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Draft
Final Report
for
Soil Remediation of Site 82 AOC - 1 Area A
MCB Camp Lejeune, North Carolina

Volume I of II

Prepared for:

Department of the Navy
Contract No. N62470-93-D-3032
Delivery Order 0015

Prepared by

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A Subsidiary of OHM Corporation

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September 1996

OHM Project No. 16032

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EXECUTIVE SUMMARY

During 1995, OHM Remediation Services Corp. (OHM) installed and operated an innovative soil vapor extraction system to remediate volatile organic compound (VOC) contaminated soils in Operable Unit No. 2, Site 82, Area of Concern-1 (AOC-1), Area A at Marine Corps Base Camp Lejeune, North Carolina. OHM's project activities involved clearing and grubbing of the work area, drilling and installation of eight vertical soil vapor extraction wells, drilling and installation of one horizontal air injection well, installation of 32 soil probes, construction of a piping and manifold system, equipment mobilization and installation, system start-up and optimization, system operation and maintenance, soil confirmation sampling, and site restoration. Remedial Action Objectives (RAOs) for VOC impacted soils were reached within nine months of system operation. Site restoration included demobilization of process equipment, removal of the piping and manifold system, abandonment of extraction and injection wells, surface grading, and removal of all debris.

1.0 INTRODUCTION AND BACKGROUND

1.1 PURPOSE

OHM has completed all activities as required under LANTDIV RAC Contract No. N62470-93-D-3032, Delivery Order 15 - Soil Vapor Extraction System in AOC-1, Area A, at Site 82 of Operable Unit No. 2 in accordance with the statement of work and applicable NAVFAC Specifications. This final Closeout Report has been prepared to document site restoration activities performed by OHM to remediate contaminated soils in AOC-1. This work was performed concurrently with ongoing groundwater extraction and treatment activities also at Site 82 under the same Delivery Order No. 15.

1.2 SITE HISTORY

Marine Corps Base (MCB), Camp Lejeune, North Carolina was placed on the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) National Priorities List (NPL) that became effective on October 4, 1989 (54 Federal Register 41015, October 4, 1989). The United States Environmental Protection Agency (USEPA) Region IV, the North Carolina Department of Environment, Health and Natural Resources (NC DEHNR) and the United States Department of Navy (DoN) then entered into a Federal Facilities Agreement (FFA) for MCB Camp Lejeune. The primary purpose of the FFA was to ensure that environmental impacts associated with past and present activities at the Base were thoroughly investigated and appropriate CERCLA and Response/ Resource Conservation and Recovery Act (RCRA) Corrective Action alternatives were developed and implemented as necessary to protect public health and the environment.

Camp Lejeune is a training base for the U.S. Marine Corps, located in Onslow County, North Carolina. The base covers approximately 236 square miles and includes 14 miles of coast line. MCB Camp Lejeune is bounded to the southeast by the Atlantic ocean, to the northwest by State Route 24, and to the west by U.S. Route 17. The town of Jacksonville, North Carolina is located north of the Base. The remedial action area, OU No. 2 is one of 13 operable units within Camp Lejeune, and contains Sites 6, 9, and 82. OU No. 2 covers an area of approximately 210 acres and is bordered to the north by Wallace Creek, to the west by the Camp Lejeune Railroad, to the west by Piney Green Road, and to the south by Sneads Ferry Road (Figure 1).

Site 82, the Piney Green Road VOC Site, is located directly adjacent to Site 6 and encompasses approximately 30 acres. In 1992, Baker Environmental, Inc. (Baker) performed site investigation activities and identified two areas in the southeastern portion of Site 82 which exhibited elevated concentrations of volatile organic compounds (VOCs) in

soils. These two areas were identified by Baker as Areas "A" and "B" of AOC-1. Portions of Site 82 were apparently used as a burial site for military waste and debris. In 1994, OHM excavated material in two trenches in AOC-1 and unearthed rolls of communication wire, old drums and containers, small arms ammunition casings, and other debris.

Soil vapor extraction (SVE) was selected as the remedial technology to clean soils at MCB Camp Lejeune Site 82, AOC-1 in the U.S. EPA Record of Decision (ROD) signed in September, 1993. A pilot test was conducted by Baker to evaluate the feasibility of using SVE to remediate AOC-1. An air permeability of 1.2 to 2.8 x 10^{-7} cm^2 was calculated for site soils based on data obtained during the pilot test. Vacuum influence was observed at a maximum distance of 34.5 feet from the SVE pilot test well with an applied vacuum of 1.3 inches of Mercury (Hg) and an extracted air flow rate of 25.1 standard cubic feet per minute (scfm).

Subsequently in July, 1994, OHM was tasked to perform additional investigation work in AOC-1 to assess the vertical and horizontal extent of VOC contamination in the soils. This effort was undertaken to gather specific design data needed to construct an effective soil vapor extraction system which could achieve the established soil RAOs. Prior to this effort, few analytical data points existed for determining the extent and concentrations of contaminants of concern in this area.

Other relevant site conditions in AOC-1 were identified during this investigation. Significantly higher concentrations of chlorinated hydrocarbons were observed in Area B compared to Area A. However, due to the presence of shallow groundwater at depths of 2 to 3 feet below land surface (bls) in Area "B" of AOC-1, it was agreed that SVE was not an appropriate technology for remediation in this area. Depth to groundwater in Area "A" of AOC-1 was recorded at 16 to 18.5 feet bls. Soils in Area "A" of AOC-1 were described as silty, clayey, fine to medium grained sands.

Of the contaminants identified, tetrachloroethene (PCE) was the most prevalent. Given the low remedial action goal of 10.5 ppb, PCE governed the areal extent of VOCs exceeding the RAOs. It was estimated that approximately 17,500 cubic yards of soil in Area A contained VOCs in excess of the clean up goals. The highest PCE concentrations were observed at greater depths near water table (approx. 14-16' bls). Figure 3 shows the basis for the estimated lateral extent of PCE at 14-16' bls within Area A. Based upon the findings reported by OHM in August, 1994, OHM began to develop the Remedial Action Work Plan for implementation of a SVE system in Area A. This final report documents these field activities.

1.3 REMEDIAL ACTION OBJECTIVES

The remedial objective for this project was to remediate soils contaminated with VOCs in AOC-1, Area "A" to Remedial Action objectives (RAOs) identified in the ROD as reported in the Basis of Design Report (BODR) issued by Baker Environmental, Inc. in May, 1994. These RAOs were specified as follows:

Contaminant	Soil RAOs (ug/kg)
Trichloroethene	32.2
Tetrachloroethene	10.5
Benzene	5.4

1.4 PROCESS SUMMARY

The SVE system installed included the following seven primary components: 1) an array of eight vertical vapor extraction wells, 2) one horizontal air injection well, 3) a piping and manifold system, 4) a vacuum extraction unit, 5) a vapor phase carbon vessel, 6)a diesel powered generator, and 7) a water storage tank. A process flow schematic illustrating the configuration of these components was previously submitted in the Remedial Action Work Plan

A positive displacement blower was used to apply a vacuum to the eight vertical vacuum extraction wells. Extracted soil vapors were routed through the piping and manifold system to a vapor/liquid separator to remove entrained liquids in the vapor stream. Extracted liquids were pumped to a water storage tank and subsequently to the nearby Site 82 groundwater treatment plant. Extracted soil vapors were treated with activated carbon prior to reinjection or discharge.

2.0 SUMMARY OF ACTION

2.1 WORK PLANS

OHM submitted a written proposal and cost estimate to implement a SVE system in AOC-1, Area A in November, 1994. The proposal was approved, and notice to proceed with preparation of a Remedial Action Work Plan (RAWP) was received in late December. The final Work Plan was submitted to LANTDIV in February, 1995. The final RAWP provided a description of the project objectives, system design, remedial tasks, specific sampling and analysis requirements, and project schedule. Several other plans had been developed previously under Delivery Order No. 15 which were supplementary to this plan including a Health and Safety Plan, Construction Quality Control Plan, Sampling and Analysis Plan, Transportation and Disposal Plan, and Environmental Protection Plan.

The remediation of VOC contaminated soil as outlined in the RAWP at Site 82, AOC-1, Area "A" included the following operational tasks:

- Clearing and Grubbing
- Access Road and Vapor Barrier Construction
- Extraction Well Installations
- Horizontal Well Installation
- Soil Probe Installations
- Piping and Equipment Installation
- System Start-up
- System Operation and Maintenance
- Performance Monitoring
- Soil Confirmation Sampling and Analysis
- Site Restoration

2.2 CLEARING AND GRUBBING

Prior to system installation, an area measuring approximately 350 feet by 200 feet was cleared and grubbed to allow access for drilling rigs and support vehicles, installation of the geomembrane, and for construction and installation of process equipment. All deforestation activities were coordinated with the Base Forestry Department. Organic debris was transported and disposed at the base landfill. Dust and erosion control measures were initiated as needed in accordance with the approved Environmental Protection Plan.

2.3 ACCESS ROAD AND VAPOR BARRIER CONSTRUCTION

Subsequent to clearing and grubbing of the treatment area, an access road measuring approximately 15 feet wide by 350 feet long was constructed longitudinally along the axis of the horizontal well. The area of the access road was leveled and compacted and a 15 feet wide by 200 feet long 40 mil geomembrane was laid over the approximate area of the screened interval of the horizontal injection well to prevent short-circuiting of injected air. Above the liner, a geotextile was placed for drainage. An access road was constructed over the membranes by covering these materials with six to eight inches of road base aggregate mix. The location of the access road is indicated on the site layout Figure 4.

2.4 EXTRACTION WELL INSTALLATIONS

Eight vertical vapor extraction wells, one horizontal injection well, and thirty two soil probes were installed within the treatment area in the locations indicted in Figure 4. All drilling and well installations were supervised by an OHM Professional Geologist registered in the State of North Carolina.

The eight vertical vapor extraction wells were installed by OHM's subcontractor Groundwater Protection, Inc. located in Charlotte, N.C. using a truck-mounted drill rig using 8 1/4-inch I.D. hollow stem augers. Boreholes for the extraction wells had a nominal diameter of 11 inches and were terminated at depths of 15 to 16 feet below ground surface (bls). The extraction wells were constructed of 4-inch I.D., Schedule 40 PVC with 10 feet of 0.020-inch, continuously slotted well screen. A filter pack consisting of clean silica sand was placed in the annular space of the borehole adjacent to the well screen. Six inches of bentonite pellets were placed on top of the filter pack. A square area was excavated to a depth of 2 feet around each extraction well and the remainder of the borehole and excavated pit were filled with a Portland cement grout. Extraction wellheads were equipped with ports for measuring extracted airflow and collecting vapor samples, gauges for measuring wellhead vacuum levels, and ball valves for isolating flow. Extraction wells were designated SVEW-1 through SVEW-8. Boring records and construction details for the eight extraction wells are included in Appendix B. OK

2.5 HORIZONTAL WELL INSTALLATION

The horizontal air injection well was installed by OHM's subcontractor Richard Simmons Drilling Co. out of Buchanan, Virginia using a directional drill rig. The borehole of the horizontal well had a nominal diameter of 10 inches and was advanced using mud rotary drilling techniques. The borehole was completed at a maximum depth of 15 feet bls with a total horizontal length of 330 feet. The borehole was guided into place using a transmitter fitted on the drill bit which sent electrical signals to a receiver at the surface. The

horizontal well was constructed with 6-inch I.D. HDPE with 140 feet of 0.020-inch machine slotted well screen. The horizontal well included entry and exit ports fitted with ports for measuring injected airflow, gauges for measuring injection pressures, and gauges for measuring injected air temperature. Construction details for the horizontal well are shown in Figure 5.

