- 3.25
2	Di-Isopropyl ether	40.000	41.359	-3.4	107	-0.01	3.45- 3.75
3	BENZENE	40.000	41.617	-4.0	112	-0.01	4.71- 5.01
4 S	a,a,a-TFT(S)	20.000	19.744	1.3	98	-0.02	5.46- 5.76
5	TOLUENE	40.000	41.391	-3.5	112	-0.02	7.30- 7.60
6	CHLOROBENZENE	40.000	41.735	-4.3	112	0.00	9.16- 9.46
7	ETHYLBENZENE	40.000	41.318	-3.3	111	0.00	9.60- 9.90
8	m,p-XYLENE	80.000	82.689	-3.4	111	0.00	9.90-10.20
9	o-XYLENE	40.000	41.665	-4.2	111	0.01	10.42-10.72
10 S	BFB(S)	20.000	21.074	-5.4	103	0.02	10.89-11.19
	----------	Amount	Calc.	%Drift	----------		
11	1,3-DICHLOROBENZENE	40.000	43.822	-9.6	116	0.01	13.04-13.24
12	1,4-DICHLOROBENZENE	40.000	43.296	-8.2	117	0.01	13.12-13.32
	----------	Amount	Calc.	%Drift	----------		
13	1,2-DICHLOROBENZENE	40.000	44.142	-10.4	120	0.02	13.57-13.81

(#) = Out of Range SPCC's out = 0 CCC's out = 0
CD059750.D GCD0421.M Mon May 09 10:08:38 2005

Continuing Calibration Summary

Job Number: F31531
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GCD2487-CC2463
Lab FileID: CD060282.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\050905\CD060282.D\FID1A.CH Vial: 1
Signal #2 : C:\HPCHEM\1\DATA\050905\CD060282.D\FID2B.CH
Acq On : 9 May 2005 10:47 am Operator: KelliK
Sample : cc2463-40 Inst : VOA2
Misc : gc4898,gcd2487,,,,,1 MultiplR: 1.00
IntFile Signal #1: PID.E IntFile Signal #2: FID.E

Method : C:\HPCHEM\1\METHODS\GCD0421.M (Chemstation Integrator)
Title : EPA 602/8021B
Last Update : Mon May 09 12:22:44 2005
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	Methyl tert Butyl Ethe	40.000	47.871	-19.7#	119	-0.04	2.98- 3.38
2	Di-Isopropyl ether	40.000	44.130	-10.3	110	-0.04	3.51- 3.81
3	BENZENE	40.000	44.366	-10.9	112	-0.04	4.84- 5.14
4 S	a,a,a-TFT(S)	20.000	20.329	-1.6	97	-0.04	5.88- 6.18
5	TOLUENE	40.000	44.171	-10.4	112	-0.04	7.31- 7.61
6	CHLOROBENZENE	40.000	44.806	-12.0	113	-0.03	9.13- 9.43
7	ETHYLBENZENE	40.000	43.787	-9.5	111	-0.03	9.48- 9.78
8	m,p-XYLENE	80.000	87.630	-9.5	111	-0.03	9.78-10.08
9	o-XYLENE	40.000	44.476	-11.2	112	-0.03	10.32-10.62
10 S	BFB(S)	20.000	21.614	-8.1	106	-0.01	10.86-11.16
11	1,3-DICHLOROBENZENE	40.000	45.521	-13.8	116	-0.02	12.78-12.98
12	1,4-DICHLOROBENZENE	40.000	45.878	-14.7	118	-0.02	12.90-13.10
13	1,2-DICHLOROBENZENE	40.000	45.647	-14.1	119	-0.01	13.36-13.66
*****	Signal #2 *****						
1	Methyl tert Butyl Ethe	40.000	42.219	-5.5	111	-0.05	2.85- 3.25
2	Di-Isopropyl ether	40.000	40.376	-0.9	105	-0.05	3.45- 3.75
3	BENZENE	40.000	40.581	-1.5	109	-0.06	4.71- 5.01
4 S	a,a,a-TFT(S)	20.000	19.040	4.8	95	-0.06	5.46- 5.76
5	TOLUENE	40.000	40.277	-0.7	109	-0.06	7.30- 7.60
6	CHLOROBENZENE	40.000	40.636	-1.6	109	-0.05	9.16- 9.46
7	ETHYLBENZENE	40.000	40.234	-0.6	108	-0.05	9.60- 9.90
8	m,p-XYLENE	80.000	80.140	-0.2	108	-0.05	9.90-10.20
9	o-XYLENE	40.000	40.655	-1.6	108	-0.03	10.42-10.72
10 S	BFB(S)	20.000	20.913	-4.6	103	-0.03	10.89-11.19
	----------	Amount	Calc.	%Drift			----------
11	1,3-DICHLOROBENZENE	40.000	42.486	-6.2	112	-0.10#	13.11-13.31
12	1,4-DICHLOROBENZENE	40.000	42.191	-5.5	114	-0.03	13.12-13.32
	----------	Amount	Calc.	%Drift			----------
13	1,2-DICHLOROBENZENE	40.000	42.665	-6.7	116	-0.03	13.57-13.81

(#) = Out of Range SPCC's out = 0 CCC's out = 0
CD059750.D GCD0421.M Tue May 10 15:35:25 2005

Continuing Calibration Summary

Job Number: F31531
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GCD2487-CC2634
Lab FileID: CD060293.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\050905\CD060293.D\FID1A.CH Vial: 12
Signal #2 : C:\HPCHEM\1\DATA\050905\CD060293.D\FID2B.CH
Acq On : 9 May 2005 3:47 pm Operator: KelliK
Sample : cc2634-20 Inst : VOA2
Misc : gc4898,gcd2487,,,,,1 Multiplr: 1.00
IntFile Signal #1: PID.E IntFile Signal #2: FID.E

Method : C:\HPCHEM\1\METHODS\GCD0421.M (Chemstation Integrator)
Title : EPA 602/8021B
Last Update : Wed May 11 11:08:47 2005
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	Methyl tert Butyl Ethe	20.000	24.593	-23.0#	125	0.00	2.95- 3.35
2	Di-Isopropyl ether	20.000	22.181	-10.9	111	0.00	3.49- 3.79
3	BENZENE	20.000	21.722	-8.6	111	0.00	4.80- 5.10
4 S	a,a,a-TFT(S)	20.000	20.076	-0.4	98	0.00	5.84- 6.14
5	TOLUENE	20.000	21.307	-6.5	108	0.00	7.27- 7.57
6	CHLOROBENZENE	20.000	21.646	-8.2	109	0.00	9.09- 9.39
7	ETHYLBENZENE	20.000	21.153	-5.8	107	0.00	9.44- 9.74
8	m,p-XYLENE	40.000	42.132	-5.3	106	0.00	9.74-10.04
9	o-XYLENE	20.000	21.422	-7.1	107	0.00	10.28-10.58
10 S	BFB(S)	20.000	21.034	-5.2	106	-0.01	10.84-11.14
11	1,3-DICHLOROBENZENE	20.000	21.662	-8.3	113	-0.02	12.77-12.97
12	1,4-DICHLOROBENZENE	20.000	21.734	-8.7	114	-0.02	12.88-13.08
13	1,2-DICHLOROBENZENE	20.000	22.225	-11.1	117	-0.02	13.35-13.65
*****	Signal #2 *****						
1	Methyl tert Butyl Ethe	20.000	21.628	-8.1	111	0.00	2.82- 3.22
2	Di-Isopropyl ether	20.000	20.383	-1.9	102	0.00	3.41- 3.71
3	BENZENE	20.000	20.229	-1.1	104	0.00	4.66- 4.96
4 S	a,a,a-TFT(S)	20.000	18.663	6.7	93	0.00	5.41- 5.71
5	TOLUENE	20.000	19.784	1.1	103	0.00	7.25- 7.55
6	CHLOROBENZENE	20.000	20.018	-0.1	104	0.00	9.10- 9.40
7	ETHYLBENZENE	20.000	19.578	2.1	103	0.00	9.55- 9.85
8	m,p-XYLENE	40.000	38.320	4.2	103	0.00	9.85-10.15
9	o-XYLENE	20.000	20.004	-0.0	104	-0.01	10.39-10.69
10 S	BFB(S)	20.000	20.291	-1.5	102	-0.01	10.87-11.17
	----------	Amount	Calc.	%Drift	----------		
11	1,3-DICHLOROBENZENE	20.000	20.532	-2.7	108	-0.02	13.01-13.21
12	1,4-DICHLOROBENZENE	20.000	20.310	-1.5	110	-0.02	13.09-13.29
	----------	Amount	Calc.	%Drift	----------		
13	1,2-DICHLOROBENZENE	20.000	20.553	-2.8	112	-0.02	13.55-13.79

(#) = Out of Range SPCC's out = 0 CCC's out = 0
CD059749.D GCD0421.M Wed May 11 15:23:17 2005

Continuing Calibration Summary

Job Number: F31531
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GCD2487-CC2634
Lab FileID: CD060304.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\050905\CD060304.D\FID1A.CH Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\050905\CD060304.D\FID2B.CH
Acq On : 9 May 2005 8:13 pm Operator: KelliK
Sample : cc2634-20 Inst : V0A2
Misc : gc4899,gcd2487,,,,,1 MultiplIr: 1.00
IntFile Signal #1: PID.E IntFile Signal #2: FID.E

Method : C:\HPCHEM\1\METHODS\GCD0421.M (Chemstation Integrator)
Title : EPA 602/8021B
Last Update : Wed May 11 11:08:47 2005
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1		Methyl tert Butyl Ethe	20.000	23.512	-17.6#	119	0.00	2.95- 3.35
2		Di-Isopropyl ether	20.000	21.471	-7.4	108	0.00	3.49- 3.79
3		BENZENE	20.000	21.547	-7.7	110	0.00	4.80- 5.10
4	S	a,a,a-TFT(S)	20.000	19.473	2.6	95	0.00	5.84- 6.14
5		TOLUENE	20.000	21.194	-6.0	107	0.00	7.27- 7.57
6		CHLOROBENZENE	20.000	21.366	-6.8	108	0.00	9.09- 9.39
7		ETHYLBENZENE	20.000	21.300	-6.5	108	0.00	9.44- 9.74
8		m,p-XYLENE	40.000	42.099	-5.2	106	0.00	9.74-10.04
9		o-XYLENE	20.000	21.282	-6.4	106	0.00	10.28-10.58
10	S	BFB(S)	20.000	20.560	-2.8	104	0.00	10.84-11.14
11		1,3-DICHLOROBENZENE	20.000	21.558	-7.8	112	-0.01	12.77-12.97
12		1,4-DICHLOROBENZENE	20.000	21.519	-7.6	113	-0.01	12.88-13.08
13		1,2-DICHLOROBENZENE	20.000	21.843	-9.2	115	-0.01	13.35-13.65
*****		Signal #2 *****						
1		Methyl tert Butyl Ethe	20.000	21.915	-9.6	112	0.00	2.82- 3.22
2		Di-Isopropyl ether	20.000	20.393	-2.0	102	0.00	3.41- 3.71
3		BENZENE	20.000	20.335	-1.7	105	0.00	4.66- 4.96
4	S	a,a,a-TFT(S)	20.000	18.328	8.4	91	0.00	5.41- 5.71
5		TOLUENE	20.000	19.930	0.4	103	0.00	7.25- 7.55
6		CHLOROBENZENE	20.000	20.005	-0.0	104	0.00	9.10- 9.40
7		ETHYLBENZENE	20.000	19.836	0.8	104	0.00	9.55- 9.85
8		m,p-XYLENE	40.000	38.534	3.7	104	0.00	9.85-10.15
9		o-XYLENE	20.000	19.850	0.7	103	-0.01	10.39-10.69
10	S	BFB(S)	20.000	20.020	-0.1	101	-0.01	10.87-11.17
		----------	Amount	Calc.	%Drift			----------
11		1,3-DICHLOROBENZENE	20.000	20.632	-3.2	109	-0.01	13.01-13.21
12		1,4-DICHLOROBENZENE	20.000	20.230	-1.2	109	-0.01	13.09-13.29
		----------	Amount	Calc.	%Drift			----------
13		1,2-DICHLOROBENZENE	20.000	20.714	-3.6	113	-0.01	13.55-13.79

(#) = Out of Range SPCC's out = 0 CCC's out = 0
CD059749.D GCD0421.M Wed May 11 15:23:17 2005

Continuing Calibration Summary

Job Number: F31531
Account: EEINCJX EEI
Project: CSFF MCAS New River

Sample: GCD2489-CC2463
Lab FileID: CD060338.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\051005\CD060338.D\FID1A.CH Vial: 1
Signal #2 : C:\HPCHEM\1\DATA\051005\CD060338.D\FID2B.CH
Acq On : 10 May 2005 9:48 am Operator: KelliK
Sample : cc2463-40 Inst : VOA2
Misc : gc4898,gcd2489,,,,,1 MultiplIr: 1.00
IntFile Signal #1: PID.E IntFile Signal #2: FID.E

Method : C:\HPCHEM\1\METHODS\GCD0421.M (Chemstation Integrator)
Title : EPA 602/8021B
Last Update : Wed May 11 11:08:47 2005
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	Methyl tert Butyl Ethe	40.000	40.303	-0.8	100	0.00	2.95- 3.35
2	Di-Isopropyl ether	40.000	37.209	7.0	92	0.00	3.49- 3.79
3	BENZENE	40.000	38.061	4.8	96	0.00	4.80- 5.10
4 S	a,a,a-TFT(S)	20.000	17.766	11.2	85	0.01	5.84- 6.14
5	TOLUENE	40.000	38.689	3.3	98	0.01	7.27- 7.57
6	CHLOROBENZENE	40.000	40.057	-0.1	101	0.02	9.09- 9.39
7	ETHYLBENZENE	40.000	40.816	-2.0	103	0.02	9.44- 9.74
8	m,p-XYLENE	80.000	83.157	-3.9	106	0.02	9.74-10.04
9	o-XYLENE	40.000	42.036	-5.1	106	0.02	10.28-10.58
10 S	BFB(S)	20.000	19.933	0.3	98	0.02	10.84-11.14
11	1,3-DICHLOROBENZENE	40.000	43.516	-8.8	111	0.01	12.77-12.97
12	1,4-DICHLOROBENZENE	40.000	43.853	-9.6	113	0.01	12.88-13.08
13	1,2-DICHLOROBENZENE	40.000	44.173	-10.4	115	0.01	13.35-13.65
*****	Signal #2 *****						
1	Methyl tert Butyl Ethe	40.000	42.509	-6.3	112	0.00	2.82- 3.22
2	Di-Isopropyl ether	40.000	39.676	0.8	103	0.00	3.41- 3.71
3	BENZENE	40.000	39.212	2.0	105	0.00	4.66- 4.96
4 S	a,a,a-TFT(S)	20.000	19.012	4.9	95	0.00	5.41- 5.71
5	TOLUENE	40.000	39.450	1.4	106	0.00	7.25- 7.55
6	CHLOROBENZENE	40.000	39.702	0.7	106	0.01	9.10- 9.40
7	ETHYLBENZENE	40.000	39.257	1.9	106	0.01	9.55- 9.85
8	m,p-XYLENE	80.000	78.538	1.8	106	0.01	9.85-10.15
9	o-XYLENE	40.000	39.900	0.3	106	0.01	10.39-10.69
10 S	BFB(S)	20.000	19.875	0.6	98	0.00	10.87-11.17
	----------	Amount	Calc.	%Drift	----------		
11	1,3-DICHLOROBENZENE	40.000	41.930	-4.8	111	0.00	13.01-13.21
12	1,4-DICHLOROBENZENE	40.000	41.505	-3.8	112	0.00	13.09-13.29
	----------	Amount	Calc.	%Drift	----------		
13	1,2-DICHLOROBENZENE	40.000	42.238	-5.6	114	0.00	13.55-13.79

(#) = Out of Range SPCC's out = 0 CCC's out = 0
CD059750.D GCD0421.M Thu May 12 15:03:40 2005

June 2005 Laboratory Reports

Southeast
ACCUTEST.
Laboratories

12/08/05

Technical Report for

EEI

Camp Lejeune-Campbell St. Fuel Farm

844271

Accutest Job Number: F32751

Sampling Dates: 06/20/05 - 06/21/05

Report to:

EEI

bmorris@eeimail.com

ATTN: Bill Morris

Total number of pages in report: 97

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Sections: 1 2 3 4 5 6 7 8

Table of Contents

Section 1: Sample Summary 3
Section 2: Case Narrative/Conformance Summary 4
Section 3: Sample Results 6
3.1: F32751-1: UST-CSFF-RWB1 6
3.2: F32751-2: UST-CSFF-RWB3 7
3.3: F32751-3: UST-CSFF-RWB4 8
3.4: F32751-4: UST-CSFF-RWC1 9
3.5: F32751-5: UST-CSFF-EFF 10
3.6: F32751-6: UST-CSFF-DW06 14
3.7: F32751-7: UST-CSFF-MW21 17
3.8: F32751-8: UST-CSFF-MW24 19
3.9: F32751-9: TRIP BLANK 21
Section 4: Misc. Forms 22
4.1: Chain of Custody 23
Section 5: GC Volatiles - QC Data Summaries 25
5.1: Method Blank Summary 26
5.2: Blank Spike Summary 29
5.3: Matrix Spike/Matrix Spike Duplicate Summary 33
5.4: Surrogate Recovery Summaries 36
5.5: GC Surrogate Retention Time Summaries 38
5.6: Initial and Continuing Calibration Summaries 45
Section 6: GC Semi-volatiles - QC Data Summaries 59
6.1: Method Blank Summary 60
6.2: Blank Spike Summary 61
6.3: Surrogate Recovery Summaries 62
6.4: GC Surrogate Retention Time Summaries 63
6.5: Initial and Continuing Calibration Summaries 64
Section 7: Metals Analysis - QC Data Summaries 71
7.1: Inst QC MA4414: As,Ba,Cd,Cr,Fe,Pb,Mn,Se 72
7.2: Prep QC MP8199: As,Ba,Cd,Cr,Fe,Pb,Mn,Se 91
Section 8: General Chemistry - QC Data Summaries 95
8.1: Method Blank and Spike Results Summary 96
8.2: Duplicate Results Summary 97

Sample Summary

EEI

Job No: F32751

Camp Lejeune-Campbell St. Fuel Farm
Project No: 844271

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
F32751-1	06/20/05	12:30	TE	06/23/05	AQ	Ground Water	UST-CSFF-RWB1
F32751-2	06/20/05	13:00	TE	06/23/05	AQ	Ground Water	UST-CSFF-RWB3
F32751-3	06/20/05	13:25	TE	06/23/05	AQ	Ground Water	UST-CSFF-RWB4
F32751-4	06/20/05	14:00	TE	06/23/05	AQ	Ground Water	UST-CSFF-RWC1
F32751-5	06/20/05	14:30	TE	06/23/05	AQ	Ground Water	UST-CSFF-EFF
F32751-6	06/21/05	11:30	TE	06/23/05	AQ	Ground Water	UST-CSFF-DW06
F32751-7	06/21/05	12:30	TE	06/23/05	AQ	Ground Water	UST-CSFF-MW21
F32751-8	06/21/05	13:00	TE	06/23/05	AQ	Ground Water	UST-CSFF-MW24
F32751-9	06/21/05	00:00	TE	06/23/05	AQ	Trip Blank Water	TRIP BLANK

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: EEI **Job No:** F32751

Site: Camp Lejeune-Campbell St. Fuel Farm **Report Date:** 7/15/2005 5:01:04 PM

8 Samples and 1 Trip Blank were collected on between 06/20/2005 and 06/21/2005 and were received at Accutest on 06/23/2005 properly preserved, at 3.6 Deg. C and intact. These Samples reeeived an Aceutest job number of F32751. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Seetion of this report.

Except as noted below, all method specified calibrations and quality control performanee eriteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GC by Method EPA 504.1

Matrix: AQ **Batch ID:** OP13719

All samples were extracted within the recommended method holding time.

All samples were analyzed within the reeommended method holding time.

All method blanks for this batch meet method specific criteria.

Samples F32751-6MS, F32751-6MSD were used as the QC samples indicated.

Volatiles by GC by Method EPA 601/602

Matrix: AQ **Batch ID:** GEF3689

All samples were analyzed within the recommended method holding time.

Samples F32605-17MS, F32605-17MSD were used as the QC samples indicated.

All method blanks for this batch meet method specifie criteria.

F32751-1: All hits confirmed by dual column analysis.

Matrix: AQ **Batch ID:** GEF3691

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Samples F32754-3MS, F32754-3MSD were used as the QC samples indieated.

Sample F32751-7 has eompounds reported with "E" qualifiers indicating estimated value exceeding calibration range.

F32751-2: All hits eonfirmed by dual column analysis.

F32751-5: All hits confirmed by dual column analysis.

F32751-7: All hits eonfirmed by GC/MS.

F32751-8: All hits eonfirmed by dual column analysis.

F32751-2 for 1,2-Diehlorobenzene: Elevated reporting limits due to matrix interference.

F32751-8 for 1,2-Diehlorobenzene: Elevated reporting limits due to matrix interference.

F32751-7 for 1,2-Diehlorobenzene: Elevated reporting limits due to matrix interference.

F32751-7 for Methyl Tert Butyl Ether: No sample available for reanalysis.

Extractables by GC by Method EPA 610

Matrix: AQ **Batch ID:** OP13685

All samples were extracted within the recommended method holding time.

All samples were analyzed within the reeommended method holding time.

All method blanks for this batch meet method specific criteria.

Blank Spike Reeovery for Benzo(k)fluoranthene are outside control limits.

OP13685-BS for Benzo(k)fluoranthene: Sporadic marginal failure.

OP13685-BS: Insufficient sample for MS/MSD.

Metals by Method SW846 6010B

Matrix: AQ **Batch ID:** MP8199

All samples were digested within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Samples F32782-1DUP, F32782-1MS, F32782-1SDL were used as the QC samples for metals.

RPDs for Duplicate for Arsenic, Lead, Selenium are outside control limits for sample MP8199-D1. RPD aeceptable due to low duplicate and sample concentrations.

RPDs for Serial Dilution for Arsenic, Lead, Selenium are outside control limits for sample MP8199-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

Wet Chemistry by Method EPA 160.1

Matrix: AQ **Batch ID:** GN17560

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample F32751-5DUP was used as the QC sample for Solids, Total Dissolved.

Wet Chemistry by Method EPA 160.2

Matrix: AQ **Batch ID:** GN17563

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample F32739-1DUP was used as the QC sample for Solids, Total Suspended.

Aceutest Laboratories Southeast (ALSE) certifies that this report meets the project requirements for analytical data produced for the samples as received at ALSE and as stated on the COC. ALSE certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the ALSE Quality Manual except as noted above. This report is to be used in its entirety. ALSE is not responsible for any assumptions of data quality if partial data packages are used.

Narrative prepared by:

Date: July 15, 2005

Ellen Pampel, Inorganic QA (signature on file)

Friday, July 15, 2005

Report of Analysis

Client Sample ID:	UST-CSFF-RWB1		
Lab Sample ID:	F32751-1	**Date Sampled:**	06/20/05
Matrix:	AQ - Ground Water	**Date Received:**	06/23/05
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	EF052507.D	1	06/28/05	RAW	n/a	n/a	GEF3689
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	48.6	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	0.75	1.0	0.50	ug/l	J
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	4.0	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	21.3	1.0	0.50	ug/l	
108-88-3	Toluene	4.8	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	37.5	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	101%		71-130%
98-08-8	aaa-Trifluorotoluene	102%		71-124%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST-CSFF-RWB3		
Lab Sample ID:	F32751-2	**Date Sampled:**	06/20/05
Matrix:	AQ - Ground Water	**Date Received:**	06/23/05
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	EF052540.D	5	06/29/05	TD	n/a	n/a	GEF3691
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	221	5.0	2.5	ug/l	
108-90-7	Chlorobenzene	ND	5.0	2.5	ug/l	
95-50-1	1,2-Dichlorobenzene [b]	ND	20	20	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	2.5	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	2.5	ug/l	
100-41-4	Ethylbenzene	30.8	5.0	2.5	ug/l	
1634-04-4	Methyl Tert Butyl Ether	38.9	5.0	2.5	ug/l	
108-88-3	Toluene	19.6	5.0	2.5	ug/l	
1330-20-7	Xylenes (total)	258	15	5.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	106%		71-130%
98-08-8	aaa-Trifluorotoluene	109%		71-124%

(a) All hits confirmed by dual column analysis.
(b) Elevated reporting limits due to matrix interferenee.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST-CSFF-RWB4		
Lab Sample ID:	F32751-3	**Date Sampled:**	06/20/05
Matrix:	AQ - Ground Water	**Date Received:**	06/23/05
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF052509.D	1	06/28/05	RAW	n/a	n/a	GEF3689
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	66.2	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	11.4	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	48.1	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	14.2	1.0	0.50	ug/l	
108-88-3	Toluene	53.6	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	141	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	104%		71-130%
98-08-8	aaa-Trifluorotoluene	108%		71-124%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidenee of a compound

Report of Analysis

Client Sample ID:	UST-CSFF-RWC1		
Lab Sample ID:	F32751-4	**Date Sampled:**	06/20/05
Matrix:	AQ - Ground Water	**Date Received:**	06/23/05
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF052510.D	1	06/28/05	RAW	n/a	n/a	GEF3689
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	92%		71-130%
98-08-8	aaa-Trifluorotoluene	96%		71-124%

ND = Not deteeted MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidenee of a compound

Report of Analysis

Client Sample ID:	UST-CSFF-EFF		
Lab Sample ID:	F32751-5	**Date Sampled:**	06/20/05
Matrix:	AQ - Ground Water	**Date Received:**	06/23/05
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	EF052550.D	1	06/29/05	TD	n/a	n/a	GEF3691
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.60	1.0	0.50	ug/l	J
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	92%		71-130%
98-08-8	aaa-Trifluorotoluene	98%		71-124%

(a) All hits eonfirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST-CSFF-EFF		
Lab Sample ID:	F32751-5	**Date Sampled:**	06/20/05
Matrix:	AQ - Ground Water	**Date Received:**	06/23/05
Method:	EPA 610 EPA 610	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LL04449.D	1	06/29/05	AA	06/25/05	OP13685	GLL177
Run #2							

	Initial Volume	Final Volume
Run #1	1040 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	4.8	1.9	ug/l	
208-96-8	Aeenaphthylene	ND	4.8	1.9	ug/l	
120-12-7	Anthracene	ND	4.8	1.9	ug/l	
56-55-3	Benzo(a)anthraeene	ND	4.8	1.9	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.8	1.9	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.8	1.9	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.8	1.9	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.8	1.9	ug/l	
218-01-9	Chrysene	ND	4.8	1.9	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.8	1.9	ug/l	
206-44-0	Fluoranthene	ND	4.8	1.9	ug/l	
86-73-7	Fluorene	ND	4.8	1.9	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrenc	ND	4.8	1.9	ug/l	
91-20-3	Naphthalene	ND	4.8	1.9	ug/l	
90-12-0	1-Methylnaphthalene	ND	4.8	1.9	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.8	1.9	ug/l	
85-01-8	Phenanthrene	ND	4.8	1.9	ug/l	
129-00-0	Pyrene	ND	4.8	1.9	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	96%		42-123%
84-15-1	o-Terphenyl	102%		51-123%

ND = Not detccted MDL - Method Detection Limit
RL = Reporting Limit
E = Indicatcs value exceeds calibration range
J = Indicates an estimated value
B = Indicatcs analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST-CSFF-EFF		
Lab Sample ID:	F32751-5	**Date Sampled:**	06/20/05
Matrix:	AQ - Ground Water	**Date Received:**	06/23/05
		Percent Solids:	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	< 10	10	ug/l	1	06/28/05	06/28/05	JM	SW846 6010B [1]	SM 3030C [2]
Barium	< 200	200	ug/l	1	06/28/05	06/28/05	JM	SW846 6010B [1]	SM 3030C [2]
Cadmium	< 5.0	5.0	ug/l	1	06/28/05	06/28/05	JM	SW846 6010B [1]	SM 3030C [2]
Chromium	< 10	10	ug/l	1	06/28/05	06/28/05	JM	SW846 6010B [1]	SM 3030C [2]
Iron	< 300	300	ug/l	1	06/28/05	06/28/05	JM	SW846 6010B [1]	SM 3030C [2]
Lead	< 5.0	5.0	ug/l	1	06/28/05	06/28/05	JM	SW846 6010B [1]	SM 3030C [2]
Manganese	15.0	15	ug/l	1	06/28/05	06/28/05	JM	SW846 6010B [1]	SM 3030C [2]
Selenium	< 10	10	ug/l	1	06/28/05	06/28/05	JM	SW846 6010B [1]	SM 3030C [2]

(1) Instrument QC Batch: MA4414
(2) Prep QC Batch: MP8199

RL = Reporting Limit

Report of Analysis

Client Sample ID:	UST-CSFF-EFF		
Lab Sample ID:	F32751-5	**Date Sampled:**	06/20/05
Matrix:	AQ - Ground Water	**Date Received:**	06/23/05
		Percent Solids:	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Hardness, Total as CaCO3	261	4.0	mg/l	1	07/14/05	DM	SW846 6010B/SM 2340B
Solids, Total Dissolved	553	10	mg/l	1	06/24/05 14:30	LE	EPA 160.1
Solids, Total Suspended	< 4.0	4.0	mg/l	1	06/24/05 14:35	LE	EPA 160.2

RL = Reporting Limit

Report of Analysis

Client Sample ID:	UST-CSFF-DW06		
Lab Sample ID:	F32751-6	**Date Sampled:**	06/21/05
Matrix:	AQ - Ground Water	**Date Received:**	06/23/05
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF052551.D	1	06/29/05	TD	n/a	n/a	GEF3691
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	97%		71-130%
98-08-8	aaa-Trifluorotoluene	102%		71-124%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exeeeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST-CSFF-DW06		
Lab Sample ID:	F32751-6	**Date Sampled:**	06/21/05
Matrix:	AQ - Ground Water	**Date Received:**	06/23/05
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD24857.D	1	06/30/05	AG	06/29/05	OP13719	GDD733
Run #2							

	Initial Volume	Final Volume
Run #1	35.0 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.020	0.010	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	96%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST-CSFF-DW06		
Lab Sample ID:	F32751-6	**Date Sampled:**	06/21/05
Matrix:	AQ - Ground Water	**Date Received:**	06/23/05
Method:	EPA 610 EPA 610	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LL04450.D	1	06/29/05	AA	06/25/05	OP13685	GLL177
Run #2							

	Initial Volume	Final Volume
Run #1	990 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.1	2.0	ug/l	
208-96-8	Acenaphthylene	ND	5.1	2.0	ug/l	
120-12-7	Anthraeene	ND	5.1	2.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.1	2.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.1	2.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.1	2.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.1	2.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.1	2.0	ug/l	
218-01-9	Chrysene	ND	5.1	2.0	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.1	2.0	ug/l	
206-44-0	Fluoranthene	ND	5.1	2.0	ug/l	
86-73-7	Fluorene	ND	5.1	2.0	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.1	2.0	ug/l	
91-20-3	Naphthalene	ND	5.1	2.0	ug/l	
90-12-0	1-Methylnaphthalene	ND	5.1	2.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.1	2.0	ug/l	
85-01-8	Phenanthrene	ND	5.1	2.0	ug/l	
129-00-0	Pyrene	ND	5.1	2.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	59%		42-123%
84-15-1	o-Terphenyl	85%		51-123%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates prcsumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST-CSFF-MW21		
Lab Sample ID:	F32751-7	**Date Sampled:**	06/21/05
Matrix:	AQ - Ground Water	**Date Received:**	06/23/05
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	EF052552.D	1	06/29/05	TD	n/a	n/a	GEF3691
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	58.4	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene [b]	ND	10	10	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	4.3	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether [c]	139	1.0	0.50	ug/l	E
108-88-3	Toluene	2.8	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	7.3	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	113%		71-130%
98-08-8	aaa-Trifluorotoluene	116%		71-124%

(a) All hits confirmed by GC/MS.
(b) Elevated reporting limits due to matrix interference.
(c) No sample available for reanalysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST-CSFF-MW21		
Lab Sample ID:	F32751-7	**Date Sampled:**	06/21/05
Matrix:	AQ - Ground Water	**Date Received:**	06/23/05
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD24860.D	1	06/30/05	AG	06/29/05	OP13719	GDD733
Run #2							

	Initial Volume	Final Volume
Run #1	35.0 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.020	0.010	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	96%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indieates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST-CSFF-MW24		
Lab Sample ID:	F32751-8	**Date Sampled:**	06/21/05
Matrix:	AQ - Ground Water	**Date Received:**	06/23/05
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	EF052553.D	10	06/29/05	TD	n/a	n/a	GEF3691
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	130	10	5.0	ug/l	
108-90-7	Chlorobenzene	ND	10	5.0	ug/l	
95-50-1	1,2-Dichlorobenzene [b]	ND	20	20	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	10	5.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	10	5.0	ug/l	
100-41-4	Ethylbenzene	45.3	10	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	21.1	10	5.0	ug/l	
108-88-3	Toluene	15.6	10	5.0	ug/l	
1330-20-7	Xylenes (total)	182	30	10	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	102%		71-130%
98-08-8	aaa-Trifluorotoluene	102%		71-124%

(a) All hits confirmed by dual column analysis.
(b) Elevated reporting limits due to matrix interference.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST-CSFF-MW24		
Lab Sample ID:	F32751-8	**Date Sampled:**	06/21/05
Matrix:	AQ - Ground Water	**Date Received:**	06/23/05
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD24861.D	1	06/30/05	AG	06/29/05	OP13719	GDD733
Run #2							

	Initial Volume	Final Volume
Run #1	35.0 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.020	0.010	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	99%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	F32751-9	**Date Sampled:**	06/21/05
Matrix:	AQ - Trip Blank Water	**Date Received:**	06/23/05
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Bateh	Analytical Batch
Run #1	EF052554.D	1	06/29/05	TD	n/a	n/a	GEF3691
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Diehlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	91%		71-130%
98-08-8	aaa-Trifluorotoluene	97%		71-124%

ND = Not deteeted MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

CHAIN OF CUSTODY

ACCUTEST Laboratories
4405 VINELAND ROAD • SUITE C-15
ORLANDO, FL 32811
TEL: 407-425-6700 • FAX: 407-425-0707

ACCUTEST JOB #: F32751
ACCUTEST QUOTE #:

CLIENT INFORMATION
NAME: Engineering & Environment, Inc
ADDRESS: PT 32 Parachute Towers Rd
CITY: Camp Lejeune STATE: NC ZIP: 28542
SEND REPORT TO: Matt Morris
PHONE #: (910) 981-3314

FACILITY INFORMATION
PROJECT NAME: Campbell St. Fuel Farm (CSFF)
LOCATION: MCAS/Camp Lejeune/Marine Corps Air Station NC, North
PROJECT NO.: LD03-016 / CTO 015
FAX #: (910) 989-3314

ANALYTICAL INFORMATION
602, 610, Metals + Hardness, TDS, TSS, EDB (504.1)

MATRIX CODES
DW - DRINKING WATER
GW - GROUND WATER
WW - WASTE WATER
SO - SOIL
SL - SLUDGE
OL - OIL
LIQ - OTHER LIQUID
SOL - OTHER SOLID

ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION DATE	TIME	SAMPLED BY:	MATRIX	# OF BOTTLES	PRESERVATION: HCl	NaOH	HNO3	H2SO4	NONE	PASS/FAIL	602	610	Metals + Hardness	TDS, TSS	EDB (504.1)
1	UST-CSFF-RWB1	6/20/05	1240	TE	GW	3	X						X				
2	UST-CSFF-RWB3		1300			3	X						X				
3	UST-CSFF-RWB4		1325			3	X						X				
4	UST-CSFF-RWC1		1400			3	X						X				
5	UST-CSFF-EFF	6/20/05	1450	TE	GW	11	X				X		X	X	X	X	
6	UST-CSFF-DW06	6/21/05	1130			8	X				X		X	X			X
7	UST-CSFF-MW21		1230			6	X				X		X				X
8	UST-CSFF-MW24	6/21/05	1300	TE	GW	6	X				X		X				X
9	TRIP BLANKS	6/18/05	LAB	LAB	W	2	X						X				
10	TEMP BLANK	6/21/05	LAB	LAB	W	1					X						

LAB USE ONLY

DATA TURNAROUND INFORMATION
- [x] STANDARD
- [ ] 48 HOUR RUSH
- [ ] 24 HOUR EMERGENCY
- [ ] OTHER

APPROVED BY:
EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED

DATA DELIVERABLE INFORMATION
- [ ] STANDARD
- [ ] COMMERCIAL "B"
- [ ] DISK DELIVERABLE
- [ ] STATE FORMS
- [x] OTHER (SPECIFY): NCSA

COMMENTS/REMARKS
Metals: As, Ba, Cd, Cr, Fe, Mn, Pb, Se and Hardness

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY

RELINQUISHED BY: SAMPLER	DATE/TIME	RECEIVED BY:	RELINQUISHED BY:	DATE/TIME: 7:00	RECEIVED BY:
1.		1. FX	2. FX	6-22-05	2.
RELINQUISHED BY:	DATE/TIME	RECEIVED BY:	RELINQUISHED BY:	DATE/TIME	RECEIVED BY:
3.		3.	4.		4.
RELINQUISHED BY:	DATE/TIME	RECEIVED BY:	SEAL #	PRESERVE WHERE APPLICABLE ☐	ON ICE ☐
5.		5.			TEMPERATURE: 3.5 °C

F32751: Chain of Custody
Page 1 of 2

ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: F32751 CLIENT: Eng. + env. PROJECT: Campell St. Fuel Farm

DATE/TIME RECEIVED: 6-22-05 / 9:00 # OF COOLERS RECEIVED: 1 COOLER TEMPS: 3.8

METHOD OF DELIVERY: FEDEX UPS ACCUTEST COURIER GREYHOUND DELIVERY OTHER

AIRBILL NUMBERS: 8508 6832 0370

COOLER INFORMATION

- ☐ CUSTODY SEAL NOT PRESENT OR NOT INTACT
- ☐ NO COC RECEIVED
- ☐ ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- ☐ SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- ☐ TEMPERATURE CRITERIA NOT MET

TRIP BLANK INFORMATION

- ☐ TRIP BLANK NOT PROVIDED
- ☐ TRIP BLANK NOT ON COC
- ☒ TRIP BLANK INTACT
- ☐ TRIP BLANK NOT INTACT
- ☒ RECEIVED WATER TRIP BLANK
- ☐ RECEIVED SOIL TRIP BLANK

SAMPLE INFORMATION

- ☐ SAMPLE LABELS PRESENT ON ALL BOTTLES
- ☐ CORRECT NUMBER OF CONTAINERS USED
- ☐ SAMPLE RECEIVED IMPROPERLY PRESERVED
- ☐ INSUFFICIENT VOLUME FOR ANALYSIS
- ☐ TIMES ON COC DON'T MATCH LABEL
- ☐ ID'S ON COC DON'T MATCH LABEL
- ☐ VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
- ☐ BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
- ☐ NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
- ☐ UNCLEAR FILTERING INSTRUCTIONS
- ☐ UNCLEAR COMPOSITING INSTRUCTIONS
- ☐ SAMPLE(S) RECEIVED BROKEN
- ☐ % SOLIDS JAR NOT RECEIVED

SOIL INFORMATION

NUMBER OF ENCORES ? Ø

NUMBER OF 5035 FIELD KITS ? Ø

SUMMARY OF COMMENTS:

TECHNICIAN SIGNATURE/DATE: [signature] 6-22-05 TECHNICIAN SIGNATURE/DATE: [signature]

ASBD05/22/05

F32751: Chain of Custody
Page 2 of 2

GC Volatiles

5

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: F32751
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GEF3689-MB	EF052486.D	1	06/27/05	RAW	n/a	n/a	GEF3689

The QC reported here applies to the following samples: **Method:** EPA 601/602

F32751-1, F32751-3, F32751-4

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	93%	71-130%
98-08-8	aaa-Trifluorotoluene	97%	71-124%

Method Blank Summary

Job Number: F32751
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GEF3691-MB	EF052538.D	1	06/29/05	TD	n/a	n/a	GEF3691

The QC reported here applies to the following samples: **Method:** EPA 601/602

F32751-2, F32751-5, F32751-6, F32751-7, F32751-8, F32751-9

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	81%	71-130%
460-00-4	4-Bromofluorobenzene	87%	71-130%
98-08-8	aaa-Trifluorotoluene	93%	71-124%
98-08-8	aaa-Trifluorotoluene	100%	71-124%

Method Blank Summary

Job Number: F32751
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP13719-MB	DD24846.D	1	06/30/05	AG	06/29/05	OP13719	GDD733

The QC reported here applies to the following samples: **Method:** EPA 504.1

F32751-6, F32751-7, F32751-8

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.020	0.010	ug/l	

CAS No.	Surrogate Recoverics		Limits
460-00-4	4-Bromofluorobenzene	102%	60-139%

Blank Spike Summary

Job Number: F32751
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Aualytical Batch
GEF3689-BS	EF052485.D	1	06/27/05	RAW	n/a	n/a	GEF3689

5.2 G

The QC reported here applies to the following samples: **Method:** EPA 601/602

F32751-1, F32751-3, F32751-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	20	18.8	94	81-121
108-90-7	Chlorobenzene	20	19.9	100	76-120
95-50-1	1,2-Dichlorobenzene	20	19.1	96	63-127
541-73-1	1,3-Dichlorobenzene	20	19.3	97	70-124
106-46-7	1,4-Dichlorobenzene	20	17.9	90	68-121
100-41-4	Ethylbenzene	20	19.7	99	79-124
1634-04-4	Methyl Tert Butyl Ether	20	17.9	90	73-118
108-88-3	Toluene	20	19.6	98	79-122
1330-20-7	Xylenes (total)	60	57.7	96	79-121

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	100%	71-130%
98-08-8	aaa-Trifluorotoluene	97%	71-124%

Blank Spike Summary

Job Number: F32751
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GEF3691-BS	EF052537.D	1	06/29/05	TD	n/a	n/a	GEF3691

The QC reported here applies to the following samples: **Method:** EPA 601/602

F32751-2, F32751-5, F32751-6, F32751-7, F32751-8, F32751-9

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	20	21.2	106	81-121
108-90-7	Chlorobenzene	20	21.9	110	76-120
95-50-1	1,2-Diehlorobenzene	20	19.6	98	63-127
541-73-1	1,3-Dichlorobenzene	20	20.1	101	70-124
106-46-7	1,4-Dichlorobenzene	20	18.4	92	68-121
100-41-4	Ethylbenzene	20	21.7	109	79-124
1634-04-4	Methyl Tert Butyl Ether	20	21.2	106	73-118
108-88-3	Toluene	20	21.5	108	79-122
1330-20-7	Xylenes (total)	60	63.8	106	79-121

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	105%	71-130%
98-08-8	aaa-Trifluorotoluene	106%	71-124%

Blank Spike Summary

Job Number: F32751
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP13719-BS	DD24847.D	1	06/30/05	AG	06/29/05	OP13719	GDD733

The QC reported here applies to the following samples: **Method:** EPA 504.1

F32751-6, F32751-7, F32751-8

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
106-93-4	1,2-Dibromoethane	0.25	0.20	80	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	104%	60-139%

Blank Spike Summary

Job Number: F32751
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP13719-BS2	DD24848.D	1	06/30/05	AG	06/29/05	OP13719	GDD733

The QC reported here applies to the following samples: **Method:** EPA 504.1

F32751-6, F32751-7, F32751-8

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
106-93-4	1,2-Dibromoethane	0.25	0.21	84	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	101%	60-139%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F32751
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F32605-17MS	EF052496.D	1	06/27/05	RAW	n/a	n/a	GEF3689
F32605-17MSD	EF052497.D	1	06/27/05	RAW	n/a	n/a	GEF3689
F32605-17 [a]	EF052492.D	1	06/27/05	RAW	n/a	n/a	GEF3689

The QC reported here applies to the following samples: **Method:** EPA 601/602

F32751-1, F32751-3, F32751-4

CAS No.	Compound	F32605-17 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	4.5		20	24.0	98	24.1	98	0	74-126/11
108-90-7	Chlorobenzene	ND		20	20.3	102	20.4	102	0	72-124/8
95-50-1	1,2-Dichlorobenzene	ND		20	18.5	93	19.2	96	4	55-136/13
541-73-1	1,3-Dichlorobenzene	ND		20	19.4	97	19.6	98	1	65-132/16
106-46-7	1,4-Dichlorobenzene	ND		20	17.8	89	18.0	90	1	61-133/11
100-41-4	Ethylbenzene	ND		20	20.2	101	20.2	101	0	71-131/8
1634-04-4	Methyl Tert Butyl Ether	13.5		20	33.1	98	33.8	102	2	63-130/11
108-88-3	Toluene	ND		20	20.1	101	20.1	101	0	69-132/7
1330-20-7	Xylenes (total)	ND		60	59.6	99	59.6	99	0	71-127/8

CAS No.	Surrogate Recoveries	MS	MSD	F32605-17	Limits
460-00-4	4-Bromofluorobenzene	101%	102%	91%	71-130%
98-08-8	aaa-Trifluorotoluene	101%	100%	96%	71-124%

(a) All hits confirmed by dual column analysis.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F32751
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F32754-3MS	EF052558.D	1	06/29/05	TD	n/a	n/a	GEF3691
F32754-3MSD	EF052559.D	1	06/29/05	TD	n/a	n/a	GEF3691
F32754-3	EF052557.D	1	06/29/05	TD	n/a	n/a	GEF3691

The QC reported here applies to the following samples: **Method:** EPA 601/602

F32751-2, F32751-5, F32751-6, F32751-7, F32751-8, F32751-9

CAS No.	Compound	F32754-3 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND		20	21.5	108	21.7	109	1	74-126/11
108-90-7	Chlorobenzene	ND		20	22.3	112	22.5	113	1	72-124/8
95-50-1	1,2-Dichlorobenzene	ND		20	20.2	101	21.3	107	5	55-136/13
541-73-1	1,3-Dichlorobenzene	ND		20	20.6	103	21.2	106	3	65-132/16
106-46-7	1,4-Dichlorobenzene	ND		20	19.0	95	19.5	98	3	61-133/11
100-41-4	Ethylbenzene	ND		20	21.8	109	22.0	110	1	71-131/8
1634-04-4	Methyl Tert Butyl Ether	ND		20	20.5	103	20.9	105	2	63-130/11
108-88-3	Toluene	ND		20	21.7	109	22.0	110	1	69-132/7
1330-20-7	Xylenes (total)	ND		60	64.8	108	65.1	109	0	71-127/8

CAS No.	Surrogate Recoveries	MS	MSD	F32754-3	Limits
460-00-4	4-Bromofluorobenzene	104%	110%	91%	71-130%
98-08-8	aaa-Trifluorotoluene	102%	109%	97%	71-124%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F32751
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP13719-MS	DD24858.D	1	06/30/05	AG	06/29/05	OP13719	GDD733
OP13719-MSD	DD24859.D	1	06/30/05	AG	06/29/05	OP13719	GDD733
F32751-6	DD24857.D	1	06/30/05	AG	06/29/05	OP13719	GDD733

The QC reported here applies to the following samples: **Method:** EPA 504.1

F32751-6, F32751-7, F32751-8

CAS No.	Compound	F32751-6 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
106-93-4	1,2-Dibromoethane	ND		0.25	0.20	80	0.19	76	5	65-135/25

CAS No.	Surrogate Recoveries	MS	MSD	F32751-6	Limits
460-00-4	4-Bromofluorobenzene	97%	99%	96%	60-139%

Volatile Surrogate Recovery Summary

Job Number: F32751
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Method: EPA 601/602 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S2 [a]
F32751-1	EF052507.D	101.0	102.0
F32751-2	EF052540.D	106.0	109.0
F32751-3	EF052509.D	104.0	108.0
F32751-4	EF052510.D	92.0	96.0
F32751-5	EF052550.D	92.0	98.0
F32751-6	EF052551.D	97.0	102.0
F32751-7	EF052552.D	113.0	116.0
F32751-8	EF052553.D	102.0	102.0
F32751-9	EF052554.D	91.0	97.0
F32605-17MS	EF052496.D	101.0	101.0
F32605-17MSD	EF052497.D	102.0	100.0
F32754-3MS	EF052558.D	104.0	102.0
F32754-3MSD	EF052559.D	110.0	109.0
GEF3689-BS	EF052485.D	100.0	97.0
GEF3689-MB	EF052486.D	93.0	97.0
GEF3691-BS	EF052537.D	105.0	106.0
GEF3691-MB	EF052538.D	87.0	100.0

Surrogate Compounds	Recovery Limits
S1 = 4-Bromofluorobenzene	71-130%
S2 = aaa-Trifluorotoluene	71-124%

(a) Recovery from GC signal #2

Volatile Surrogate Recovery Summary

Job Number: F32751
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Method: EPA 504.1 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]
F32751-6	DD24857.D	96.0
F32751-7	DD24860.D	96.0
F32751-8	DD24861.D	99.0
OP13719-BS	DD24847.D	104.0
OP13719-BS2	DD24848.D	101.0
OP13719-MB	DD24846.D	102.0
OP13719-MS	DD24858.D	97.0
OP13719-MSD	DD24859.D	99.0

Surrogate Compounds	Recovery Limits
S1 = 4-Bromofluorobenzene	60-139%

(a) Recovery from GC signal #2

5.4

GC Surrogate Retention Time Summary

Job Number: F32751
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GEF3689-CC3669	**Injection Date:**	06/27/05
Lab File ID:	EF052484.D	**Injection Time:**	12:06
Instrument ID:	GCEF	**Method:**	EPA 601/602

	S1 [a] RT	S2 [a] RT
Check Std	10.88	5.83

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
GEF3689-BS	EF052485.D	06/27/05	13:04	10.86	5.83
GEF3689-MB	EF052486.D	06/27/05	13:29	10.88	5.83
ZZZZZZ	EF052487.D	06/27/05	16:20	10.86	5.83
ZZZZZZ	EF052488.D	06/27/05	16:45	10.86	5.83
ZZZZZZ	EF052489.D	06/27/05	17:09	10.86	5.83
ZZZZZZ	EF052490.D	06/27/05	17:33	10.86	5.83
ZZZZZZ	EF052491.D	06/27/05	17:57	10.86	5.83
F32605-17	EF052492.D	06/27/05	18:22	10.86	5.83
ZZZZZZ	EF052493.D	06/27/05	18:46	10.86	5.83
ZZZZZZ	EF052494.D	06/27/05	19:10	10.86	5.83

Surrogate Compounds

S1 = 4-Bromofluorobenzene
S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F32751
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GEF3689-CC3669	**Injection Date:**	06/27/05
Lab File ID:	EF052495.D	**Injection Time:**	19:34
Instrument ID:	GCEF	**Method:**	EPA 601/602

	S1 [a] RT	S2 [a] RT
Check Std	10.86	5.83

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
F32605-17MS	EF052496.D	06/27/05	19:59	10.86	5.83
F32605-17MSD	EF052497.D	06/27/05	20:23	10.86	5.83
ZZZZZZ	EF052498.D	06/27/05	20:47	10.86	5.83
ZZZZZZ	EF052501.D	06/27/05	22:00	10.86	5.83
ZZZZZZ	EF052502.D	06/27/05	22:24	10.86	5.83
ZZZZZZ	EF052503.D	06/27/05	22:49	10.86	5.83
ZZZZZZ	EF052504.D	06/27/05	23:13	10.86	5.83
ZZZZZZ	EF052505.D	06/27/05	23:38	10.86	5.83

Surrogate Compounds

S1 = 4-Bromofluorobenzene
S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F32751
Account: EEINCJX EEI
Projeet: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GEF3689-CC3669	**Injection Date:**	06/28/05
Lab File ID:	EF052506.D	**Injection Time:**	00:02
Instrument ID:	GCEF	**Method:**	EPA 601/602

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	10.67	10.86	5.72	5.83

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
F32751-1	EF052507.D	06/28/05	00:26		10.86		5.83
F32751-3	EF052509.D	06/28/05	01:20		10.86		5.83
F32751-4	EF052510.D	06/28/05	01:45		10.86		5.83
GEF3689-ECC3669	EF052512.D	06/28/05	02:33	10.69	10.88	5.72	5.83

Surrogate Compounds

S1 = 4-Bromofluorobenzene
S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F32751
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GEF3691-CC3669	**Injection Date:**	06/29/05
Lab File ID:	EF052536.D	**Injection Time:**	08:47
Instrument ID:	GCEF	**Method:**	EPA 601/602

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	10.68	10.86	5.72	5.83

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
GEF3691-BS	EF052537.D	06/29/05	09:11		10.86		5.83
GEF3691-MB	EF052538.D	06/29/05	09:35	10.69	10.88	5.72	5.83
ZZZZZZ	EF052539.D	06/29/05	10:32		10.86		5.83
F32751-2	EF052540.D	06/29/05	10:59		10.86		5.83
ZZZZZZ	EF052541.D	06/29/05	11:23		10.86		5.83
ZZZZZZ	EF052542.D	06/29/05	11:47		10.86		5.83
ZZZZZZ	EF052543.D	06/29/05	12:12	10.67	10.86	5.72	5.83
ZZZZZZ	EF052544.D	06/29/05	12:36		10.86		5.83
ZZZZZZ	EF052545.D	06/29/05	13:00		10.86		5.83
ZZZZZZ	EF052546.D	06/29/05	13:24		10.86		5.83
ZZZZZZ	EF052547.D	06/29/05	13:49		10.86		5.83

Surrogate Compounds

S1 = 4-Bromofluorobenzene
S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F32751
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GEF3691-CC3669	**Injection Date:**	06/29/05
Lab File ID:	EF052549.D	**Injection Time:**	14:37
Instrument ID:	GCEF	**Method:**	EPA 601/602

	S1 [a] RT	S2 [a] RT
Check Std	10.86	5.83

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
F32751-5	EF052550.D	06/29/05	15:02	10.86	5.83
F32751-6	EF052551.D	06/29/05	15:26	10.86	5.83
F32751-7	EF052552.D	06/29/05	15:50	10.86	5.83
F32751-8	EF052553.D	06/29/05	16:17	10.85	5.83
F32751-9	EF052554.D	06/29/05	16:42	10.86	5.83
ZZZZZZ	EF052555.D	06/29/05	17:06	10.86	5.83
ZZZZZZ	EF052556.D	06/29/05	17:30	10.86	5.83
F32754-3	EF052557.D	06/29/05	17:54	10.86	5.83
F32754-3MS	EF052558.D	06/29/05	18:19	10.86	5.83
F32754-3MSD	EF052559.D	06/29/05	18:43	10.85	5.83

Surrogate Compounds

S1 = 4-Bromofluorobenzene
S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F32751
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GDD733-ICC733	**Injection Date:**	06/30/05
Lab File ID:	DD24840.D	**Injection Time:**	09:35
Instrument ID:	GCDD	**Method:**	EPA 504.1

	S1 [a] RT
Cheek Std	7.02

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT
OP13719-MB	DD24846.D	06/30/05	11:53	7.01
OP13719-BS	DD24847.D	06/30/05	12:12	7.02
OP13719-BS2	DD24848.D	06/30/05	12:32	7.02
ZZZZZZ	DD24849.D	06/30/05	12:52	7.02
ZZZZZZ	DD24850.D	06/30/05	13:12	7.02
ZZZZZZ	DD24851.D	06/30/05	13:32	7.02
ZZZZZZ	DD24852.D	06/30/05	13:52	7.02
ZZZZZZ	DD24853.D	06/30/05	14:12	7.01
ZZZZZZ	DD24854.D	06/30/05	14:32	7.02
ZZZZZZ	DD24855.D	06/30/05	14:52	7.02

Surrogate Compounds

S1 = 4-Bromofluorobenzene

(a) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F32751
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GDD733-CC733	**Injection Date:**	06/30/05
Lab File ID:	DD24856.D	**Injection Time:**	15:12
Instrument ID:	GCDD	**Method:**	EPA 504.1

	S1 [a] RT
Check Std	7.02

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT
F32751-6	DD24857.D	06/30/05	15:31	7.02
OP13719-MS	DD24858.D	06/30/05	15:51	7.02
OP13719-MSD	DD24859.D	06/30/05	16:11	7.02
F32751-7	DD24860.D	06/30/05	16:31	7.02
F32751-8	DD24861.D	06/30/05	16:51	7.02

Surrogate Compounds

S1 = 4-Bromofluorobenzene

(a) Retention time from GC signal #2

Initial Calibration Summary

Job Number: F32751
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GDD733-ICC733
Lab FileID: DD24840.D

Response Factor Report ECD 4

Method : C:\HPCHEM\2\METHODS\504_1.M (Chemstation Integrator)
Title : EDB/DBCP by EPA 504/504.1 or SW846 8011
Last Update : Thu Jun 30 11:37:07 2005
Response via : Initial Calibration

Calibration Files
1 =DD24843.D .75 =DD24842.D .50 =DD24841.D .25 =DD24840.D
0.1 =DD24839.D 0.02=DD24838.D icv =DD24845.D

Compound	1	.75	.50	.25	0.1	0.02	icv	Avg	%RSD
1) 1,2-Dibromoethane	1.210	1.071	1.044	1.032	1.056			1.083 E6	6.70
2)S 4-Bromofluorobenz	0.854	0.828	0.885	0.930	1.095	1.157		0.958 E5	14.17
3) 1,2,3-Trichloropr	1.873	1.824	1.922	2.051	2.452	3.738		2.310 E5	31.84
---- Linear regr., Force(0,0) ---- Coefficient = 0.9991									
Response Ratio = 0.00000 + 187419.05737 *A									
4) 1,2-Dibromo-3-chl	3.003	2.871	2.832	2.757	2.997	3.041		2.917 E6	3.88
Signal #2									
1) 1,2-Dibromoethane	3.310	3.102	3.083	3.113	3.442	3.379		3.238 E5	4.88
2)S 4-Bromofluorobenz	2.546	2.440	2.555	2.605	2.916	2.989		2.675 E4	8.32
3) 1,2,3-Trichloropr	5.933	5.697	6.019	5.993	6.448	6.615		6.118 E4	5.63
4) 1,2-Dibromo-3-chl	8.077	7.559	7.552	6.994	7.181	6.592		7.326 E5	7.07

(#) = Out of Range

504_1.M Fri Jul 01 10:29:43 2005

Initial Calibration Verification

Job Number: F32751
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GDD733-ICV733
Lab FileID: DD24845.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\0630EDB\DD24845.D\ECD1A.CH Vial: 9
Signal #2 : C:\HPCHEM\2\DATA\0630EDB\DD24845.D\ECD2B.CH
Acq On : 30 Jun 2005 11:14 am Operator: ansleyg
Sample : icv733-0.25 Inst : ECD 4
Misc : op13655,gdd733,35.0,,,2,1,water MultiplIr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\2\METHODS\504_1.M (Chemstation Integrator)
Title : EDB/DBCP by EPA 504/504.1 or SW846 8011
Last Update : Thu Jun 30 11:37:07 2005
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	1,2-Dibromoethane	0.250	0.253	-1.2	106	0.00	5.87- 6.07
2 S	4-Bromofluorobenzene	2.000	2.051	-2.6	106	0.00	7.13- 7.33
	----------	Amount	Calc.	%Drift	----------		
3	1,2,3-Trichloropropane	0.250	0.250	0.0	91	0.00	7.51- 7.71
	----------	Amount	Calc.	%Drift	----------		
4	1,2-Dibromo-3-chloropr	0.250	0.216	13.6	92	0.00	9.57- 9.77
*****	Signal #2 *****						
1	1,2-Dibromoethane	0.250	0.217	13.2	90	0.00	5.64- 5.84
2 S	4-Bromofluorobenzene	2.000	2.032	-1.6	104	0.00	6.92- 7.12
3	1,2,3-Trichloropropane	0.250	0.215	14.0	88	0.00	7.08- 7.28
4	1,2-Dibromo-3-chloropr	0.250	0.214	14.4	90	0.00	9.27- 9.47

(#) = Out of Range SPCC's out = 0 CCC's out = 0
DD24840.D 504_1.M Fri Jul 01 10:29:07 2005

Continuing Calibration Summary

Job Number: F32751
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GDD733-CC733
Lab FileID: DD24856.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\0630EDB\DD24856.D\ECD1A.CH Vial: 4
Signal #2 : C:\HPCHEM\2\DATA\0630EDB\DD24856.D\ECD2B.CH
Acq On : 30 Jun 2005 3:12 pm Operator: ansleyg
Sample : cc733-0.25 Inst : ECD 4
Misc : op13719,gdd733,35.0,,,2,1,water MultiplR: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\2\METHODS\504_1.M (Chemstation Integrator)
Title : EDB/DBCP by EPA 504/504.1 or SW846 8011
Last Update : Thu Jun 30 11:37:07 2005
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	1,2-Dibromoethane	0.250	0.221	11.6	93	0.00	5.87- 6.07
2 S	4-Bromofluorobenzene	2.000	1.933	3.3	100	0.00	7.13- 7.33
	----------	Amount	Calc.	%Drift	----------		
3	1,2,3-Trichloropropane	0.250	0.267	-6.8	98	0.00	7.51- 7.71
	----------	Amount	Calc.	%Drift	----------		
4	1,2-Dibromo-3-chloropr	0.250	0.233	6.8	98	0.00	9.57- 9.77
*****	Signal #2 *****						
1	1,2-Dibromoethane	0.250	0.234	6.4	97	0.00	5.64- 5.84
2 S	4-Bromofluorobenzene	2.000	1.931	3.4	99	0.00	6.92- 7.12
3	1,2,3-Trichloropropane	0.250	0.236	5.6	96	0.00	7.08- 7.28
4	1,2-Dibromo-3-chloropr	0.250	0.236	5.6	99	0.00	9.27- 9.47

(#) = Out of Range SPCC's out = 0 CCC's out = 0
DD24840.D 504_1.M Fri Jul 01 10:29:08 2005

5.6

Continuing Calibration Summary

Job Number: F32751
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GDD733-CC733
Lab FileID: DD24862.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\0630EDB\DD24862.D\ECD1A.CH Vial: 5
Signal #2 : C:\HPCHEM\2\DATA\0630EDB\DD24862.D\ECD2B.CH
Acq On : 30 Jun 2005 5:11 pm Operator: ansleyg
Sample : cc733-0.50 Inst : ECD 4
Misc : op13719,gdd733,35.0,,,2,1,water MultiplIr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\2\METHODS\504_1.M (Chemstation Integrator)
Title : EDB/DBCP by EPA 504/504.1 or SW846 8011
Last Update : Thu Jun 30 11:37:07 2005
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	1,2-Dibromoethane	0.500	0.462	7.6	96	0.00	5.87- 6.07
2 S	4-Bromofluorobenzene	4.000	3.637	9.1	98	0.00	7.13- 7.33
	----------	Amount	Calc.	%Drift	----------		
3	1,2,3-Trichloropropane	0.500	0.514	-2.8	100	0.00	7.51- 7.71
	----------	Amount	Calc.	%Drift	----------		
4	1,2-Dibromo-3-chloropr	0.500	0.482	3.6	99	0.00	9.57- 9.77
*****	Signal #2 *****						
1	1,2-Dibromoethane	0.500	0.470	6.0	99	0.00	5.64- 5.84
2 S	4-Bromofluorobenzene	4.000	3.833	4.2	100	0.00	6.92- 7.12
3	1,2,3-Trichloropropane	0.500	0.489	2.2	99	0.00	7.08- 7.28
4	1,2-Dibromo-3-chloropr	0.500	0.505	-1.0	98	0.00	9.27- 9.47

(#) = Out of Range SPCC's out = 0 CCC's out = 0
DD24841.D 504_1.M Fri Jul 01 10:29:27 2005

Initial Calibration Summary

Job Number: F32751
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GEF3669-ICC3669
Lab FileID: EF052010.D

Response Factor Report VOA1

Method : C:\HPCHEM\1\METHODS\DUAL0330.M (Chemstation Integrator)
Title : EPA 602 & 5030B/8021B
Last Update : Wed Jun 08 14:07:36 2005
Response via : Initial Calibration

Calibration Files
1 =EF052007.D 5 =EF052008.D 20 =EF052009.D 40 =EF052010.D
70 =EF052011.D 100 =EF052012.D

		Compound	1	5	20	40	70	100	Avg		%RSD
1)		Methyl tert Butyl E	1.303	1.475	1.467	1.480	1.481	1.479	1.448	E3	4.89
2)		Di-Isopropyl ether	2.410	2.711	2.677	2.668	2.656	2.657	2.630	E3	4.17
3)		Benzene	5.138	5.656	5.546	5.574	5.647	5.614	5.529	E3	3.55
4)	S	a,a,a-TFT(S)	1.731	1.756	1.778	1.736	1.839	1.843	1.780	E3	2.79
5)		Toluene	4.681	4.893	4.802	4.905	4.947	4.931	4.860	E3	2.08
6)		Chlorobenzene	4.461	4.585	4.564	4.629	4.681	4.690	4.602	E3	1.85
7)		Ethylbenzene	3.841	4.002	3.965	4.117	4.174	4.132	4.039	E3	3.11
8)		m,p-Xylene	4.420	4.405	4.367	4.500	4.556	4.572	4.470	E3	1.90
9)		o-Xylene	3.701	3.829	3.852	3.962	4.014	4.018	3.896	E3	3.20
10)	S	BFB(S)	3.307	3.412	3.638	3.670	3.957	3.961	3.658	E3	7.40
11)		1,3-Dichlorobenzene	2.907	2.617	2.838	3.091	3.302	3.287	3.007	E3	8.97
		---- Linear regr., Force(0,0) ---- Coefficient = 0.9991									
		Response Ratio = 0.00000 + 3261.26140 *A									
12)		1,4-Dichlorobenzene	3.511	2.896	3.136	3.454	3.685	3.707	3.398	E3	9.44
		---- Linear regr., Force(0,0) ---- Coefficient = 0.9989									
		Response Ratio = 0.00000 + 3661.76321 *A									
13)		1,2-Dichlorobenzene	1.648	1.298	1.477	1.723	1.901	1.886	1.656	E3	14.24
		---- Linear regr., Force(0,0) ---- Coefficient = 0.9979									
		Response Ratio = 0.00000 + 1864.69285 *A									

Signal #2

1)		Methyl tert Butyl E	1.339	1.535	1.559	1.577	1.574	1.569	1.525	E3	6.06
2)		Di-Isopropyl ether	2.293	2.683	2.735	2.733	2.703	2.678	2.638	E3	6.46
3)		Benzene	5.246	5.881	5.883	5.890	5.953	5.901	5.792	E3	4.64
4)	S	a,a,a-TFT(S)	1.732	1.782	1.838	1.787	1.895	1.893	1.821	E3	3.60
5)		Toluene	4.825	5.174	5.136	5.149	5.221	5.174	5.113	E3	2.82
6)		Chlorobenzene	4.666	4.913	4.952	5.011	5.032	5.015	4.931	E3	2.79
7)		Ethylbenzene	4.180	4.455	4.398	4.495	4.579	4.525	4.439	E3	3.18
8)		m,p-Xylene	4.730	4.875	4.737	4.943	4.988	4.920	4.865	E3	2.23
9)		o-Xylene	3.732	3.982	4.069	4.139	4.209	4.153	4.048	E3	4.28
10)	S	BFB(S)	3.747	3.878	4.095	4.164	4.458	4.457	4.133	E3	7.08
11)		1,3-Dichlorobenzene	2.968	2.704	2.964	3.218	3.425	3.400	3.113	E3	9.10
		---- Linear regr., Force(0,0) ---- Coefficient = 0.9992									
		Response Ratio = 0.00000 + 3378.80375 *A									
12)		1,4-Dichlorobenzene	3.441	2.925	3.160	3.477	3.665	3.696	3.394	E3	8.83
		---- Linear regr., Force(0,0) ---- Coefficient = 0.9992									
		Response Ratio = 0.00000 + 3652.69225 *A									
13)		1,2-Dichlorobenzene	1.708	1.375	1.585	1.868	2.048	2.051	1.772	E3	15.15
		---- Linear regr., Force(0,0) ---- Coefficient = 0.9979									
		Response Ratio = 0.00000 + 2021.11827 *A									

Initial Calibration Summary

Job Number: F32751
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GEF3669-ICC3669
Lab FileID: EF052010.D

(#) = Out of Range

DUAL0330.M Thu Jun 09 08:54:50 2005

5.6

Initial Calibration Verification

Job Number: F32751
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GEF3669-ICV3669
Lab FileID: EF052013.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\060805\EF052013.D\FID1A.CH Vial: 9
Signal #2 : C:\HPCHEM\1\DATA\060805\EF052013.D\FID2B.CH
Acq On : 8 Jun 2005 2:07 pm Operator: KelliK
Sample : icv3669-20 Inst : VOA1
Misc : gc5022,gef3669,,,,,1 MultiplR: 1.00
IntFile Signal #1: AUTOINT1.E IntFile Signal #2: autoint2.e