2.6 SOIL PROBE INSTALLATIONS

Sixteen clusters of soil probes were installed by OHM personnel to monitor subsurface vacuum levels and baseline soil gas concentrations. Each soil probe cluster included two soil probes installed at shallow and deep intervals. Soil probe clusters were identified as SP-1A and B through SP-16A and B. The soil probes were installed in a 7/8-inch diameter hole completed by advancing 7/8-inch O.D. stainless steel rods with an electric percussion hammer. An aluminum slotted shield point connected to tygon tubing was placed in the bottom of each hole. Silica sand was placed in the hole adjacent to the shield point to allow communication with the formation. Bentonite pellets were placed in the hole from the top of the sand to ground surface to seal the target zone. Approximately two feet of tygon tubing was left above ground surface to allow for sampling and pressure measurements. Construction details for the soil probes are included in Appendix C.

2.7 PIPING AND EQUIPMENT

Separate piping and manifold systems were constructed for vapor extraction and air injection. Vapor extraction piping was constructed with Schedule 40 PVC bell and spigot pipe with solvent welded joints. Injection piping and manifold was constructed of 6-inch, Schedule 40 carbon steel pipe with welded joints. The majority of piping and manifold was installed above ground. The general location and pipe size of extraction and injection piping and manifold are shown in Figure 1. FIG 4

2.8 PROCESS EQUIPMENT

Process equipment included a vacuum extraction unit (VEU), a vapor phase granular activated carbon (GAC) vessel, a diesel generator, a fuel tank, and a 20,000 gallon water storage tank. Process equipment was staged on a 6-inch thick, 30 foot by 30 foot concrete pad. A piping and instrumentation diagram for the integrated system as constructed is provided as Figure 6.

The VEU included a vapor/liquid separator, liquid transfer pump, vacuum blower, particulate filters, silencer, discharge stack, and control panel. The vacuum blower was a MD-Pneumatics Model 7021, lobe type, positive displacement blower capable of moving 1500 CFM at a vacuum level of 15"Hg. The carbon vessel was initially loaded with 4,000

pounds of vapor phase GAC. Extracted groundwater was pumped to a 20,000 gallon storage tank staged adjacent to the equipment pad.

2.9 SYSTEM START-UP

System start-up and optimization was conducted between March 29 and April 7, 1995 and included the following activities:

- Collection of baseline soil gas samples from 32 soil probes for VOC analyses
- Development and quantification of air injection pressure and flow
- Development and quantification of vacuum and flow from extraction wells
- Quantification of subsurface vacuum levels in soil probes
- Collection of vapor samples from individual extraction wells, system total and vacuum blower outlet and analyses for VOCs
- Quantification and maximization of contaminant extraction rates
- Quantification of liquid extraction rates
- Testing and calibration of process controls and equipment
- Initial maintenance of process equipment

2.10 SYSTEM OPERATION AND MAINTENANCE

Following the system startup period in early April, the system was placed in continuous unattended mode of operation. Performance monitoring data was maintained by site personnel as described in Section 3.0 during this operational period. Daily checklists for operational parameters were completed along with a periodic start-up check list each time the unit was restarted following routing maintenance events. An interim performance report was issued to LANTDIV in July, 1995 to record the progress to date. Monthly progress reports also documented the performance of the SVE system. From April 4, 1995 to December 21, 1995, when the system was shut down, the system logged a total of 5,889 hours with an on-line time of approximately 85%. The system was shut down from October 12, 1995 to October 30, 1995, awaiting results from soil samples procured on October 4, 1995.

3.0 *PERFORMANCE MONITORING*

Performance of the remedial system was monitored to allow optimization of contaminant extraction and to determine when remedial action objectives were achieved. Performance monitoring was initiated during the system start-up and optimization period and continued for the duration of the project. System performance was measured quantitatively by obtaining the following data:

- Extraction well measurements including vacuum, velocity, and temperature. With these measurements, air flow rates were calculated.
- Air injection well measurements including injection pressure, temperature, and velocity; similarly, air flow rates were also calculated.
- Subsurface vacuum and pressure measurements from the soil vapor probes.
- Vapor phase concentrations of the target volatile organic compounds including benzene, ethylbenzene, tetrachloroethene, and trichloroethene.
- Confirmation soil sampling and analysis.

3.1 EXTRACTION WELL MEASUREMENTS

Each of the well heads was equipped with a pressure gauge for reading vacuum, a flow control valve, and an individual flow port for determining air velocities. Upon reaching steady state, a turbine velocity meter was inserted in the flow port to obtain air velocities inside the transfer piping. Air flow rates in cubic feet per minute (CFM) were calculated and recorded for each extraction well including the system total. This data is summarized in Table 3.1.

Air velocities at each of the well heads ranged from 780 ft/min to 1750 ft/min. Corresponding flow rates calculated from each of the extraction wells ranged from 31 to 80 CFM. Well head vacuum levels ranged from 4.5 to 7.5 "Hg with an average near 6 "Hg throughout the project. Full vacuum was optimized and attained throughout the network of extraction wells as evidenced by the air flow data and vacuum measurements taken from the soil vapor probes discussed in section 3.3.

3.2 INJECTION WELL MEASUREMENTS

Injection well data included injection pressure in pounds per square inch (psi), blower discharge temperature, and air velocity. Velocity measurements were used to subsequently calculate average air flow rates. Subsequent to bringing all eight extraction wells on line during system startup, injection air was introduced into the subsurface through the horizontal well. As the treated blower discharge air was introduced, a positive pressure was observed as expected in the wells closest to the injection well. Vacuum or pressure readings were obtained from the soil vapor probes to assess the influence of the injection well.

Particular care was taken to ensure adequate capture of soil vapors within the zone of influence. This was accomplished by maximizing pressure and flow to the injection well while attaining negative air pressures at the perimeter of the treatment zone. Negative pressures of 0.5 psi or more at the periphery were desirable to maintain the proper pneumatic balance in the system.

During the initial system startup in early April, air injection pressures were optimized to deliver air flow rates greater than 900 CFM at pressures between 0.25 and 1.5 psi. Average injection pressure was approximately 1.0 psi over the course of the project. Injection air temperature was dependent on ambient weather conditions, but typically ranged around 80 degrees F. Table 3.2 summarizes the air injection well data for the days recorded.

3.3 SOIL PROBE MEASUREMENTS

Subsurface vacuum and pressure levels were measured from 32 soil probes to determine the zone of extraction or injection well influence. A shallow and deep probe were installed in each of the sixteen locations to evaluate vacuum influence and contaminant capture. Probe locations were chosen to assess the performance of the vacuum in developing an adequate vacuum influence. Extraction well spacing for AOC-1 was based on an estimated 40 foot effective radius of vacuum influence. Field data obtained by OHM support this design assumption. In some cases, significantly greater than 40 foot radius of influence was observed.

Field measurements were recorded using a portable mounted magnehelic pressure gauge capable of measuring both pressure and vacuum as appropriate. Table 3.3 provides a summary of the soil probe measurements taken over the course of the project. Soil probe locations and designations can be found on Figure 4.

3.4 VAPOR SAMPLING AND ANALYSIS

Vapor samples were taken of extracted air during the system startup and periodically throughout the project to measure well specific and total VOC removal rates. This information was also used to optimize the available air flow and vacuum levels to target areas of the site displaying higher concentrations of contaminants. Figure 3 shows soil exhibiting the highest initial concentrations of PCE along the central axis of the main extraction header.

Sampling activities began on April 4 during system startup and continued through December 4, 1995 Table 3.4 summarizes all of the VOC performance data obtained by both the on-site laboratory and off-site laboratory for each individual well, the system total, and the discharge stack. Samples taken through 4/28/96 were analyzed by an OHM field chemist on-site using a mobile laboratory equipped with a gas chromatograph. Samples taken and reported beyond that date with the exception of 8/24/96 were analyzed off-site by Quanterra laboratory in Knoxville, Tennessee.

Samples were collected by OHM personnel using a vacuum pump, sampling chamber and collection bags from the designated sample ports on the extraction piping and/or discharge stack. Two liter samples were obtained in tedlar bags, placed on ice, logged, and preserved until run time. Each of the samples was analyzed for the target volatile organics including benzene, ethylbenzene, tetrachloroethene, and trichloroethene using modified field method 5030/8020. Samples were analyzed utilizing a Hewlett Packard model 5890 gas chromatograph. Contaminant levels are reported in micrograms per liter (ug/l). The same methodology was used for both on-site and off-site sampling according to the approved Sampling and Analysis Plan.

Tetrachloroethene provided the largest contribution of the total VOCs present in the vapor stream (typically 80 to 99+ % of the total VOCs measured). Initial PCE concentrations were highest in SVEW-1 measuring nearly 600 ug/l. Vapor VOC levels fluctuated substantially during the first month of operation and in some cases increased. Although it is uncertain what caused this oscillation, beginning in May, the emission rates show a significant downward trend for all extraction wells and the system total for the subsequent months of system operation. Based on this trend, it was determined that confirmation soil sampling would be appropriate to determine compliance with RAOs. Section 4.1 describes these activities.

4.0 SITE RESTORATION

4.1 SOIL CONFIRMATION SAMPLING AND ANALYSIS

Interim confirmation soil sampling and analysis was conducted on July 18, August 23, and October 12, 1995 to evaluate the performance of the soil vapor extraction system toward meeting Remedial Action Objectives at the site. Soil analytical results for these three sampling events along with the baseline sampling event in July 1994 are included in Table 4.1

Sample locations were chosen near the original baseline sampling points to gauge the progress of soil cleanup. Figure 3 shows the original grid used to sample Area A in 1994. Point 0,0 represents the southwest corner of Area A, while grid point 5,5 identifies the opposite northeast corner, given a 40 foot grid integral used for the 1994 sampling event. Figure 7 shows the eight confirmation soil sampling locations as designated by their respective coordinates. Three different depth intervals were sampled, namely 2 to 3 feet bls, 9 to 10 feet bls, and 15 to 16 feet bls.

All soil borings were performed by hand augering to the desired depths. Grab samples were collected from each depth and placed into sample jars, preserved and prepared for analyses. The OHM field chemist analyzed the soil samples using the on-site laboratory GC following modified field Method 5030/8020. Results were reported for the target volatile organic compounds as presented in Table 4.1.

The data reported for the 7/18/95 and 8/23/95 sampling events which was analyzed by the field GC shows elevated concentrations of benzene in the soil, not previously seen at the site.. This anomaly was further investigated by OHM. Based on a careful evaluation of the data and the disappearance of this compound in future sampling events, it was determined these values were the result of corrupt laboratory data.

Additional soil confirmation samples were also collected on 10/12/95, 12/4/96, and lastly on 2/6/96 for off-site analysis. These confirmation samples including QC blanks and duplicates were collected similarly to the previous rounds of sampling and sent under chain of custody to Quanterra laboratories. Each sample was analyzed for volatile organics using EPA Method 8240. The results from the samples analyzed off-site are presented in Table 4.2

With the exception of a single reported value for PCE for sample CLJ 3, 5-2, the results from the 12/4/95 sampling event showed that the system had achieved RAOs for all soil VOC parameters. Prior to initiating site closure activities, it was determined that a final

round of soil sampling would be necessary following a 60 day shut down period to verify that no rebound of contamination had occurred. In late December, 1995, the system was shut down permanently. The final soil confirmation sampling event occurred on February 2, 1996. The results are presented in Table 4.2. With the exception of one data point for PCE (sample CLJ3, 2-1), all site remedial objectives had been successfully achieved. Samples taken from this same location on the two previous sampling events showed non detectable levels of PCE. The system had remediated Area A to the RAOs for the designated target VOC compounds in less than 10 months of treatment. This time frame was very reasonable based on cleanup time estimates discussed with LANTDIV personnel prior during development of the RAWP.

4.2 SYSTEM DECOMMISSIONING AND RESIDUALS MANAGEMENT

The SVE system was decontaminated and decommissioned following the receipt of the final analytical results, indicating that the remedial objectives had been met. System components including the blower skid, vapor phase carbon skid were returned to OHM inventory.

Steel pipe was cut or disassembled and transported off-site as scrap metal to Raymond Goldman Company, Inc. A total of 16,080 lbs of scrap was hauled off-site. Non-metallic unsalvageable scrap including PVC piping and fittings was discarded as nonhazardous debris at BFI's Sampson County Landfill in Roseboro, North Carolina. One 20 cubic yard container of debris was shipped off-site. Documentation is provided in Appendix J.

Spent vapor phase carbon was transported and disposed as nonhazardous waste at BFI's Sampson County Landfill in Roseboro, North Carolina. A total of 2.37 tons of spent carbon was shipped and disposed on 3/15/96. Backup documentation including waste determination from the Base, waste profile, and manifests are included in Appendix J.

Condensate collected from the SVE system was temporarily stored in a 20,000-gallon frac tank adjacent to treatment compound. It is estimated that less than 10,000 gallons of water was generated from the vapor liquid separator. This liquid was treated in the Site 82 groundwater treatment facility in February, 1996. Analytical results of this water can be found in Appendix J.

4.3 WELL ABANDONMENT

All eight extraction wells used in the SVE system were plugged and abandoned in accordance with State of North Carolina requirements. On April 18-19, 1995, Groundwater Protection, OHM's drilling subcontractor filled the well casings with grout to the ground surface.

Table 3.1
Extraction Well Measurements

Date	4/5/95					4/5/95				
Well	Time	Vacuum (inch Hg)	Velocity (ft/min)	Temp (deg F)	Flow (cfm)	Time	Vacuum (inch Hg)	Velocity (ft/min)	Temp (deg F)	Flow (cfm)
SVEW-1	1628	6.2	1,110	68	50	1813	5.0	710	59	32
SVEW-2	1638	6.0	920	65	41	1815	4.9	650	57	29
SVEW-3	1645	4.9	1,805	65	81	1818	3.9	1,325	58	59
SVEW-4	1654	4.4	870	65	39	1820	4.0	1,800	58	81
SVEW-5	1700	5.0	1,040	66	47	1823	5.0	855	57	38
SVEW-6	1708	4.5	1,730	65	77	1825	4.4	1,490	57	67
SVEW-7	1710	5.0	2,280	63	102	1827	5.0	2,210	54	99
SVEW-8	1725	4.1	1,210	64	54	1829	4.3	1,050	56	47
System Total	1745	4.2	860	62	268	1832	4.3	1,175	5.3	367

Date	4/6/95					4/6/95				
Well	Time	Vacuum (inch Hg)	Velocity (ft/min)	Temp (deg F)	Flow (cfm)	Time	Vacuum (inch Hg)	Velocity (ft/min)	Temp (deg F)	Flow (cfm)
SVEW-1	0855	5.0	580	58	26	1800	4.5	600	59	27
SVEW-2	0900	5.0	640	57	29	1809	4.2	605	58	27
SVEW-3	0905	4.0	1,300	57	58	1816	4.3	1,060	58	47
SVEW-4	0910	4.0	1,670	57	75	1823	3.5	1,435	58	64
SVEW-5	0915	5.0	920	57	41	1833	4.5	800	57	36
SVEW-6	0920	4.9	1,395	57	62	1840	4.5	1,140	56	51
SVEW-7	0925	5.0	2,260	58	101	1845	4.8	2,100	58	94
SVEW-8	0930	4.4	1.050	57	47	1900	4.5	1,165	57	52
System Total	0935	4.5	1,050	56	328	1906	3.9	1,040	56	325

Table 3.1 Extraction Well Measurements										
Date	4/7/95					4/7/95				
Well	Time	Vacuum (inch Hg)	Velocity (ft/min)	Temp (deg F)	Flow (cfm)	Time	Vacuum (inch Hg)	Velocity (ft/min)	Temp (deg F)	Flow (cfm)
SVEW-1	0855	6.0	810	57	36	1631	6.0	780	70	35
SVEW-2	0858	5.9	980	56	44	1637	5.5	690	68	31
SVEW-3	0902	5.0	1,350	55	60	1643	5.0	1,400	68	63
SVEW-4	0906	5.5	950	57	43	1648	5.0	1,750	63	78
SVEW-5	0927	6.5	1,030	55	46	1657	6.1	1,030	66	46
SVEW-6	0937	6.0	1,500	56	67	1703	5.3	1,600	61	72
SVEW-7	0944	6.5	2,500	57	112	1710	5.9	2,550	75	114
SVEW-8	0948	5.9	1,400	57	63	1714	5.1	1,450	63	65
System Total	0955	6.0	1,280	55	400	1736	5.1	1,275	70	398
Date	4/8/95					4/10/95				
Well	Time	Vacuum (inch Hg)	Velocity (ft/min)	Temp (deg F)	Flow (cfm)	Time	Vacuum (inch Hg)	Velocity (ft/min)	Temp (deg F)	Flow (cfm)
SVEW-1	1404	7.0	800	73	36	1718	5.9	1,050	67	47
SVEW-2	1408	6.5	1,080	69	48	1722	6.0	1,050	66	47
SVEW-3	1412	6.0	1,600	66	72	1728	5.5	1,500	63	67
SVEW-4	1415	6.0	1,830	62	82	1737	6.0	2,000	60	89
SVEW-5	1419	7.1	1,220	65	55	1740	5.9	1,360	63	61
SVEW-6	1422	6.5	1,980	59	89	1745	6.0	2,300	61	103
SVEW-7	1426	6.8	2,020	79	90	1749	7.0	2,800	71	125
SVEW-8	1430	6.5	1,460	65	65	1756	6.0	1,700	63	76
System Total	1436	6.7	1,300	67	406	1751	6.0	1,500	63	468

Table 3.1
Extraction Well Measurements

Date	4/11/95					4/12/95				
Well	Time	Vacuum (inch Hg)	Velocity (ft/min)	Temp (deg F)	Flow (cfm)	Time	Vacuum (inch Hg)	Velocity (ft/min)	Temp (deg F)	Flow (cfm)
SVEW-1	1720	7.0	785	65	35	1305	7.0	700	64	31
SVEW-2	1723	7.0	1,192	62	53	1313	7.0	1,250	63	56
SVEW-3	1725	6.0	1,651	60	74	1323	6.0	1,700	59	76
SVEW-4	1727	6.0	2,075	59	93	1334	6.0	2,050	59	92
SVEW-5	1732	7.0	1,616	60	72	1348	7.0	1,300	59	58
SVEW-6	1734	6.5	2,093	57	94	1353	7.0	2,000	57	89
SVEW-7	1736	7.0	2,898	68	130	1356	7.0	2,650	69	119
SVEW-8	1738	6.5	1,659	60	74	1359	6.8	1,500	60	67
System Total	1741	6.5	1,304	63	407	1404	7.0	1,350	61	421

Date	4/13/95					4/14/95				
Well	Time	Vacuum (inch Hg)	Velocity (ft/min)	Temp (deg F)	Flow (cfm)	Time	Vacuum (inch Hg)	Velocity (ft/min)	Temp (deg F)	Flow (cfm)
SVEW-1	0903	7.0	1,100	64	49					
SVEW-2	0906	6.5	1,150	61	51					
SVEW-3	0909	6.0	1,400	58	63					
SVEW-4	0913	6.0	2,300	58	103	1012	5.5	1,700	57	76
SVEW-5	0916	7.0	1,450	60	65					
SVEW-6	0918	6.3	2,350	58	105					
SVEW-7	0920	7.0	2,600	67	116					
SVEW-8	0923	6.5	1,700	60	76					
System Total	0926	6.5	1,500	60	468					

Table 3.1
Extraction Well Measurements

Date	4/19/95					4/21/95				
Well	Time	Vacuum (inch Hg)	Velocity (ft/min)	Temp (deg F)	Flow (cfm)	Time	Vacuum (inch Hg)	Velocity (ft/min)	Temp (deg F)	Flow (cfm)
SVEW-1	0821	6.5	710	63	32	1642	6.8	1,100	70	49
SVEW-2	0822	6.0	1,020	61	46	1644	6.5	1,800	67	81
SVEW-3	0824	5.5	1,400	57	63	1646	4.0	2,750	63	123
SVEW-4	0826	5.5	2,000	60	89	1648	5.9	1,900	62	85
SVEW-5	0828	6.0	1,900	61	85	1650	7.0	1,550	67	69
SVEW-6	0830	6.0	1,900	58	85	1654	6.3	2,400	61	107
SVEW-7	0832	7.0	2,400	66	107	1656	6.9	2,550	74	114
SVEW-8	0833	6.2	1,300	60	58	1658	6.4	2,000	65	89
System Total	0835	6.2	1,400	61	437	1700	6.0	1,350	70	421

Date	4/24/95					4/26/95				
Well	Time	Vacuum (inch Hg)	Velocity (ft/min)	Temp (deg F)	Flow (cfm)	Time	Vacuum (inch Hg)	Velocity (ft/min)	Temp (deg F)	Flow (cfm)
SVEW-1	0810	6.5	800	63	36	0812	7.0	800	59	36
SVEW-2	0812	6.0	1,150	63	51	0815	6.0	1,250	59	56
SVEW-3	0814	4.0	1,450	59	65	0817	4.0	1,800	57	81
SVEW-4	0816	6.0	2,000	60	89	0818	5.5	1,900	58	85
SVEW-5	0818	7.0	1,400	63	63	0824	6.8	1,450	60	65
SVEW-6	0821	6.0	2,000	60	89	0826	6.0	2,100	59	94
SVEW-7	0823	6.5	2,400	64	107	0829	6.8	2,550	54	114
SVEW-8	0825	6.0	1,400	61	63	0831	6.0	1,450	60	65
System Total	0826	6.0	1,400	62	437	0833	6.2	1,350	54	421

Table 3.1
Extraction Well Measurements

Date	4/28/95					4/28/95				
Well	Time	Vacuum (inch Hg)	Velocity (ft/min)	Temp (deg F)	Flow (cfm)	Time	Vacuum (inch Hg)	Velocity (ft/min)	Temp (deg F)	Flow (cfm)
SVEW-1	0755	6.5	800	59	36	1500	6.0	1,700	73	76
SVEW-2	0758	6.0	1,200	59	54	1505	5.8	1,000	71	45
SVEW-3	0800	4.2	1,500	58	67	1508	4.0	1,800	69	81
SVEW-4	0804	6.0	2,000	57	89	1510	5.5	2,250	68	101
SVEW-5	0811	7.0	1,450	60	65	1515	6.0	1,300	70	58
SVEW-6	0814	6.0	1,950	59	87	1517	5.5	2,350	67	105
SVEW-7	0817	6.5	2,480	56	111	1519	6.5	2,250	76	101
SVEW-8	0820	6.0	1,450	60	65	1521	5.5	2,950	70	132
System Total	0825	6.0	1,400	59	437	1523	5.5	1,500	70	468