Method : C:\HPCHEM\1\METHODS\DUAL0330.M (Chemstation Integrator)
Title : EPA 602 & 5030B/8021B
Last Update : Wed Jun 08 14:07:36 2005
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	Methyl tert Butyl Ethe	20.000	21.126	-5.6	104	0.00	2.84- 3.04
2	Di-Isopropyl ether	20.000	19.170	4.1	94	0.00	3.30- 3.50
3	Benzene	20.000	19.771	1.1	99	0.00	4.57- 4.77
4 S	a,a,a-TFT(S)	20.000	20.143	-0.7	101	0.00	5.60- 5.80
5	Toluene	20.000	20.170	-0.9	102	0.00	7.00- 7.20
6	Chlorobenzene	20.000	20.878	-4.4	105	0.02	8.81- 9.01
7	Ethylbenzene	20.000	20.548	-2.7	105	0.02	9.15- 9.35
8	m,p-Xylene	40.000	41.048	-2.6	105	0.02	9.46- 9.66
9	o-Xylene	20.000	20.832	-4.2	105	0.02	9.99-10.19
10 S	BFB(S)	20.000	20.851	-4.3	105	0.02	10.50-10.80
	----------	Amount	Calc.	%Drift	----------		
11	1,3-Dichlorobenzene	20.000	21.711	-8.6	125	0.02	12.43-12.63
12	1,4-Dichlorobenzene	20.000	19.799	1.0	116	0.02	12.54-12.74
13	1,2-Dichlorobenzene	20.000	21.633	-8.2	137	0.02	13.05-13.25

***** Signal #2 *****

	----------	Amount	Calc.	%Drift	----------		
1	Methyl tert Butyl Ethe	20.000	20.428	-2.1	100	0.00	2.79- 2.99
2	Di-Isopropyl ether	20.000	19.020	4.9	92	0.00	3.21- 3.41
3	Benzene	20.000	19.689	1.6	97	0.00	4.59- 4.79
4 S	a,a,a-TFT(S)	20.000	19.701	1.5	98	0.00	5.71- 5.91
5	Toluene	20.000	20.071	-0.4	100	0.00	6.96- 7.16
6	Chlorobenzene	20.000	21.020	-5.1	105	0.02	8.93- 9.13
7	Ethylbenzene	20.000	20.578	-2.9	104	0.02	9.12- 9.32
8	m,p-Xylene	40.000	41.007	-2.5	105	0.02	9.31- 9.51
9	o-Xylene	20.000	21.168	-5.8	105	0.02	9.90-10.11
10 S	BFB(S)	20.000	20.721	-3.6	105	0.02	10.69-10.99
	----------	Amount	Calc.	%Drift	----------		
11	1,3-Dichlorobenzene	20.000	21.481	-7.4	122	0.02	12.50-12.70
12	1,4-Dichlorobenzene	20.000	20.054	-0.3	116	0.02	12.66-12.86
13	1,2-Dichlorobenzene	20.000	21.477	-7.4	137	0.01	13.26-13.46

(#) = Out of Range SPCC's out = 0 CCC's out = 0
EF052009.D DUAL0330.M Thu Jun 09 08:54:11 2005

Continuing Calibration Summary

Job Number: F32751
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GEF3689-CC3669
Lab FileID: EF052484.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\062705\EF052484.D\FID1A.CH Vial: 1
Signal #2 : C:\HPCHEM\1\DATA\062705\EF052484.D\FID28.CH
Acq On : 27 Jun 2005 12:06 pm Operator: RickW
Sample : cc3669-40 Inst : VOA1
Misc : gc5080,gef3689,,,,, Multiplr: 1.00
IntFile Signal #1: AUTOINT1.E IntFile Signal #2: autoint2.e

Method : C:\HPCHEM\1\METHODS\DUAL0608.M (Chemstation Integrator)
Title : EPA 602 & 5030B/8021B
Last Update : Thu Jun 23 09:42:28 20D5
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	Methyl tert 8utyl Ethe	40.000	41.197	-3.0	101	0.00	2.85- 3.05
2	Di-Isopropyl ether	40.000	40.273	-0.7	99	0.00	3.31- 3.51
3	Benzene	40.000	42.450	-6.1	105	0.00	4.59- 4.79
4 S	a,a,a-TFT(S)	20.000	19.808	1.0	102	0.00	5.61- 5.81
5	Toluene	40.000	42.854	-7.1	106	0.00	7.02- 7.22
6	Chlorobenzene	40.000	42.322	-5.8	105	0.03	8.83- 9.03
7	Ethylbenzene	40.000	42.486	-6.2	104	0.03	9.17- 9.37
8	m,p-Xylene	80.000	85.891	-7.4	107	0.03	9.48- 9.68
9	o-Xylene	40.000	43.171	-7.9	106	0.03	10.01-10.21
10 S	BFB(S)	20.000	20.706	-3.5	103	0.03	10.52-10.82
	----------	Amount	Calc.	%Drift	----------		
11	1,3-Dichlorobenzene	40.000	41.302	-3.3	109	0.03	12.45-12.65
12	1,4-Dichlorobenzene	40.000	40.817	-2.0	108	0.03	12.56-12.76
13	1,2-Dichlorobenzene	40.000	41.456	-3.6	112	0.02	13.07-13.27

***** Signal #2 *****

	----------	Amount	Calc.	%Drift	----------		
1	Methyl tert Butyl Ethe	40.000	41.463	-3.7	100	0.00	2.80- 3.00
2	Di-Isopropyl ether	40.000	40.635	-1.6	98	0.00	3.22- 3.42
3	Benzene	40.000	42.467	-6.2	104	0.00	4.60- 4.80
4 S	a,a,a-TFT(S)	20.000	19.825	0.9	101	0.00	5.73- 5.93
5	Toluene	40.000	42.404	-6.0	105	0.00	6.97- 7.17
6	Chlorobenzene	40.000	42.173	-5.4	104	0.03	8.94- 9.14
7	Ethylbenzene	40.000	42.532	-6.3	105	0.03	9.14- 9.34
8	m,p-Xylene	80.000	85.901	-7.4	106	0.03	9.33- 9.53
9	o-Xylene	40.000	43.356	-8.4	106	0.03	9.92-10.12
10 S	BFB(S)	20.000	20.715	-3.6	103	0.03	10.70-11.00
	----------	Amount	Calc.	%Drift	----------		
11	1,3-Dichlorobenzene	40.000	41.489	-3.7	109	0.02	12.52-12.72
12	1,4-Dichlorobenzene	40.000	40.830	-2.1	107	0.02	12.68-12.88
13	1,2-Dichlorobenzene	40.000	40.829	-2.1	110	0.02	13.27-13.47

(#) = Out of Range SPCC's out = 0 CCC's out = 0
EF052010.D DUAL0608.M Tue Jun 28 09:49:02 2005

Continuing Calibration Summary

Job Number: F32751
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GEF3689-CC3669
Lab FileID: EF052495.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\062705\EF052495.D\FID1A.CH Vial: 12
Signal #2 : C:\HPCHEM\1\DATA\062705\EF052495.D\FID2B.CH
Acq On : 27 Jun 2005 7:34 pm Operator: RickW
Sample : cc3669-20 Inst : VOA1
Misc : gc5080,gef3689,,,,, Multiplr: 1.00
IntFile Signal #1: AUTOINT1.E IntFile Signal #2: autoint2.e

Method : C:\HPCHEM\1\METHODS\DUAL0608.M (Chemstation Integrator)
Title : EPA 602 & 5030B/8021B
Last Update : Thu Jun 23 09:42:28 2005
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	Methyl tert Butyl Ethe	20.000	20.779	-3.9	103	0.00	2.85- 3.05
2	Di-Isopropyl ether	20.000	20.272	-1.4	100	0.00	3.31- 3.51
3	Benzene	20.000	21.079	-5.4	105	0.00	4.59- 4.79
4 S	a,a,a-TFT(S)	20.000	19.941	0.3	100	0.00	5.61- 5.81
5	Toluene	20.000	21.050	-5.3	107	0.00	7.02- 7.22
6	Chlorobenzene	20.000	21.246	-6.2	107	0.00	8.83- 9.03
7	Ethylbenzene	20.000	21.011	-5.1	107	0.00	9.17- 9.37
8	m,p-Xylene	40.000	41.397	-3.5	106	0.00	9.48- 9.68
9	o-Xylene	20.000	21.268	-6.3	108	0.00	10.01-10.21
10 S	BFB(S)	20.000	20.411	-2.1	103	0.00	10.52-10.82
	----------	Amount	Calc.	%Drift	----------		
11	1,3-Dichlorobenzene	20.000	20.176	-0.9	116	0.00	12.45-12.65
12	1,4-Dichlorobenzene	20.000	19.759	1.2	115	0.00	12.56-12.76
13	1,2-Dichlorobenzene	20.000	20.384	-1.9	129	0.00	13.07-13.27

***** Signal #2 *****

	----------	Amount	Calc.	%Drift	----------		
1	Methyl tert Butyl Ethe	20.000	21.233	-6.2	104	0.00	2.80- 3.00
2	Di-Isopropyl ether	20.000	20.756	-3.8	100	0.00	3.22- 3.42
3	Benzene	20.000	21.428	-7.1	105	0.00	4.60- 4.80
4 S	a,a,a-TFT(S)	20.000	20.149	-0.7	100	0.00	5.73- 5.93
5	Toluene	20.000	21.310	-6.5	106	0.00	6.97- 7.17
6	Chlorobenzene	20.000	21.506	-7.5	107	0.00	8.94- 9.14
7	Ethylbenzene	20.000	21.135	-5.7	107	0.00	9.14- 9.34
8	m,p-Xylene	40.000	41.669	-4.2	107	0.00	9.33- 9.53
9	o-Xylene	20.000	21.532	-7.7	107	0.00	9.92-10.12
10 S	BFB(S)	20.000	20.542	-2.7	104	0.00	10.70-11.00
	----------	Amount	Calc.	%Drift	----------		
11	1,3-Dichlorobenzene	20.000	20.373	-1.9	116	0.00	12.52-12.72
12	1,4-Dichlorobenzene	20.000	20.056	-0.3	116	0.00	12.68-12.88
13	1,2-Dichlorobenzene	20.000	20.235	-1.2	129	0.00	13.27-13.47

(#) = Out of Range SPCC's out = 0 CCC's out = 0
EF052009.D DUAL0608.M Tue Jun 28 09:50:54 2005

Continuing Calibration Summary

Job Number: F32751
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GEF3689-CC3669
Lab FileID: EF052506.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\062705\EF052506.D\FID1A.CH Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\062705\EF052506.D\FID2B.CH
Acq On : 28 Jun 2005 12:02 am Operator: RickW
Sample : cc3669-20 Inst : VOA1
Misc : gc5080,gef3689,,,,, MultiplIr: 1.00
IntFile Signal #1: AUTOINT1.E IntFile Signal #2: autoint2.e

Method : C:\HPCHEM\1\METHODS\DUAL0608.M (Chemstation Integrator)
Title : EPA 602 & 5030B/8021B
Last Update : Thu Jun 23 09:42:28 2005
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	Methyl tert Butyl Ethe	20.000	20.510	-2.6	101	0.00	2.85- 3.05
2	Di-Isopropyl ether	20.000	20.362	-1.8	100	0.00	3.31- 3.51
3	Benzene	20.000	21.262	-6.3	106	0.00	4.59- 4.79
4 S	a,a,a-TFT(S)	20.000	19.706	1.5	99	0.00	5.61- 5.81
5	Toluene	20.000	21.175	-5.9	107	0.00	7.02- 7.22
6	Chlorobenzene	20.000	21.034	-5.2	106	0.00	8.83- 9.03
7	Ethylbenzene	20.000	21.095	-5.5	107	0.00	9.17- 9.37
8	m,p-Xylene	40.000	41.595	-4.0	106	0.00	9.48- 9.68
9	o-Xylene	20.000	21.429	-7.1	108	0.00	10.01-10.21
10 S	BFB(S)	20.000	20.025	-0.1	101	0.00	10.52-10.82
	----------	Amount	Calc.	%Drift	----------		
11	1,3-Dichlorobenzene	20.000	19.571	2.1	112	0.00	12.45-12.65
12	1,4-Dichlorobenzene	20.000	19.093	4.5	111	0.00	12.56-12.76
13	1,2-Dichlorobenzene	20.000	18.910	5.4	119	0.00	13.07-13.27

***** Signal #2 *****

	----------	Amount	Calc.	%Drift	----------		
1	Methyl tert Butyl Ethe	20.000	20.283	-1.4	99	0.00	2.80- 3.00
2	Di-Isopropyl ether	20.000	20.310	-1.5	98	0.00	3.22- 3.42
3	Benzene	20.000	21.295	-6.5	105	0.00	4.60- 4.80
4 S	a,a,a-TFT(S)	20.000	19.703	1.5	98	0.00	5.73- 5.93
5	Toluene	20.000	21.202	-6.0	106	0.00	6.97- 7.17
6	Chlorobenzene	20.000	21.354	-6.8	106	0.00	8.94- 9.14
7	Ethylbenzene	20.000	21.181	-5.9	107	0.00	9.14- 9.34
8	m,p-Xylene	40.000	42.314	-5.8	109	0.00	9.33- 9.53
9	o-Xylene	20.000	21.802	-9.0	108	0.00	9.92-10.12
10 S	BFB(S)	20.000	20.186	-0.9	102	0.00	10.70-11.00
	----------	Amount	Calc.	%Drift	----------		
11	1,3-Dichlorobenzene	20.000	19.763	1.2	113	0.00	12.52-12.72
12	1,4-Dichlorobenzene	20.000	19.368	3.2	112	0.00	12.68-12.88
13	1,2-Dichlorobenzene	20.000	19.218	3.9	123	0.00	13.27-13.47

(#) = Out of Range SPCC's out = 0 CCC's out = 0
EF052009.D DUAL0608.M Tue Jun 28 09:50:54 2005

Continuing Calibration Summary

Job Number: F32751
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GEF3689-ECC3669
Lab FileID: EF052512.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\062705\EF052512.D\FID1A.CH Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\062705\EF052512.D\FID2B.CH
Acq On : 28 Jun 2005 2:33 am Operator: RickW
Sample : ecc3669-20 Inst : VOA1
Misc : gc5080,gef3689,,,,, MultiplR: 1.00
IntFile Signal #1: AUTOINT1.E IntFile Signal #2: autoint2.e

Method : C:\HPCHEM\1\METHODS\DUAL0608.M (Chemstation Integrator)
Title : EPA 602 & 5030B/8021B
Last Update : Thu Jun 23 09:42:28 2005
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	Methyl tert Butyl Ethe	20.000	21.355	-6.8	105	0.00	2.85- 3.05
2	Di-Isopropyl ether	20.000	20.732	-3.7	102	0.00	3.31- 3.51
3	Benzene	20.000	21.364	-6.8	106	0.00	4.59- 4.79
4 S	a,a,a-TFT(S)	20.000	20.074	-0.4	100	0.00	5.61- 5.81
5	Toluene	20.000	21.231	-6.2	107	0.00	7.02- 7.22
6	Chlorobenzene	20.000	21.214	-6.1	107	0.02	8.83- 9.03
7	Ethylbenzene	20.000	21.118	-5.6	108	0.02	9.17- 9.37
8	m,p-Xylene	40.000	42.443	-6.1	109	0.02	9.48- 9.68
9	o-Xylene	20.000	21.565	-7.8	109	0.02	10.01-10.21
10 S	BFB(S)	20.000	20.568	-2.8	103	0.02	10.52-10.82
		Amount	Calc.	%Drift			
11	1,3-Dichlorobenzene	20.000	20.638	-3.2	119	0.02	12.45-12.65
12	1,4-Dichlorobenzene	20.000	20.019	-0.1	117	0.02	12.56-12.76
13	1,2-Dichlorobenzene	20.000	20.618	-3.1	130	0.02	13.07-13.27

***** Signal #2 *****

		Amount	Calc.	%Drift			
1	Methyl tert Butyl Ethe	20.000	21.430	-7.1	105	0.00	2.80- 3.00
2	Di-Isopropyl ether	20.000	21.048	-5.2	101	0.00	3.22- 3.42
3	Benzene	20.000	21.788	-8.9	107	0.00	4.60- 4.80
4 S	a,a,a-TFT(S)	20.000	20.284	-1.4	100	0.00	5.73- 5.93
5	Toluene	20.000	21.773	-8.9	108	0.00	6.97- 7.17
6	Chlorobenzene	20.000	21.637	-8.2	108	0.02	8.94- 9.14
7	Ethylbenzene	20.000	21.331	-6.7	108	0.02	9.14- 9.34
8	m,p-Xylene	40.000	42.283	-5.7	109	0.02	9.33- 9.53
9	o-Xylene	20.000	22.054	-10.3	110	0.03	9.92-10.12
10 S	BFB(S)	20.000	20.825	-4.1	105	0.02	10.70-11.00
		Amount	Calc.	%Drift			
11	1,3-Dichlorobenzene	20.000	20.687	-3.4	118	0.02	12.52-12.72
12	1,4-Dichlorobenzene	20.000	20.457	-2.3	118	0.02	12.68-12.88
13	1,2-Dichlorobenzene	20.000	20.484	-2.4	131	0.02	13.27-13.47

(#) = Out of Range SPCC's out = 0 CCC's out = 0
EF052009.D DUAL0608.M Tue Jun 28 09:50:09 2005

Continuing Calibration Summary

Job Number: F32751
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GEF3691-CC3669
Lab FileID: EF052536.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\062905\EF052536.D\FID1A.CH Vial: 1
Signal #2 : C:\HPCHEM\1\DATA\062905\EF052536.D\FID2B.CH
Acq On : 29 Jun 2005 8:47 am Operator: Trangd
Sample : cc3669-40 Inst : V0A1
Misc : gc5093,gef3690,,,,, MultiplR: 1.00
IntFile Signal #1: AUTOINT1.E IntFile Signal #2: autoint2.e

Method : C:\HPCHEM\1\METHODS\DUAL0608.M (Chemstation Integrator)
Title : EPA 602 & 5030B/8021B
Last Update : Thu Jun 23 09:42:28 2005
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	Methyl tert Butyl Ethe	40.000	39.572	1.1	97	0.00	2.85- 3.05
2	Di-Isopropyl ether	40.000	38.723	3.2	95	0.00	3.31- 3.51
3	Benzene	40.000	40.754	-1.9	101	0.00	4.59- 4.79
4 S	a,a,a-TFT(S)	20.000	16.207	19.0#	83	0.00	5.61- 5.81
5	Toluene	40.000	40.925	-2.3	101	0.00	7.02- 7.22
6	Chlorobenzene	40.000	40.807	-2.0	101	0.00	8.83- 9.03
7	Ethylbenzene	40.000	40.839	-2.1	100	0.00	9.17- 9.37
8	m,p-Xylene	80.000	81.005	-1.3	101	0.00	9.48- 9.68
9	o-Xylene	40.000	41.621	-4.1	102	0.00	10.01-10.21
10 S	BFB(S)	20.000	17.097	14.5	85	0.00	10.52-10.82
		Amount	Calc.	%Drift			
11	1,3-Dichlorobenzene	40.000	37.470	6.3	99	0.00	12.45-12.65
12	1,4-Dichlorobenzene	40.000	36.939	7.7	98	0.00	12.56-12.76
13	1,2-Dichlorobenzene	40.000	36.900	7.8	100	0.00	13.07-13.27

***** Signal #2 *****

		Amount	Calc.	%Drift			
1	Methyl tert Butyl Ethe	40.000	42.368	-5.9	102	0.00	2.80- 3.00
2	Di-Isopropyl ether	40.000	41.702	-4.3	101	0.00	3.22- 3.42
3	Benzene	40.000	43.653	-9.1	107	0.00	4.60- 4.80
4 S	a,a,a-TFT(S)	20.000	17.303	13.5	88	0.00	5.73- 5.93
5	Toluene	40.000	43.676	-9.2	108	0.00	6.97- 7.17
6	Chlorobenzene	40.000	43.669	-9.2	107	0.00	8.94- 9.14
7	Ethylbenzene	40.000	43.946	-9.9	108	0.00	9.14- 9.34
8	m,p-Xylene	80.000	86.948	-8.7	107	0.00	9.33- 9.53
9	o-Xylene	40.000	44.767	-11.9	109	0.00	9.92-10.12
10 S	BFB(S)	20.000	18.074	9.6	90	0.00	10.70-11.00
		Amount	Calc.	%Drift			
11	1,3-Dichlorobenzene	40.000	40.731	-1.8	107	0.00	12.52-12.72
12	1,4-Dichlorobenzene	40.000	39.602	1.0	104	0.00	12.68-12.88
13	1,2-Dichlorobenzene	40.000	39.657	0.9	107	0.00	13.27-13.47

(#) = Out of Range SPCC's out = 0 CCC's out = 0
EF052010.D DUAL0608.M Thu Jun 30 12:38:14 2005

Continuing Calibration Summary

Job Number: F32751
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GEF3691-CC3669
Lab FileID: EF052549.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\062905\EF052549.D\FID1A.CH Vial: 14
Signal #2 : C:\HPCHEM\1\DATA\062905\EF052549.D\FID2B.CH
Acq On : 29 Jun 2005 2:37 pm Operator: Trangd
Sample : cc3669-20 Inst : VOA1
Misc : gc5093,gef3691,,,,, Multiplr: 1.00
IntFile Signal #1: AUTOINT1.E IntFile Signal #2: autoint2.e

Method : C:\HPCHEM\1\METHODS\DUAL0608.M (Chemstation Integrator)
Title : EPA 602 & 5030B/8021B
Last Update : Thu Jun 23 09:42:28 2005
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	Methyl tert Butyl Ethe	20.000	20.659	-3.3	102	0.00	2.85- 3.05
2	Di-Isopropyl ether	20.000	19.777	1.1	97	0.00	3.31- 3.51
3	Benzene	20.000	20.352	-1.8	101	0.00	4.59- 4.79
4 S	a,a,a-TFT(S)	20.000	18.970	5.2	95	0.00	5.61- 5.81
5	Toluene	20.000	20.248	-1.2	102	0.00	7.02- 7.22
6	Chlorobenzene	20.000	20.151	-0.8	102	0.00	8.83- 9.03
7	Ethylbenzene	20.000	20.318	-1.6	103	0.00	9.17- 9.37
8	m,p-Xylene	40.000	39.849	0.4	102	0.00	9.48- 9.68
9	o-Xylene	20.000	20.375	-1.9	103	0.00	10.01-10.21
10 S	BFB(S)	20.000	19.772	1.1	99	0.00	10.52-10.82
	----------	Amount	Calc.	%Drift	----------		
11	1,3-Dichlorobenzene	20.000	18.620	6.9	107	0.00	12.45-12.65
12	1,4-Dichlorobenzene	20.000	18.154	9.2	106	0.00	12.56-12.76
13	1,2-Dichlorobenzene	20.000	19.212	3.9	121	0.00	13.07-13.27

***** Signal #2 *****

	----------	Amount	Calc.	%Drift	----------		
1	Methyl tert Butyl Ethe	20.000	21.740	-8.7	106	0.00	2.80- 3.00
2	Di-Isopropyl ether	20.000	21.229	-6.1	102	0.00	3.22- 3.42
3	Benzene	20.000	21.851	-9.3	108	0.00	4.60- 4.80
4 S	a,a,a-TFT(S)	20.000	20.246	-1.2	100	0.00	5.73- 5.93
5	Toluene	20.000	22.020	-10.1	110	0.00	6.97- 7.17
6	Chlorobenzene	20.000	21.678	-8.4	108	0.00	8.94- 9.14
7	Ethylbenzene	20.000	21.939	-9.7	111	0.00	9.14- 9.34
8	m,p-Xylene	40.000	43.143	-7.9	111	0.00	9.33- 9.53
9	o-Xylene	20.000	22.356	-11.8	111	0.00	9.92-10.12
10 S	8FB(S)	20.000	21.184	-5.9	107	0.00	10.70-11.00
	----------	Amount	Calc.	%Drift	----------		
11	1,3-Dichlorobenzene	20.000	20.122	-0.6	115	0.00	12.52-12.72
12	1,4-Dichlorobenzene	20.000	19.665	1.7	114	0.00	12.68-12.88
13	1,2-Dichlorobenzene	20.000	20.641	-3.2	132	0.00	13.27-13.47

(#) = Out of Range SPCC's out = 0 CCC's out = 0
EF052009.D DUAL0608.M Thu Jun 30 12:37:51 2005

Continuing Calibration Summary

Job Number: F32751
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GEF3691-ECC3669
Lab FileID: EF052560.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\062905\EF052560.D\FID1A.CH Vial: 24
Signal #2 : C:\HPCHEM\1\DATA\062905\EF052560.D\FID2B.CH
Acq On : 29 Jun 2005 7:07 pm Operator: Trangd
Sample : ecc3669-20 Inst : V0A1
Misc : gc5100,gef3691,,,,, Multiplr: 1.00
IntFile Signal #1: AUTOINT1.E IntFile Signal #2: autoint2.e

Method : C:\HPCHEM\1\METHODS\DUAL0608.M (Chemstation Integrator)
Title : EPA 602 & 5030B/8021B
Last Update : Thu Jun 23 09:42:28 2005
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	Methyl tert Butyl Ethe	20.000	20.362	-1.8	100	0.00	2.85- 3.05
2	Di-Isopropyl ether	20.000	19.784	1.1	97	0.00	3.31- 3.51
3	Benzene	20.000	20.260	-1.3	101	0.00	4.59- 4.79
4 S	a,a,a-TFT(S)	20.000	19.377	3.1	97	0.00	5.61- 5.81
5	Toluene	20.000	20.195	-1.0	102	0.00	7.02- 7.22
6	Chlorobenzene	20.000	20.036	-0.2	101	0.02	8.83- 9.03
7	Ethylbenzene	20.000	20.071	-0.4	102	0.02	9.17- 9.37
8	m,p-Xylene	40.000	39.659	0.9	101	0.02	9.48- 9.68
9	o-Xylene	20.000	20.345	-1.7	103	0.02	10.01-10.21
10 S	BFB(S)	20.000	19.778	1.1	99	0.02	10.52-10.82
	----------	Amount	Calc.	%Drift	----------		
11	1,3-Dichlorobenzene	20.000	18.661	6.7	107	0.02	12.45-12.65
12	1,4-Dichlorobenzene	20.000	18.360	8.2	107	0.02	12.56-12.76
13	1,2-Dichlorobenzene	20.000	18.935	5.3	120	0.01	13.07-13.27

***** Signal #2 *****

	----------	Amount	Calc.	%Drift	----------		
1	Methyl tert Butyl Ethe	20.000	22.330	-11.6	109	0.00	2.80- 3.00
2	Di-Isopropyl ether	20.000	21.847	-9.2	105	0.00	3.22- 3.42
3	Benzene	20.000	22.374	-11.9	110	0.00	4.60- 4.80
4 S	a,a,a-TFT(S)	20.000	21.336	-6.7	106	0.00	5.73- 5.93
5	Toluene	20.000	22.165	-10.8	110	0.00	6.97- 7.17
6	Chlorobenzene	20.000	22.093	-10.5	110	0.02	8.94- 9.14
7	Ethylbenzene	20.000	21.839	-9.2	110	0.02	9.14- 9.34
8	m,p-Xylene	40.000	43.359	-8.4	111	0.02	9.33- 9.53
9	o-Xylene	20.000	22.463	-12.3	112	0.02	9.92-10.12
10 S	BFB(S)	20.000	21.620	-8.1	109	0.02	10.70-11.00
	----------	Amount	Calc.	%Drift	----------		
11	1,3-Dichlorobenzene	20.000	20.509	-2.5	117	0.02	12.52-12.72
12	1,4-Dichlorobenzene	20.000	20.233	-1.2	117	0.02	12.68-12.88
13	1,2-Dichlorobenzene	20.000	20.316	-1.6	130	0.02	13.27-13.47

(#) = Out of Range SPCC's out = 0 CCC's out = 0
EF052009.D DUAL0608.M Fri Jul 01 13:03:48 2005

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: F32751
Account: EEINCJX EE1
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP13685-MB	LL04448.D	1	06/29/05	AA	06/25/05	OP13685	GLL177

The QC reported here applies to the following samples: **Method:** EPA 610

F32751-5, F32751-6

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Accnaphthene	ND	5.0	2.0	ug/l	
208-96-8	Acenaphthylene	ND	5.0	2.0	ug/l	
120-12-7	Anthraecne	ND	5.0	2.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.0	2.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.0	2.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.0	2.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.0	2.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.0	2.0	ug/l	
218-01-9	Chrysene	ND	5.0	2.0	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.0	2.0	ug/l	
206-44-0	Fluoranthene	ND	5.0	2.0	ug/l	
86-73-7	Fluorene	ND	5.0	2.0	ug/l	
193-39-5	Indeno(1,2,3-ed)pyrene	ND	5.0	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.0	ug/l	
90-12-0	1-Methylnaphthalene	ND	5.0	2.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.0	2.0	ug/l	
85-01-8	Phenanthrene	ND	5.0	2.0	ug/l	
129-00-0	Pyrene	ND	5.0	2.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
321-60-8	2-Fluorobiphenyl	84%	42-123%
84-15-1	o-Terphenyl	95%	51-123%

Blank Spike Summary

Job Number: F32751
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP13685-BS [a]	LL04447.D	1	06/29/05	AA	06/25/05	OP13685	GLL177

The QC reported here applies to the following samples: **Method:** EPA 610

F32751-5, F32751-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
83-32-9	Acenaphthene	25	19.0	76	71-113
208-96-8	Acenaphthylene	25	19.0	76	63-102
120-12-7	Anthracene	25	21.4	86	71-110
56-55-3	Benzo(a)anthracene	25	19.7	79	70-114
50-32-8	Benzo(a)pyrene	25	17.1	68	67-114
205-99-2	Benzo(b)fluoranthene	25	17.7	71	69-115
191-24-2	Benzo(g,h,i)perylene	25	16.0	64	61-117
207-08-9	Benzo(k)fluoranthene	25	16.8	67* [b]	69-111
218-01-9	Chrysene	25	19.5	78	70-114
53-70-3	Dibenzo(a,h)anthracene	25	16.1	64	64-114
206-44-0	Fluoranthene	25	21.5	86	71-114
86-73-7	Fluorene	25	20.5	82	69-111
193-39-5	Indeno(1,2,3-cd)pyrene	25	16.5	66	63-112
91-20-3	Naphthalene	25	17.5	70	66-105
90-12-0	1-Methylnaphthalene	25	19.0	76	71-112
91-57-6	2-Methylnaphthalene	25	19.0	76	65-106
85-01-8	Phenanthrene	25	21.3	85	69-112
129-00-0	Pyrene	25	21.5	86	70-114

CAS No.	Surrogate Recoveries	BSP	Limits
321-60-8	2-Fluorobiphenyl	74%	42-123%
84-15-1	o-Terphenyl	86%	51-123%

(a) Insufficient sample for MS/MSD.
(b) Sporadic marginal failure.