Date	5/2/95					5/4/95				
Well	Time	Vacuum (inch Hg)	Velocity (ft/min)	Temp (deg F)	Flow (cfm)	Time	Vacuum (inch Hg)	Velocity (ft/min)	Temp (deg F)	Flow (cfm)
SVEW-1	0859	7.0	850	64	38	1607	6.0	850	71	38
SVEW-2	0810	6.0	1,200	64	54	1609	6.0	1,120	69	50
SVEW-3	0915	4.0	1,400	58	63	1612	4.5	1,350	63	60
SVEW-4	0920	6.0	2,000	60	89	1616	6.0	2,000	63	89
SVEW-5	0912	7.0	1,525	64	68	1618	7.0	1,400	69	63
SVEW-6	0908	6.0	1,300	60	58	1621	6.0	2,050	62	92
SVEW-7	0903	7.0	2,150	68	96	1624	6.5	1,500	74	67
SVEW-8	0926	6.0	1,600	62	72	1627	6.0	2,150	67	96
System Total	0954	6.0	1,300	62	406	1630	6.0	1,450	70	453

Table 3.1
Extraction Well Measurements

Date	5/11/95					5/25/95				
Well	Time	Vacuum (inch Hg)	Velocity (ft/min)	Temp (deg F)	Flow (cfm)	Time	Vacuum (inch Hg)	Velocity (ft/min)	Temp (deg F)	Flow (cfm)
SVEW-1	0816	7.0	800	66	36	0822	7.0	1,740	64	78
SVEW-2	0818	6.0	1,250	65	56	0829	6.0	1,275	62	57
SVEW-3	0821	4.0	1,500	62	67	0835	5.0	1,425	62	64
SVEW-4	0827	5.5	2,150	62	96	0839	6.0	2,500	64	112
SVEW-5	0830	7.0	1,600	66	72	0850	7.0	2,025	66	91
SVEW-6	0833	5.75	2,300	62	103	0854	6.0	2,800	64	125
SVEW-7	0835	7.0	2,200	69	98	0940	7.0	2,350	64	105
SVEW-8	0838	6.2	1,650	64	74	0858	6.0	2,050	64	92
System Total	0841	6.0	1,100	65	343	0903	6.0	1,600	64	499

Date	6/12/95					6/22/95				
Well	Time	Vacuum (inch Hg)	Velocity (ft/min)	Temp (deg F)	Flow (cfm)	Time	Vacuum (inch Hg)	Velocity (ft/min)	Temp (deg F)	Flow (cfm)
SVEW-1	1138	7.5	1,150	77	51	1605	7.0	800	62	36
SVEW-2	1143	7.0	900	78	40	1608	7.0	750	62	34
SVEW-3	1146	6.0	1,500	68	67	1610	6.0	1,150	58	51
SVEW-4	1150	6.3	2,000	68	89	1613	6.0	1,800	58	81
SVEW-5	1202	7.5	1,300	76	58	1620	7.0	1,125	70	50
SVEW-6	1206	6.5	1,900	69	85	1622	6.0	1,525	68	68
SVEW-7	1210	7.2	2,550	77	114	1626	7.0	2,200	72	98
SVEW-8	1214	7.0	1,270	74	57	1628	6.0	1,200	70	54
System Total	1218	6.2	1,500	72	468	1631	7.0	1,125	68	351

Table 3.1 Extraction Well Measurements										
Date	7/13/95					8/24/95				
Well	Time	Vacuum (inch Hg)	Velocity (ft/min)	Temp (deg F)	Flow (cfm)	Time	Vacuum (inch Hg)	Velocity (ft/min)	Temp (deg F)	Flow (cfm)
SVEW-1	0914	6.5	500	73	22	1137	6.5	900	82	40
SVEW-2	0922	6.0	715	76	32	1141	6.0	980	83	44
SVEW-3	0925	5.5	965	70	43	1145	4.0	1,850	73	83
SVEW-4	0928	6.0	1,750	69	78	1148	5.5	2,000	75	89
SVEW-5	0931	7.0	1,140	72	51	1153	7.0	1,450	78	65
SVEW-6	0934	6.0	1,450	70	65	1156	6.0	2,300	71	103
SVEW-7	0938	6.5	1,650	76	74	1158	6.5	1,900	80	85
SVEW-8	0942	5.5	1,300	70	58	1200	6.0	1,380	80	62
System Total	0944	5.5	1,115	72	348	1202	5.5	1,500	79	468

Note: For SVE wells a 3" pipe (with an inside diameter of 2.864"), flow in cfm = (22/7)x[(2.864/12)^2)/4xvelocity in fpm
For SVE wells a 8" pipe (with an inside diameter of 7.565"), flow in cfm = (22/7)x[(7.565/12)^2)/4xvelocity in fpm

Table 3.2 Injection Well Measurements								
	South End				North End			
Date	Time	Pressure (psi)	Velocity (ft/min)	Temp (deg F)	Time	Pressure (psi)	Velocity (ft/min)	Temp (deg F)
4/7/95	1110	1.5		83	1110	1.7		77
4/7/95		0.5	—		No test			
4/10/95	1805	0.75	—	73	1758	0.75	300	87
4/11/95					1730	1	386	84
4/12/95	1411	1	—	61	1407	1.5	500	78
4/13/95	0928	0.75	—	70	0932	1.5	465	75
4/14/95					0950		287	68
4/19/95	0820	0.75	—	64	0840	0.75	165	70
4/21/95	1704	0.5	—	88	1652	0.5	265	93
4/24/95	0828	0.5	—	67	0820	0.5	220	72
4/26/95	0838	1	—	50	0821	1.5	235	50
4/28/95	0829	1	—	51	0807	1	225	51
4/28/95	1525	0.5	—	92	1513	0.5	317	109
5/2/95	0930	0	—	68	0923	0	200	60
5/4/95	1634	0.5	—	90	1632	0.5	300	102
5/11/95	0849	0.75	—	72	0853	1	550	76
5/25/95	0845	0	—	68	0910	1	250	60
6/12/95	1220	0.25	—	98	1158	0.25	280	104
6/22/95	1635	1	—	82	1616	1	350	88
7/13/95	0951	1	—	78	0947	1	300	80
8/24/95	1204	0	—	83	1150	0	245	99

Velocity measurements no applicable; control valve in closed position

Table 3.3 – Soil Vapor Probe Measurements																		
Soil Probe	4/5/95		4/5/95		4/6/95		4/6/95		4/7/95		4/7/95		4/8/95		4/10/95		4/11/95	
	Time	Press. "WC	Time	Press. "WC	Time	Press. "WC	Time	Press. "WC	Time	Press. "WC	Time	Press. "WC	Time	Press. "WC	Time	Press. "WC	Time	Press. "WC
SP-1A	1649	-2.0	1906	-3.0	0958	-2.7	1932	+11.0	1040	+3.6	1737	+5.8	1220	0	0747	-0.7	1302	-0.3
SP-1B	1650	-1.9	1906	-3.0	0958	-2.7	1932	+11.0	1041	+3.4	1737	+5.6	1221	-0.1	0749	-0.8	1303	-0.4
SP-2A	1652	-5.0	1908	-7.0	0955	-5.7	1930	+30.0	1042	+8.2	1739	+10.0	1223	-0.5	0751	-2.0	1305	-2.3
SP-2B	1653	-4.5	1908	-6.5	0955	-6.1	1931	+21.0	1042	+4.9	1739	+8.5	1224	-1.5	0751	-2.6	1305	-2.9
SP-3A	1654	-5.0	1910	-5.2	1000	-4.4	1933	+0.3	1043	+0.1	1741	+2.0	1225	-3.1	0752	-3.6	1306	-3.9
SP-3B	1654	-5.0	1910	-5.0	1000	-4.3	1933	+4.2	1043	+0.1	1741	+1.0	1226	-1.5	0752	-1.6	1308	-3.9
SP-4A	1658	-4.1	1911	-3.9	1003	-3.8	1937	+0.1	1044	-2.9	1746	-2.0	1227	-3.5	0754	-3.5	1311	-4.8
SP-4B	1658	-3.7	1911	-3.9	1003	-3.7	1938	+4.0	1044	-1.1	1746	-0.7	1228	-3.3	0754	-3.5	1312	-4.0
SP-5A	1701	-2.2	1916	-2.0	1004	-2.0	1940	+1.3	1045	-1.0	1748	-0.9	1229	-1.7	0755	-1.7	1313	-1.9
SP-5B	1701	-2.8	1916	-2.5	1004	-2.4	1941	+1.8	1045	-1.0	1754	-1.2	1230	-2.0	0755	-2.0	1314	-2.2
SP-6A	1656	-1.6	1912	-1.6	1006	-1.4	1942	-0.6	1047	-1.2	1754	-1.4	1231	-1.5	0756	-1.4	1315	-1.4
SP-6B	1656	-1.6	1915	-1.6	1006	-1.4	1993	0	1047	-1.1	1750	-0.9	1231	-1.6	0756	-1.5	1315	-1.6
SP-7A	1702	-2.4	1917	-2.0	1008	-2.0	1944	+1.3	1050	-0.9	1750	-0.8	1233	-1.4	0757	-1.4	1316	-1.4
SP-7B	1702	-5.4	1916	-4.5	1008	-4.0	1944	+3.9	1050	-1.1	1750	-0.8	1233	-2.4	0757	-2.7	1317	-2.9
SP-8A	1703	-0.1	1918	-0.1	1010	-0.1	1945	0	1052	-0.1	1752	-0.1	1234	-0.1	0800	-0.1	1318	-0.1
SP-8B	1703	-1.0	1918	-0.9	1010	-0.7	1945	-0.4	1052	-0.6	1752	-0.7	1235	-0.6	0800	-0.6	1322	-0.5
SP-9A	1705	-0.80	1920	-0.7	1012	-0.6	1946	+0.4	1054	-0.3	1756	-0.2	1236	-0.6	0802	-0.6	1323	-0.6
SP-9B	1705	-1.0	1920	-0.9	1012	-0.8	1947	+0.7	1054	-0.3	1756	-0.2	1237	-0.7	0803	-0.7	1324	-0.8
SP-10A	1706	-0.6	1921	-0.6	1016	-0.5	1948	+0.9	1055	-0.1	1758	-0.1	1238	-0.4	0805	-0.5	1326	-0.5
SO-10B	1706	-1.2	1921	-1.3	1016	-1.2	1948	+7.6	1055	-1.0	1758	-2.0	1239	+0.1	0806	-0.5	1326	-0.5
SP-11A	1708	-1.0	1922	-0.9	1018	-0.8	1949	-0.2	1057	-0.8	1800	-0.8	1240	-1.0	0808	-0.4	1328	-1.0
SP-11B	1709	-4.0	1922	-4.0	1018	-2.8	1950	+3.3	1057	-1.1	1800	-1.0	1241	-2.9	0808	-3.2	1328	-3.6
SP-12A	1711	-0.8	1925	-0.8	1020	-0.6	1951	+1.0	1058	0	1800	+0.5	1243	+0.1	0809	0	1331	0
SP-12B	1711	-3.6	1925	-3.6	1020	-2.7	1952	+8.6	1058	+1.1	1800	+1.1	1244	-1.9	0809	-2.4	1332	-2.2
SP-13A	1732	-1.5	1926	-1.4	1022	-1.4	1953	+5.2	1100	+1.0	1759	+1.0	1245	-0.6	0811	-0.9	1332	-0.6
SP-13B	1732	-2.6	1926	-2.2	1022	-2.1	1953	+9.0	1100	+2.1	1759	+2.0	1246	-0.9	0812	-1.2	1333	-1.2
SP-14A	1733	0	1927	0	1024	0	1954	0	1102	0	1757	0	1248	0	0814	0	1334	0
SP-14B	1734	-3.9	1927	-3.5	1024	-3.1	1954	+6.3	1102	+0.4	1757	0	1247	-2.0	0814	-2.5	1334	-2.6
SP-15A	1734	-1.5	1927	-1.4	1025	-1.4	1955	+4.8	1104	0	1753	+6.7	1249	-0.2	0816	-0.6	1336	-0.5
SP-15B	1735	-3.7	1927	-3.3	1025	-3.1	1955	+4.3	1104	+5.8	1753	0	1250	+0.4	0817	-0.7	1337	-0.4
SP-16A	1736	0.3	1929	-0.3	1027	-0.3	1956	+0.4	1105	0	1754	0	1252	-0.2	0818	-0.2	1338	-0.2
SP-16B	1736	0.7	1929	-0.6	1027	-0.6	1957	+1.1	1105	0	1754	0	1253	-0.4	0819	-0.5	1339	-0.5

Table 3.3 Soil Vapor Probe Measurements																		
Soil Probe	4/12/95		4/13/95		4/14/95		4/19/95		4/21/95		4/24/95		5/4/95		6/12/95		6/22/95	
	Time	Press. "WC	Time	Press. "WC	Time	Press. "WC	Time	Press. "WC	Time	Press. "WC	Time	Press. "WC	Time	Press. "WC	Time	Press. "WC	Time	Press. "WC
SP-1A	1132	+0.2	1756	+0.6	0910	-0.5	0748	-1.0	1620	-1.2	0810	-1.2	1538	-1.2	1125	-4.8	1543	-0.3
SP-1B	1133	+0.1	1757	+0.4	0910	-0.6	0749	-1.0	1620	-1.2	0810	-1.3	1538	-1.2	1125	-5.0	1544	-0.4
SP-2A	1133	-0.8	1808	-0.1	0913	-1.6	0750	-2.8	1622	-3.6	0811	-3.2	1540	-3.0	1130	-8.2	1546	0
SP-2B	1134	-1.7	1808	-1.0	0914	-1.3	0750	-3.2	1623	-3.8	0811	-2.5	1541	-3.2	1130	-9.0	1547	-2.4
SP-3A	1135	-3.3	1810	-3.0	0915	-3.6	0751	-4.0	1624	-4.4	0812	-4.1	1542	-3.9	1133	+0.1	1548	0
SP-3B	1136	-1.0	1810	-2.8	0916	-3.8	0752	-4.0	1625	-4.2	0812	-3.8	1544	+0.2	1133	+0.1	1549	0
SP-4A	1138	-4.8	1812	-4.4	0917	-4.5	0754	-4.6	1626	-4.8	0814	-4.4	1545	-4.3	1135	-7.6	1550	-6.7
SP-4B	1139	-3.8	1812	-3.4	0918	-3.7	0755	-3.9	1627	-4.2	0814	-3.6	1546	-3.9	1135	-7.0	1551	-5.5
SP-5A	1140	-2.0	1813	-1.9	0919	-1.8	0755	-1.8	1628	-2.0	0815	-1.9	1548	-2.0	1139	-4.5	1553	-3.9
SP-5B	1140	-2.3	1813	-2.1	0920	-2.0	0756	-2.2	1628	-2.4	0815	-2.3	1549	-1.8	1139	-4.8	1554	-4.1
SP-6A	1141	-1.5	1814	-1.4	0920	-1.4	0757	-1.4	1629	-1.5	0816	-2.4	1550	-1.3	1141	-3.2	1555	-1.8
SP-6B	1141	-1.7	1814	-1.6	0921	-1.6	0757	-1.6	1629	-1.7	0816	-1.4	1551	-1.5	1141	+0.1	1556	0
SP-7A	1142	-1.5	1815	-1.4	0922	-1.4	0758	-1.4	1630	-1.6	0817	-1.1	1552	-1.5	1144	-3.3	1558	-2.6
SP-7B	1142	-2.8	1815	-2.6	0922	-2.6	0759	-2.9	1630	-3.3	0817	-3.2	1553	-3.0	1144	-5.0	1559	-3.8
SP-8A	1143	-0.1	1816	-0.1	0923	-0.1	0800	-0.1	1631	-0.1	0818	-0.1	1555	-0.1	1146	-0.1	1600	+0.1
SP-8B	1143	-0.1	1816	-0.1	0923	+0.1	0800	-0.4	1631	-0.5	0818	-0.5	1555	+0.1	1146	+0.1	1601	+0.1
SP-9A	1145	-0.6	1818	-0.6	0924	-0.6	0801	-0.7	1632	-0.8	0819	-0.7	1557	-0.7	1149	-1.2	1603	-1.0
SP-9B	1145	-0.8	1818	-0.7	0924	-0.7	0802	-0.8	1633	-0.9	0819	-0.9	2558	-0.8	1149	-1.2	1604	-1.0
SP-10A	1147	-0.5	1820	-0.5	0925	-0.5	0803	-0.5	1633	-0.6	0820	-0.5	1600	-0.5	1152	-1.2	1607	-1.0
SO-10B	1147	-0.3	1820	-0.3	0925	-0.4	0804	-0.8	1634	-0.9	0820	-0.9	1600	-0.6	1152	-1.6	1608	-0.6
SP-11A	1148	-1.2	1821	-1.0	0926	-1.0	0805	-1.2	1635	-1.3	0821	-0.5	1601	-0.1	1154	0	1610	0
SP-11B	1149	-3.3	1822	-2.9	0927	-3.2	0805	-3.6	1635	-3.5	0821	-3.7	1603	-3.6	1154	-5.0	1611	-3.2
SP-12A	1150	0	1823	-1.9	0928	-2.0	0806	0	1636	-0.1	0823	-0.6	1604	-0.8	1157	-2.0	1613	-1.2
SP-12B	1150	-2.1	1823	0	0929	0	0807	-2.7	1636	-2.9	0823	-0.6	1604	-2.7	1157	-4.8	1614	-2.3
SP-13A	1151	-0.6	1825	-0.6	0930	-0.7	0808	-0.9	1637	-1.0	0824	-1.0	1605	-1.0	1200	-2.8	1616	-1.2
SP-13B	1151	-0.9	1825	-0.8	0930	-1.0	0809	-1.5	1638	-1.8	0824	-1.7	1605	-1.6	1200	-4.0	1617	-1.4
SP-14A	1152	0	1826	0	0931	0	0809	0	1638	0	0825	0	1606	0	1202	0	1619	0
SP-14B	1152	-2.2	1826	-2.2	0931	-2.3	0809	-2.7	1638	-3.0	0825	-2.9	1606	-2.8	1202	-5.1	1620	-2.3
SP-15A	1154	-0.2	1827	-0.2	0933	-0.4	0810	-0.7	1639	-0.9	0826	-0.7	1607	-0.7	1205	-3.0	1622	-1.0
SP-15B	1155	+0.3	1827	+0.2	0933	-0.2	0811	-1.4	1639	-1.4	0826	-1.2	1607	-1.2	1205	-4.5	1623	+0.8
SP-16A	1156	0	1829	-0.2	0934	-0.1	0812	-0.1	1640	-0.2	0827	-0.1	1610	0	1207	-0.3	1625	-0.2
SP-16B	1156	-0.1	1830	-0.4	0935	-0.4	0813	-0.4	1641	-0.4	0827	-0.3	1611	-0.1	1207	-0.7	1626	0

Table 3.3 – Soil Vapor Probe Measurements				
	7/13/95		8/24/95	
Soil Probe	Time	Press. "WC	Time	Press. "WC
SP-1A	0852	-1.6	1131	-1.4
SP-1B	0853	-1.7	1133	-1.5
SP-2A	0854	0	1137	-3.2
SP-2B	0855	-4.6	1139	-3.2
SP-3A	0856	0	11412	-3.2
SP-3B	0857	+0.1	1141	0
SP-4A	0858	-6.2	1145	-3.6
SP-4B	0859	-5.2	1146	-3.2
SP-5A	0900	-3.2	1150	-1.4
SP-5B	0901	-3.4	1151	-1.4
SP-6A	0902	-2.3	1153	-1.2
SP-6B	0903	+0.1	1154	-1.4
SP-7A	0904	-2.0	1155	-1.2
SP-7B	0905	-3.8	1156	-3.0
SP-8A	0906	+0.1	1158	0
SP-8B	0907	+0.1	1159	+0.1
SP-9A	0908	-0.9	1200	+0.3
SP-9B	0909	-1.0	1201	+0.4
SP-10A	0910	-0.8	1216	+0.4
SO-10B	0911	-1.1	1217	+0.6
SP-11A	0912	0	1206	0
SP-11B	0913	-3.4	1207	-2.6
SP-12A	0914	+0.1	1212	+0.5
SP-12B	0915	-2.9	1213	-2.2
SP-13A	0916	-1.2	1218	+0.7
SP-13B	0917	-1.9	1219	+0.7
SP-14A			N/A	
SP-14B	0918	-2.7	1221	-2.2
SP-15A	0919	-1.4	1222	+0.5
SP-15B	0920	-1.8	1223	+1.4
SP-16A	0921	-0.5	1225	+0.3
SP-16B	0922	0	1226	+0.1

Table 3.4 Extracted Vapor Analyses					
Sample Name	Date Sampled	Benzene (ug/L)	Ethylbenzene (ug/L)	Tetrachloroethene (ug/L)	Trichloroethene (ug/L)
SVEW-1	4/3/95	11	ND	561.5	9
SVEW-1	4/3/95	13.3	ND	199	6.7
SVEW-1	4/5/95	19	ND	72	ND
SVEW-1	4/6/95	10.5	1.5	88	5
SVEW-1	4/6/95	11.5	2	79.5	5.5
SVEW-1	4/7/95	8.3	3.7	165.7	5
SVEW-1	4/7/95	7.7	3.3	168	4.7
SVEW-1	4/8/95	6	5	213.5	4.5
SVEW-1	4/10/95	6	5	231.8	4.5
SVEW-1	4/11/95	10	7	300.5	6
SVEW-1	4/12/95	6.9	6	257.7	4.6
SVEW-1	4/18/95	20	9	291	ND
SVEW-1	4/19/95	7.3	5.3	223.7	4.3
SVEW-1	4/21/95	7.3	3	141	4
SVEW-1	4/24/95	2	1.5	227.5	ND
SVEW-1	4/26/95	2	0.8	317.6	1.6
SVEW-1	4/28/95	2	1	212	1
SVEW-1	5/2/95	21	1	224	ND
SVEW-1	5/4/95	ND	ND	434	ND
SVEW-1	5/11/95	ND	ND	584	3
SVEW-1	5/25/95	ND	ND	582	3
SVEW-1	6/12/95	ND	ND	656	ND
SVEW-1D	6/12/95	ND	ND	744	ND
SVEW-1	6/22/95	ND	ND	447	ND
SVEW-1	7/13/95	ND	ND	65	ND
SVEW-1	8/25/95	3	ND	36.1	ND
SVEW-2	4/4/95	31	2	279	11
SVEW-2	4/4/95	33	6	610	11