Semivolatile Surrogate Recovery Summary

Job Number: F32751
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Method: EPA 610	**Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S2 [a]
F32751-5	LL04449.D	96.0	102.0
F32751-6	LL04450.D	59.0	85.0
OP13685-BS	LL04447.D	74.0	86.0
OP13685-MB	LL04448.D	84.0	95.0

Surrogate Compounds	Recovery Limits
S1 = 2-Fluorobiphenyl	42-123%
S2 = o-Terphenyl	51-123%

(a) Recovery from GC signal #1

GC Surrogate Retention Time Summary

Job Number: F32751
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GLL177-CC174	**Injection Date:**	06/29/05
Lab File ID:	LL04446.D	**Injection Time:**	15:28
Instrument ID:	GCLL	**Method:**	EPA 610

	S1 [a] RT	S2 [a] RT
Check Std	6.31	11.78

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
OP13685-BS	LL04447.D	06/29/05	15:58	6.30	11.78
OP13685-MB	LL04448.D	06/29/05	16:29	6.30	11.78
F32751-5	LL04449.D	06/29/05	16:59	6.30	11.78
F32751-6	LL04450.D	06/29/05	17:29	6.30	11.78
ZZZZZZ	LL04451.D	06/29/05	17:59	0.00	0.00
ZZZZZZ	LL04452.D	06/29/05	18:29	6.30	11.78

Surrogate Compounds

S1 = 2-Fluorobiphenyl
S2 = o-Terphenyl

(a) Retention time from GC signal #1

Initial Calibration Summary

Job Number: F32751
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GLL174-ICC174
Lab FileID: LL04365.D

Response Factor Report FLGSLL

Method : C:\MSDCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title : PAH's BY EPA 610 OR 8100
Last Update : Mon Jun 20 13:18:53 2005
Response via : Initial Calibration

Calibration Files
5 =LL04363.D 10 =LL04364.D 20 =LL04365.D 30 =LL04366.D
40 =LL04367.D 50 =LL04368.D

		Compound	5	10	20	30	40	50	Avg		%RSD
1)		Naphthalene	2.630	2.655	2.689	3.017	3.085	2.941	2.836	E4	7.10
2)		2-Methyl Naphthalen	2.403	2.397	2.413	2.763	2.850	2.720	2.591	E4	8.06
3)		1-Methyl Naphthalen	2.475	2.484	2.512	2.833	2.896	2.763	2.660	E4	7.20
4)	S	2-Fluorobiphenyl	2.176	2.186	2.203	2.526	2.595	2.473	2.360	E4	8.14
5)		Acenaphthylene	2.399	2.387	2.326	2.646	2.792	2.660	2.535	E4	7.45
6)		Acenaphthene	2.577	2.559	2.589	2.947	3.032	2.879	2.764	E4	7.71
7)		Fluorene	2.376	2.335	2.299	2.671	2.783	2.645	2.518	E4	8.16
8)		Phenanthrene	2.365	2.370	2.305	2.631	2.739	2.577	2.498	E4	7.01
9)		Anthracene	2.305	2.298	2.245	2.552	2.670	2.513	2.431	E4	7.04
10)	S	O-Terphenyl	2.482	2.450	2.384	2.693	2.767	2.606	2.564	E4	5.83
11)		Fluoranthene	2.410	2.416	2.366	2.679	2.756	2.570	2.533	E4	6.34
12)		Pyrene	2.436	2.448	2.375	2.700	2.775	2.584	2.553	E4	6.28
13)		Benzo(a)Anthracene	2.254	2.230	2.217	2.517	2.629	2.429	2.379	E4	7.24
14)		Chrysene	2.319	2.296	2.282	2.584	2.693	2.488	2.444	E4	7.02
15)		Benzo(b)Fluoranthen	2.329	2.322	2.300	2.600	2.723	2.519	2.466	E4	7.12
16)		Benzo(k)Fluoranthen	2.331	2.305	2.275	2.558	2.666	2.486	2.437	E4	6.47
17)		Benzo(a) Pyrene	2.210	2.198	2.190	2.473	2.597	2.422	2.348	E4	7.37
18)		Indeno(1,2,3-cd)pyr	2.185	2.271	2.234	2.485	2.600	2.406	2.364	E4	6.81
19)		Dibenzo(a,h)anthrac	2.194	2.232	2.191	2.416	2.519	2.321	2.312	E4	5.76
20)		Benzo(g,h,i) Peryle	2.321	2.354	2.312	2.538	2.643	2.433	2.434	E4	5.47

Signal #2

1)		Naphthalene	2.854	2.863	2.891	2.934	2.950	3.099	2.932	E4	3.08
2)		2-Methyl Naphthalen	2.634	2.652	2.707	2.757	2.784	2.932	2.744	E4	3.96
3)		1-Methyl Naphthalen	2.643	2.661	2.703	2.748	2.769	2.908	2.739	E4	3.51
4)	S	2-Fluorobiphenyl	2.394	2.377	2.444	2.486	2.509	2.643	2.476	E4	3.90
5)		Acenaphthylene	2.480	2.534	2.498	2.603	2.660	2.825	2.600	E4	4.96
6)		Acenaphthene	2.628	2.690	2.743	2.834	2.879	3.045	2.803	E4	5.35
7)		Fluorene	2.515	2.597	2.647	2.701	2.750	2.911	2.687	E4	5.09
8)		Phenanthrene	2.444	2.535	2.601	2.677	2.733	2.900	2.648	E4	6.04
9)		Anthracene	2.452	2.537	2.561	2.637	2.696	2.867	2.625	E4	5.54
10)	S	O-Terphenyl	2.458	2.497	2.519	2.602	2.667	2.829	2.596	E4	5.29
11)		Fluoranthene	2.425	2.527	2.525	2.612	2.705	2.857	2.608	E4	5.89
12)		Pyrene	2.432	2.539	2.516	2.601	2.697	2.845	2.605	E4	5.65
13)		Benzo(a)Anthracene	2.207	2.299	2.301	2.383	2.555	2.664	2.402	E4	7.25
14)		Chrysene	2.389	2.442	2.425	2.482	2.642	2.744	2.521	E4	5.59
15)		Benzo(b)Fluoranthen	2.225	2.317	2.375	2.436	2.609	2.756	2.453	E4	8.00
16)		Benzo(k)Fluoranthen	2.397	2.441	2.406	2.485	2.613	2.738	2.513	E4	5.39
17)		Benzo(a) Pyrene	2.265	2.300	2.321	2.400	2.536	2.693	2.419	E4	6.84
18)		Indeno(1,2,3-cd)pyr	2.178	2.197	2.268	2.394	2.475	2.692	2.367	E4	8.28
19)		Dibenzo(a,h)anthrac	2.230	2.232	2.254	2.366	2.445	2.664	2.365	E4	7.18
20)		Benzo(g,h,i) Peryle	2.296	2.294	2.374	2.495	2.566	2.812	2.473	E4	8.04

(#) = Out of Range

8100_H2.M Tue Jun 21 12:27:34 2005

Initial Calibration Verification

Job Number: F32751
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GLL174-ICV174
Lab FileID: LL04369.D

Evaluate Continuing Calibration Report

Signal #1 : C:\MSDCHEM\1\DATA\0620PAH\LL04369.D\FID1B.CH Vial: 7
Signal #2 : C:\MSDCHEM\1\DATA\0620PAH\LL04369.D\FID2A.CH
Acq On : 20 Jun 2005 12:53 pm Operator: aubreya
Sample : icv174-20 Inst : FLGSLL
Misc : OP13608,GLL174,1000,,,1,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : C:\MSDCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title : PAH's BY EPA 610 OR 8100
Last Update : Mon Jun 20 13:18:53 2005
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1		Naphthalene	20.000	19.303	3.5	102	0.00	4.50- 4.70
2		2-Methyl Naphthalene	20.000	20.256	-1.3	109	0.00	5.40- 5.60
3		1-Methyl Naphthalene	20.000	20.260	-1.3	107	0.00	5.67- 5.87
4	S	2-Fluorobiphenyl		----------NA----------				
5		Acenaphthylene	20.000	19.798	1.0	108	0.00	7.34- 7.54
6		Acenaphthene	20.000	19.568	2.2	104	0.00	7.61- 7.81
7		Fluorene	20.000	19.843	0.8	109	0.00	8.53- 8.73
8		Phenanthrene	20.000	19.206	4.0	104	0.00	10.70-10.90
9		Anthracene	20.000	19.381	3.1	105	0.00	10.74-10.94
10	S	O-Terphenyl		----------NA----------				
11		Fluoranthene	20.000	18.898	5.5	101	0.00	13.24-13.44
12		Pyrene	20.000	19.013	4.9	102	0.00	13.82-14.02
13		Benzo(a)Anthracene	20.000	18.719	6.4	100	0.00	16.36-16.56
14		Chrysene	20.000	18.639	6.8	100	0.00	16.54-16.74
15		Benzo(b)Fluoranthene	20.000	19.020	4.9	102	0.00	18.57-18.77
16		Benzo(k)Fluoranthene	20.000	19.030	4.8	102	0.00	18.62-18.82
17		Benzo(a) Pyrene	20.000	19.010	4.9	102	0.00	19.34-19.54
18		Indeno(1,2,3-cd)pyrene	20.000	19.819	0.9	105	0.00	21.19-21.39
19		Dibenzo(a,h)anthracene	20.000	20.013	-0.1	106	0.00	21.26-21.46
20		Benzo(g,h,i) Perylene	20.000	19.731	1.3	104	0.00	21.73-21.93
*****		Signal #2 *****						
1		Naphthalene	20.000	19.621	1.9	99	0.00	3.58- 3.78
2		2-Methyl Naphthalene	20.000	20.556	-2.8	104	0.00	4.44- 4.64
3		1-Methyl Naphthalene	20.000	20.795	-4.0	105	0.00	4.58- 4.78
4	S	2-Fluorobiphenyl		----------NA----------				
5		Acenaphthylene	20.000	20.723	-3.6	108	0.00	5.77- 5.97
6		Acenaphthene	20.000	20.252	-1.3	103	0.00	6.10- 6.30
7		Fluorene	20.000	20.496	-2.5	104	0.00	7.00- 7.20
8		Phenanthrene	20.000	20.283	-1.4	103	0.00	8.76- 8.96
9		Anthracene	20.000	20.652	-3.3	106	0.00	8.84- 9.04
10	S	O-Terphenyl		----------NA----------				
11		Fluoranthene	20.000	20.224	-1.1	104	0.00	11.11-11.31
12		Pyrene	20.000	20.263	-1.3	105	0.00	11.50-11.70
13		Benzo(a)Anthracene	20.000	20.270	-1.3	106	0.00	14.00-14.20
14		Chrysene	20.000	19.883	0.6	103	0.00	14.08-14.28
15		Benzo(b)Fluoranthene	20.000	20.022	-0.1	103	0.00	16.06-16.26
16		Benzo(k)Fluoranthene	20.000	19.899	0.5	104	0.00	16.11-16.31
17		Benzo(a) Pyrene	20.000	19.543	2.3	102	0.00	16.58-16.78
18		Indeno(1,2,3-cd)pyrene	20.000	18.844	5.8	98	0.00	18.40-18.60

6.5

Initial Calibration Verification

Job Number: F32751
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GLL174-ICV174
Lab FileID: LL04369.D

19	Dibenzo(a,h)anthracene	20.000	19.015	4.9	100	0.00	18.49-18.69
20	Benzo(g,h,i) Perylene	20.000	18.697	6.5	97	0.00	18.74-18.94

(#) = Out of Range SPCC's out = 0 CCC's out = 0
LL04365.D 8100_H2.M Tue Jun 21 12:28:08 2005

Continuing Calibration Summary

Job Number: F32751
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GLL177-CC174
Lab FileID: LL04446.D

Evaluate Continuing Calibration Report

Signal #1 : C:\MSDCHEM\1\DATA\0629PAH\LL04446.D\FID1B.CH Vial: 10
Signal #2 : C:\MSDCHEM\1\DATA\0629PAH\LL04446.D\FID2A.CH
Acq On : 6-29-05 03:28:34 PM Operator: aubreya
Sample : cc174-30 Inst : FLGSLL
Misc : OP13700,GLL177,1010,,,1,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : C:\MSDCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title : PAH's BY EPA 610 OR 8100
Last Update : Wed Jun 29 13:07:06 2005
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1		Naphthalene	30.000	31.141	-3.8	98	0.00	4.50- 4.70
2		2-Methyl Naphthalene	30.000	31.674	-5.6	99	0.00	5.40- 5.60
3		1-Methyl Naphthalene	30.000	31.428	-4.8	98	0.00	5.67- 5.87
4	S	2-Fluorobiphenyl	30.000	31.591	-5.3	98	0.00	6.20- 6.40
5		Acenaphthylene	30.000	31.102	-3.7	99	0.00	7.34- 7.54
6		Acenaphthene	30.000	31.335	-4.5	98	0.00	7.61- 7.81
7		Fluorene	30.000	31.426	-4.8	99	0.00	8.53- 8.73
8		Phenanthrene	30.000	31.031	-3.4	98	0.00	10.70-10.90
9		Anthracene	30.000	30.508	-1.7	97	0.00	10.74-10.94
10	S	O-Terphenyl	30.000	30.934	-3.1	98	0.00	11.68-11.88
11		Fluoranthene	30.000	29.967	0.1	94	0.00	13.24-13.44
12		Pyrene	30.000	29.754	0.8	94	0.00	13.82-14.02
13		Benzo(a)Anthracene	30.000	29.515	1.6	93	0.00	16.36-16.56
14		Chrysene	30.000	29.466	1.8	93	0.00	16.54-16.74
15		Benzo(b)Fluoranthene	30.000	29.718	0.9	94	0.00	18.57-18.77
16		Benzo(k)Fluoranthene	30.000	29.972	0.1	95	0.00	18.62-18.82
17		Benzo(a) Pyrene	30.000	30.406	-1.4	96	0.00	19.34-19.54
18		Indeno(1,2,3-cd)pyrene	30.000	32.038	-6.8	102	0.00	21.19-21.39
19		Dibenzo(a,h)anthracene	30.000	31.914	-6.4	102	0.00	21.26-21.46
20		Benzo(g,h,i) Perylene	30.000	31.914	-6.4	102	0.00	21.73-21.93
*****		Signal #2 *****						
1		Naphthalene	30.000	29.244	2.5	97	0.00	3.55- 3.75
2		2-Methyl Naphthalene	30.000	29.865	0.5	99	0.00	4.41- 4.61
3		1-Methyl Naphthalene	30.000	29.607	1.3	98	0.00	4.54- 4.74
4	S	2-Fluorobiphenyl	30.000	29.900	0.3	99	0.00	5.03- 5.23
5		Acenaphthylene	30.000	30.182	-0.6	100	0.00	5.73- 5.93
6		Acenaphthene	30.000	30.223	-0.7	100	0.00	6.05- 6.25
7		Fluorene	30.000	29.685	1.1	98	0.00	6.95- 7.15
8		Phenanthrene	30.000	29.377	2.1	97	0.00	8.71- 8.91
9		Anthracene	30.000	28.742	4.2	95	0.00	8.79- 8.99
10	S	O-Terphenyl	30.000	30.154	-0.5	100	0.00	9.77- 9.97
11		Fluoranthene	30.000	29.264	2.5	97	0.00	11.05-11.25
12		Pyrene	30.000	29.098	3.0	97	0.00	11.45-11.65
13		Benzo(a)Anthracene	30.000	29.577	1.4	99	0.00	13.94-14.14
14		Chrysene	30.000	29.437	1.9	100	0.00	14.02-14.22
15		Benzo(b)Fluoranthene	30.000	30.844	-2.8	104	0.00	16.01-16.21
16		Benzo(k)Fluoranthene	30.000	29.751	0.8	100	0.00	16.05-16.25
17		Benzo(a) Pyrene	30.000	30.607	-2.0	103	0.00	16.52-16.72
18		Indeno(1,2,3-cd)pyrene	30.000	32.111	-7.0	106	0.00	18.34-18.54

Continuing Calibration Summary

Job Number: F32751
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GLL177-CC174
Lab FileID: LL04446.D

19	Dibenzo(a,h)anthracene	30.000	32.031	-6.8	107	0.00	18.44-18.64
20	Benzo(g,h,i) Perylene	30.000	32.532	-8.4	107	0.00	18.68-18.88

(#) = Out of Range SPCC's out = 0 CCC's out = 0
LL04366.D 8100_H2.M Thu Jun 30 14:31:25 2005

6.5

Continuing Calibration Summary

Job Number: F32751
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GLL177-CC174
Lab FileID: LL04453.D

Evaluate Continuing Calibration Report

Signal #1 : C:\MSDCHEM\1\DATA\0629PAH\LL04453.D\FID1B.CH Vial: 17
Signal #2 : C:\MSDCHEM\1\DATA\0629PAH\LL04453.D\FID2A.CH
Acq On : 6-29-05 07:00:18 PM Operator: aubreya
Sample : cc174-20 Inst : FLGSLL
Misc : OP13700,GLL177,1010,,,1,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : C:\MSDCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title : PAH's BY EPA 610 OR 8100
Last Update : Wed Jun 29 13:07:06 2005
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1		Naphthalene	20.000	20.867	-4.3	110	0.00	4.50- 4.70
2		2-Methyl Naphthalene	20.000	21.291	-6.5	114	0.00	5.40- 5.60
3		1-Methyl Naphthalene	20.000	21.015	-5.1	111	0.00	5.67- 5.87
4	S	2-Fluorobiphenyl	20.000	21.143	-5.7	113	0.00	6.20- 6.40
5		Acenaphthylene	20.000	21.106	-5.5	115	0.00	7.34- 7.54
6		Acenaphthene	20.000	21.034	-5.2	112	0.00	7.61- 7.81
7		Fluorene	20.000	21.128	-5.6	116	0.00	8.53- 8.73
8		Phenanthrene	20.000	20.801	-4.0	113	0.00	10.70-10.90
9		Anthracene	20.000	20.536	-2.7	111	0.00	10.74-10.94
10	S	O-Terphenyl	20.000	20.848	-4.2	112	0.00	11.68-11.88
11		Fluoranthene	20.000	20.161	-0.8	108	0.00	13.24-13.44
12		Pyrene	20.000	20.087	-0.4	108	0.00	13.82-14.02
13		Benzo(a)Anthracene	20.000	19.904	0.5	107	0.00	16.36-16.56
14		Chrysene	20.000	19.815	0.9	106	0.00	16.54-16.74
15		Benzo(b)Fluoranthene	20.000	20.097	-0.5	108	0.00	18.57-18.77
16		Benzo(k)Fluoranthene	20.000	20.157	-0.8	108	0.00	18.62-18.82
17		Benzo(a) Pyrene	20.000	20.504	-2.5	110	0.00	19.34-19.54
18		Indeno(1,2,3-cd)pyrene	20.000	21.651	-8.3	115	0.00	21.19-21.39
19		Dibenzo(a,h)anthracene	20.000	21.704	-8.5	115	0.00	21.26-21.46
20		Benzo(g,h,i) Perylene	20.000	21.646	-8.2	114	0.00	21.73-21.93
*****		Signal #2 *****						
1		Naphthalene	20.000	20.397	-2.0	103	0.00	3.55- 3.75
2		2-Methyl Naphthalene	20.000	20.809	-4.0	105	0.00	4.41- 4.61
3		1-Methyl Naphthalene	20.000	20.619	-3.1	104	0.00	4.54- 4.74
4	S	2-Fluorobiphenyl	20.000	20.644	-3.2	105	0.00	5.03- 5.23
5		Acenaphthylene	20.000	21.144	-5.7	110	0.00	5.73- 5.93
6		Acenaphthene	20.000	21.054	-5.3	108	0.00	6.05- 6.25
7		Fluorene	20.000	20.521	-2.6	104	0.00	6.95- 7.15
8		Phenanthrene	20.000	20.163	-0.8	103	0.00	8.71- 8.91
9		Anthracene	20.000	19.824	0.9	102	0.00	8.79- 8.99
10	S	O-Terphenyl	20.000	21.104	-5.5	109	0.00	9.77- 9.97
11		Fluoranthene	20.000	20.312	-1.6	105	0.00	11.05-11.25
12		Pyrene	20.000	20.217	-1.1	105	0.00	11.45-11.65
13		Benzo(a)Anthracene	20.000	20.496	-2.5	107	0.00	13.94-14.14
14		Chrysene	20.000	20.461	-2.3	106	0.00	14.02-14.22
15		Benzo(b)Fluoranthene	20.000	21.018	-5.1	109	0.00	16.01-16.21
16		Benzo(k)Fluoranthene	20.000	20.857	-4.3	109	0.00	16.05-16.25
17		Benzo(a) Pyrene	20.000	21.100	-5.5	110	0.00	16.52-16.72
18		Indeno(1,2,3-cd)pyrene	20.000	21.634	-8.2	113	0.00	18.34-18.54

Continuing Calibration Summary

Job Number: F32751 **Sample:** GLL177-CC174
Account: EEINCJX EEI **Lab FileID:** LL04453.D
Project: Camp Lejeune-Campbell St. Fuel Farm

19	Dibenzo(a,h)anthracene	20.000	21.567	-7.8	113	0.00	18.44-18.64
20	Benzo(g,h,i) Perylene	20.000	21.738	-8.7	113	-0.01	18.68-18.88

(#) = Out of Range SPCC's out = 0 CCC's out = 0
LL04365.D 8100_H2.M Thu Jun 30 14:31:10 2005

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Instrument Runlogs
- Initial and Continuing Calibration Blanks
- Initial and Continuing Calibration Checks
- High and Low Check Standards
- Interfering Element Check Standards
- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: F32751
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: 1R062805.ASC Date Analyzed: 06/28/05 Methods: SW846 6010B
Analyst: JM Run ID: MA4414
Parameters: As,Ba,Cd,Cr,Fe,Pb,Mn,Se

Time	Sample Description	Dilution Factor	PS Recov	Comments
07:38	MA4414-ICV1	1		
07:44	MA4414-ICB1	1		
07:47	MA4414-CRI1	1		
07:52	MA4414-ICSA1	1		
07:53	MA4414-ICSAB1	1		
07:59	MA4414-CCV1	1		
08:04	MA4414-CCB1	1		
08:08	MP8190-MB1	1		
08:12	MP8190-B1	1		
08:17	F32761-1	1		(sample used for QC only; not part of login F32751)
08:21	MP8190-D1	1		
08:25	MP8190-SD1	5		
08:29	MP8190-S1	1		
08:32	MP8190-S2	1		
08:37	ZZZZZZ	1		
08:41	ZZZZZZ	1		
08:45	ZZZZZZ	1		
08:49	MA4414-CCV2	1		
08:54	MA4414-CCB2	1		
08:58	ZZZZZZ	1		
09:01	ZZZZZZ	1		
09:05	ZZZZZZ	1		
09:09	ZZZZZZ	1		
09:13	ZZZZZZ	1		
09:17	ZZZZZZ	1		
09:20	ZZZZZZ	1		
09:24	ZZZZZZ	1		
09:28	ZZZZZZ	1		
09:33	ZZZZZZ	1		
09:37	MA4414-CCV3	1		
09:43	MA4414-CCB3	1		
10:50	MA4414-ICV2	1		
10:55	MA4414-ICB2	1		

7.1.7

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: F32751
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR062805.ASC Date Analyzed: 06/28/05 Methods: SW846 6010B
Analyst: JM Run ID: MA4414
Parameters: As,Ba,Cd,Cr,Fe,Pb,Mn,Se

Time	Sample Description	Dilution Factor	PS Recov	Comments
10:57	MA4414-CRI2	1		
10:59	MA4414-ICSA2	1		
11:01	MA4414-ICSAB2	1		
11:06	MA4414-CCV4	1		
11:12	MA4414-CCB4	1		
11:16	ZZZZZZ	1		
11:20	ZZZZZZ	1		
11:24	ZZZZZZ	1		
11:27	ZZZZZZ	1		
11:31	ZZZZZZ	1		
11:35	MP8190-MB2A	1		
11:39	MP8193-MB1	1		
11:43	MP8193-B1	1		
11:49	F32446-3R	1		(sample used for QC only; not part of login F32751)
11:53	MP8193-D1	1		
12:01	MA4414-CCV5	1		
12:07	MA4414-CCB5	1		
12:11	MP8193-SD1	5		
12:15	MP8193-S1	1		
12:19	MP8193-S2	1		
12:25	ZZZZZZ	1		
12:28	ZZZZZZ	1		
12:32	ZZZZZZ	1		
12:36	ZZZZZZ	1		
12:40	ZZZZZZ	1		
12:44	ZZZZZZ	1		
12:47	ZZZZZZ	1		
12:51	MA4414-CCV6	1		
12:57	MA4414-CCB6	1		
13:01	ZZZZZZ	1		
13:05	ZZZZZZ	1		
13:09	ZZZZZZ	1		
13:13	ZZZZZZ	1		

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: F32751
Account: EEINCOX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR062805.ASC Date Analyzed: 06/28/05 Methods: SW846 6010B
Analyst: JM Run ID: MA4414
Parameters: As,Ba,Cd,Cr,Fe,Pb,Mn,Se

Time	Sample Description	Dilution Factor	PS Recov	Comments
13:16	ZZZZZZ	1		
13:20	ZZZZZZ	1		
13:24	ZZZZZZ	1		
13:28	ZZZZZZ	1		
13:32	ZZZZZZ	1		
13:36	ZZZZZZ	1		
13:39	MA4414-CCV7	1		
13:45	MA4414-CCB7	1		
13:49	ZZZZZZ	1		
13:53	ZZZZZZ	1		
13:57	ZZZZZZ	25		
14:01	ZZZZZZ	10		
14:05	ZZZZZZ	10		
14:11	MP8192-MB2	1		
14:14	MA4414-CCV8	1		
14:21	MA4414-CCB8	1		
14:29	MP8201-MB1	1		
14:32	MP8201-B1	1		
14:36	MP8201-B2	1		
14:42	ZZZZZZ	1		
14:46	ZZZZZZ	1		
14:50	ZZZZZZ	1		
14:54	ZZZZZZ	1		
14:58	ZZZZZZ	1		
15:01	ZZZZZZ	1		
15:05	ZZZZZZ	1		
15:09	MA4414-CCV9	1		
15:15	MA4414-CCB9	1		
15:19	MP8197-MB1	1		
15:23	MP8197-B1	1		
15:29	T10716-1	1		(sample used for QC only; not part of login F32751)
15:33	MP8197-D1	1		
15:37	MP8197-SD1	5		

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: F32751
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR062805.ASC Date Analyzed: 06/28/05 Methods: SW846 6010B
Analyst: JM Run ID: MA4414
Parameters: As,Ba,Cd,Cr,Fe,Pb,Mn,Se

Time	Sample Description	Dilution Factor	PS Recov	Comments
15:40	MP8197-S1	1		
15:44	MP8197-S2	1		
15:50	ZZZZZZ	1		
15:54	ZZZZZZ	1		
15:58	ZZZZZZ	1		
16:02	MA4414-CCV10	1		
16:08	MA4414-CCB10	1		
16:12	ZZZZZZ	1		
16:16	ZZZZZZ	1		
16:19	ZZZZZZ	1		
16:23	ZZZZZZ	1		
16:27	ZZZZZZ	1		
16:31	ZZZZZZ	1		
16:35	ZZZZZZ	1		
16:38	MP8197-MB2	1		
16:42	MP8197-B2	1		
16:48	MP8199-MB1	1		
16:52	MA4414-CCV11	1		
16:58	MA4414-CCB11	1		
17:02	MP8199-B1	1		
17:08	F32782-1	1		(sample used for QC only; not part of login F32751)
17:12	MP8199-D1	1		
17:16	MP8199-SD1	5		
17:20	MP8199-S1	1		
17:26	ZZZZZZ	1		
17:30	ZZZZZZ	1		
17:33	F32751-5	1		
---------->	Last reportable sample/prep for job F32751			
17:38	MA4414-CRI3	1		
17:42	MA4414-CCV12	1		
17:48	MA4414-CCB12	1		
---------->	Last reportable CCB for job F32751			
	Refer to raw data for calibration curve and standards.			

7.1
7

INTERNAL STANDARD SUMMARY

Login Number: F32751
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR062805.ASC Date Analyzed: 06/28/05 Methods: SW846 6010B
Analyst: JM Run ID: MA4414
Parameters: As,Ba,Cd,Cr,Fe,Pb,Mn,Se

Time	Sample Description	Istd#1
07:38	MA4414-ICV1	5866
07:44	MA4414-ICB1	5878 R
07:47	MA4414-CRI1	5984
07:52	MA4414-ICSA1	5306
07:53	MA4414-ICSAB1	5124
07:59	MA4414-CCV1	5649
08:04	MA4414-CCB1	5792
08:08	MP8190-MB1	5577
08:12	MP8190-B1	5345
08:17	F32761-1	5532
08:21	MP8190-D1	5553
08:25	MP8190-SD1	5705
08:29	MP8190-S1	5378
08:32	MP8190-S2	5328
08:37	ZZZZZZ	5512
08:41	ZZZZZZ	5524
08:45	ZZZZZZ	5508
08:49	MA4414-CCV2	5659
08:54	MA4414-CCB2	5861
08:58	ZZZZZZ	5328
09:01	ZZZZZZ	5468
09:05	ZZZZZZ	5452
09:09	ZZZZZZ	5542
09:13	ZZZZZZ	5718
09:17	ZZZZZZ	5533
09:20	ZZZZZZ	5200
09:24	ZZZZZZ	5633
09:28	ZZZZZZ	5688
09:33	ZZZZZZ	5426
09:37	MA4414-CCV3	5646
09:43	MA4414-CCB3	5940
10:50	MA4414-ICV2	5345
10:55	MA4414-ICB2	5341

7.1.1

INTERNAL STANDARD SUMMARY

Login Number: F32751
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR062805.ASC Date Analyzed: 06/28/05 Methods: SW846 6010B
Analyst: JM Run ID: MA4414
Parameters: As,Ba,Cd,Cr,Fe,Pb,Mn,Se

Time	Sample Description	Istd#1
10:57	MA4414-CRI2	5363
10:59	MA4414-ICSA2	4904
11:01	MA4414-ICSAB2	4849
11:06	MA4414-CCV4	5200
11:12	MA4414-CCB4	5432
11:16	ZZZZZZ	5289
11:20	ZZZZZZ	5291
11:24	ZZZZZZ	5376
11:27	ZZZZZZ	5361
11:31	ZZZZZZ	5370
11:35	MP8190-MB2A	5562
11:39	MP8193-MB1	5538
11:43	MP8193-B1	5304
11:49	F32446-3R	5151
11:53	MP8193-D1	5122
12:01	MA4414-CCV5	5316
12:07	MA4414-CCB5	5407
12:11	MP8193-SD1	5227
12:15	MP8193-S1	5155
12:19	MP8193-S2	4962
12:25	ZZZZZZ	5361
12:28	ZZZZZZ	5581
12:32	ZZZZZZ	5538
12:36	ZZZZZZ	5580
12:40	ZZZZZZ	5380
12:44	ZZZZZZ	5469
12:47	ZZZZZZ	5346
12:51	MA4414-CCV6	5395
12:57	MA4414-CCB6	5513
13:01	ZZZZZZ	5374
13:05	ZZZZZZ	5370
13:09	ZZZZZZ	5275
13:13	ZZZZZZ	5244

7.1.1

INTERNAL STANDARD SUMMARY

Login Number: F32751
Account: EEIXCUX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR062805.ASC Date Analyzed: 06/28/05 Methods: SW846 6010B
Analyst: JM Run ID: MA4414
Parameters: As,Ba,Cd,Cr,Fe,Pb,Mn,Se

Time	Sample Description	Istd#1
13:16	ZZZZZZ	5278
13:20	ZZZZZZ	5484
13:24	ZZZZZZ	5457
13:28	ZZZZZZ	5519
13:32	ZZZZZZ	5624
13:36	ZZZZZZ	5564
13:39	MA4414-CCV7	5383
13:45	MA4414-CCB7	5557
13:49	ZZZZZZ	5457
13:53	ZZZZZZ	5456
13:57	ZZZZZZ	5563
14:01	ZZZZZZ	5838
14:05	ZZZZZZ	5243
14:11	MP8192-MB2	5106
14:14	MA4414-CCV8	5341
14:21	MA4414-CCB8	5481
14:29	MP8201-MB1	5212
14:32	MP8201-B1	5354
14:36	MP8201-B2	5209
14:42	ZZZZZZ	5246
14:46	ZZZZZZ	5222
14:50	ZZZZZZ	5251
14:54	ZZZZZZ	5291
14:58	ZZZZZZ	5370
15:01	ZZZZZZ	5293
15:05	ZZZZZZ	5337
15:09	MA4414-CCV9	5330
15:15	MA4414-CCB9	5465
15:19	MP8197-MB1	5527
15:23	MP8197-B1	5415
15:29	T10716-1	4540
15:33	MP8197-D1	4559
15:37	MP8197-SD1	5034

INTERNAL STANDARD SUMMARY

Login Number: F32751
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR062805.ASC Date Analyzed: 06/28/05 Methods: SW846 6010B
Analyst: JM Run ID: MA4414
Parameters: As,Ba,Cd,Cr,Fe,Pb,Mn,Se

Time	Sample Description	Istd#1
15:40	MP8197-S1	4648
15:44	MP8197-S2	4595
15:50	ZZZZZZ	4440
15:54	ZZZZZZ	4358
15:58	ZZZZZZ	4621
16:02	MA4414-CCV10	5178
16:08	MA4414-CCB10	5603
16:12	ZZZZZZ	4579
16:16	ZZZZZZ	4415
16:19	ZZZZZZ	4572
16:23	ZZZZZZ	4539
16:27	ZZZZZZ	4519
16:31	ZZZZZZ	4349
16:35	ZZZZZZ	4428
16:38	MP8197-MB2	5415
16:42	MP8197-B2	5403
16:48	MP8199-MB1	5359
16:52	MA4414-CCV11	5275
16:58	MA4414-CCB11	5411
17:02	MP8199-B1	5437
17:08	F32782-1	5432
17:12	MP8199-D1	5422
17:16	MP8199-SD1	5465
17:20	MP8199-S1	5189
17:26	ZZZZZZ	5368
17:30	ZZZZZZ	5421
17:33	F32751-5	5350
17:38	MA4414-CRI3	5438
17:42	MA4414-CCV12	5372
17:48	MA4414-CCB12	5495

R = Reference for ISTD limits. ! = Outside limits.