Table 3.4 Extracted Vapor Analyses					
Sample Name	Date Sampled	Benzene (ug/L)	Ethylbenzene (ug/L)	Tetrachloroethene (ug/L)	Trichloroethene (ug/L)
SVEW-2	4/5/95	196	3	899	ND
SVEW-2	4/6/95	24	5	158	ND
SVEW-2	4/6/95	38	4	151	11
SVEW-2	4/7/95	66	33	967	33
SVEW-2	4/7/95	35.3	14	469.3	18
SVEW-2	4/8/95	25	2	98	ND
SVEW-2	4/10/95	191	33	820	ND
SVEW-2	4/11/95	190	ND	214	ND
SVEW-2	4/12/95	187	ND	187	ND
SVEW-2	4/18/95	38	ND	98	ND
SVEW-2	4/19/95	26	29	846	17
SVEW-2	4/21/95	15.3	10.7	287.3	7.3
SVEW-2	4/24/95	6	4	528	ND
SVEW-2	4/26/95	3	3	168	ND
SVEW-2	4/28/95	6	6	134	ND
SVEW-2	5/2/95	39	5.4	842	ND
SVEW-2	5/4/95	ND	ND	3256	ND
SVEW-2	5/11/95	ND	ND	6106.7	ND
SVEW-2	5/25/95	ND	ND	6294	ND
SVEW-2	6/12/95	ND	ND	5008	ND
SVEW-2	6/22/95	ND	ND	5008	ND
SVEW-2	7/13/95	ND	ND	619	ND
SVEW-2	8/25/95	14.3	ND	452.4	1.7
SVEW-3	4/4/95	20	7	167	ND
SVEW-3	4/4/95	11	1	132	ND
SVEW-3	4/5/95	5.6	2.8	116.6	2.6
SVEW-3	4/6/95	5.4	3.2	85	2.2
SVEW-3	4/6/95	6.4	4.2	118.4	3
SVEW-3	4/7/95	6	3.2	75	2.2

Table 3.4 Extracted Vapor Analyses					
Sample Name	Date Sampled	Benzene (ug/L)	Ethylbenzene (ug/L)	Tetrachloroethene (ug/L)	Trichloroethene (ug/L)
SVEW-3	4/7/95	5.4	3.8	83.8	2.4
SVEW-3	4/8/95	5.2	5.8	117.4	2.6
SVEW-3	4/10/95	4.2	2.8	66.6	ND
SVEW-3	4/11/95	10	14	241.6	5.2
SVEW-3	4/12/95	4.4	8.6	105	ND
SVEW-3	4/18/95	4.4	1.6	144	2.2
SVEW-3	4/19/95	4.4	9.8	124.8	2
SVEW-3	4/21/95	4.2	7.6	106.8	ND
SVEW-3	4/24/95	0.8	0.8	142.6	ND
SVEW-3	4/26/95	0.6	0.6	117.2	ND
SVEW-3	4/28/95	0.6	0.4	35.8	ND
SVEW-3	5/2/95	148.8	0.4	35.4	ND
SVEW-3	5/4/95	ND	ND	115	ND
SVEW-3	5/11/95	ND	ND	128.9	ND
SVEW-3	5/25/95	ND	ND	108	ND
SVEW-3	6/22/95	ND	ND	46	ND
SVEW-3	7/13/95	ND	ND	7.5	ND
SVEW-3	8/25/95	10.6	ND	11	ND
SVEW-4	4/4/95	10	3	55.5	ND
SVEW-4	4/4/95	6.7	2.3	50.3	ND
SVEW-4	4/5/95	4	0.8	23	ND
SVEW-4	4/6/95	4	2.2	46.6	ND
SVEW-4	4/6/95	4.2	1.8	40.2	ND
SVEW-4	4/7/95	4	2	30.8	ND
SVEW-4	4/7/95	4.4	3.2	57.4	2
SVEW-4	4/8/95	4	1.6	56.4	ND
SVEW-4	4/10/95	4	4.2	57.6	ND
SVEW-4	4/11/95	3.8	2.2	30	ND
SVEW-4	4/12/95	4.2	3.6	65.4	ND

Table 3.4
Extracted Vapor Analyses

Sample Name	Date Sampled	Benzene (ug/L)	Ethylbenzene (ug/L)	Tetrachloroethene (ug/L)	Trichloroethene (ug/L)
SVEW-4	4/18/95	4.2	9.8	108.2	ND
SVEW-4	4/19/95	4.2	6.4	76.4	ND
SVEW-4	4/21/95	4.2	10.8	117.6	ND
SVEW-4	4/24/95	0.6	0.4	68.2	0.6
SVEW-4	4/26/95	0.6	1	12.8	ND
SVEW-4	4/28/95	0.8	1.8	23.6	ND
SVEW-4	5/2/95	185.4	0.4	37.4	ND
SVEW-4	5/4/95	ND	ND	217	ND
SVEW-4	5/11/95	ND	ND	142.5	ND
SVEW-4	5/25/95	ND	ND	74	ND
SVEW-4	6/12/95	ND	ND	101	ND
SVEW-4	6/22/95	ND	ND	68	ND
SVEW-4	7/13/95	ND	ND	5.6	ND
SVEW-4	8/25/95	4.3	ND	2.6	ND
SVEW-5	4/4/95	4	1.2	18.2	ND
SVEW-5	4/5/95	3.8	3.4	65	ND
SVEW-5	4/6/95	3.8	1.2	20	ND
SVEW-5	4/6/95	3.8	1	18.4	ND
SVEW-5	4/7/95	4.2	1	15.4	ND
SVEW-5	4/7/95	4.4	0.8	24.4	ND
SVEW-5	4/8/95	4.2	2.4	41.4	ND
SVEW-5	4/10/95	9.2	15.6	286	4.8
SVEW-5	4/11/95	4.2	3.8	100.4	2
SVEW-5	4/12/95	6.6	8.9	152	3.1
SVEW-5	4/18/95	4	3	41.8	ND
SVEW-5	4/19/95	4.2	5.4	56	ND
SVEW-5	4/21/95	4	3.4	42.2	ND
SVEW-5	4/24/95	0.8	1	168.8	0.6
SVEW-5	4/26/95	0.6	1.8	21.2	ND

Table 3.4 Extracted Vapor Analyses					
Sample Name	Date Sampled	Benzene (ug/L)	Ethylbenzene (ug/L)	Tetrachloroethene (ug/L)	Trichloroethene (ug/L)
SVEW-5	4/28/96	0.6	2	30.5	ND
SVEW-5	5/2/95	13.2	0.4	65.8	0.6
SVEW-5	5/4/95	ND	ND	31	ND
SVEW-5	5/11/95	ND	ND	332.5	ND
SVEW-5	5/25/95	ND	ND	33.2	ND
SVEW-5	6/12/95	ND	ND	41	ND
SVEW-5	6/22/95	ND	ND	67	ND
SVEW-5	7/13/95	ND	ND	0.62	ND
SVEW-5	8/25/95	2.1	ND	1.4	ND
SVEW-6	4/4/95	4.2	1.4	23.6	ND
SVEW-6	4/5/95	3.8	2.2	50.8	ND
SVEW-6	4/6/95	3.8	1	18.8	ND
SVEW-6	4/6/95	4	1.8	39.8	ND
SVEW-6	4/7/95	4	0.4	13.8	ND
SVEW-6	4/7/95	4.2	1.4	26.2	ND
SVEW-6	4/8/95	4.2	1.8	32.6	ND
SVEW-6	4/10/95	4.2	1.8	29	ND
SVEW-6	4/11/95	4	3.2	41	ND
SVEW-6	4/12/95	4.2	4.6	100.4	ND
SVEW-6	4/18/95	4	1.8	31.6	ND
SVEW-6	4/19/95	4.4	8.4	104	2
SVEW-6	4/21/95	4.4	11.6	181.4	2.2
SVEW-6	4/24/95	0.6	1.2	17	ND
SVEW-6	4/26/95	0.8	0.6	92.4	ND
SVEW-6	4/28/95	0.6	1.6	17.8	ND
SVEW-6	5/2/95	9.4	1	18.4	ND
SVEW-6	5/4/95	ND	ND	102	ND
SVEW-6	5/11/95	ND	ND	237.5	ND
SVEW-6	5/25/95	ND	ND	25	ND

Table 3.4 Extracted Vapor Analyses					
Sample Name	Date Sampled	Benzene (ug/L)	Ethylbenzene (ug/L)	Tetrachloroethene (ug/L)	Trichloroethene (ug/L)
SVEW-6	6/12/95	ND	ND	30	ND
SVEW-6	6/22/95	ND	ND	21	ND
SVEW-6	7/13/95	ND	ND	1.7	ND
SVEW-6	8/25/95	2.2	ND	1.6	ND
SVEW-7	4/4/95	4	1.4	25.2	ND
SVEW-7	4/4/95	3.8	1.2	28.6	ND
SVEW-7	4/5/95	3.8	0.6	18	ND
SVEW-7	4/6/95	3.8	1	22.4	ND
SVEW-7	4/6/95	4.2	1.4	31.6	ND
SVEW-7	4/7/95	4	0.8	17.8	ND
SVEW-7	4/7/95	4	0.8	17.6	ND
SVEW-7	4/8/95	4	1.2	22.2	ND
SVEW-7	4/10/95	3.8	1.6	21.2	ND
SVEW-7	4/11/95	11	10.5	225	5.5
SVEW-7	4/12/95	4	5.2	54	ND
SVEW-7	4/18/95	4.2	4.6	74.2	ND
SVEW-7	4/19/96	4.2	7.6	77.6	ND
SVEW-7	4/21/95	3.8	2.4	28.2	ND
SVEW-7	4/24/95	0.6	1.2	11.4	ND
SVEW-7	4/26/95	0.6	1.2	21.8	ND
SVEW-7	4/28/95	0.6	2.4	26	ND
SVEW-7	5/2/95	7.8	0.4	64.6	ND
SVEW-7	5/4/95	ND	ND	543	ND
SVEW-7	5/11/95	ND	ND	44.8	ND
SVEW-7	5/25/95	ND	ND	28	ND
SVEW-7	6/12/95	ND	ND	35	ND
SVEW-7	6/22/95	ND	ND	47	ND
SVEW-7	7/13/95	ND	ND	1.9	ND
SVEW-7	8/25/95	44.3	ND	1.6	0.7