LEGEND:

Istd#	Parameter	Limits
Istd#1	Yttrium	60-125 %

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: F32751
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR062805.ASC Date Analyzed: 06/28/05 Methods: SW846 6010B
QC Limits: result < RL Run ID: MA4414 Units: ug/l

Time: / Sample ID: / Metal	RL	IDL	07:44 ICB1 raw	final	08:04 CCB1 raw	final	08:54 CCB2 raw	final	09:43 CCB3 raw	final
Aluminum	200	6.6	anr							
Antimony	5.0	1.5	anr							
Arsenic	10	2.8	2.4	<10	0.50	<10	3.0	<10	-4.0	<10
Barium	200	.5	-0.020	<200	0.080	<200	0.27	<200	0.30	<200
Beryllium	4.0	.3	anr							
Cadmium	5.0	.3	-0.27	<5.0	0.0	<5.0	0.20	<5.0	0.0	<5.0
Calcium	1000	3.8								
Chromium	10	.4	0.23	<10	0.41	<10	0.70	<10	0.71	<10
Cobalt	50	.5	anr							
Copper	25	.4	anr							
Iron	300	7.1	-2.5	<300	0.19	<300	12.3	<300	12.4	<300
Lead	25	1.2	-0.86	<25			5.3	<25	5.2	<25
Magnesium	5000	9.9								
Manganese	15	.2	-0.050	<15	0.10	<15	0.36	<15	0.33	<15
Molybdenum	50	.8								
Nickel	40	1.1	anr							
Potassium	5000	14								
Selenium	10	2	6.8	<10	5.9	<10	6.4	<10	7.1	<10
Silver	10	.6	anr							
Sodium	5000	150								
Thallium	10	1.5	anr							
Tin	50	1.5								
Vanadium	50	.5	anr							
Zinc	20	.6	anr							

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: F32751
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR062805.ASC Date Analyzed: 06/28/05 Methods: SW846 6010B
QC Limits: result < RL Run ID: MA4414 Units: ug/l

Time: / Sample ID: / Metal	RL	IDL	10:55 ICB2 raw	final	11:12 CCB4 raw	final	12:07 CCB5 raw	final	12:57 CCB6 raw	final
Aluminum	200	6.6	anr							
Antimony	5.0	1.5	anr							
Arsenic	10	2.8	0.68	<10	-3.4	<10	-0.89	<10	-4.1	<10
Barium	200	.5	0.070	<200	0.33	<200	0.33	<200	0.57	<200
Beryllium	4.0	.3	anr							
Cadmium	5.0	.3	0.23	<5.0	0.37	<5.0	0.64	<5.0	0.50	<5.0
Calcium	1000	3.8								
Chromium	10	.4	0.11	<10	0.59	<10	0.14	<10	0.65	<10
Cobalt	50	.5	anr							
Copper	25	.4	anr							
Iron	300	7.1	0.59	<300	13.7	<300	7.3	<300	25.8	<300
Lead	25	1.2	2.0	<25	6.5	<25	5.1	<25	6.9	<25
Magnesium	5000	9.9								
Mangauese	15	.2	0.050	<15	0.31	<15	0.41	<15	0.68	<15
Molybdenum	50	.8								
Nickel	40	1.1	anr							
Potassium	5000	14								
Selenium	10	2	0.060	<10	2.4	<10	3.0	<10	0.34	<10
Silver	10	.6	anr							
Sodium	5000	150								
Thallium	10	1.5	anr							
Tin	50	1.5								
Vanadium	50	.5	anr							
Zinc	20	.6	anr							

(*) Outside of QC limits
(anr) Analyte not requested

7.1.2
7

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: F32751
Account: EEINCJX - EE1
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR062805.ASC Date Analyzed: 06/28/05 Methods: SW846 6010B
QC Limits: result < RL Run ID: MA4414 Units: ug/l

Time: / Sample ID: / Metal	RL	IDL	13:45 CCB7 raw	final	14:21 CCB8 raw	final	15:15 CCB9 raw	final	16:08 CCB10 raw	final
Aluminum	200	6.6	anr							
Antimony	5.0	1.3	anr							
Arsenic	10	2.8	-2.1	<10	-0.87	<10	-1.2	<10	-1.3	<10
Barium	200	.5	0.56	<200	0.25	<200	0.32	<200	0.32	<200
Beryllium	4.0	.3	anr							
Cadmium	5.0	.3	0.42	<5.0	0.56	<5.0	0.40	<5.0	0.54	<5.0
Calcium	1000	3.8								
Chromium	10	.4	0.74	<10	0.070	<10	0.35	<10	0.14	<10
Cobalt	50	.5	anr							
Copper	25	.4	anr							
Iron	300	7.1	14.9	<300	2.6	<300	13.1	<300	6.6	<300
Lead	25	1.2	5.4	<25	4.3	<25	3.6	<25	3.5	<25
Magnesium	5000	9.9								
Manganese	15	.2	0.62	<15	0.25	<15	0.29	<15	0.25	<15
Molybdenum	50	.8								
Nickel	40	1.1	anr							
Potassium	5000	14								
Selenium	10	2	1.9	<10	-1.3	<10	2.3	<10	0.75	<10
Silver	10	.6	anr							
Sodium	5000	150								
Thallium	10	1.5	anr							
Tin	50	1.5								
Vanadium	50	.5	anr							
Zinc	20	.6	anr							

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: F32751
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR062805.ASC Date Analyzed: 06/28/05 Methods: SW846 6010B
QC Limits: result < RL Run ID: MA4414 Units: ug/l

Time:			16:58		17:48	
Sample ID:			CCB11		CCB12	
Metal	RL	IDL	raw	final	raw	final
Aluminum	200	6.6	anr			
Antimony	5.0	1.5	anr			
Arsenic	10	2.8	0.93	<10	0.52	<10
Barium	200	.5	0.41	<200	0.44	<200
Beryllium	4.0	.3	anr			
Cadmium	5.0	.3	0.62	<5.0	0.42	<5.0
Calcium	1000	3.8				
Chromium	10	.4	0.50	<10	0.26	<10
Cobalt	50	.5	anr			
Copper	25	.4	anr			
Iron	300	7.1	7.7	<300	9.6	<300
Lead	25	1.2	3.9	<25	4.7	<25
Magnesium	5000	9.9				
Manganese	15	.2	0.35	<15	0.38	<15
Molybdenum	50	.8				
Nickel	40	1.1	anr			
Potassium	5000	14				
Selenium	10	2	0.86	<10	2.0	<10
Silver	10	.6	anr			
Sodium	5000	150				
Thallium	10	1.5	anr			
Tin	50	1.5				
Vanadium	50	.5	anr			
Zinc	20	.6	anr			

(*) Outside of QC limits
(anr) Analyte not requested

7.1.2
7

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: F32751
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR062805.ASC Date Analyzed: 06/28/05 Methods: SW846 6010B
QC Limits: 90 to 110 % Recovery Run ID: MA4414 Units: ug/l

Time:		07:38			07:59			08:49	
Sample ID:	ICV	ICV1		CCV	CCV1		CCV	CCV2	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	2000	1890	94.5	2000	1880	94.0	2000	1870	93.5
Barium	2000	1930	96.5	2000	1880	94.0	2000	1850	92.5
Beryllium	anr								
Cadmium	2000	1960	98.0	2000	1970	98.5	2000	1960	98.0
Calcium									
Chromium	2000	1880	94.0	2000	1900	95.0	2000	1910	95.5
Cobalt	anr								
Copper	anr								
Iron	40000	40200	100.5	40000	40700	101.8	40000	40500	101.3
Lead	2000	1920	96.0	2000	1960	98.0	2000	1950	97.5
Magnesium									
Manganese	2000	1970	98.5	2000	1980	99.0	2000	1980	99.0
Molybdenum									
Nickel	anr								
Potassium									
Selenium	2000	1960	98.0	2000	1970	98.5	2000	1940	97.0
Silver	anr								
Sodium									
Thallium	anr								
Tin									
Vanadium	anr								
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

7.1.3

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: F32751
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR062805.ASC Date Analyzed: 06/28/05 Methods: SW846 6010B
QC Limits: 90 to 110 % Recovery Run ID: MA4414 Units: ug/l

Time:		09:37			10:50			11:06	
Sample ID:	CCV	CCV3		ICV	ICV2		CCV	CCV4	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	2000	1890	94.5	2000	1960	98.0	2000	2010	100.5
Barium	2000	1910	95.5	2000	2010	100.5	2000	2090	104.5
Beryllium	anr								
Cadmium	2000	1980	99.0	2000	2030	101.5	2000	2090	104.5
Calcium									
Chromium	2000	1920	96.0	2000	1950	97.5	2000	2000	100.0
Cobalt	anr								
Copper	anr								
Iron	40000	40900	102.3	40000	41900	104.8	40000	43100	107.8
Lead	2000	1960	98.0	2000	2000	100.0	2000	2040	102.0
Magnesium									
Manganese	2000	2010	100.5	2000	2040	102.0	2000	2100	105.0
Molybdenum									
Nickel	anr								
Potassium									
Selenium	2000	1960	98.0	2000	2040	102.0	2000	2090	104.5
Silver	anr								
Sodium									
Thallium	anr								
Tin									
Vanadium	anr								
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

7.1.3

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: F32751
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR062805.ASC Date Analyzed: 06/28/05 Methods: SW846 6010B
QC Limits: 90 to 110 % Recovery Run ID: MA4414 Units: ug/l

Time:		12:01			12:51			13:39	
Sample ID:	CCV	CCV5		CCV	CCV6		CCV	CCV7	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	2000	1900	95.0	2000	1910	95.5	2000	1900	95.0
Barium	2000	1940	97.0	2000	1930	96.5	2000	1930	96.5
Beryllium	anr								
Cadmium	2000	1990	99.5	2000	2030	101.5	2000	2000	100.0
Calcium									
Chromium	2000	1900	95.0	2000	1940	97.0	2000	1930	96.5
Cobalt	anr								
Copper	anr								
Iron	40000	40900	102.3	40000	41600	104.0	40000	41400	103.5
Lead	2000	1960	98.0	2000	2000	100.0	2000	1980	99.0
Magnesium									
Manganese	2000	1980	99.0	2000	2010	100.5	2000	2000	100.0
Molybdenum									
Nickel	anr								
Potassium									
Selenium	2000	1990	99.5	2000	2000	100.0	2000	1990	99.5
Silver	anr								
Sodium									
Thallium	anr								
Tin									
Vanadium	anr								
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

7.1.3

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: F32751
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR062805.ASC Date Analyzed: 06/28/05 Methods: SW846 6010B
QC Limits: 90 to 110 % Recovery Run ID: MA4414 Units: ug/l

Time:		14:14			15:09			16:02	
Sample ID:	CCV	CCV8		CCV	CCV9		CCV	CCV10	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	2000	1870	93.5	2000	1870	93.5	2000	1930	96.5
Barium	2000	1900	95.0	2000	1860	93.0	2000	1910	95.5
Beryllium	anr								
Cadmium	2000	1960	98.0	2000	1970	98.5	2000	2020	101.0
Calcium									
Chromium	2000	1890	94.5	2000	1910	95.5	2000	1960	98.0
Cobalt	anr								
Copper	anr								
Iron	40000	40500	101.3	40000	40800	102.0	40000	42000	105.0
Lead	2000	1950	97.5	2000	1970	98.5	2000	2010	100.5
Magnesium									
Manganese	2000	1960	98.0	2000	1970	98.5	2000	2030	101.5
Molybdenum									
Nickel	anr								
Potassium									
Selenium	2000	1970	98.5	2000	1970	98.5	2000	2040	102.0
Silver	anr								
Sodium									
Thallium	anr								
Tin									
Vanadium	anr								
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

7.1.3

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: F32751
Account: EEINCOX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR062805.ASC Date Analyzed: 06/28/05 Methods: SW846 6010B
QC Limits: 90 to 110 % Recovery Run ID: MA4414 Units: ug/l

Time:		16:52			17:42	
Sample ID:	CCV	CCV11		CCV	CCV12	
Metal	True	Results	% Rec	True	Results	% Rec
Aluminum	anr					
Antimony	anr					
Arsenic	2000	1800	90.0	2000	1800	90.0
Barium	2000	1820	91.0	2000	1810	90.5
Beryllium	anr					
Cadmium	2000	1880	94.0	2000	1880	94.0
Calcium						
Chromium	2000	1840	92.0	2000	1830	91.5
Cobalt	anr					
Copper	anr					
Iron	40000	39300	98.3	40000	39200	98.0
Lead	2000	1900	95.0	2000	1890	94.5
Magnesium						
Manganese	2000	1900	95.0	2000	1900	95.0
Molybdenum						
Nickel	anr					
Potassium						
Selenium	2000	1930	96.5	2000	1930	96.5
Silver	anr					
Sodium						
Thallium	anr					
Tin						
Vanadium	anr					
Zinc	anr					

(*) Outside of QC limits
(anr) Analyte not requested

7.1.3

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: F32751
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR062805.ASC Date Analyzed: 06/28/05 Methods: SW846 6010B
QC Limits: 70 to 130 % Recovery Run ID: MA4414 Units: ug/l

Time:			07:47		10:57		17:38	
Sample ID:	CRI	CRIA	CR11		CRI2		CRI3	
Metal	True	True	Results	% Rec	Results	% Rec	Results	% Rec
Aluminum	400	200	anr					
Antimony	10	5.0	anr					
Arsenic	20	10	18.3	91.5	19.2	96.0	17.3	86.5
Barium	400	200	365	91.3	406	101.5	362	90.5
Beryllium	10	5.0	anr					
Cadmium	10	5.0	9.4	94.0	10.4	104.0	9.6	96.0
Calcium	2000	1000						
Chromium	20	10	20.1	100.5	21.2	106.0	20.0	100.0
Cobalt	100	50	anr					
Copper	50	25	anr					
Iron	600	300	510	85.0	553	92.2	516	86.0
Lead	10	5.0	12.1	121.0	11.3	113.0	14.1	141.0
Magnesium	10000	5000						
Manganese	30	15	29.8	99.3	32.2	107.3	29.8	99.3
Molybdenum	100	50						
Nickel	80	40	anr					
Potassium	10000	5000						
Selenium	10	5.0	12.9	129.0	11.4	114.0	9.9	99.0
Silver	20	10	anr					
Sodium	10000	5000						
Thallium	20	10	anr					
Tin	100	50						
Vanadium	100	50	anr					
Zinc	40	20	anr					

(*) Outside of QC limits
(anr) Analyte not requested

7.1.4

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: F32751
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

File ID: IR062805.ASC Date Analyzed: 06/28/05 Methods: SW846 6010B
QC Limits: 80 to 120 % Recovery Run ID: MA4414 Units: ug/l

Time: / Sample ID: / Metal	ICSA True	ICSAB True	07:52 ICSA1 Results	% Rec	07:53 ICSAB1 Results	% Rec	10:59 ICSA2 Results	% Rec	11:01 ICSAB2 Results	% Rec
Aluminum	500000	500000	499000	99.8	508000	101.6	523000	104.6	527000	105.4
Antimony		1000	-3.8		941	94.1	2.5		996	99.6
Arsenic		1000	3.4		967	96.7	2.8		1000	100.0
Barium		500	0.51		502	100.4	0.69		539	107.8
Beryllium		500	-1.5		503	100.6	-1.2		509	101.8
Cadmium		1000	0.36		951	95.1	0.40		972	97.2
Calcium	500000	500000	454000	90.8	461000	92.2	479000	95.8	482000	96.4
Chromium		500	4.4		487	97.4	4.6		504	100.8
Cobalt		500	1.4		478	95.6	1.5		491	98.2
Copper		500	4.0		538	107.6	2.7		559	111.8
Iron	200000	200000	191000	95.5	197000	98.5	199000	99.5	203000	101.5
Lead		1000	-0.050		956	95.6	2.8		981	98.1
Magnesium	500000	500000	503000	100.6	509000	101.8	533000	106.6	535000	107.0
Manganese		500	0.080		497	99.4	0.16		515	103.0
Molybdenum		1000	5.6		922	92.2	1.6		962	96.2
Nickel		1000	0.85		943	94.3	1.8		989	98.9
Potassium			11.2		-370		22.9		-350	
Selenium		1000	7.5		943	94.3	1.1		988	98.8
Silver		1000	-0.42		1070	107.0	-0.030		1100	110.0
Sodium			-2.3		235		-52		121	
Thallium		1000	-7.7		985	98.5	-10		951	95.1
Tin		1000	-2.8		859	85.9	-3.2		887	88.7
Vanadium		500	-2.5		489	97.8	-2.5		501	100.2
Zinc		1000	5.5		956	95.6	5.1		977	97.7

(*) Outside of QC limits
(anr) Analyte not requested

7.1.5

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: F32751
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

QC Batch ID: MP8199
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date: 06/28/05

Metal	RL	IDL	MB raw	final
Aluminum	200	6.6		
Antimony	3.0	1.5		
Arsenic	10	2.8	-2.2	<10
Barium	200	.5	0.030	<200
Beryllium	4.0	.3		
Cadmium	5.0	.3	-0.28	<5.0
Calcium	1000	3.8		
Chromium	10	.4	-0.26	<10
Cobalt	50	.5		
Copper	25	.4		
Iron	300	7.1	-1.8	<300
Lead	5.0	1.2	2.0	<5.0
Magnesium	5000	9.9		
Manganese	15	.2	-0.14	<15
Molybdenum	50	.8		
Nickel	40	1.1		
Potassium	5000	14		
Selenium	10	2	-0.53	<10
Silver	10	.6		
Sodium	5000	150		
Thallium	10	1.5		
Tin	50	1.5		
Vanadium	50	.5		
Zinc	20	.6		

Associated samples MP8199: F32751-5

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: F32751
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

QC Batch ID: MP8199
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date: 06/28/05 06/28/05

Metal	F32782-1 Original	DUP	RPD	QC Limits	F32782-1 Original	MS	Spikelot MPFLICP	% Rec	QC Limits
Aluminum									
Antimony									
Arsenic	4.9	0.0	200.0(a)	0-12	4.9	3650	4000	91.1	83-116
Barium	178	174	2.3	0-13	178	3500	4000	83.1	82-116
Beryllium									
Cadmium	0.0	0.0	NC	0-13	0.0	88.6	100	88.6	80-115
Calcium									
Chromium	0.0	0.0	NC	0-12	0.0	360	400	90.0	82-120
Cobalt									
Copper									
Iron	1120	1110	0.9	0-14	1120	26200	27000	92.9	76-125
Lead	2.0	2.5	22.2 (a)	0-10	2.0	911	1000	90.9	84-118
Magnesium									
Manganese	4010	3950	1.5	0-13	4010	4780	1000	77.0	75-125
Molybdenum									
Nickel									
Potassium									
Selenium	2.3	0.0	200.0(a)	0-13	2.3	4360	4000	108.9	84-121
Silver									
Sodium									
Thallium									
Tin									
Vanadium									
Zinc									

Associated samples MP8199: F32751-5

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) RPD acceptable due to low duplicate and sample concentrations.

7.2.2

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: F32751
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

QC Batch ID: MP8199
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date: 06/28/05

Metal	BSP Result	Spikelot MPFLICP	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic	3480	4000	87.0	80-120
Barium	3180	4000	80.0	80-120
Beryllium				
Cadmium	88.3	100	88.3	80-120
Calcium				
Chromium	351	400	87.8	80-120
Cobalt				
Copper				
Iron	24600	27000	91.1	80-120
Lead	904	1000	90.4	80-120
Magnesium				
Manganese	896	1000	89.6	80-120
Molybdenum				
Nickel				
Potassium				
Selenium	4060	4000	101.5	80-120
Silver				
Sodium				
Thallium				
Tin				
Vanadium				
Zinc				

Associated samples MP8199: F32751-5

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

7.2.3

SERIAL DILUTION RESULTS SUMMARY

Login Number: F32751
Account: EEINCJX - FEI
Project: Camp Lejeune-Campbell St. Fuel Farm

QC Batch ID: MP8199
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date: 06/28/05

Metal	F32782-1 Original	SDL 1:5	RPD	QC Limits
Aluminum				
Antimony				
Arsenic	4.85	0.00	100.0(a)	0-10
Barium	178	179	0.7	0-10
Beryllium				
Cadmium	0.00	0.00	NC	0-10
Calcium				
Chromium	0.00	0.00	NC	0-10
Cobalt				
Copper				
Iron	1120	1140	1.5	0-10
Lead	2.00	7.48	274.0(a)	0-10
Magnesium				
Manganese	4010	4150	3.6	0-10
Molybdenum				
Nickel				
Potassium				
Selenium	2.32	0.00	100.0(a)	0-10
Silver				
Sodium				
Thallium				
Tin				
Vanadium				
Zinc				

Associated samples MP8199: F32751-5

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

7.2.4

General Chemistry

QC Data Summaries

8

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: F32751
Account: EEINCOX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Solids, Total Dissolved	GN17560	10	<10	mg/l				
Solids, Total Suspended	GN17563	4.0	<4.0	mg/l				

Associated Samples:
Batch GN17560: F32751-5
Batch GN17563: F32751-5

8.1
8

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: F32751
Account: EEINCJX - EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Solids, Total Dissolved	GN17560	F32751-5	mg/l	553	540	2.4	0-29%
Solids, Total Suspended	GN17563	F32739-1	mg/l	4.0 B	<4.0	28.6	0-33%

Associated Samples:
Batch GN17560: F32751-5
Batch GN17563: F32751-5

8.2

8

Southeast
ACCUTEST.
Laboratories

12/08/05

Technical Report for

EEI

Camp Lejeune-Campbell St. Fuel Farm

844271

Accutest Job Number: F32780

Sampling Date: 06/22/05

Report to:

EEI

bmorris@eeimail.com

ATTN: Bill Morris

Total number of pages in report: 92

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Sections: 1 2 3 4 5 6

Table of Contents

-1-

Section 1: Sample Summary 3
Section 2: Case Narrative/Conformance Summary 5
Section 3: Sample Results 7
3.1: F32780-1: USTCSFF-MW03 7
3.2: F32780-2: USTCSFF-MW16 9
3.3: F32780-3: USTCSFF-MW12 11
3.4: F32780-4: USTCSFF-MW14 13
3.5: F32780-5: USTCSFF-DW02 15
3.6: F32780-6: USTCSFF-MW11 18
3.7: F32780-7: USTCSFF-122MW03 20
3.8: F32780-8: USTCSFF-122MW07 22
3.9: F32780-9: USTCSFF-122MW04 24
3.10: F32780-10: USTCSFF-122MW08 26
3.11: F32780-11: USTCSFF-~~122MW01~~ 13MW1 (previously) 28
3.12: F32780-12: USTCSFF-122MW09 30
3.13: F32780-13: USTCSFF-122MW11 33
3.14: F32780-14: USTCSFF-~~122DW01~~ 13DW1 (previously) 35
3.15: F32780-15: USTCSFF-DUP 38
3.16: F32780-16: TRIP BLANK 41
Section 4: Misc. Forms 42
4.1: Chain of Custody 43
Section 5: GC Volatiles - QC Data Summaries 46
5.1: Method Blank Summary 47
5.2: Blank Spike Summary 50
5.3: Matrix Spike/Matrix Spike Duplicate Summary 54
5.4: Surrogate Recovery Summaries 56
5.5: GC Surrogate Retention Time Summaries 58
5.6: Initial and Continuing Calibration Summaries 64
Section 6: GC Semi-volatiles - QC Data Summaries 77
6.1: Method Blank Summary 78
6.2: Blank Spike Summary 79
6.3: Matrix Spike/Matrix Spike Duplicate Summary 80
6.4: Surrogate Recovery Summaries 81
6.5: GC Surrogate Retention Time Summaries 82
6.6: Initial and Continuing Calibration Summaries 84

Sample Summary

EEI

Job No: F32780

Camp Lejeune-Campbell St. Fuel Farm
Project No: 844271

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
F32780-1	06/22/05	10:30	TE	06/24/05	AQ	Ground Water	USTCSFF-MW03
F32780-2	06/22/05	11:05	TE	06/24/05	AQ	Ground Water	USTCSFF-MW16
F32780-3	06/22/05	11:30	TE	06/24/05	AQ	Ground Water	USTCSFF-MW12
F32780-4	06/22/05	11:50	TE	06/24/05	AQ	Ground Water	USTCSFF-MW14
F32780-5	06/22/05	12:30	TE	06/24/05	AQ	Ground Water	USTCSFF-DW02
F32780-6	06/22/05	13:05	TE	06/24/05	AQ	Ground Water	USTCSFF-MW11
F32780-7	06/22/05	13:45	TE	06/24/05	AQ	Ground Water	USTCSFF-122MW03
F32780-8	06/22/05	14:07	TE	06/24/05	AQ	Ground Water	USTCSFF-122MW07
F32780-9	06/22/05	14:50	TE	06/24/05	AQ	Ground Water	USTCSFF-122MW04
F32780-10	06/22/05	15:10	TE	06/24/05	AQ	Ground Water	USTCSFF-122MW08
F32780-11	06/22/05	15:40	TE	06/24/05	AQ	Ground Water	USTCSFF-122MW01
F32780-12	06/22/05	16:15	TE	06/24/05	AQ	Ground Water	USTCSFF-122MW09
F32780-13	06/22/05	17:00	TE	06/24/05	AQ	Ground Water	USTCSFF-122MW11

Sample Summary
(continued)

EEI

Job No: F32780

Camp Lejeune-Campbell St. Fuel Farm
Project No: 844271

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
F32780-14	06/22/05	17:15	TE	06/24/05	AQ	Ground Water	USTCSFF-~~12~~13DW01
F32780-15	06/22/05	00:00	TE	06/24/05	AQ	Ground Water	USTCSFF-DUP
F32780-16	06/22/05	00:00	TE	06/24/05	AQ	Trip Blank Water	TRIP BLANK

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: EEI **Job No:** F32780

Site: Camp Lejeune-Campbell St. Fuel Farm **Report Date** 7/13/2005 10:44:35

15 Samples and 1 Trip Blank were collected on 06/22/2005 and were received at Accutest on 06/24/2005 properly preserved, at 2.8 Deg. C and intact. These Samples received an Accutest job number of F32780. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GC by Method EPA 504.1

Matrix: AQ **Batch ID:** OP13720

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

Samples F32780-3MS, F32780-3MSD were used as the QC samples indicated.

All method blanks for this batch meet method specific criteria.

Volatiles by GC by Method EPA 601/602

Matrix: AQ **Batch ID:** GEF3694

All samples were analyzed within the recommended method holding time.

Samples F32780-1MS, F32780-1MSD were used as the QC samples indicated.

All method blanks for this batch meet method specific criteria.

F32780-2: All hits confirmed by GC/MS.

F32780-3: All hits confirmed by dual column analysis.

F32780-10: All hits confirmed by dual column analysis.

F32780-11: All hits confirmed by dual column analysis.

F32780-12: All hits confirmed by dual column analysis.

F32780-14: All hits confirmed by dual column analysis.

F32780-15: All hits confirmed by dual column analysis.

F32780-2, F32780-3, F32780-10, F32780-11, F32780-12, F32780-15 for 1,2-Dichlorobenzene: Elevated reporting limits due to matrix interference.

F32780-2 for 1,3-Dichlorobenzene: Elevated reporting limits due to matrix interference.

F32780-12, F32780-15 for 1,4-Dichlorobenzene: Elevated reporting limits due to matrix interference.

Extractables by GC by Method EPA 610

Matrix: AQ **Batch ID:** OP13700

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

Samples F32780-12MSD, F32780-12MS were used as the QC samples indicated.

All method blanks for this batch meet method specific criteria.

Matrix Spike Recoverys for 1-Methylnaphthalene, 2-Methylnaphthalene, Acenaphthene, Acenaphthylene, Anthracene, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(g,h,i)perylene, Benzo(k)fluoranthene, Chrysene, Dibenzo(a,h)anthracene, Fluoranthene, Fluorene, Indeno(1,2,3-cd)pyrene, Naphthalene, Phenanthrene, Pyrene are outside control limits. Probable cause: due to matrix interference.

RPDs for MSD for 1-Methylnaphthalene, 2-Methylnaphthalene, Acenaphthene, Acenaphthylene, Anthracene, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(g,h,i)perylene, Benzo(k)fluoranthene, Chrysene, Dibenzo(a,h)anthracene, Fluoranthene, Fluorene, Indeno(1,2,3-cd)pyrene, Naphthalene, Phenanthrene, Pyrene are outside control limits for sample OP13700-MSD. Probable cause: due to sample non-homogeneity.

Samples OP13700-MS, F32780-14 have surrogates outside control limits. Probable cause: due to matrix interference.

F32780-15: Confirmed by GC/MS

F32780-5, F32780-12, F32780-14: All hits confirmed by dual column analysis.

OP13700-MS: High RPD's due to suspected leaky separatory funnel.

F32780-14 for o-Terphenyl, 2-Fluorobiphenyl: Outside control limits due to dilution.

Accutest Laboratories Southeast (ALSE) certifies that this report meets the project requirements for analytical data produced for the samples as received at ALSE and as stated on the COC. ALSE certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the ALSE Quality Manual except as noted above. This report is to be used in its entirety. ALSE is not responsible for any assumptions of data quality if partial data packages are used.

Narrative prepared by:

Date: July 13, 2005

Ellen Pampel, Inorganic QA (signature on file)

Wednesday, July 13, 2005

Report of Analysis

Client Sample ID:	USTCSFF-MW03		
Lab Sample ID:	F32780-1	**Date Sampled:**	06/22/05
Matrix:	AQ - Ground Water	**Date Received:**	06/24/05
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF052607.D	1	07/01/05	TD	n/a	n/a	GEF3694
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	101%		71-130%
98-08-8	aaa-Trifluorotoluene	107%		71-124%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a eompound

Report of Analysis

Client Sample ID:	USTCSFF-MW03		
Lab Sample ID:	F32780-1	**Date Sampled:**	06/22/05
Matrix:	AQ - Ground Water	**Date Received:**	06/24/05
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD24866.D	1	06/30/05	AG	06/29/05	OP13720	GDD733
Run #2							

	Initial Volume	Final Volume
Run #1	35.0 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.020	0.010	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	82%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW16		
Lab Sample ID:	F32780-2	**Date Sampled:**	06/22/05
Matrix:	AQ - Ground Water	**Date Received:**	06/24/05
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	EF052610.D	1	07/01/05	TD	n/a	n/a	GEF3694
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	49.6	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene [b]	ND	70	70	ug/l	
541-73-1	1,3-Dichlorobenzene [b]	ND	15	15	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	7.0	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	20.4	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	123%		71-130%
98-08-8	aaa-Trifluorotoluene	107%		71-124%

(a) All hits confirmed by GC/MS.
(b) Elevated reporting limits due to matrix interference.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exeeeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW16		
Lab Sample ID:	F32780-2	**Date Sampled:**	06/22/05
Matrix:	AQ - Ground Water	**Date Received:**	06/24/05
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD24867.D	1	06/30/05	AG	06/29/05	OP13720	GDD733
Run #2							

	Initial Volume	Final Volume
Run #1	35.0 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.020	0.010	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	100%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW12		
Lab Sample ID:	F32780-3	**Date Sampled:**	06/22/05
Matrix:	AQ - Ground Water	**Date Received:**	06/24/05
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	EF052612.D	1	07/01/05	TD	n/a	n/a	GEF3694
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene [b]	ND	5.0	5.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	0.71	1.0	0.50	ug/l	J
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	104%		71-130%
98-08-8	aaa-Trifluorotoluene	100%		71-124%

(a) All hits confirmed by dual column analysis.
(b) Elevated reporting limits due to matrix interference.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW12		
Lab Sample ID:	F32780-3	**Date Sampled:**	06/22/05
Matrix:	AQ - Ground Water	**Date Received:**	06/24/05
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD24868.D	1	06/30/05	AG	06/29/05	OP13720	GDD733
Run #2							

	Initial Volnme	Final Volume
Run #1	35.0 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.020	0.010	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	94%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidenee of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW14		
Lab Sample ID:	F32780-4	**Date Sampled:**	06/22/05
Matrix:	AQ - Ground Water	**Date Received:**	06/24/05
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF052613.D	1	07/01/05	TD	n/a	n/a	GEF3694
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	99%		71-130%
98-08-8	aaa-Trifluorotoluene	100%		71-124%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indieates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW14		
Lab Sample ID:	F32780-4	**Date Sampled:**	06/22/05
Matrix:	AQ - Ground Water	**Date Received:**	06/24/05
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD24871.D	1	06/30/05	AG	06/29/05	OP13720	GDD733
Run #2							

	Initial Volume	Final Volume
Run #1	35.0 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.020	0.010	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	95%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exeeeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-DW02		
Lab Sample ID:	F32780-5	**Date Sampled:**	06/22/05
Matrix:	AQ - Ground Water	**Date Received:**	06/24/05
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF052614.D	1	07/01/05	TD	n/a	n/a	GEF3694
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	101%		71-130%
98-08-8	aaa-Trifluorotoluene	100%		71-124%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-DW02		
Lab Sample ID:	F32780-5	**Date Sampled:**	06/22/05
Matrix:	AQ - Ground Water	**Date Received:**	06/24/05
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD24872.D	1	06/30/05	AG	06/29/05	OP13720	GDD733
Run #2							

	Iuitial Volume	Final Volume
Run #1	35.0 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.020	0.010	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	97%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-DW02		
Lab Sample ID:	F32780-5	**Date Sampled:**	06/22/05
Matrix:	AQ - Ground Water	**Date Received:**	06/24/05
Method:	EPA 610 EPA 610	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	LL04440.D	1	06/29/05	AA	06/28/05	OP13700	GLL177
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	12.9	5.0	2.0	ug/l	
208-96-8	Acenaphthylene	ND	5.0	2.0	ug/l	
120-12-7	Anthraeene	ND	5.0	2.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.0	2.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.0	2.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.0	2.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.0	2.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.0	2.0	ug/l	
218-01-9	Chrysene	ND	5.0	2.0	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.0	2.0	ug/l	
206-44-0	Fluoranthene	ND	5.0	2.0	ug/l	
86-73-7	Fluorene	10.7	5.0	2.0	ug/l	
193-39-5	Indeno(1,2,3-ed)pyrene	ND	5.0	2.0	ug/l	
91-20-3	Naphthalene	18.8	5.0	2.0	ug/l	
90-12-0	1-Methylnaphthalene	ND	5.0	5.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.0	2.0	ug/l	
85-01-8	Phenanthrene	ND	5.0	2.0	ug/l	
129-00-0	Pyrene	ND	5.0	2.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	54%		42-123%
84-15-1	o-Terphenyl	76%		51-123%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indieates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidenee of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW11		
Lab Sample ID:	F32780-6	**Date Sampled:**	06/22/05
Matrix:	AQ - Ground Water	**Date Received:**	06/24/05
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF052615.D	1	07/01/05	TD	n/a	n/a	GEF3694
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	97%		71-130%
98-08-8	aaa-Trifluorotoluene	102%		71-124%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-MW11		
Lab Sample ID:	F32780-6	**Date Sampled:**	06/22/05
Matrix:	AQ - Ground Water	**Date Received:**	06/24/05
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytieal Batch
Run #1	DD24874.D	1	06/30/05	AG	06/29/05	OP13720	GDD733
Run #2							

	Initial Volume	Final Volume
Run #1	35.0 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.020	0.010	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	98%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-122MW03		
Lab Sample ID:	F32780-7	**Date Sampled:**	06/22/05
Matrix:	AQ - Ground Water	**Date Received:**	06/24/05
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF052616.D	1	07/01/05	TD	n/a	n/a	GEF3694
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	95%		71-130%
98-08-8	aaa-Trifluorotoluene	100%		71-124%

ND = Not deteeted MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-122MW03		
Lab Sample ID:	F32780-7	**Date Sampled:**	06/22/05
Matrix:	AQ - Ground Water	**Date Received:**	06/24/05
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD24875.D	1	06/30/05	AG	06/29/05	OP13720	GDD733
Run #2							

	Initial Volume	Final Volume
Run #1	35.0 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.020	0.010	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	84%		60-139%

ND = Not deteeted MDL - Method Deteetion Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-122MW07		
Lab Sample ID:	F32780-8	**Date Sampled:**	06/22/05
Matrix:	AQ - Ground Water	**Date Received:**	06/24/05
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF052617.D	1	07/01/05	TD	n/a	n/a	GEF3694
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	104%		71-130%
98-08-8	aaa-Trifluorotoluene	103%		71-124%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-122MW07		
Lab Sample ID:	F32780-8	**Date Sampled:**	06/22/05
Matrix:	AQ - Ground Water	**Date Received:**	06/24/05
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD24876.D	1	06/30/05	AG	06/29/05	OP13720	GDD733
Run #2							

	Initial Volume	Final Volume
Run #1	35.0 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.020	0.010	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	97%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-122MW04		
Lab Sample ID:	F32780-9	**Date Sampled:**	06/22/05
Matrix:	AQ - Ground Water	**Date Received:**	06/24/05
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF052618.D	1	07/01/05	TD	n/a	n/a	GEF3694
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	95%		71-130%
98-08-8	aaa-Trifluorotoluene	97%		71-124%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-122MW04		
Lab Sample ID:	F32780-9	**Date Sampled:**	06/22/05
Matrix:	AQ - Ground Water	**Date Received:**	06/24/05
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD24877.D	1	06/30/05	AG	06/29/05	OP13720	GDD733
Run #2							

	Initial Volume	Final Volume
Run #1	35.0 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.020	0.010	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	100%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exeeeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-122MW08		
Lab Sample ID:	F32780-10	**Date Sampled:**	06/22/05
Matrix:	AQ - Ground Water	**Date Received:**	06/24/05
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytieal Batch
Run #1 [a]	EF052604.D	1	07/01/05	TD	n/a	n/a	GEF3694
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene [b]	ND	2.0	2.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	104%		71-130%
98-08-8	aaa-Trifluorotoluene	103%		71-124%

(a) All hits confirmed by dual column analysis.
(b) Elevated reporting limits due to matrix interference.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-122MW08		
Lab Sample ID:	F32780-10	**Date Sampled:**	06/22/05
Matrix:	AQ - Ground Water	**Date Received:**	06/24/05
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD24878.D	1	06/30/05	AG	06/29/05	OP13720	GDD733
Run #2							

	Initial Volume	Final Volume
Run #1	35.0 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.020	0.010	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	97%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-~~122MW01~~	**Date Sampled:**	06/22/05
Lab Sample ID:	F32780-11	**Date Received:**	06/24/05
Matrix:	AQ - Ground Water	**Percent Solids:**	n/a
Method:	EPA 601/602		
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	EF052619.D	1	07/01/05	TD	n/a	n/a	GEF3694
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene [b]	ND	30	30	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	3.1	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	116%		71-130%
98-08-8	aaa-Trifluorotoluene	106%		71-124%

(a) All hits confirmed by dual column analysis.
(b) Elevated reporting limits due to matrix interference.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-122MW01		
Lab Sample ID:	F32780-11	**Date Sampled:**	06/22/05
Matrix:	AQ - Ground Water	**Date Received:**	06/24/05
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD24879.D	1	06/30/05	AG	06/29/05	OP13720	GDD733
Run #2							

	Initial Volume	Final Volume
Run #1	35.0 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.020	0.010	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	99%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-122MW09		
Lab Sample ID:	F32780-12	**Date Sampled:**	06/22/05
Matrix:	AQ - Ground Water	**Date Received:**	06/24/05
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	EF052620.D	1	07/01/05	TD	n/a	n/a	GEF3694
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Uuits	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene [b]	ND	15	15	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene [b]	ND	2.0	2.0	ug/l	J
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	1.4	3.0	1.0	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	114%		71-130%
98-08-8	aaa-Trifluorotoluene	108%		71-124%

(a) All hits confirmed by dual column analysis.
(b) Elevated reporting limits due to matrix interference.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indieates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-122MW09		
Lab Sample ID:	F32780-12	**Date Sampled:**	06/22/05
Matrix:	AQ - Ground Water	**Date Received:**	06/24/05
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD24880.D	1	06/30/05	AG	06/29/05	OP13720	GDD733
Run #2							

	Initial Volume	Final Volume
Run #1	35.0 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.020	0.010	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	104%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-122MW09		
Lab Sample ID:	F32780-12	**Date Sampled:**	06/22/05
Matrix:	AQ - Ground Water	**Date Received:**	06/24/05
Method:	EPA 610 EPA 610	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	LL04441.D	1	06/29/05	AA	06/28/05	OP13700	GLL177
Run #2							

	Initial Volume	Final Volume
Run #1	990 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.1	2.0	ug/l	
208-96-8	Acenaphthylene	ND	5.1	2.0	ug/l	
120-12-7	Anthracene	ND	5.1	2.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.1	2.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.1	2.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.1	2.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.1	2.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.1	2.0	ug/l	
218-01-9	Chrysene	ND	5.1	2.0	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.1	2.0	ug/l	
206-44-0	Fluoranthene	ND	5.1	2.0	ug/l	
86-73-7	Fluorene	ND	5.1	2.0	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.1	2.0	ug/l	
91-20-3	Naphthalene	8.3	5.1	2.0	ug/l	
90-12-0	1-Methylnaphthalene	3.8	5.1	2.0	ug/l	J
91-57-6	2-Methylnaphthalene	ND	5.1	2.0	ug/l	
85-01-8	Phenanthrene	ND	5.1	2.0	ug/l	
129-00-0	Pyrene	ND	5.1	2.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Rnn# 2	Limits
321-60-8	2-Fluorobiphenyl	48%		42-123%
84-15-1	o-Terphenyl	61%		51-123%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-122MW11		
Lab Sample ID:	F32780-13	**Date Sampled:**	06/22/05
Matrix:	AQ - Ground Water	**Date Received:**	06/24/05
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF052621.D	1	07/01/05	TD	n/a	n/a	GEF3694
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	103%		71-130%
98-08-8	aaa-Trifluorotoluene	105%		71-124%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-122MW11		
Lab Sample ID:	F32780-13	**Date Sampled:**	06/22/05
Matrix:	AQ - Ground Water	**Date Received:**	06/24/05
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD24881.D	1	06/30/05	AG	06/29/05	OP13720	GDD733
Run #2							

	Initial Volume	Final Volume
Run #1	35.0 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.020	0.010	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	101%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-~~I22DW01~~ 13DW01		
Lab Sample ID:	F32780-14	**Date Sampled:**	06/22/05
Matrix:	AQ - Ground Water	**Date Received:**	06/24/05
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	EF052625.D	1	07/01/05	TD	n/a	n/a	GEF3694
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	9.8	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	9.2	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	2.3	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	16.0	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	117%		71-130%
98-08-8	aaa-Trifluorotoluene	109%		71-124%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-122DW01-	**Date Sampled:**	06/22/05
Lab Sample ID:	F32780-14	**Date Received:**	06/24/05
Matrix:	AQ - Ground Water	**Percent Solids:**	n/a
Method:	EPA 504.1 EPA 504		
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD24882.D	1	06/30/05	AG	06/29/05	OP13720	GDD733
Run #2							

	Initial Volume	Final Volume
Run #1	35.0 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.020	0.010	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	100%		60-139%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-122DW01	**Date Sampled:**	06/22/05
Lab Sample ID:	F32780-14	**Date Received:**	06/24/05
Matrix:	AQ - Ground Water	**Percent Solids:**	n/a
Method:	EPA 610 EPA 610		
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	LL04451.D	40	06/29/05	AA	06/28/05	OP13700	GLL177
Run #2							

	Initial Volume	Final Volume
Run #1	1040 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	190	77	ug/l	
208-96-8	Acenaphthylene	ND	190	77	ug/l	
120-12-7	Anthracene	ND	190	77	ug/l	
56-55-3	Benzo(a)anthracene	ND	190	77	ug/l	
50-32-8	Benzo(a)pyrene	ND	190	77	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	190	77	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	190	77	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	190	77	ug/l	
218-01-9	Chrysene	ND	190	77	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	190	77	ug/l	
206-44-0	Fluoranthene	ND	190	77	ug/l	
86-73-7	Fluorene	ND	190	77	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	190	77	ug/l	
91-20-3	Naphthalene	924	190	77	ug/l	
90-12-0	1-Methylnaphthalene	ND	190	77	ug/l	
91-57-6	2-Methylnaphthalene	86.6	190	77	ug/l	J
85-01-8	Phenanthrene	ND	190	77	ug/l	
129-00-0	Pyrene	ND	190	77	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	0% [b]		42-123%
84-15-1	o-Terphenyl	0% [b]		51-123%

(a) All hits confirmed by dual column analysis.
(b) Outside control limits due to dilution.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-DUP		
Lab Sample ID:	F32780-15	**Date Sampled:**	06/22/05
Matrix:	AQ - Ground Water	**Date Received:**	06/24/05
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	EF052626.D	1	07/01/05	TD	n/a	n/a	GEF3694
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene [b]	ND	15	15	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene [b]	ND	2.0	2.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	1.4	3.0	1.0	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	110%		71-130%
98-08-8	aaa-Trifluorotoluene	101%		71-124%

(a) All hits confirmed by dual column analysis.
(b) Elevated reporting limits due to matrix interference.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-DUP		
Lab Sample ID:	F32780-15	**Date Sampled:**	06/22/05
Matrix:	AQ - Ground Water	**Date Received:**	06/24/05
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD24883.D	1	07/01/05	AG	06/29/05	OP13720	GDD733
Run #2							

	Initial Volume	Final Volume
Run #1	35.0 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.020	0.010	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	91%		60-139%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	USTCSFF-DUP		
Lab Sample ID:	F32780-15	**Date Sampled:**	06/22/05
Matrix:	AQ - Ground Water	**Date Received:**	06/24/05
Method:	EPA 610 EPA 610	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	LL04452.D	1	06/29/05	AA	06/28/05	OP13700	GLL177
Run #2							

	Initial Volume	Final Volume
Run #1	1010 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.0	2.0	ug/l	
208-96-8	Acenaphthylene	ND	5.0	2.0	ug/l	
120-12-7	Anthracene	ND	5.0	2.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.0	2.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.0	2.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.0	2.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.0	2.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.0	2.0	ug/l	
218-01-9	Chrysene	ND	5.0	2.0	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.0	2.0	ug/l	
206-44-0	Fluoranthene	ND	5.0	2.0	ug/l	
86-73-7	Fluorene	ND	5.0	2.0	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.0	2.0	ug/l	
91-20-3	Naphthalene	3.7	5.0	2.0	ug/l	J
90-12-0	1-Methylnaphthalene	5.0	5.0	2.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.0	2.0	ug/l	
85-01-8	Phenanthrene	ND	5.0	2.0	ug/l	
129-00-0	Pyrene	ND	5.0	2.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	45%		42-123%
84-15-1	o-Terphenyl	61%		51-123%

(a) Confirmed by GC/MS

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	F32780-16	**Date Sampled:**	06/22/05
Matrix:	AQ - Trip Blank Water	**Date Received:**	06/24/05
Method:	EPA 601/602	**Percent Solids:**	n/a
Project:	Camp Lejeune-Campbell St. Fuel Farm		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF052627.D	1	07/01/05	TD	n/a	n/a	GEF3694
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	104%		71-130%
98-08-8	aaa-Trifluorotoluene	104%		71-124%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indieates value exceeds calibration range
J = Indicatcs an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

CHAIN OF CUSTODY

ACCUTEST Laboratories
4405 VINELAND ROAD • SUITE C-15
ORLANDO, FL 32811
TEL: 407-425-6700 • FAX: 407-425-0707

ACCUTEST JOB #: F32780
ACCUTEST QUOTE #:

CLIENT INFORMATION
NAME: ENGINEERING & ENVIRONMENT PT 32 FIREFIGHTER TOWER RD
ADDRESS:
CITY: Camp Lejeune STATE: NC ZIP: 28542
SEND REPORT TO: Bill
PHONE #: (910) 989-3214

FACILITY INFORMATION
PROJECT NAME: Camp Bell St. Fuel Farm MCB5
LOCATION: LD03-016 / CTO 015
PROJECT NO.:
FAX #: (910) 450-9302

ANALYTICAL INFORMATION

MATRIX CODES
DW - DRINKING WATER
GW - GROUND WATER
WW - WASTE WATER
SO - SOIL
SL - SLUDGE
OI - OIL
LIQ - OTHER LIQUID
SOL - OTHER SOLID

ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION DATE	COLLECTION TIME	SAMPLED BY:	MATRIX	# OF BOTTLES	PRESERVATION HCl	PRESERVATION NON	PRESERVATION H2SO4	PRESERVATION NONE	602	504.1 (EDB)	6D	LAB USE ONLY
1	UST CSFF - MW03	6/20/05	1030	TE	GW	6	X			X	X	X		
2	UST CSFF - MW16	"	1105	"	"	6	X			X	X	X		
3	UST CSFF - MW12		1130			6	X			X	X	X		
4	UST CSFF - MW14		1150			6	X			X	X	X		
5	UST CSFF - DW02		1230			8	X			X	X	X	X	
6	UST CSFF - MW11	6/20/05	1305			6	X			X	X	X		
	~~UST CSFF~~ -	/	/			/				X	X	X		
7	UST - 122 MW03	6/20/05	1345			6	X			X	X	X		
8	UST - 122 MW07	"	1407			6	X			X	X	X		
9	UST - 122 MW04	"	1450			6	X			X	X	X		
10	UST - 122 MW08	6/20/05	1510	TE	GW	6	X			X	X	X		

DATA TURNAROUND INFORMATION
- [X] STANDARD
- [ ] 48 HOUR RUSH
- [ ] 24 HOUR EMERGENCY
- [ ] OTHER

APPROVED BY:

EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED

DATA DELIVERABLE INFORMATION
- [ ] STANDARD
- [ ] COMMERCIAL "B"
- [ ] DISK DELIVERABLE
- [ ] STATE FORMS
- [X] OTHER (SPECIFY) NEESA 4

COMMENTS/REMARKS
Ref 1 of 2

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESION, INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE TIME: 6/22/05	RECEIVED BY: 1. FX	RELINQUISHED BY: 2. FX	DATE TIME: 9:00 6-24-05	RECEIVED BY: 2.
RELINQUISHED BY: 3.	DATE TIME:	RECEIVED BY: 3.	RELINQUISHED BY: 4.	DATE TIME:	RECEIVED BY: 4.
RELINQUISHED BY:	DATE TIME:	RECEIVED BY: 5.	SEAL #	PRESERVE WHERE APPLICABLE ☐	ON ICE ☐ TEMPERATURE 2.8, 3.2 °C

F32780: Chain of Custody
Page 1 of 3

CHAIN OF CUSTODY

ACCUTEST Laboratories
4405 VINELAND ROAD • SUITE C-15
ORLANDO, FL 32811
TEL: 407-425-6700 • FAX: 407-425-0707

ACCUTEST JOB #: F32780
ACCUTEST QUOTE #:

CLIENT INFORMATION

NAME: Engineering & Environment Inc
ADDRESS: PT32 Parachute Tower Rd
CITY: Camp Lejeune STATE: NC ZIP: 28547
SEND REPORT TO: Bill Morris
PHONE #: (910) 989-3214

FACILITY INFORMATION

PROJECT NAME: CSFF
LOCATION: NCAS
PROJECT NO.: CD03-016 / ATOOLS
FAX #: (910) 450-9302

ANALYTICAL INFORMATION

(622 SOH 1 (EDB) 610

MATRIX CODES

DW - DRINKING WATER
GW - GROUND WATER
WW - WASTE WATER
SO - SOIL
SL - SLUDGE
OL - OIL
LIQ - OTHER LIQUID
SOL - OTHER SOLID

ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION DATE	COLLECTION TIME	SAMPLED BY:	MATRIX	# OF BOTTLES	PRESERVATION: NO	HCL	HNO3	H2SO4	NONE	NaOH				LAB USE ONLY
11	~~UST-122MW01~~ (DUP)	6/22/05	1510	TE	GW	6		X				X	X	X		
12	UST-122 MW09 (MS/MSD)		1115			9		X			X	X	X	X	X	
13	UST-122 MW11		1700			6		X				X	X	X		
14	UST-122 DW04 (BOTTLE)		1715			8		X			X	X	X	X	X	
15	UST-CSFF-DUP			TE	GW	8		X			X	X	X	X	X	
16	TRIP BLANKS		LAB	LAB	W	4		X				X				
	TEMP BLANKS	6/22/05	LAB	LAB	W	2					X					

DATA TURNAROUND INFORMATION

X STANDARD
APPROVED BY:
○ 48 HOUR RUSH
○ 24 HOUR EMERGENCY
○ OTHER
EMERGENCY OR RUSH IS Fax DATA UNLESS PREVIOUSLY APPROVED

DATA DELIVERABLE INFORMATION

○ STANDARD
○ COMMERCIAL "B"
○ DISK DELIVERABLE
○ STATE FORMS
X OTHER (SPECIFY) NEEDED 4

COMMENTS/REMARKS

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY

RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:
1.	6/23/05	1. FX	2. FX	6-24-05	2.
3.	DATE/TIME:	3.	4.	DATE/TIME:	4.
5.	DATE/TIME:	6.	SEAL #	PRESERVE WHERE APPLICABLE ○	ON ICE ○ TEMPERATURE °C

4.4 A

ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: F32780 CLIENT: Engin + Enviro PROJECT: Compost St. Fuel Farm

DATE/TIME RECEIVED: 6-24-05 / 9:00 # OF COOLERS RECEIVED: 2 COOLER TEMPS: 2.4, 3.2

METHOD OF DELIVERY: (FEDEX) UPS ACCUTEST COURIER GREYHOUND DELIVERY OTHER

AIRBILL NUMBERS: 8508 6831 7513

COOLER INFORMATION

- [ ] CUSTODY SEAL NOT PRESENT OR NOT INTACT
- [ ] NO COC RECEIVED
- [ ] ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- [ ] SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- [ ] TEMPERATURE CRITERIA NOT MET

TRIP BLANK INFORMATION

- [ ] TRIP BLANK NOT PROVIDED
- [ ] TRIP BLANK NOT ON COC
- [X] TRIP BLANK INTACT
- [ ] TRIP BLANK NOT INTACT
- [X] RECEIVED WATER TRIP BLANK
- [ ] RECEIVED SOIL TRIP BLANK

SAMPLE INFORMATION

- [ ] SAMPLE LABELS PRESENT ON ALL BOTTLES
- [ ] CORRECT NUMBER OF CONTAINERS USED
- [ ] SAMPLE RECEIVED IMPROPERLY PRESERVED
- [ ] INSUFFICIENT VOLUME FOR ANALYSIS
- [ ] TIMES ON COC DON'T MATCH LABEL
- [ ] ID'S ON COC DON'T MATCH LABEL
- [ ] VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
- [ ] BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
- [ ] NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
- [ ] UNCLEAR FILTERING INSTRUCTIONS
- [ ] UNCLEAR COMPOSITING INSTRUCTIONS
- [ ] SAMPLE(S) RECEIVED BROKEN
- [ ] % SOLIDS JAR NOT RECEIVED

SOIL INFORMATION

NUMBER OF ENCORES ? Ø

NUMBER OF 5035 FIELD KITS ? Ø

SUMMARY OF COMMENTS: Recieved two trip Blanks

TECHNICIAN SIGNATURE/DATE: Steven Brown / 6-24-05 TECHNICIAN SIGNATURE/DATE:

ASBD06/22/05

4.1 4

F32780: Chain of Custody
Page 3 of 3

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: F32780
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GEF3694-MB	EF052602.D	1	07/01/05	TD	n/a	n/a	GEF3694

The QC reported here applies to the following samples: **Method:** EPA 601/602

F32780-1, F32780-2, F32780-3, F32780-4, F32780-5, F32780-6, F32780-7, F32780-8, F32780-9, F32780-10, F32780-11, F32780-12, F32780-13, F32780-14, F32780-15, F32780-16

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	98%	71-130%
98-08-8	aaa-Trifluorotoluene	103%	71-124%

Method Blank Summary

Job Number: F32780
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GEF3694-MB	EF052624.D	1	07/01/05	TD	n/a	n/a	GEF3694

The QC reported here applies to the following samples: **Method:** EPA 601/602

F32780-1, F32780-2, F32780-3, F32780-4, F32780-5, F32780-6, F32780-7, F32780-8, F32780-9, F32780-10, F32780-11, F32780-12, F32780-13, F32780-14, F32780-15, F32780-16

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	99%	71-130%
98-08-8	aaa-Trifluorotoluene	104%	71-124%

Method Blank Summary

Job Number: F32780
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP13720-MB	DD24863.D	1	06/30/05	AG	06/29/05	OP13720	GDD733

The QC reported here applies to the following samples: **Method:** EPA 504.1

F32780-1, F32780-2, F32780-3, F32780-4, F32780-5, F32780-6, F32780-7, F32780-8, F32780-9, F32780-10, F32780-11, F32780-12, F32780-13, F32780-14, F32780-15

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.020	0.010	ug/l	

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	94%	60-139%

Blank Spike Summary

Job Number: F32780
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GEF3694-BS	EF052601.D	1	07/01/05	TD	n/a	n/a	GEF3694

The QC reported here applies to the following samples: **Method:** EPA 601/602

F32780-1, F32780-2, F32780-3, F32780-4, F32780-5, F32780-6, F32780-7, F32780-8, F32780-9, F32780-10, F32780-11, F32780-12, F32780-13, F32780-14, F32780-15, F32780-16

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	20	19.6	98	81-121
108-90-7	Chlorobenzene	20	20.4	102	76-120
95-50-1	1,2-Dichlorobenzene	20	19.1	96	63-127
541-73-1	1,3-Dichlorobenzene	20	19.4	97	70-124
106-46-7	1,4-Dichlorobenzene	20	18.1	91	68-121
100-41-4	Ethylbenzene	20	20.2	101	79-124
1634-04-4	Methyl Tert Butyl Ether	20	19.3	97	73-118
108-88-3	Toluene	20	20.0	100	79-122
1330-20-7	Xylenes (total)	60	59.5	99	79-121

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	107%	71-130%
98-08-8	aaa-Trifluorotoluene	108%	71-124%

Blank Spike Summary

Job Number: F32780
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GEF3694-BS	EF052623.D	1	07/01/05	TD	n/a	n/a	GEF3694

The QC reported here applies to the following samples: **Method:** EPA 601/602

F32780-1, F32780-2, F32780-3, F32780-4, F32780-5, F32780-6, F32780-7, F32780-8, F32780-9, F32780-10, F32780-11, F32780-12, F32780-13, F32780-14, F32780-15, F32780-16

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	20	20.1	101	81-121
108-90-7	Chlorobenzene	20	20.7	104	76-120
95-50-1	1,2-Dichlorobenzene	20	19.6	98	63-127
541-73-1	1,3-Dichlorobenzene	20	19.7	99	70-124
106-46-7	1,4-Dichlorobenzene	20	18.1	91	68-121
100-41-4	Ethylbenzene	20	20.4	102	79-124
1634-04-4	Methyl Tert Butyl Ether	20	20.7	104	73-118
108-88-3	Toluene	20	20.4	102	79-122
1330-20-7	Xylenes (total)	60	60.0	100	79-121

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	108%	71-130%
98-08-8	aaa-Trifluorotoluene	108%	71-124%

Blank Spike Summary

Job Number: F32780
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP13720-BS	DD24864.D	1	06/30/05	AG	06/29/05	OP13720	GDD733

The QC reported here applies to the following samples: **Method:** EPA 504.1

F32780-1, F32780-2, F32780-3, F32780-4, F32780-5, F32780-6, F32780-7, F32780-8, F32780-9, F32780-10, F32780-11, F32780-12, F32780-13, F32780-14, F32780-15

CAS No.	Compound	Spike ng/l	BSP ug/l	BSP %	Limits
106-93-4	1,2-Dibromoethane	0.25	0.21	84	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	105%	60-139%

Blank Spike Summary

Job Number: F32780
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Aualyzed	By	Prep Date	Prep Batch	Analytical Batch
OP13720-BS2	DD24865.D	1	06/30/05	AG	06/29/05	OP13720	GDD733

The QC reported here applies to tbe following samples: **Method:** EPA 504.1

F32780-1, F32780-2, F32780-3, F32780-4, F32780-5, F32780-6, F32780-7, F32780-8, F32780-9, F32780-10, F32780-11, F32780-12, F32780-13, F32780-14, F32780-15

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
106-93-4	1,2-Dibromoethane	0.25	0.18	72	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	102%	60-139%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F32780
Account: EEINCJX EEI
Projeet: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F32780-1MS	EF052608.D	1	07/01/05	TD	n/a	n/a	GEF3694
F32780-1MSD	EF052609.D	1	07/01/05	TD	n/a	n/a	GEF3694
F32780-1	EF052607.D	1	07/01/05	TD	n/a	n/a	GEF3694

The QC reported here applies to the following samples: **Method:** EPA 601/602

F32780-1, F32780-2, F32780-3, F32780-4, F32780-5, F32780-6, F32780-7, F32780-8, F32780-9, F32780-10, F32780-11, F32780-12, F32780-13, F32780-14, F32780-15, F32780-16

CAS No.	Compound	F32780-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND		25	27.5	110	27.8	111	1	74-126/11
108-90-7	Chlorobenzene	ND		25	28.4	114	28.9	116	2	72-124/8
95-50-1	1,2-Diehlorobenzene	ND		25	27.7	111	28.4	114	2	55-136/13
541-73-1	1,3-Dichlorobenzene	ND		25	27.6	110	28.2	113	2	65-132/16
106-46-7	1,4-Dichlorobenzene	ND		25	27.2	109	27.8	111	2	61-133/11
100-41-4	Ethylbenzene	ND		25	29.2	117	29.2	117	0	71-131/8
1634-04-4	Methyl Tert Butyl Ether	ND		25	26.2	105	25.6	102	2	63-130/11
108-88-3	Toluene	ND		25	28.4	114	28.4	114	0	69-132/7
1330-20-7	Xylenes (total)	ND		75	86.3	115	87.4	117	1	71-127/8

CAS No.	Surrogate Recoveries	MS	MSD	F32780-1	Limits
460-00-4	4-Bromofluorobenzene	103%	103%	101%	71-130%
98-08-8	aaa-Trifluorotoluene	100%	99%	107%	71-124%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F32780
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP13720-MS	DD24869.D	1	06/30/05	AG	06/29/05	OP13720	GDD733
OP13720-MSD	DD24870.D	1	06/30/05	AG	06/29/05	OP13720	GDD733
F32780-3	DD24868.D	1	06/30/05	AG	06/29/05	OP13720	GDD733

The QC reported here applies to the following samples: **Method:** EPA 504.1

F32780-1, F32780-2, F32780-3, F32780-4, F32780-5, F32780-6, F32780-7, F32780-8, F32780-9, F32780-10, F32780-11, F32780-12, F32780-13, F32780-14, F32780-15

CAS No.	Compound	F32780-3 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
106-93-4	1,2-Dibromoethane	ND		0.25	0.17	68	0.17	68	0	65-135/25

CAS No.	Surrogate Recoveries	MS	MSD	F32780-3	Limits
460-00-4	4-Bromofluorobenzene	83%	80%	94%	60-139%

Volatile Surrogate Recovery Summary

Job Number: F32780
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Method: EPA 601/602 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S2 [b]	S2 [a]
F32780-1	EF052607.D	101.0		107.0
F32780-2	EF052610.D	123.0	107.0	
F32780-3	EF052612.D	104.0		100.0
F32780-4	EF052613.D	99.0		100.0
F32780-5	EF052614.D	101.0		100.0
F32780-6	EF052615.D	97.0		102.0
F32780-7	EF052616.D	95.0		100.0
F32780-8	EF052617.D	104.0		103.0
F32780-9	EF052618.D	95.0		97.0
F32780-10	EF052604.D	104.0		103.0
F32780-11	EF052619.D	116.0		106.0
F32780-12	EF052620.D	114.0		108.0
F32780-13	EF052621.D	103.0		105.0
F32780-14	EF052625.D	117.0		109.0
F32780-15	EF052626.D	110.0		101.0
F32780-16	EF052627.D	104.0		104.0
F32780-1MS	EF052608.D	103.0		100.0
F32780-1MSD	EF052609.D	103.0		99.0
GEF3694-BS	EF052601.D	107.0		108.0
GEF3694-BS	EF052623.D	108.0		108.0
GEF3694-MB	EF052602.D	98.0		103.0
GEF3694-MB	EF052624.D	99.0		104.0

Surrogate Compounds	Recovery Limits
S1 = 4-Bromofluorobenzene	71-130%
S2 = aaa-Trifluorotoluene	71-124%

(a) Recovery from GC signal #2
(b) Recovery from GC signal #1

Volatile Surrogate Recovery Summary

Job Number: F32780
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Method: EPA 504.1 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]
F32780-1	DD24866.D	82.0
F32780-2	DD24867.D	100.0
F32780-3	DD24868.D	94.0
F32780-4	DD24871.D	95.0
F32780-5	DD24872.D	97.0
F32780-6	DD24874.D	98.0
F32780-7	DD24875.D	84.0
F32780-8	DD24876.D	97.0
F32780-9	DD24877.D	100.0
F32780-10	DD24878.D	97.0
F32780-11	DD24879.D	99.0
F32780-12	DD24880.D	104.0
F32780-13	DD24881.D	101.0
F32780-14	DD24882.D	100.0
F32780-15	DD24883.D	91.0
OP13720-BS	DD24864.D	105.0
OP13720-BS2	DD24865.D	102.0
OP13720-MB	DD24863.D	94.0
OP13720-MS	DD24869.D	83.0
OP13720-MSD	DD24870.D	80.0

Surrogate Compounds	Recovery Limits
S1 = 4-Bromofluorobenzene	60-139%

(a) Recovery from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F32780
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GEF3694-CC3669	**Injection Date:**	07/01/05
Lab File ID:	EF052600.D	**Injection Time:**	09:40
Instrument ID:	GCEF	**Method:**	EPA 601/602

	S1 [a] RT	S2 [b] RT	S2 [a] RT
Check Std	10.85	5.71	5.83

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [b] RT	S2 [a] RT
GEF3694-BS	EF052601.D	07/01/05	10:04	10.85		5.83
GEF3694-MB	EF052602.D	07/01/05	10:29	10.88		5.83
ZZZZZZ	EF052603.D	07/01/05	11:11	10.86		5.83
F32780-10	EF052604.D	07/01/05	11:35	10.85		5.83
ZZZZZZ	EF052605.D	07/01/05	12:00	10.85		5.83
ZZZZZZ	EF052606.D	07/01/05	12:24	10.85		5.83
F32780-1	EF052607.D	07/01/05	12:48	10.85		5.83
F32780-1MS	EF052608.D	07/01/05	13:12	10.85		5.83
F32780-1MSD	EF052609.D	07/01/05	13:37	10.85		5.83
F32780-2	EF052610.D	07/01/05	14:01	10.85	5.70	

Surrogate Compounds

S1 = 4-Bromofluorobenzene
S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #2
(b) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: F32780
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GEF3694-CC3669	**Injection Date:**	07/01/05
Lab File ID:	EF052611.D	**Injection Time:**	14:26
Instrument ID:	GCEF	**Method:**	EPA 601/602

	S1 [a] RT	S2 [a] RT
Check Std	10.87	5.83

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
F32780-3	EF052612.D	07/01/05	16:22	10.85	5.83
F32780-4	EF052613.D	07/01/05	16:59	10.85	5.83
F32780-5	EF052614.D	07/01/05	17:23	10.85	5.83
F32780-6	EF052615.D	07/01/05	17:47	10.85	5.83
F32780-7	EF052616.D	07/01/05	18:11	10.85	5.83
F32780-8	EF052617.D	07/01/05	18:35	10.85	5.83
F32780-9	EF052618.D	07/01/05	19:00	10.85	5.83
F32780-11	EF052619.D	07/01/05	19:24	10.85	5.83
F32780-12	EF052620.D	07/01/05	19:48	10.85	5.83
F32780-13	EF052621.D	07/01/05	20:13	10.85	5.83

Surrogate Compounds

S1 = 4-Bromofluorobenzene
S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F32780
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GEF3694-CC3669	**Injection Date:**	07/01/05
Lab File ID:	EF052622.D	**Injection Time:**	20:38
Instrument ID:	GCEF	**Method:**	EPA 601/602

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	10.67	10.85	5.71	5.83

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
GEF3694-BS	EF052623.D	07/01/05	21:02		10.85		5.83
GEF3695-BS	EF052623.D	07/01/05	21:02		10.85		5.83
GEF3694-MB	EF052624.D	07/01/05	21:26		10.85		5.83
GEF3695-MB	EF052624.D	07/01/05	21:26	10.67	10.85	5.71	5.83
F32780-14	EF052625.D	07/01/05	21:50		10.85		5.83
F32780-15	EF052626.D	07/01/05	22:14		10.85		5.83
F32780-16	EF052627.D	07/01/05	22:39		10.85		5.83
ZZZZZZ	EF052628.D	07/01/05	23:03		10.85		5.83
ZZZZZZ	EF052629.D	07/01/05	23:27		10.85		5.83
ZZZZZZ	EF052630.D	07/01/05	23:51		10.85		5.83
ZZZZZZ	EF052631.D	07/02/05	00:15		10.85		5.83
ZZZZZZ	EF052632.D	07/02/05	00:40		10.86		5.83

Surrogate Compounds

S1 = 4-Bromofluorobenzene
S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F32780
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GDD733-CC733	**Injection Date:**	06/30/05
Lab File ID:	DD24862.D	**Injection Time:**	17:11
Instrument ID:	GCDD	**Method:**	EPA 504.1

	S1 [a] RT
Check Std	7.02

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT
OP13720-MB	DD24863.D	06/30/05	17:31	7.02
OP13720-BS	DD24864.D	06/30/05	17:51	7.02
OP13720-BS2	DD24865.D	06/30/05	18:10	7.02
F32780-1	DD24866.D	06/30/05	18:30	7.02
F32780-2	DD24867.D	06/30/05	18:50	7.02
F32780-3	DD24868.D	06/30/05	19:10	7.02
OP13720-MS	DD24869.D	06/30/05	19:30	7.02
OP13720-MSD	DD24870.D	06/30/05	19:49	7.02
F32780-4	DD24871.D	06/30/05	20:09	7.02
F32780-5	DD24872.D	06/30/05	20:29	7.02

Surrogate Compounds

S1 = 4-Bromofluorobenzene

(a) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F32780
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GDD733-CC733	**Injection Date:**	06/30/05
Lab File ID:	DD24873.D	**Injection Time:**	20:49
Instrument ID:	GCDD	**Method:**	EPA 504.1

	S1 [a] RT	S1 [b] RT
Check Std	7.23	7.02

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
F32780-6	DD24874.D	06/30/05	21:09		7.02
F32780-7	DD24875.D	06/30/05	21:28		7.02
F32780-8	DD24876.D	06/30/05	21:48		7.02
F32780-9	DD24877.D	06/30/05	22:08		7.02
F32780-10	DD24878.D	06/30/05	22:28		7.02
F32780-11	DD24879.D	06/30/05	22:48		7.02
F32780-12	DD24880.D	06/30/05	23:07		7.02
F32780-13	DD24881.D	06/30/05	23:27		7.02
F32780-14	DD24882.D	06/30/05	23:47		7.02
F32780-15	DD24883.D	07/01/05	00:07		7.02
GDD733-ECC733	DD24884.D	07/01/05	00:27	7.23	7.02

Surrogate Compounds

S1 = 4-Bromofluorobenzene

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F32780
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GEF3695-CC3669	**Injection Date:**	07/01/05
Lab File ID:	EF052622.D	**Injection Time:**	20:38
Instrument ID:	GCEF	**Method:**	EPA 601/602