Table 3.4 Extracted Vapor Analyses					
Sample Name	Date Sampled	Benzene (ug/L)	Ethylbenzene (ug/L)	Tetrachloroethene (ug/L)	Trichloroethene (ug/L)
SVEW-8	4/3/95	5.2	1.4	78.2	2.2
SVEW-8	4/3/95	6.8	ND	97.2	2.4
SVEW-8	4/5/95	4	1.2	36.2	ND
SVEW-8	4/6/95	3.8	1	26.6	ND
SVEW-8	4/6/95	4.2	0.4	32.8	ND
SVEW-8	4/7/95	3.8	0.6	9.8	ND
SVEW-8	4/7/95	4	0.5	10.8	ND
SVEW-8	4/8/95	4	1.6	25.2	ND
SVEW-8	4/10/95	4	2.6	61.6	ND
SVEW-8	4/11/95	4	5.8	342	2.2
SVEW-8	4/12/95	4.4	2.2	26.6	ND
SVEW-8	4/18/95	8	11.7	220	4.3
SVEW-8	4/19/95	4.6	6	64	ND
SVEW-8	4/21/95	4.2	2.2	25.2	ND
SVEW-8	4/24/95	0.8	1	170.8	0.6
SVEW-8	4/26/95	1.2	0.6	114.6	0.8
SVEW-8	4/28/95	0.8	0.6	111.4	0.8
SVEW-8	5/2/95	9	0.2	36.2	ND
SVEW-8	5/4/95	ND	2.6	400	ND
SVEW-8	5/11/95	ND	ND	149.3	ND
SVEW-8	5/25/95	ND	ND	63	ND
SVEW-8	6/12/95	ND	ND	129	ND
SVEW-8	6/22/95	ND	ND	156	ND
SVEW-8	7/13/95	ND	ND	4.3	0.26
SVEW-8	8/25/95	54.8	ND	0.8	ND
System Total	4/5/95	12	5.2	199.2	6
System Total	4/6/95	11	8.3	240	6.3
System Total	4/6/95	12	3	81.5	ND
System Total	4/7/95	11.6	1.2	44.4	4.4

Table 3.4 Extracted Vapor Analyses					
Sample Name	Date Sampled	Benzene (ug/L)	Ethylbenzene (ug/L)	Tetrachloroethene (ug/L)	Trichloroethene (ug/L)
System Total	4/7/95	18	12.7	326.7	9.3
System Total	4/8/95	11	6.7	207.3	6
System Total	4/10/95	7.4	5.7	168.3	4.3
System Total	4/11/95	15.5	17.5	458.5	10.5
System Total	4/12/95	9.2	5.6	151.6	4.4
System Total	4/18/95	7.7	9.3	198.7	4.3
System Total	4/19/95	7.7	14.7	296	4.7
System Total	4/21/95	7.7	12.7	245.7	4.3
System Total	4/24/95	2	2.5	484.5	1.5
System Total	4/26/95	1.7	1.7	292	1
System Total	4/28/95	0.7	1.3	252.7	1.3
System Total	5/2/95	15.3	2	298.7	1
System Total	5/4/95	ND	ND	543	ND
System Total	5/11/95	ND	ND	583.5	ND
System Total	5/25/95	ND	ND	541	ND
System Total	6/12/95	ND	ND	433	ND
System Total	6/22/95	ND	ND	311	ND
System Total	7/13/95	ND	ND	55.3	0.6
System Total	8/25/95	18.2	ND	33.6	ND
Discharge Stack	4/5/95	3.8	0.8	31.8	ND
Discharge Stack	4/6/95	3.6	0.8	14.8	ND
Discharge Stack	4/6/95	5.7	1.1	18.3	ND
Discharge Stack	4/7/95	4	0.6	14.8	ND
Discharge Stack	4/8/95	4	2	32.8	ND
Discharge Stack	4/10/95	4	0.8	14.8	ND
Discharge Stack	4/11/95	4.6	5.6	95	2
Discharge Stack	4/12/95	5.2	2	26.4	ND
Discharge Stack	4/18/95	5.6	4.4	42.8	2.2
Discharge Stack	4/19/95	5.4	7.4	67.6	2.2

Table 3.4 Extracted Vapor Analyses					
Sample Name	Date Sampled	Benzene (ug/L)	Ethylbenzene (ug/L)	Tetrachloroethene (ug/L)	Trichloroethene (ug/L)
Discharge Stack	4/21/95	4.8	1.8	23.8	2.2
Discharge Stack	4/24/95	1.2	0.4	59.8	1
Discharge Stack	4/26/95	0.8	1.8	39.8	0.6
Discharge Stack	4/28/95	1	1.8	50.8	1.2
Discharge Stack	4/28/95	1.2	0.4	82.2	1.4
Discharge Stack	5/2/95	10.2	1	147.4	1.2
Discharge Stack	5/4/95	ND	ND	68	ND
Discharge Stack	5/11/95	ND	ND	74.6	ND
Discharge Stack	5/25/95	ND	ND	149	ND
Discharge Stack	6/12/95	ND	ND	217	ND
Discharge Stack	6/22/95	ND	ND	183	ND
Discharge Stack	7/13/95	ND	ND	8.94	0.26
Discharge Stack	8/25/95	5.6	ND	ND	ND

Table 4.1
Soil Confirmation Results (On-site)

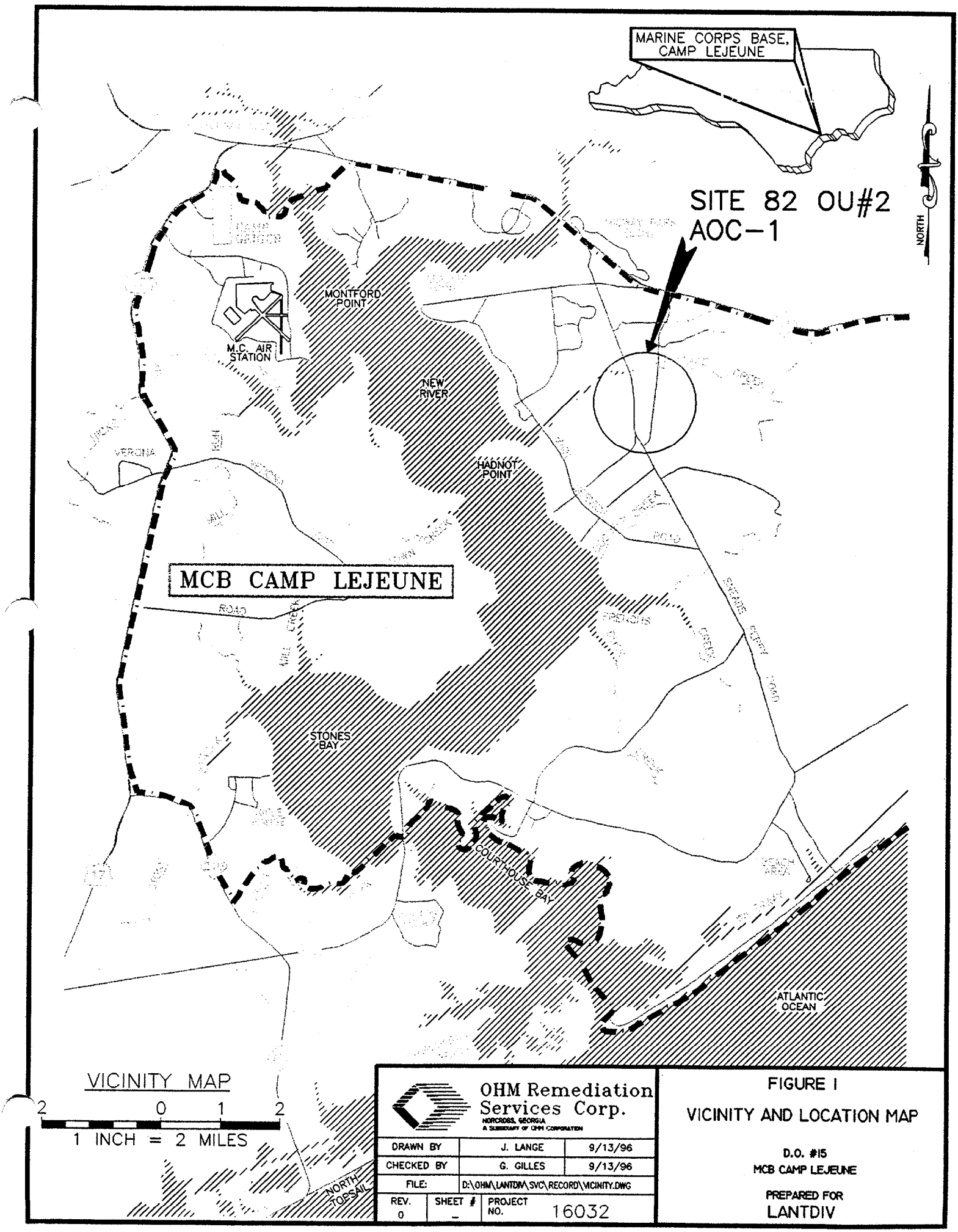
Sampling Location	Benzene (ug/kg)				Trichloroethene (ug/kg)				Tetrachloroethene (ug/kg)			
	7/94	7/18/95	8/23/95	10/12/95	7/94	7/18/95	8/23/95	10/12/95	7/94	7/18/95	8/23/95	10/12/95
(2,2)												
2-3 ft	<5.5	45.2	119	ND	<5.5	ND	ND	ND	<6.3 (25)	1.1	ND	ND
9-10 ft		ND	19	ND		ND	ND	ND		1.1	ND	5.1
14-16 ft		ND	5.3	ND		ND	ND	ND		0.4	ND	5.7
(3,2)												
3-4 ft	<5.9	99.5	162.4	ND	<5.9	ND	ND	ND	<7.4	8.2	ND	ND
9-10 ft	<5.9	3.8	72	(12.2) ND	<5.9	ND	ND	ND	46	0.8	ND	ND
14-16 ft	<27	ND	1.3	ND	<27	ND	ND	ND	110	0.7	ND	32
(3,5)												
2-3 ft		ND	ND	ND		ND	ND	ND		1.1	15.9	2.4
9-10 ft		101.3	ND	ND		ND	ND	ND		4.4	ND	ND
14-16 ft		ND	ND	ND		ND	ND	ND		ND	ND	2.6
(4,1)												
2-3 ft	<380	108.1	2.4	ND	<380	ND	ND	ND	200J	4.7	ND	ND
9-10 ft		108.3	96.5	ND		ND	ND	ND		3.0	ND	ND
14-16 ft	<6.2	ND	44	ND	6.5	ND	ND	ND	26	ND	ND	ND
(4,3)												
2-3 ft	<28	115.2	187.4	ND	<28	ND	ND	ND	<28	ND	ND	ND
9-10 ft	<26	132.4	25.9	ND	<26	ND	ND	ND	<26	16.3	ND	ND
14-16 ft	<5.8	1.1	163.7	ND	<5.8	ND	ND	ND	<5.8 (99)	ND	ND	
(4,4)												
3-4 ft	<780	ND	123.8		254J	ND	ND	ND	1800	0.9	ND	ND
9-10 ft	<26	ND	40.2	28.6	<26	ND	ND	ND	130	0.5	ND	3.2
14-16 ft	<27	ND	1.8	ND	<27	ND	ND	ND	160	ND	ND	ND
(5,3)												
2-3 ft	<5.4	33.4	38.4 (1.3)	ND	<5.4	ND	ND	ND	12	ND	ND	ND
9-10 ft	<5.3	50	64	ND	<5.3	101	ND	ND	12	ND	ND	ND
14-16 ft		0.8	1.4	ND		ND	ND	ND			ND	ND
(5,5)												
2-3 ft		40.6	1.4	ND		ND	ND	ND		0.9	ND	ND
9-10 ft		ND	3.5	ND		ND	ND	ND		0.5	ND	ND
14-16 ft		ND(5.6)	2.4	ND		ND	ND	ND		ND	ND	ND

Notes: Bolded results exceed established soil RAOs
RAOs include benzene (5.4 ug/kg), Trichloroethene (32.3 ug/kg) and Tetrachloroethene (10.5 ug/kg)
7/94 event represents initial baseline results
All results reported in ug/kg