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	10.67	10.85	5.71	5.83

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
GEF3694-BS	EF052623.D	07/01/05	21:02		10.85		5.83
GEF3695-BS	EF052623.D	07/01/05	21:02		10.85		5.83
GEF3694-MB	EF052624.D	07/01/05	21:26		10.85		5.83
GEF3695-MB	EF052624.D	07/01/05	21:26	10.67	10.85	5.71	5.83
F32780-14	EF052625.D	07/01/05	21:50		10.85		5.83
F32780-15	EF052626.D	07/01/05	22:14		10.85		5.83
F32780-16	EF052627.D	07/01/05	22:39		10.85		5.83
ZZZZZZ	EF052628.D	07/01/05	23:03		10.85		5.83
ZZZZZZ	EF052629.D	07/01/05	23:27		10.85		5.83
ZZZZZZ	EF052630.D	07/01/05	23:51		10.85		5.83
ZZZZZZ	EF052631.D	07/02/05	00:15		10.85		5.83
ZZZZZZ	EF052632.D	07/02/05	00:40		10.86		5.83

Surrogate Compounds

S1 = 4-Bromofluorobenzene
S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

Initial Calibration Summary

Job Number: F32780
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GDD733-ICC733
Lab FileID: DD24840.D

Response Factor Report ECD 4

Method : C:\HPCHEM\2\METHODS\504_1.M (Chemstation Integrator)
Title : EDB/DBCP by EPA 504/504.1 or SW846 8011
Last Update : Thu Jun 30 11:37:07 2005
Response via : Initial Calibration

Calibration Files
1 =DD24843.D .75 =DD24842.D .50 =DD24841.D .25 =DD24840.D
0.1 =DD24839.D 0.02=DD24838.D icv =DD24845.D

Compound	1	.75	.50	.25	0.1	0.02	icv	Avg	%RSD
1) 1,2-Dibromoethane	1.210	1.071	1.044	1.032	1.056			1.083 E6	6.70
2)S 4-Bromofluorobenz	0.854	0.828	0.885	0.930	1.095	1.157		0.958 E5	14.17
3) 1,2,3-Trichloropr	1.873	1.824	1.922	2.051	2.452	3.738		2.310 E5	31.84
---- Linear regr., Force(0,0) ---- Coefficient = 0.9991									
Response Ratio = 0.00000 + 187419.05737 *A									
4) 1,2-Dibromo-3-chl	3.003	2.871	2.832	2.757	2.997	3.041		2.917 E6	3.88
Signal #2									
1) 1,2-Dibromoethane	3.310	3.102	3.083	3.113	3.442	3.379		3.238 E5	4.88
2)S 4-Bromofluorobenz	2.546	2.440	2.555	2.605	2.916	2.989		2.675 E4	8.32
3) 1,2,3-Trichloropr	5.933	5.697	6.019	5.993	6.448	6.615		6.118 E4	5.63
4) 1,2-Dibromo-3-chl	8.077	7.559	7.552	6.994	7.181	6.592		7.326 E5	7.07

(#) = Out of Range

504_1.M Fri Jul 01 10:29:43 2005

Initial Calibration Verification

Job Number: F32780
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GDD733-ICV733
Lab FileID: DD24845.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\0630EDB\DD24845.D\ECD1A.CH Vial: 9
Signal #2 : C:\HPCHEM\2\DATA\0630EDB\DD24845.D\ECD2B.CH
Acq On : 30 Jun 2005 11:14 am Operator: ansleyg
Sample : icv733-0.25 Inst : ECD 4
Misc : op13655,gdd733,35.0,,,2,1,water MultiplR: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\2\METHODS\504_1.M (Chemstation Integrator)
Title : EDB/DBCP by EPA 504/504.1 or SW846 8011
Last Update : Thu Jun 30 11:37:07 2005
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	1,2-Dibromoethane	0.250	0.253	-1.2	106	0.00	5.87- 6.07
2 S	4-Bromofluorobenzene	2.000	2.051	-2.6	106	0.00	7.13- 7.33
	----------	Amount	Calc.	%Drift	----------		
3	1,2,3-Trichloropropane	0.250	0.250	0.0	91	0.00	7.51- 7.71
	----------	Amount	Calc.	%Drift	----------		
4	1,2-Dibromo-3-chloropr	0.250	0.216	13.6	92	0.00	9.57- 9.77
*****	Signal #2 *****						
1	1,2-Dibromoethane	0.250	0.217	13.2	90	0.00	5.64- 5.84
2 S	4-Bromofluorobenzene	2.000	2.032	-1.6	104	0.00	6.92- 7.12
3	1,2,3-Trichloropropane	0.250	0.215	14.0	88	0.00	7.08- 7.28
4	1,2-Dibromo-3-chloropr	0.250	0.214	14.4	90	0.00	9.27- 9.47

(#) = Out of Range SPCC's out = 0 CCC's out = 0
DD24840.D 504_1.M Fri Jul 01 10:29:07 2005

Continuing Calibration Summary

Job Number: F32780
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GDD733-CC733
Lab FileID: DD24862.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\0630EDB\DD24862.D\ECD1A.CH Vial: 5
Signal #2 : C:\HPCHEM\2\DATA\0630EDB\DD24862.D\ECD2B.CH
Acq On : 30 Jun 2005 5:11 pm Operator: ansleyg
Sample : cc733-0.50 Inst : ECD 4
Misc : op13719,gdd733,35.0,,,2,1,water MultiplIr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\2\METHODS\504_1.M (Chemstation Integrator)
Title : EDB/DBCP by EPA 504/504.1 or SW846 8011
Last Update : Thu Jun 30 11:37:07 2005
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	1,2-Dibromoethane	0.500	0.462	7.6	96	0.00	5.87- 6.07
2 S	4-Bromofluorobenzene	4.000	3.637	9.1	98	0.00	7.13- 7.33
	----------	Amount	Calc.	%Drift	----------		
3	1,2,3-Trichloropropane	0.500	0.514	-2.8	100	0.00	7.51- 7.71
	----------	Amount	Calc.	%Drift	----------		
4	1,2-Dibromo-3-chloropr	0.500	0.482	3.6	99	0.00	9.57- 9.77
*****	Signal #2 *****						
1	1,2-Dibromoethane	0.500	0.470	6.0	99	0.00	5.64- 5.84
2 S	4-Bromofluorobenzene	4.000	3.833	4.2	100	0.00	6.92- 7.12
3	1,2,3-Trichloropropane	0.500	0.489	2.2	99	0.00	7.08- 7.28
4	1,2-Dibromo-3-chloropr	0.500	0.505	-1.0	98	0.00	9.27- 9.47

(#) = Out of Range SPCC's out = 0 CCC's out = 0
DD24841.D 504_1.M Fri Jul 01 10:29:27 2005

Continuing Calibration Summary

Job Number: F32780
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GDD733-CC733
Lab FileID: DD24873.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\0630EDB\DD24873.D\ECD1A.CH Vial: 4
Signal #2 : C:\HPCHEM\2\DATA\0630EDB\DD24873.D\ECD2B.CH
Acq On : 30 Jun 2005 8:49 pm Operator: ansleyg
Sample : cc733-0.25 Inst : ECD 4
Misc : op13719,gdd733,35.0,,,2,1,water MultiplR: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\2\METHODS\504_1.M (Chemstation Integrator)
Title : EDB/DBCP by EPA 504/504.1 or SW846 8011
Last Update : Thu Jun 30 11:37:07 2005
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	1,2-Dibromoethane	0.250	0.233	6.8	98	0.00	5.87- 6.07
2 S	4-Bromofluorobenzene	2.000	1.962	1.9	101	0.00	7.13- 7.33
	----------	Amount	Calc.	%Drift	----------		
3	1,2,3-Trichloropropane	0.250	0.277	-10.8	101	0.00	7.51- 7.71
	----------	Amount	Calc.	%Drift	----------		
4	1,2-Dibromo-3-chloropr	0.250	0.243	2.8	103	0.00	9.57- 9.77
*****	Signal #2 *****						
1	1,2-Dibromoethane	0.250	0.241	3.6	100	0.00	5.64- 5.84
2 S	4-Bromofluorobenzene	2.000	1.998	0.1	103	0.00	6.92- 7.12
3	1,2,3-Trichloropropane	0.250	0.242	3.2	99	0.00	7.08- 7.28
4	1,2-Dibromo-3-chloropr	0.250	0.244	2.4	102	0.00	9.27- 9.47

(#) = Out of Range SPCC's out = 0 CCC's out = 0
DD24840.D 504_1.M Fri Jul 01 10:29:08 2005

Continuing Calibration Summary

Job Number: F32780
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GDD733-ECC733
Lab FileID: DD24884.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\0630EDB\DD24884.D\ECD1A.CH Vial: 4
Signal #2 : C:\HPCHEM\2\DATA\0630EDB\DD24884.D\ECD2B.CH
Acq On : 1 Jul 2005 12:27 am Operator: ansleyg
Sample : ecc733-0.25 Inst : ECD 4
Misc : op13719,gdd733,35.0,,,2,1,water MultiplIr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\2\METHODS\504_1.M (Chemstation Integrator)
Title : EDB/DBCP by EPA 504/504.1 or SW846 8011
Last Update : Thu Jun 30 11:37:07 2005
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	1,2-Dibromoethane	0.250	0.209	16.4	88	0.00	5.87- 6.07
2 S	4-Bromofluorobenzene	2.000	1.934	3.3	100	0.00	7.13- 7.33
	----------	Amount	Calc.	%Drift	----------		
3	1,2,3-Trichloropropane	0.250	0.268	-7.2	98	0.00	7.51- 7.71
	----------	Amount	Calc.	%Drift	----------		
4	1,2-Dibromo-3-chloropr	0.250	0.237	5.2	100	0.00	9.57- 9.77
*****	Signal #2 *****						
1	1,2-Dibromoethane	0.250	0.218	12.8	91	0.00	5.64- 5.84
2 S	4-Bromofluorobenzene	2.000	1.945	2.7	100	0.00	6.92- 7.12
3	1,2,3-Trichloropropane	0.250	0.246	1.6	100	0.00	7.08- 7.28
4	1,2-Dibromo-3-chloropr	0.250	0.237	5.2	99	0.00	9.27- 9.47

(#) = Out of Range SPCC's out = 0 CCC's out = 0
DD24840.D 504_1.M Fri Jul 01 10:29:09 2005

Initial Calibration Summary

Job Number: F32780
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GEF3669-ICC3669
Lab FileID: EF052010.D

Response Factor Report VOA1

Method : C:\HPCHEM\1\METHODS\DUAL0330.M (Chemstation Integrator)
Title : EPA 602 & 5030B/8021B
Last Update : Wed Jun 08 14:07:36 2005
Response via : Initial Calibration

Calibration Files
1 =EF052007.D 5 =EF052008.D 20 =EF052009.D 40 =EF052010.D
70 =EF052011.D 100 =EF052012.D

		Compound	1	5	20	40	70	100	Avg		%RSD
1)		Methyl tert Butyl E	1.303	1.475	1.467	1.480	1.481	1.479	1.448	E3	4.89
2)		Di-Isopropyl ether	2.410	2.711	2.677	2.668	2.656	2.657	2.630	E3	4.17
3)		Benzene	5.138	5.656	5.546	5.574	5.647	5.614	5.529	E3	3.55
4)	S	a,a,a-TFT(S)	1.731	1.756	1.778	1.736	1.839	1.843	1.780	E3	2.79
5)		Toluene	4.681	4.893	4.802	4.905	4.947	4.931	4.860	E3	2.08
6)		Chlorobenzene	4.461	4.585	4.564	4.629	4.681	4.690	4.602	E3	1.85
7)		Ethylbenzene	3.841	4.002	3.965	4.117	4.174	4.132	4.039	E3	3.11
8)		m,p-Xylene	4.420	4.405	4.367	4.500	4.556	4.572	4.470	E3	1.90
9)		o-Xylene	3.701	3.829	3.852	3.962	4.014	4.018	3.896	E3	3.20
10)	S	BFB(S)	3.307	3.412	3.638	3.670	3.957	3.961	3.658	E3	7.40
11)		1,3-Dichlorobenzene	2.907	2.617	2.838	3.091	3.302	3.287	3.007	E3	8.97
		---- Linear regr., Force(0,0) ---- Coefficient = 0.9991									
		Response Ratio = 0.00000 + 3261.26140 *A									
12)		1,4-Dichlorobenzene	3.511	2.896	3.136	3.454	3.685	3.707	3.398	E3	9.44
		---- Linear regr., Force(0,0) ---- Coefficient = 0.9989									
		Response Ratio = 0.00000 + 3661.76321 *A									
13)		1,2-Dichlorobenzene	1.648	1.298	1.477	1.723	1.901	1.886	1.656	E3	14.24
		---- Linear regr., Force(0,0) ---- Coefficient = 0.9979									
		Response Ratio = 0.00000 + 1864.69285 *A									

Signal #2

1)		Methyl tert Butyl E	1.339	1.535	1.559	1.577	1.574	1.569	1.525	E3	6.06
2)		Di-Isopropyl ether	2.293	2.683	2.735	2.733	2.703	2.678	2.638	E3	6.46
3)		Benzene	5.246	5.881	5.883	5.890	5.953	5.901	5.792	E3	4.64
4)	S	a,a,a-TFT(S)	1.732	1.782	1.838	1.787	1.895	1.893	1.821	E3	3.60
5)		Toluene	4.825	5.174	5.136	5.149	5.221	5.174	5.113	E3	2.82
6)		Chlorobenzene	4.666	4.913	4.952	5.011	5.032	5.015	4.931	E3	2.79
7)		Ethylbenzene	4.180	4.455	4.398	4.495	4.579	4.525	4.439	E3	3.18
8)		m,p-Xylene	4.730	4.875	4.737	4.943	4.988	4.920	4.865	E3	2.23
9)		o-Xylene	3.732	3.982	4.069	4.139	4.209	4.153	4.048	E3	4.28
10)	S	BFB(S)	3.747	3.878	4.095	4.164	4.458	4.457	4.133	E3	7.08
11)		1,3-Dichlorobenzene	2.968	2.704	2.964	3.218	3.425	3.400	3.113	E3	9.10
		---- Linear regr., Force(0,0) ---- Coefficient = 0.9992									
		Response Ratio = 0.00000 + 3378.80375 *A									
12)		1,4-Dichlorobenzene	3.441	2.925	3.160	3.477	3.665	3.696	3.394	E3	8.83
		---- Linear regr., Force(0,0) ---- Coefficient = 0.9992									
		Response Ratio = 0.00000 + 3652.69225 *A									
13)		1,2-Dichlorobenzene	1.708	1.375	1.585	1.868	2.048	2.051	1.772	E3	15.15
		---- Linear regr., Force(0,0) ---- Coefficient = 0.9979									
		Response Ratio = 0.00000 + 2021.11827 *A									

Initial Calibration Summary

Job Number: F32780
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GEF3669-ICC3669
Lab FileID: EF052010.D

(#) = Out of Range

DUAL0330.M Thu Jun 09 08:54:50 2005

5.6

Initial Calibration Verification

Job Number: F32780
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GEF3669-ICV3669
Lab FileID: EF052013.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\060805\EF052013.D\FID1A.CH Vial: 9
Signal #2 : C:\HPCHEM\1\DATA\060805\EF052013.D\FID2B.CH
Acq On : 8 Jun 2005 2:07 pm Operator: KelliK
Sample : icv3669-20 Inst : VOA1
Misc : gc5022,gef3669,,,,,1 MultiplR: 1.00
IntFile Signal #1: AUTOINT1.E IntFile Signal #2: autoint2.e

Method : C:\HPCHEM\1\METHODS\DUAL0330.M (Chemstation Integrator)
Title : EPA 602 & 5030B/8021B
Last Update : Wed Jun 08 14:07:36 2005
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	Methyl tert Butyl Ethe	20.000	21.126	-5.6	104	0.00	2.84- 3.04
2	Di-Isopropyl ether	20.000	19.170	4.1	94	0.00	3.30- 3.50
3	Benzene	20.000	19.771	1.1	99	0.00	4.57- 4.77
4 S	a,a,a-TFT(S)	20.000	20.143	-0.7	101	0.00	5.60- 5.80
5	Toluene	20.000	20.170	-0.9	102	0.00	7.00- 7.20
6	Chlorobenzene	20.000	20.878	-4.4	105	0.02	8.81- 9.01
7	Ethylbenzene	20.000	20.548	-2.7	105	0.02	9.15- 9.35
8	m,p-Xylene	40.000	41.048	-2.6	105	0.02	9.46- 9.66
9	o-Xylene	20.000	20.832	-4.2	105	0.02	9.99-10.19
10 S	8FB(S)	20.000	20.851	-4.3	105	0.02	10.50-10.80
	----------	Amount	Calc.	%Drift	----------		
11	1,3-Dichlorobenzene	20.000	21.711	-8.6	125	0.02	12.43-12.63
12	1,4-Dichlorobenzene	20.000	19.799	1.0	116	0.02	12.54-12.74
13	1,2-Dichlorobenzene	20.000	21.633	-8.2	137	0.02	13.05-13.25

***** Signal #2 *****

	----------	Amount	Calc.	%Drift	----------		
1	Methyl tert Butyl Ethe	20.000	20.428	-2.1	100	0.00	2.79- 2.99
2	Di-Isopropyl ether	20.000	19.020	4.9	92	0.00	3.21- 3.41
3	Benzene	20.000	19.689	1.6	97	0.00	4.59- 4.79
4 S	a,a,a-TFT(S)	20.000	19.701	1.5	98	0.00	5.71- 5.91
5	Toluene	20.000	20.071	-0.4	100	0.00	6.96- 7.16
6	Chlorobenzene	20.000	21.020	-5.1	105	0.02	8.93- 9.13
7	Ethylbenzene	20.000	20.578	-2.9	104	0.02	9.12- 9.32
8	m,p-Xylene	40.000	41.007	-2.5	105	0.02	9.31- 9.51
9	o-Xylene	20.000	21.168	-5.8	105	0.02	9.90-10.11
10 S	8FB(S)	20.000	20.721	-3.6	105	0.02	10.69-10.99
	----------	Amount	Calc.	%Drift	----------		
11	1,3-Dichlorobenzene	20.000	21.481	-7.4	122	0.02	12.50-12.70
12	1,4-Dichlorobenzene	20.000	20.054	-0.3	116	0.02	12.66-12.86
13	1,2-Dichlorobenzene	20.000	21.477	-7.4	137	0.01	13.26-13.46

(#) = Out of Range SPCC's out = 0 CCC's out = 0
EF052009.D DUAL0330.M Thu Jun 09 08:54:11 2005

5.6

Continuing Calibration Summary

Job Number: F32780
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GEF3694-CC3669
Lab FileID: EF052600.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\070105\EF052600.D\FID1A.CH Vial: 1
Signal #2 : C:\HPCHEM\1\DATA\070105\EF052600.D\FID2B.CH
Acq On : 1 Jul 2005 9:40 am Operator: Trangd
Sample : CC3669-40 Inst : VOA1
Misc : gc5100,gef3694,,,,, MultiplIr: 1.00
IntFile Signal #1: AUTOINT1.E IntFile Signal #2: autoint2.e

Method : C:\HPCHEM\1\METHODS\DUAL0608.M (Chemstation Integrator)
Title : EPA 602 & 5030B/8021B
Last Update : Thu Jun 23 09:42:28 2005
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	Methyl tert Butyl Ethe	40.000	38.834	2.9	95	0.00	2.85- 3.05
2	Di-Isopropyl ether	40.000	37.966	5.1	94	0.00	3.31- 3.51
3	Benzene	40.000	39.107	2.2	97	0.00	4.59- 4.79
4 S	a,a,a-TFT(S)	20.000	18.747	6.3	96	0.00	5.61- 5.81
5	Toluene	40.000	39.437	1.4	98	0.00	7.02- 7.22
6	Chlorobenzene	40.000	40.060	-0.2	100	0.00	8.83- 9.03
7	Ethylbenzene	40.000	40.271	-0.7	99	0.00	9.17- 9.37
8	m,p-Xylene	80.000	80.235	-0.3	100	0.00	9.48- 9.68
9	o-Xylene	40.000	40.498	-1.2	100	0.00	10.01-10.21
10 S	BFB(S)	20.000	19.262	3.7	96	0.00	10.52-10.82
	----------	Amount	Calc.	%Drift	----------		
11	1,3-Dichlorobenzene	40.000	38.811	3.0	102	0.00	12.45-12.65
12	1,4-Dichlorobenzene	40.000	38.617	3.5	102	0.00	12.56-12.76
13	1,2-Dichlorobenzene	40.000	39.445	1.4	107	0.00	13.07-13.27

***** Signal #2 *****

	----------	Amount	Calc.	%Drift	----------		
1	Methyl tert Butyl Ethe	40.000	42.532	-6.3	103	0.00	2.80- 3.00
2	Di-Isopropyl ether	40.000	42.158	-5.4	102	0.00	3.22- 3.42
3	Benzene	40.000	42.692	-6.7	105	0.00	4.60- 4.80
4 S	a,a,a-TFT(S)	20.000	20.481	-2.4	104	0.00	5.73- 5.93
5	Toluene	40.000	42.826	-7.1	106	0.00	6.97- 7.17
6	Chlorobenzene	40.000	43.660	-9.1	107	0.00	8.94- 9.14
7	Ethylbenzene	40.000	43.839	-9.6	108	0.00	9.14- 9.34
8	m,p-Xylene	80.000	87.316	-9.1	107	0.00	9.33- 9.53
9	o-Xylene	40.000	44.323	-10.8	108	0.00	9.92-10.12
10 S	BFB(S)	20.000	20.899	-4.5	104	0.00	10.70-11.00
	----------	Amount	Calc.	%Drift	----------		
11	1,3-Dichlorobenzene	40.000	43.021	-7.6	113	0.00	12.52-12.72
12	1,4-Dichlorobenzene	40.000	42.071	-5.2	110	0.00	12.68-12.88
13	1,2-Dichlorobenzene	40.000	42.605	-6.5	115	0.00	13.27-13.47

(#) = Out of Range SPCC's out = 0 CCC's out = 0
EF052010.D DUAL0608.M Fri Jul 08 13:24:31 2005

5.6

Continuing Calibration Summary

Job Number: F32780
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GEF3694-CC3669
Lab FileID: EF052611.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\070105\EF052611.D\FID1A.CH Vial: 11
Signal #2 : C:\HPCHEM\1\DATA\070105\EF052611.D\FID2B.CH
Acq On : 1 Jul 2005 2:26 pm Operator: Trangd
Sample : CC3669-20 Inst : VOA1
Misc : gc5100,gef3694,,,,, MultiplIr: 1.00
IntFile Signal #1: AUTOINT1.E IntFile Signal #2: autoint2.e

Method : C:\HPCHEM\1\METHODS\DUAL0608.M (Chemstation Integrator)
Title : EPA 602 & 5030B/8021B
Last Update : Thu Jun 23 09:42:28 2005
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	Methyl tert Butyl Ethe	20.000	21.372	-6.9	105	0.00	2.85- 3.05
2	Di-Isopropyl ether	20.000	20.499	-2.5	101	0.00	3.31- 3.51
3	Benzene	20.000	20.136	-0.7	100	0.00	4.59- 4.79
4 S	a,a,a-TFT(S)	20.000	20.036	-0.2	100	0.00	5.61- 5.81
5	Toluene	20.000	19.523	2.4	99	0.00	7.02- 7.22
6	Chlorobenzene	20.000	19.614	1.9	99	0.02	8.83- 9.03
7	Ethylbenzene	20.000	18.952	5.2	97	0.02	9.17- 9.37
8	m,p-Xylene	40.000	37.760	5.6	97	0.02	9.48- 9.68
9	o-Xylene	20.000	19.714	1.4	100	0.02	10.01-10.21
10 S	BFB(S)	20.000	21.153	-5.8	106	0.02	10.52-10.82
		Amount	Calc.	%Drift			
11	1,3-Dichlorobenzene	20.000	19.060	4.7	110	0.01	12.45-12.65
12	1,4-Dichlorobenzene	20.000	18.863	5.7	110	0.01	12.56-12.76
13	1,2-Dichlorobenzene	20.000	20.258	-1.3	128	0.01	13.07-13.27

***** Signal #2 *****

		Amount	Calc.	%Drift			
1	Methyl tert Butyl Ethe	20.000	22.883	-14.4	112	0.00	2.80- 3.00
2	Di-Isopropyl ether	20.000	22.283	-11.4	107	0.00	3.22- 3.42
3	Benzene	20.000	21.951	-9.8	108	0.00	4.60- 4.80
4 S	a,a,a-TFT(S)	20.000	21.615	-8.1	107	0.00	5.73- 5.93
5	Toluene	20.000	21.221	-6.1	106	0.00	6.97- 7.17
6	Chlorobenzene	20.000	21.397	-7.0	107	0.02	8.94- 9.14
7	Ethylbenzene	20.000	20.631	-3.2	104	0.02	9.14- 9.34
8	m,p-Xylene	40.000	40.698	-1.7	104	0.02	9.33- 9.53
9	o-Xylene	20.000	21.570	-7.9	107	0.02	9.92-10.12
10 S	BFB(S)	20.000	22.718	-13.6	115	0.02	10.70-11.00
		Amount	Calc.	%Drift			
11	1,3-Dichlorobenzene	20.000	20.630	-3.1	118	0.01	12.52-12.72
12	1,4-Dichlorobenzene	20.000	20.358	-1.8	118	0.01	12.68-12.88
13	1,2-Dichlorobenzene	20.000	21.675	-8.4	138	0.01	13.27-13.47

(#) = Out of Range SPCC's out = 0 CCC's out = 0
EF052009.D DUAL0608.M Thu Jul 07 10:26:48 2005

5.6 G

Continuing Calibration Summary

Job Number: F32780
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GEF3694-CC3669
Lab FileID: EF052622.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\070105\EF052622.D\FID1A.CH Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\070105\EF052622.D\FID2B.CH
Acq On : 1 Jul 2005 8:38 pm Operator: Trangd
Sample : CC3669-20 Inst : V0A1
Misc : gc5100,gef3694,,,,, MultiplR: 1.00
IntFile Signal #1: AUTOINT1.E IntFile Signal #2: autoint2.e

Method : C:\HPCHEM\1\METHODS\DUAL0608.M (Chemstation Integrator)
Title : EPA 602 & 5030B/8021B
Last Update : Thu Jun 23 09:42:28 2005
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	Methyl tert Butyl Ethe	20.000	18.949	5.3	93	0.00	2.85- 3.05
2	Di-Isopropyl ether	20.000	18.978	5.1	93	0.00	3.31- 3.51
3	Benzene	20.000	19.392	3.0	97	0.00	4.59- 4.79
4 S	a,a,a-TFT(S)	20.000	19.890	0.5	100	0.00	5.61- 5.81
5	Toluene	20.000	19.921	0.4	101	0.00	7.02- 7.22
6	Chlorobenzene	20.000	20.257	-1.3	102	0.00	8.83- 9.03
7	Ethylbenzene	20.000	20.365	-1.8	104	0.00	9.17- 9.37
8	m,p-Xylene	40.000	40.556	-1.4	104	0.00	9.48- 9.68
9	o-Xylene	20.000	20.490	-2.4	104	0.00	10.01-10.21
10 S	8FB(S)	20.000	20.149	-0.7	101	0.00	10.52-10.82
	----------	Amount	Calc.	%Drift	----------		
11	1,3-Dichlorobenzene	20.000	19.493	2.5	112	0.00	12.45-12.65
12	1,4-Dichlorobenzene	20.000	18.881	5.6	110	0.00	12.56-12.76
13	1,2-Dichlorobenzene	20.000	19.590	2.1	124	0.00	13.07-13.27

***** Signal #2 *****

	----------	Amount	Calc.	%Drift	----------		
1	Methyl tert Butyl Ethe	20.000	20.487	-2.4	100	0.00	2.80- 3.00
2	Di-Isopropyl ether	20.000	20.787	-3.9	100	0.00	3.22- 3.42
3	Benzene	20.000	21.098	-5.5	104	0.00	4.60- 4.80
4 S	a,a,a-TFT(S)	20.000	21.500	-7.5	107	0.00	5.73- 5.93
5	Toluene	20.000	21.553	-7.8	107	0.00	6.97- 7.17
6	Chlorobenzene	20.000	21.946	-9.7	109	0.00	8.94- 9.14
7	Ethylbenzene	20.000	21.912	-9.6	111	0.00	9.14- 9.34
8	m,p-Xylene	40.000	43.279	-8.2	111	0.00	9.33- 9.53
9	o-Xylene	20.000	22.437	-12.2	112	0.00	9.92-10.12
10 S	BFB(S)	20.000	21.666	-8.3	109	0.00	10.70-11.00
	----------	Amount	Calc.	%Drift	----------		
11	1,3-Dichlorobenzene	20.000	20.911	-4.6	119	0.00	12.52-12.72
12	1,4-Dichlorobenzene	20.000	20.523	-2.6	119	0.00	12.68-12.88
13	1,2-Dichlorobenzene	20.000	21.001	-5.0	134	0.00	13.27-13.47

(#) = Out of Range SPCC's out = 0 CCC's out = 0
EF052009.D DUAL0608.M Thu Jul 07 10:43:07 2005

Continuing Calibration Summary

Job Number: F32780
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GEF3695-CC3669
Lab FileID: EF052622.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\070105\EF052622.D\FID1A.CH Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\070105\EF052622.D\FID2B.CH
Acq On : 1 Jul 2005 8:38 pm Operator: Trangd
Sample : CC3669-20 Inst : VOA1
Misc : gc5100,gef3694,,,,, Multiplr: 1.00
IntFile Signal #1: AUTOINT1.E IntFile Signal #2: autoint2.e

Method : C:\HPCHEM\1\METHODS\DUAL0608.M (Chemstation Integrator)
Title : EPA 602 & 5030B/8021B
Last Update : Thu Jun 23 09:42:28 2005
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	Methyl tert Butyl Ethe	20.000	18.949	5.3	93	0.00	2.85- 3.05
2	Di-Isopropyl ether	20.000	18.978	5.1	93	0.00	3.31- 3.51
3	Benzene	20.000	19.392	3.0	97	0.00	4.59- 4.79
4 S	a,a,a-TFT(S)	20.000	19.890	0.5	100	0.00	5.61- 5.81
5	Toluene	20.000	19.921	0.4	101	0.00	7.02- 7.22
6	Chlorobenzene	20.000	20.257	-1.3	102	0.00	8.83- 9.03
7	Ethylbenzene	20.000	20.365	-1.8	104	0.00	9.17- 9.37
8	m,p-Xylene	40.000	40.556	-1.4	104	0.00	9.48- 9.68
9	o-Xylene	20.000	20.490	-2.4	104	0.00	10.01-10.21
10 S	BFB(S)	20.000	20.149	-0.7	101	0.00	10.52-10.82
	----------	Amount	Calc.	%Drift	----------		
11	1,3-Dichlorobenzene	20.000	19.493	2.5	112	0.00	12.45-12.65
12	1,4-Dichlorobenzene	20.000	18.881	5.6	110	0.00	12.56-12.76
13	1,2-Dichlorobenzene	20.000	19.590	2.1	124	0.00	13.07-13.27

***** Signal #2 *****

	Compound	Amount	Calc.	%Drift			
	----------	Amount	Calc.	%Drift	----------		
1	Methyl tert Butyl Ethe	20.000	20.487	-2.4	100	0.00	2.80- 3.00
2	Di-Isopropyl ether	20.000	20.787	-3.9	100	0.00	3.22- 3.42
3	Benzene	20.000	21.098	-5.5	104	0.00	4.60- 4.80
4 S	a,a,a-TFT(S)	20.000	21.500	-7.5	107	0.00	5.73- 5.93
5	Toluene	20.000	21.553	-7.8	107	0.00	6.97- 7.17
6	Chlorobenzene	20.000	21.946	-9.7	109	0.00	8.94- 9.14
7	Ethylbenzene	20.000	21.912	-9.6	111	0.00	9.14- 9.34
8	m,p-Xylene	40.000	43.279	-8.2	111	0.00	9.33- 9.53
9	o-Xylene	20.000	22.437	-12.2	112	0.00	9.92-10.12
10 S	BFB(S)	20.000	21.666	-8.3	109	0.00	10.70-11.00
	----------	Amount	Calc.	%Drift	----------		
11	1,3-Dichlorobenzene	20.000	20.911	-4.6	119	0.00	12.52-12.72
12	1,4-Dichlorobenzene	20.000	20.523	-2.6	119	0.00	12.68-12.88
13	1,2-Dichlorobenzene	20.000	21.001	-5.0	134	0.00	13.27-13.47

(#) = Out of Range SPCC's out = 0 CCC's out = 0
EF052009.D DUAL0608.M Thu Jul 07 10:43:07 2005

Continuing Calibration Summary

Job Number: F32780
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GEF3695-CC3669
Lab FileID: EF052633.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\070105\EF052633.D\FID1A.CH Vial: 33
Signal #2 : C:\HPCHEM\1\DATA\070105\EF052633.D\FID2B.CH
Acq On : 2 Jul 2005 1:04 am Operator: Trangd
Sample : CC3669-20 Inst : VOA1
Misc : gc5117,gef3695,,,,, Multiplr: 1.00
IntFile Signal #1: AUTOINT1.E IntFile Signal #2: autoint2.e

Method : C:\HPCHEM\1\METHODS\DUAL0608.M (Chemstation Integrator)
Title : EPA 602 & 5030B/8021B
Last Update : Thu Jun 23 09:42:28 2005
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	Methyl tert Butyl Ethe	20.000	19.842	0.8	98	0.00	2.85- 3.05
2	Di-Isopropyl ether	20.000	19.386	3.1	95	0.00	3.31- 3.51
3	Benzene	20.000	19.685	1.6	98	0.00	4.59- 4.79
4 S	a,a,a-TFT(S)	20.000	18.751	6.2	94	0.00	5.61- 5.81
5	Toluene	20.000	19.948	0.3	101	0.00	7.02- 7.22
6	Chlorobenzene	20.000	19.889	0.6	100	0.00	8.83- 9.03
7	Ethylbenzene	20.000	19.865	0.7	101	0.00	9.17- 9.37
8	m,p-Xylene	40.000	39.975	0.1	102	0.00	9.48- 9.68
9	o-Xylene	20.000	20.434	-2.2	103	0.00	10.01-10.21
10 S	BFB(S)	20.000	19.190	4.0	96	0.00	10.52-10.82
	----------	Amount	Calc.	%Drift	----------		
11	1,3-Dichlorobenzene	20.000	18.992	5.0	109	0.00	12.45-12.65
12	1,4-Dichlorobenzene	20.000	18.567	7.2	108	0.00	12.56-12.76
13	1,2-Dichlorobenzene	20.000	19.579	2.1	124	0.00	13.07-13.27

***** Signal #2 *****

	----------	Amount	Calc.	%Drift	----------		
1	Methyl tert Butyl Ethe	20.000	21.506	-7.5	105	0.00	2.80- 3.00
2	Di-Isopropyl ether	20.000	21.214	-6.1	102	0.00	3.22- 3.42
3	Benzene	20.000	21.438	-7.2	106	0.00	4.60- 4.80
4 S	a,a,a-TFT(S)	20.000	20.403	-2.0	101	0.00	5.73- 5.93
5	Toluene	20.000	21.625	-8.1	108	0.00	6.97- 7.17
6	Chlorobenzene	20.000	21.790	-8.9	109	0.00	8.94- 9.14
7	Ethylbenzene	20.000	21.567	-7.8	109	0.00	9.14- 9.34
8	m,p-Xylene	40.000	42.887	-7.2	110	0.00	9.33- 9.53
9	o-Xylene	20.000	22.118	-10.6	110	0.00	9.92-10.12
10 S	BFB(S)	20.000	21.030	-5.2	106	0.00	10.70-11.00
	----------	Amount	Calc.	%Drift	----------		
11	1,3-Dichlorobenzene	20.000	20.676	-3.4	118	0.00	12.52-12.72
12	1,4-Dichlorobenzene	20.000	20.395	-2.0	118	0.00	12.68-12.88
13	1,2-Dichlorobenzene	20.000	20.723	-3.6	132	0.00	13.27-13.47

(#) = Out of Range SPCC's out = 0 CCC's out = 0
EF052009.D DUAL0608.M Thu Jul 07 10:43:07 2005

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: F32780
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP13700-MB	LL04439.D	1	06/29/05	AA	06/28/05	OP13700	GLL177

The QC reported here applies to the following samples: **Method:** EPA 610

F32780-5, F32780-12, F32780-14, F32780-15

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.0	2.0	ug/l	
208-96-8	Acenaphthylene	ND	5.0	2.0	ug/l	
120-12-7	Anthracene	ND	5.0	2.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.0	2.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.0	2.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.0	2.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.0	2.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.0	2.0	ug/l	
218-01-9	Chrysene	ND	5.0	2.0	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.0	2.0	ug/l	
206-44-0	Fluoranthene	ND	5.0	2.0	ug/l	
86-73-7	Fluorene	ND	5.0	2.0	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.0	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.0	ug/l	
90-12-0	1-Methylnaphthalene	ND	5.0	2.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.0	2.0	ug/l	
85-01-8	Phenanthrene	ND	5.0	2.0	ug/l	
129-00-0	Pyrene	ND	5.0	2.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
321-60-8	2-Fluorobiphenyl	80%	42-123%
84-15-1	o-Terphenyl	88%	51-123%

Blank Spike Summary

Job Number: F32780
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP13700-BS	LL04438.D	1	06/29/05	AA	06/28/05	OP13700	GLL177

The QC reported here applies to the following samples: **Method:** EPA 610

F32780-5, F32780-12, F32780-14, F32780-15

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
83-32-9	Acenaphthene	25	20.9	84	71-113
208-96-8	Acenaphthylene	25	21.4	86	63-102
120-12-7	Anthracene	25	21.8	87	71-110
56-55-3	Benzo(a)anthracene	25	21.9	88	70-114
50-32-8	Benzo(a)pyrene	25	21.6	86	67-114
205-99-2	Benzo(b)fluoranthene	25	21.7	87	69-115
191-24-2	Benzo(g,h,i)perylene	25	21.6	86	61-117
207-08-9	Benzo(k)fluoranthene	25	21.8	87	69-111
218-01-9	Chrysene	25	21.8	87	70-114
53-70-3	Dibenzo(a,h)anthracene	25	22.0	88	64-114
206-44-0	Fluoranthene	25	21.9	88	71-114
86-73-7	Fluorene	25	22.3	89	69-111
193-39-5	Indeno(1,2,3-cd)pyrene	25	22.3	89	63-112
91-20-3	Naphthalene	25	20.7	83	66-105
90-12-0	1-Methylnaphthalene	25	21.5	86	71-112
91-57-6	2-Methylnaphthalene	25	21.8	87	65-106
85-01-8	Phenanthrene	25	22.1	88	69-112
129-00-0	Pyrene	25	21.8	87	70-114

CAS No.	Surrogate Recoveries	BSP	Limits
321-60-8	2-Fluorobiphenyl	88%	42-123%
84-15-1	o-Terphenyl	92%	51-123%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F32780
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP13700-MS [a]	LL04442.D	1	06/29/05	AA	06/28/05	OP13700	GLL177
OP13700-MSD	LL04443.D	1	06/29/05	AA	06/28/05	OP13700	GLL177
F32780-12 [b]	LL04441.D	1	06/29/05	AA	06/28/05	OP13700	GLL177

The QC reported here applies to the following samples: **Method:** EPA 610

F32780-5, F32780-12, F32780-14, F32780-15

CAS No.	Compound	F32780-12 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	ND		50	19.1	38*	32.0	64	50*	59-123/20
208-96-8	Acenaphthylene	ND		50	19.9	40*	32.9	66	49*	51-114/20
120-12-7	Anthracene	ND		50	23.6	47*	42.8	86	58*	64-114/17
56-55-3	Benzo(a)anthracene	ND		50	24.3	49*	46.8	94	63*	66-115/17
50-32-8	Benzo(a)pyrene	ND		50	24.5	49*	48.8	98	66*	62-118/17
205-99-2	Benzo(b)fluoranthene	ND		50	24.5	49*	48.5	97	66*	66-117/17
191-24-2	Benzo(g,h,i)perylene	ND		50	25.6	51*	50.3	101	65*	59-120/17
207-08-9	Benzo(k)fluoranthene	ND		50	24.5	49*	48.0	96	65*	64-116/16
218-01-9	Chrysene	ND		50	24.1	48*	46.2	92	63*	66-117/16
53-70-3	Dibenzo(a,h)anthracene	ND		50	25.9	52*	51.6	103	66*	57-124/18
206-44-0	Fluoranthene	ND		50	24.6	49*	45.6	91	60*	67-116/17
86-73-7	Fluorene	ND		50	22.5	45*	36.7	73	48*	58-122/19
193-39-5	Indeno(1,2,3-cd)pyrene	ND		50	26.8	54*	52.4	105	65*	59-116/18
91-20-3	Naphthalene	8.3		50	26.5	36*	46.1	76	54*	47-114/20
90-12-0	1-Methylnaphthalene	3.8	J	50	25.9	44*	41.2	75	46*	55-128/21
91-57-6	2-Methylnaphthalene	ND		50	19.3	39*	31.3	63	47*	51-117/21
85-01-8	Phenanthrene	ND		50	23.9	48*	43.3	87	58*	63-116/18
129-00-0	Pyrene	ND		50	24.9	50*	46.4	93	60*	67-116/17

CAS No.	Surrogate Recoveries	MS	MSD	F32780-12	Limits
321-60-8	2-Fluorobiphenyl	45%	68%	48%	42-123%
84-15-1	o-Terphenyl	47%*	91%	61%	51-123%

(a) High RPD's due to suspected leaky sep funnel.
(b) All hits confirmed by dual column analysis.

Semivolatile Surrogate Recovery Summary

Job Number: F32780
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Method: EPA 610	**Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S2 [a]
F32780-5	LL04440.D	54.0	76.0
F32780-12	LL04441.D	48.0	61.0
F32780-14	LL04451.D	0.0* [b]	0.0* [b]
F32780-15	LL04452.D	45.0	61.0
OP13700-BS	LL04438.D	88.0	92.0
OP13700-MB	LL04439.D	80.0	88.0
OP13700-MS	LL04442.D	45.0	47.0*
OP13700-MSD	LL04443.D	68.0	91.0

Surrogate Compounds	Recovery Limits
S1 = 2-Fluorobiphenyl	42-123%
S2 = o-Terphenyl	51-123%

(a) Recovery from GC signal #1
(b) Outside control limits due to dilution.

GC Surrogate Retention Time Summary

Job Number: F32780
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GLL177-CC174	**Injection Date:**	06/29/05
Lab File ID:	LL04437.D	**Injection Time:**	10:56
Instrument ID:	GCLL	**Method:**	EPA 610

	S1 [a] RT	S2 [a] RT
Check Std	6.30	11.78

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
OP13700-BS	LL04438.D	06/29/05	11:26	6.30	11.78
OP13700-MB	LL04439.D	06/29/05	11:56	6.30	11.78
F32780-5	LL04440.D	06/29/05	12:27	6.30	11.78
F32780-12	LL04441.D	06/29/05	12:57	6.30	11.78
OP13700-MS	LL04442.D	06/29/05	13:27	6.30	11.78
OP13700-MSD	LL04443.D	06/29/05	13:57	6.30	11.78

Surrogate Compounds

S1 = 2-Fluorobiphenyl
S2 = o-Terphenyl

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: F32780
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Check Std:	GLL177-CC174	**Injection Date:**	06/29/05
Lab File ID:	LL04446.D	**Injection Time:**	15:28
Instrument ID:	GCLL	**Method:**	EPA 610

	S1 [a] RT	S2 [a] RT
Check Std	6.31	11.78

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
OP13685-BS	LL04447.D	06/29/05	15:58	6.30	11.78
OP13685-MB	LL04448.D	06/29/05	16:29	6.30	11.78
ZZZZZZ	LL04449.D	06/29/05	16:59	6.30	11.78
ZZZZZZ	LL04450.D	06/29/05	17:29	6.30	11.78
F32780-14	LL04451.D	06/29/05	17:59	0.00	0.00
F32780-15	LL04452.D	06/29/05	18:29	6.30	11.78

Surrogate Compounds

S1 = 2-Fluorobiphenyl
S2 = o-Terphenyl

(a) Retention time from GC signal #1

Initial Calibration Summary

Job Number: F32780
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GLL174-ICC174
Lab FileID: LL04365.D

Response Factor Report FLGSLL

Method : C:\MSDCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title : PAH's BY EPA 610 OR 8100
Last Update : Mon Jun 20 13:18:53 2005
Response via : Initial Calibration

Calibration Files
5 =LL04363.D 10 =LL04364.D 20 =LL04365.D 30 =LL04366.D
40 =LL04367.D 50 =LL04368.D

		Compound	5	10	20	30	40	50	Avg		%RSD
1)		Naphthalene	2.630	2.655	2.689	3.017	3.085	2.941	2.836	E4	7.10
2)		2-Methyl Naphthalen	2.403	2.397	2.413	2.763	2.850	2.720	2.591	E4	8.06
3)		1-Methyl Naphthalen	2.475	2.484	2.512	2.833	2.896	2.763	2.660	E4	7.20
4)	S	2-Fluorobiphenyl	2.176	2.186	2.203	2.526	2.595	2.473	2.360	E4	8.14
5)		Acenaphthylene	2.399	2.387	2.326	2.646	2.792	2.660	2.535	E4	7.45
6)		Acenaphthene	2.577	2.559	2.589	2.947	3.032	2.879	2.764	E4	7.71
7)		Fluorene	2.376	2.335	2.299	2.671	2.783	2.645	2.518	E4	8.16
8)		Phenanthrene	2.365	2.370	2.305	2.631	2.739	2.577	2.498	E4	7.01
9)		Anthracene	2.305	2.298	2.245	2.552	2.670	2.513	2.431	E4	7.04
10)	S	O-Terphenyl	2.482	2.450	2.384	2.693	2.767	2.606	2.564	E4	5.83
11)		Fluoranthene	2.410	2.416	2.366	2.679	2.756	2.570	2.533	E4	6.34
12)		Pyrene	2.436	2.448	2.375	2.700	2.775	2.584	2.553	E4	6.28
13)		Benzo(a)Anthracene	2.254	2.230	2.217	2.517	2.629	2.429	2.379	E4	7.24
14)		Chrysene	2.319	2.296	2.282	2.584	2.693	2.488	2.444	E4	7.02
15)		Benzo(b)Fluoranthen	2.329	2.322	2.300	2.600	2.723	2.519	2.466	E4	7.12
16)		Benzo(k)Fluoranthen	2.331	2.305	2.275	2.558	2.666	2.486	2.437	E4	6.47
17)		Benzo(a) Pyrene	2.210	2.198	2.190	2.473	2.597	2.422	2.348	E4	7.37
18)		Indeno(1,2,3-cd)pyr	2.185	2.271	2.234	2.485	2.600	2.406	2.364	E4	6.81
19)		Dibenzo(a,h)anthrac	2.194	2.232	2.191	2.416	2.519	2.321	2.312	E4	5.76
20)		Benzo(g,h,i) Peryle	2.321	2.354	2.312	2.538	2.643	2.433	2.434	E4	5.47

Signal #2

1)		Naphthalene	2.854	2.863	2.891	2.934	2.950	3.099	2.932	E4	3.08
2)		2-Methyl Naphthalen	2.634	2.652	2.707	2.757	2.784	2.932	2.744	E4	3.96
3)		1-Methyl Naphthalen	2.643	2.661	2.703	2.748	2.769	2.908	2.739	E4	3.51
4)	S	2-Fluorobiphenyl	2.394	2.377	2.444	2.486	2.509	2.643	2.476	E4	3.90
5)		Acenaphthylene	2.480	2.534	2.498	2.603	2.660	2.825	2.600	E4	4.96
6)		Acenaphthene	2.628	2.690	2.743	2.834	2.879	3.045	2.803	E4	5.35
7)		Fluorene	2.515	2.597	2.647	2.701	2.750	2.911	2.687	E4	5.09
8)		Phenanthrene	2.444	2.535	2.601	2.677	2.733	2.900	2.648	E4	6.04
9)		Anthracene	2.452	2.537	2.561	2.637	2.696	2.867	2.625	E4	5.54
10)	S	O-Terphenyl	2.458	2.497	2.519	2.602	2.667	2.829	2.596	E4	5.29
11)		Fluoranthene	2.425	2.527	2.525	2.612	2.705	2.857	2.608	E4	5.89
12)		Pyrene	2.432	2.539	2.516	2.601	2.697	2.845	2.605	E4	5.65
13)		Benzo(a)Anthracene	2.207	2.299	2.301	2.383	2.555	2.664	2.402	E4	7.25
14)		Chrysene	2.389	2.442	2.425	2.482	2.642	2.744	2.521	E4	5.59
15)		Benzo(b)Fluoranthen	2.225	2.317	2.375	2.436	2.609	2.756	2.453	E4	8.00
16)		Benzo(k)Fluoranthen	2.397	2.441	2.406	2.485	2.613	2.738	2.513	E4	5.39
17)		Benzo(a) Pyrene	2.265	2.300	2.321	2.400	2.536	2.693	2.419	E4	6.84
18)		Indeno(1,2,3-cd)pyr	2.178	2.197	2.268	2.394	2.475	2.692	2.367	E4	8.28
19)		Dibenzo(a,h)anthrac	2.230	2.232	2.254	2.366	2.445	2.664	2.365	E4	7.18
20)		Benzo(g,h,i) Peryle	2.296	2.294	2.374	2.495	2.566	2.812	2.473	E4	8.04

(#) = Out of Range

8100_H2.M Tue Jun 21 12:27:34 2005

Initial Calibration Verification

Job Number: F32780
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GLL174-ICV174
Lab FileID: LL04369.D

Evaluate Continuing Calibration Report

Signal #1 : C:\MSDCHEM\1\DATA\0620PAH\LL04369.D\FID1B.CH Vial: 7
Signal #2 : C:\MSDCHEM\1\DATA\0620PAH\LL04369.D\FID2A.CH
Acq On : 20 Jun 2005 12:53 pm Operator: aubreya
Sample : icv174-20 Inst : FLGSLL
Misc : OP13608,GLL174,1000,,,1,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : C:\MSDCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title : PAH's BY EPA 610 OR 8100
Last Update : Mon Jun 20 13:18:53 2005
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1		Naphthalene	20.000	19.303	3.5	102	0.00	4.50- 4.70
2		2-Methyl Naphthalene	20.000	20.256	-1.3	109	0.00	5.40- 5.60
3		1-Methyl Naphthalene	20.000	20.260	-1.3	107	0.00	5.67- 5.87
4	S	2-Fluorobiphenyl			----------NA----------			
5		Acenaphthylene	20.000	19.798	1.0	108	0.00	7.34- 7.54
6		Acenaphthene	20.000	19.568	2.2	104	0.00	7.61- 7.81
7		Fluorene	20.000	19.843	0.8	109	0.00	8.53- 8.73
8		Phenanthrene	20.000	19.206	4.0	104	0.00	10.70-10.90
9		Anthracene	20.000	19.381	3.1	105	0.00	10.74-10.94
10	S	O-Terphenyl			----------NA----------			
11		Fluoranthene	20.000	18.898	5.5	101	0.00	13.24-13.44
12		Pyrene	20.000	19.013	4.9	102	0.00	13.82-14.02
13		Benzo(a)Anthracene	20.000	18.719	6.4	100	0.00	16.36-16.56
14		Chrysene	20.000	18.639	6.8	100	0.00	16.54-16.74
15		Benzo(b)Fluoranthene	20.000	19.020	4.9	102	0.00	18.57-18.77
16		Benzo(k)Fluoranthene	20.000	19.030	4.8	102	0.00	18.62-18.82
17		Benzo(a) Pyrene	20.000	19.010	4.9	102	0.00	19.34-19.54
18		Indeno(1,2,3-cd)pyrene	20.000	19.819	0.9	105	0.00	21.19-21.39
19		Dibenzo(a,h)anthracene	20.000	20.013	-0.1	106	0.00	21.26-21.46
20		Benzo(g,h,i) Perylene	20.000	19.731	1.3	104	0.00	21.73-21.93
*****		Signal #2 *****						
1		Naphthalene	20.000	19.621	1.9	99	0.00	3.58- 3.78
2		2-Methyl Naphthalene	20.000	20.556	-2.8	104	0.00	4.44- 4.64
3		1-Methyl Naphthalene	20.000	20.795	-4.0	105	0.00	4.58- 4.78
4	S	2-Fluorobiphenyl			----------NA----------			
5		Acenaphthylene	20.000	20.723	-3.6	108	0.00	5.77- 5.97
6		Acenaphthene	20.000	20.252	-1.3	103	0.00	6.10- 6.30
7		Fluorene	20.000	20.496	-2.5	104	0.00	7.00- 7.20
8		Phenanthrene	20.000	20.283	-1.4	103	0.00	8.76- 8.96
9		Anthracene	20.000	20.652	-3.3	106	0.00	8.84- 9.04
10	S	O-Terphenyl			----------NA----------			
11		Fluoranthene	20.000	20.224	-1.1	104	0.00	11.11-11.31
12		Pyrene	20.000	20.263	-1.3	105	0.00	11.50-11.70
13		Benzo(a)Anthracene	20.000	20.270	-1.3	106	0.00	14.00-14.20
14		Chrysene	20.000	19.883	0.6	103	0.00	14.08-14.28
15		Benzo(b)Fluoranthene	20.000	20.022	-0.1	103	0.00	16.06-16.26
16		Benzo(k)Fluoranthene	20.000	19.899	0.5	104	0.00	16.11-16.31
17		Benzo(a) Pyrene	20.000	19.543	2.3	102	0.00	16.58-16.78
18		Indeno(1,2,3-cd)pyrene	20.000	18.844	5.8	98	0.00	18.40-18.60

Initial Calibration Verification

Job Number: F32780
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GLL174-ICV174
Lab FileID: LL04369.D

19	Dibenzo(a,h)anthracene	20.000	19.015	4.9	100	0.00	18.49-18.69
20	Benzo(g,h,i) Perylene	20.000	18.697	6.5	97	0.00	18.74-18.94

(#) = Out of Range SPCC's out = 0 CCC's out = 0
LL04365.D 8100_H2.M Tue Jun 21 12:28:08 2005

Continuing Calibration Summary

Job Number: F32780
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GLL177-CC174
Lab FileID: LL04437.D

Evaluate Continuing Calibration Report

Signal #1 : C:\MSDCHEM\1\DATA\0629PAH\LL04437.D\FID1B.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\0629PAH\LL04437.D\FID2A.CH
Acq On : 29 Jun 2005 10:56 am Operator: aubreya
Sample : cc174-20 Inst : FLGSLL
Misc : OP13700,GLL177,1000,,,1,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : C:\MSDCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title : PAH's BY EPA 610 OR 8100
Last Update : Wed Jun 29 13:07:06 2005
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1		Naphthalene	20.000	19.451	2.7	103	0.00	4.50- 4.70
2		2-Methyl Naphthalene	20.000	19.590	2.1	105	0.00	5.40- 5.60
3		1-Methyl Naphthalene	20.000	19.424	2.9	103	0.00	5.67- 5.87
4	S	2-Fluorobiphenyl	20.000	19.515	2.4	105	0.00	6.20- 6.40
5		Acenaphthylene	20.000	19.285	3.6	105	0.00	7.34- 7.54
6		Acenaphthene	20.000	19.216	3.9	103	0.00	7.61- 7.81
7		Fluorene	20.000	19.924	0.4	109	0.00	8.53- 8.73
8		Phenanthrene	20.000	19.245	3.8	104	0.00	10.70-10.90
9		Anthracene	20.000	19.546	2.3	106	0.00	10.74-10.94
10	S	O-Terphenyl	20.000	19.437	2.8	104	0.00	11.68-11.88
11		Fluoranthene	20.000	19.075	4.6	102	0.00	13.24-13.44
12		Pyrene	20.000	18.973	5.1	102	0.00	13.82-14.02
13		Benzo(a)Anthracene	20.000	18.984	5.1	102	0.00	16.36-16.56
14		Chrysene	20.000	18.879	5.6	101	0.00	16.54-16.74
15		Benzo(b)Fluoranthene	20.000	19.503	2.5	105	0.00	18.57-18.77
16		Benzo(k)Fluoranthene	20.000	19.634	1.8	105	0.00	18.62-18.82
17		Benzo(a) Pyrene	20.000	20.122	-0.6	108	0.00	19.34-19.54
18		Indeno(1,2,3-cd)pyrene	20.000	21.412	-7.1	113	0.00	21.19-21.39
19		Dibenzo(a,h)anthracene	20.000	21.232	-6.2	112	0.00	21.26-21.46
20		Benzo(g,h,i) Perylene	20.000	21.369	-6.8	112	0.00	21.73-21.93
*****		Signal #2 *****						
1		Naphthalene	20.000	21.880	-9.4	111	0.00	3.55- 3.75
2		2-Methyl Naphthalene	20.000	22.149	-10.7	112	0.00	4.41- 4.61
3		1-Methyl Naphthalene	20.000	21.993	-10.0	111	0.00	4.54- 4.74
4	S	2-Fluorobiphenyl	20.000	22.115	-10.6	112	0.00	5.03- 5.23
5		Acenaphthylene	20.000	21.879	-9.4	114	0.00	5.73- 5.93
6		Acenaphthene	20.000	22.029	-10.1	113	0.00	6.05- 6.25
7		Fluorene	20.000	21.860	-9.3	111	0.00	6.95- 7.15
8		Phenanthrene	20.000	21.587	-7.9	110	0.00	8.71- 8.91
9		Anthracene	20.000	21.149	-5.7	108	0.00	8.79- 8.99
10	S	O-Terphenyl	20.000	22.192	-11.0	114	0.00	9.77- 9.97
11		Fluoranthene	20.000	21.679	-8.4	112	0.00	11.05-11.25
12		Pyrene	20.000	21.872	-9.4	113	0.00	11.45-11.65
13		Benzo(a)Anthracene	20.000	22.696	-13.5	118	0.00	13.94-14.14
14		Chrysene	20.000	22.512	-12.6	117	0.00	14.02-14.22
15		Benzo(b)Fluoranthene	20.000	23.993	-20.0#	124	0.00	16.01-16.21
16		Benzo(k)Fluoranthene	20.000	23.578	-17.9#	123	0.00	16.05-16.25
17		Benzo(a) Pyrene	20.000	24.246	-21.2#	126	0.00	16.52-16.72
18		Indeno(1,2,3-cd)pyrene	20.000	25.401	-27.0#	133	0.00	18.34-18.54

Continuing Calibration Summary

Job Number: F32780
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GLL177-CC174
Lab FileID: LL04437.D

19	Dibenzo(a,h)anthracene	20.000	25.390	-27.0#	133	0.00	18.44-18.64
20	Benzo(g,h,i) Perylene	20.000	25.214	-26.1#	131	0.00	18.68-18.88

(#) = Out of Range SPCC's out = 0 CCC's out = 0
LL04365.D 8100_H2.M Thu Jun 30 14:31:09 2005

6.6

Continuing Calibration Summary

Job Number: F32780
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GLL177-CC174
Lab FileID: LL04446.D

Evaluate Continuing Calibration Report

Signal #1 : C:\MSDCHEM\1\DATA\0629PAH\LL04446.D\FID1B.CH Vial: 10
Signal #2 : C:\MSDCHEM\1\DATA\0629PAH\LL04446.D\FID2A.CH
Acq On : 6-29-05 03:28:34 PM Operator: aubreya
Sample : cc174-30 Inst : FLGSLL
Misc : OP13700,GLL177,1010,,,1,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : C:\MSDCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title : PAH's BY EPA 610 OR 8100
Last Update : Wed Jun 29 13:07:06 2005
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1		Naphthalene	30.000	31.141	-3.8	98	0.00	4.50- 4.70
2		2-Methyl Naphthalene	30.000	31.674	-5.6	99	0.00	5.40- 5.60
3		1-Methyl Naphthalene	30.000	31.428	-4.8	98	0.00	5.67- 5.87
4	S	2-Fluorobiphenyl	30.000	31.591	-5.3	98	0.00	6.20- 6.40
5		Acenaphthylene	30.000	31.102	-3.7	99	0.00	7.34- 7.54
6		Acenaphthene	30.000	31.335	-4.5	98	0.00	7.61- 7.81
7		Fluorene	30.000	31.426	-4.8	99	0.00	8.53- 8.73
8		Phenanthrene	30.000	31.031	-3.4	98	0.00	10.70-10.90
9		Anthracene	30.000	30.508	-1.7	97	0.00	10.74-10.94
10	S	O-Terphenyl	30.000	30.934	-3.1	98	0.00	11.68-11.88
11		Fluoranthene	30.000	29.967	0.1	94	0.00	13.24-13.44
12		Pyrene	30.000	29.754	0.8	94	0.00	13.82-14.02
13		Benzo(a)Anthracene	30.000	29.515	1.6	93	0.00	16.36-16.56
14		Chrysene	30.000	29.466	1.8	93	0.00	16.54-16.74
15		Benzo(b)Fluoranthene	30.000	29.718	0.9	94	0.00	18.57-18.77
16		Benzo(k)Fluoranthene	30.000	29.972	0.1	95	0.00	18.62-18.82
17		Benzo(a) Pyrene	30.000	30.406	-1.4	96	0.00	19.34-19.54
18		Indeno(1,2,3-cd)pyrene	30.000	32.038	-6.8	102	0.00	21.19-21.39
19		Dibenzo(a,h)anthracene	30.000	31.914	-6.4	102	0.00	21.26-21.46
20		Benzo(g,h,i) Perylene	30.000	31.914	-6.4	102	0.00	21.73-21.93
*****		Signal #2 *****						
1		Naphthalene	30.000	29.244	2.5	97	0.00	3.55- 3.75
2		2-Methyl Naphthalene	30.000	29.865	0.5	99	0.00	4.41- 4.61
3		1-Methyl Naphthalene	30.000	29.607	1.3	98	0.00	4.54- 4.74
4	S	2-Fluorobiphenyl	30.000	29.900	0.3	99	0.00	5.03- 5.23
5		Acenaphthylene	30.000	30.182	-0.6	100	0.00	5.73- 5.93
6		Acenaphthene	30.000	30.223	-0.7	100	0.00	6.05- 6.25
7		Fluorene	30.000	29.685	1.1	98	0.00	6.95- 7.15
8		Phenanthrene	30.000	29.377	2.1	97	0.00	8.71- 8.91
9		Anthracene	30.000	28.742	4.2	95	0.00	8.79- 8.99
10	S	O-Terphenyl	30.000	30.154	-0.5	100	0.00	9.77- 9.97
11		Fluoranthene	30.000	29.264	2.5	97	0.00	11.05-11.25
12		Pyrene	30.000	29.098	3.0	97	0.00	11.45-11.65
13		Benzo(a)Anthracene	30.000	29.577	1.4	99	0.00	13.94-14.14
14		Chrysene	30.000	29.437	1.9	100	0.00	14.02-14.22
15		Benzo(b)Fluoranthene	30.000	30.844	-2.8	104	0.00	16.01-16.21
16		Benzo(k)Fluoranthene	30.000	29.751	0.8	100	0.00	16.05-16.25
17		Benzo(a) Pyrene	30.000	30.607	-2.0	103	0.00	16.52-16.72
18		Indeno(1,2,3-cd)pyrene	30.000	32.111	-7.0	106	0.00	18.34-18.54

Continuing Calibration Summary

Job Number: F32780
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GLL177-CC174
Lab FileID: LL04446.D

19	Dibenzo(a,h)anthracene	30.000	32.031	-6.8	107	0.00	18.44-18.64
20	Benzo(g,h,i) Perylene	30.000	32.532	-8.4	107	0.00	18.68-18.88

(#) = Out of Range SPCC's out = 0 CCC's out = 0
LL04366.D 8100_H2.M Thu Jun 30 14:31:25 2005

Continuing Calibration Summary

Job Number: F32780 **Sample:** GLL177-CC174
Account: EEINCJX EEI **Lab FileID:** LL04453.D
Project: Camp Lejeune-Campbell St. Fuel Farm

Evaluate Continuing Calibration Report

Signal #1 : C:\MSDCHEM\1\DATA\0629PAH\LL04453.D\FID1B.CH Vial: 17
Signal #2 : C:\MSDCHEM\1\DATA\0629PAH\LL04453.D\FID2A.CH
Acq On : 6-29-05 07:00:18 PM Operator: aubreya
Sample : cc174-20 Inst : FLGSLL
Misc : OP13700,GLL177,1010,,,1,1,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : C:\MSDCHEM\1\METHODS\8100_H2.M (Chemstation Integrator)
Title : PAH's BY EPA 610 OR 8100
Last Update : Wed Jun 29 13:07:06 2005
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1		Naphthalene	20.000	20.867	-4.3	110	0.00	4.50- 4.70
2		2-Methyl Naphthalene	20.000	21.291	-6.5	114	0.00	5.40- 5.60
3		1-Methyl Naphthalene	20.000	21.015	-5.1	111	0.00	5.67- 5.87
4	S	2-Fluorobiphenyl	20.000	21.143	-5.7	113	0.00	6.20- 6.40
5		Acenaphthylene	20.000	21.106	-5.5	115	0.00	7.34- 7.54
6		Acenaphthene	20.000	21.034	-5.2	112	0.00	7.61- 7.81
7		Fluorene	20.000	21.128	-5.6	116	0.00	8.53- 8.73
8		Phenanthrene	20.000	20.801	-4.0	113	0.00	10.70-10.90
9		Anthracene	20.000	20.536	-2.7	111	0.00	10.74-10.94
10	S	O-Terphenyl	20.000	20.848	-4.2	112	0.00	11.68-11.88
11		Fluoranthene	20.000	20.161	-0.8	108	0.00	13.24-13.44
12		Pyrene	20.000	20.087	-0.4	108	0.00	13.82-14.02
13		Benzo(a)Anthracene	20.000	19.904	0.5	107	0.00	16.36-16.56
14		Chrysene	20.000	19.815	0.9	106	0.00	16.54-16.74
15		Benzo(b)Fluoranthene	20.000	20.097	-0.5	108	0.00	18.57-18.77
16		Benzo(k)Fluoranthene	20.000	20.157	-0.8	108	0.00	18.62-18.82
17		Benzo(a) Pyrene	20.000	20.504	-2.5	110	0.00	19.34-19.54
18		Indeno(1,2,3-cd)pyrene	20.000	21.651	-8.3	115	0.00	21.19-21.39
19		Dibenzo(a,h)anthracene	20.000	21.704	-8.5	115	0.00	21.26-21.46
20		Benzo(g,h,i) Perylene	20.000	21.646	-8.2	114	0.00	21.73-21.93
*****		Signal #2 *****						
1		Naphthalene	20.000	20.397	-2.0	103	0.00	3.55- 3.75
2		2-Methyl Naphthalene	20.000	20.809	-4.0	105	0.00	4.41- 4.61
3		1-Methyl Naphthalene	20.000	20.619	-3.1	104	0.00	4.54- 4.74
4	S	2-Fluorobiphenyl	20.000	20.644	-3.2	105	0.00	5.03- 5.23
5		Acenaphthylene	20.000	21.144	-5.7	110	0.00	5.73- 5.93
6		Acenaphthene	20.000	21.054	-5.3	108	0.00	6.05- 6.25
7		Fluorene	20.000	20.521	-2.6	104	0.00	6.95- 7.15
8		Phenanthrene	20.000	20.163	-0.8	103	0.00	8.71- 8.91
9		Anthracene	20.000	19.824	0.9	102	0.00	8.79- 8.99
10	S	O-Terphenyl	20.000	21.104	-5.5	109	0.00	9.77- 9.97
11		Fluoranthene	20.000	20.312	-1.6	105	0.00	11.05-11.25
12		Pyrene	20.000	20.217	-1.1	105	0.00	11.45-11.65
13		Benzo(a)Anthracene	20.000	20.496	-2.5	107	0.00	13.94-14.14
14		Chrysene	20.000	20.461	-2.3	106	0.00	14.02-14.22
15		Benzo(b)Fluoranthene	20.000	21.018	-5.1	109	0.00	16.01-16.21
16		Benzo(k)Fluoranthene	20.000	20.857	-4.3	109	0.00	16.05-16.25
17		Benzo(a) Pyrene	20.000	21.100	-5.5	110	0.00	16.52-16.72
18		Indeno(1,2,3-cd)pyrene	20.000	21.634	-8.2	113	0.00	18.34-18.54

Continuing Calibration Summary

Job Number: F32780
Account: EEINCJX EEI
Project: Camp Lejeune-Campbell St. Fuel Farm

Sample: GLL177-CC174
Lab FileID: LL04453.D

19	Dibenzo(a,h)anthracene	20.000	21.567	-7.8	113	0.00	18.44-18.64
20	Benzo(g,h,i) Perylene	20.000	21.738	-8.7	113	-0.01	18.68-18.88

(#) = Out of Range SPCC's out = 0 CCC's out = 0
LL04365.D 8100_H2.M Thu Jun 30 14:31:10 2005

6.6
6