Table 4.2 Soil Confirmation Results (Off-Site)									
Sample Location/ID	Benzene (ug/kg)			Trichloroethene (ug/kg)			Tetrachloroethene (ug/kg)		
	10/12/95	12/4/95	2/5/96	10/12/95	12/4/95	2/5/96	10/12/95	12/4/95	2/5/96
CLJ 2,2									
2-3 feet	ND	ND	ND	ND	ND	ND	ND	ND	ND
9-10 feet	ND	ND	ND	ND	ND	ND	3.0	5J	3J
14-16 feet	ND	ND	ND	ND	ND	ND	33.0	ND	ND
CLJ 3,2									
2-3 feet	ND	ND	ND	ND	ND	ND	2	ND	29
9-10 feet	ND	ND	ND	1	ND	ND	84	ND	ND
14-16 feet	ND	ND	ND	ND	ND	ND	15	ND	2J
CLJ 3,5									
2-3 feet	ND	ND	ND	ND	ND	ND	14	11	6J
2-3 feet D	ND	ND	--	ND	ND	--		58	--
9-10 feet	ND	ND	ND	ND	ND	ND	12	ND	2J
14-16 feet	ND	ND	ND	ND	ND	ND	9	ND	ND
CLJ 4,1									
2-3 feet	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-3 feet D	ND	--	ND	ND	--	ND	ND	--	ND
9-10 feet	ND	ND	ND	ND	ND	ND	4	ND	ND
14-16 feet	ND	ND	ND	ND	ND	ND	2	ND	ND
CLJ 4,3									
2-3 feet	ND	--	ND	ND	--	ND	ND	--	ND
9-10 feet	ND	--	ND	ND	--	ND	2	--	ND
14-16 feet	ND	--	ND	ND	--	ND	1	--	ND
14-16 feet D	ND	--	ND	ND	--	ND	--	--	ND
CLJ 4,4									
2-3 feet	ND	ND	ND	ND	ND	ND	ND	ND	ND
9-10 feet	ND	ND	ND	ND	ND	ND	35	ND	ND
9-10 feet D	ND	--	--	ND	--	--	1	--	--
14-16 feet	ND	ND	ND	ND	ND	ND	70	ND	ND
CLJ 5,3									
2-3 feet	ND	--	ND	ND	--	ND	ND	--	ND
9-10 feet	ND	--	ND	ND	--	ND	ND	--	ND
14-16 feet	ND	--	ND	ND	--	ND	ND	--	ND
14-16 feet D	ND	--	--	ND	--	--	ND	--	--
CLJ 5,5									
2-3 feet	ND	--	ND	ND	--	ND	ND	--	ND
9-10 feet	ND	--	ND	ND	--	ND	ND	--	ND
14-16 feet	ND	--	ND	ND	--	ND	ND	--	ND
14-16 feet D	ND	--	ND	ND	--	ND	ND	--	ND
CLJ-CS-FB	ND	ND	ND	ND	ND	ND	ND	ND	ND
CLJ-CS-RB	ND	ND	ND	ND	ND	ND	ND	ND	ND
CLJ-CS-TB	ND	ND	ND	ND	ND	ND	ND	ND	ND

Table 4.2 Soil Confirmation Results (Off-Site)									
Sample Location/ID	Benzene (ug/kg)			Trichloroethene (ug/kg)			Tetrachloroethene (ug/kg)		
	10/12/95	12/4/95	2/5/96	10/12/95	12/4/95	2/5/96	10/12/95	12/4/95	2/5/96
CLJ 2,2-3 RE	ND			51			ND		
CLJ 3,2-2RE	ND			140			ND		
CLJ3,5-2RE	ND			9			ND		
CLJ4,1-2RE	ND			2			ND		
CLJ4,1-3RE	ND			1			ND		
CLJ4,4-2RE	ND			25			ND		
CLJ4,4-3RE	ND			75			ND		

Notes: Bolded results exceed established RAOs
RAOs include benzene (5,4 ug/kg), trichloroethene (32.3 ug/kg) and tetrachloroethene A(10.5 ug/kg)
All results in ug/kg



VICINITY MAP

2 0 1 2

1 INCH = 2 MILES

OHM Remediation Services Corp.
NORCROSS, GEORGIA
A SUBSIDIARY OF OHM CORPORATION

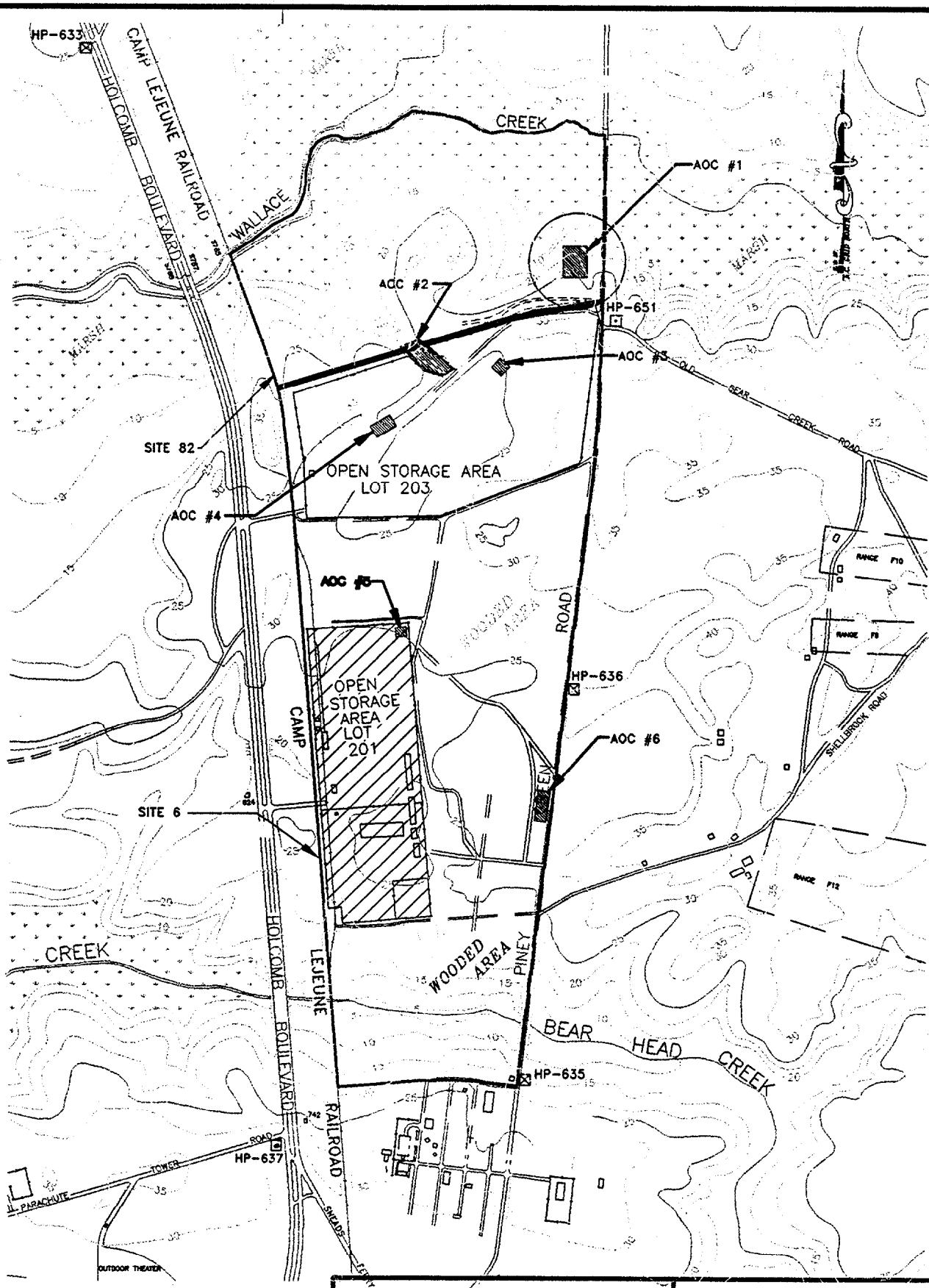
DRAWN BY	J. LANGE	9/13/96
CHECKED BY	G. GILLES	9/13/96
FILE:	D:\OHM\LANTDIV\SVC\RECORD\VICINITY.DWG	
REV. 0	SHEET # _	PROJECT NO. 16032

FIGURE 1

VICINITY AND LOCATION MAP

D.O. #15
MCB CAMP LEJEUNE

PREPARED FOR
LANTDIV



400 0 200 400
1 INCH = 400 FEET
LOCATION MAP

OHM Remediation Services Corp.
NORCROSS, GEORGIA
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DRAWN BY	J. LANGE	9/13/96
CHECKED BY	G. GILLES	9/13/96
FILE:	D:\OHM\LANTDIV\SVC\RECORD\G2.DWG	
REV. 0	SHEET # _	PROJECT NO. 16032

FIGURE 2
LOCAL SITE MAP

D.O. #15
MCB CAMP LEJEUNE

PREPARED FOR
LANTDIV

00191M012

AREA "A"

NORTH

N 348460
N 348420
N 348380
N 348340
N 348300
N 348260
N 348220
N 348180
N 348140

E 2503220
E 2503260
E 2503300
E 2503340
E 2503380
E 2503420
E 2503460
E 2503500
E 2503540
E 2503580
E 2503612

OSA-SB12C
OSA-SB12B
OSA-SB12
OSA-SB12D
OSA-SB12A

EXCAVATION AREA
EXCAVATION AREA
GUM
18" GUM
15" OAK
EXIST. MON. WELL #6GW34
HUB & TACK
HUB & TACK
PIN (S)
EXIST. DIRT ROAD

(3,5) (5,5) (4,4) (5,3) (4,3) (2,2) (3,2) (4,1) (5,0)
0 0 0 0 0 0
8.1 99 110 26
160 140 120 100 80 60 40 20

LEGEND

- SAMPLE LOCATION
- $\bullet_3$ VOLATILE ORGANICS CONCENTRATION MEASURED FROM LABORATORY ANALYTICAL
- 20 ISO-CONCENTRATION LINE (ug/Kg)
- CONTOUR INTERVAL (20 ug/Kg)
- APPROXIMATE EXTENT OF PCE >10.5 ug/Kg CONCENTRATION LEVEL (REMEDIAL GOAL)
- OSA-SB12 PREVIOUS BAKER ENVIRONMENTAL SAMPLING LOCATIONS

NOTE:
TETRACHLOROETHENE (PCE) CONCENTRATIONS IN LOWER DEPTH ZONE (14-16 FT. BLS)

-20 0 20 40 60
SCALE IN FEET
SCALE : 1" = 40-0"

OHM Remediation Services Corp.
Norcross, Georgia
A Subsidiary of OHM Corporation

SUBMITTED: _____ PROJECT MANAGER: DATE: _____
APPROVED: _____ SR. PROJECT ENGINEER DATE: _____
APPROVED: _____ DEPT. MANAGER DATE: _____

AT FULL SCALE (IF NOT 2"-SCALE ACCORDINGLY)
CADD FILE: LANTDIV\DWG\RECORD\FIG1.DWG
DRAWN: J. LANGE
DESIGNED: A. COLLINS
CHECKED: G. GILLES
CHECKED: _____

REVISIONS

ZONE	REV.	DESCRIPTION	BY	DATE	APP.
	1	INCORPORATING REVIEW COMMENTS	J.C.	2/3/95	J.D.
	2	FINAL REPORT	G.G.	9/5/96	J.D.

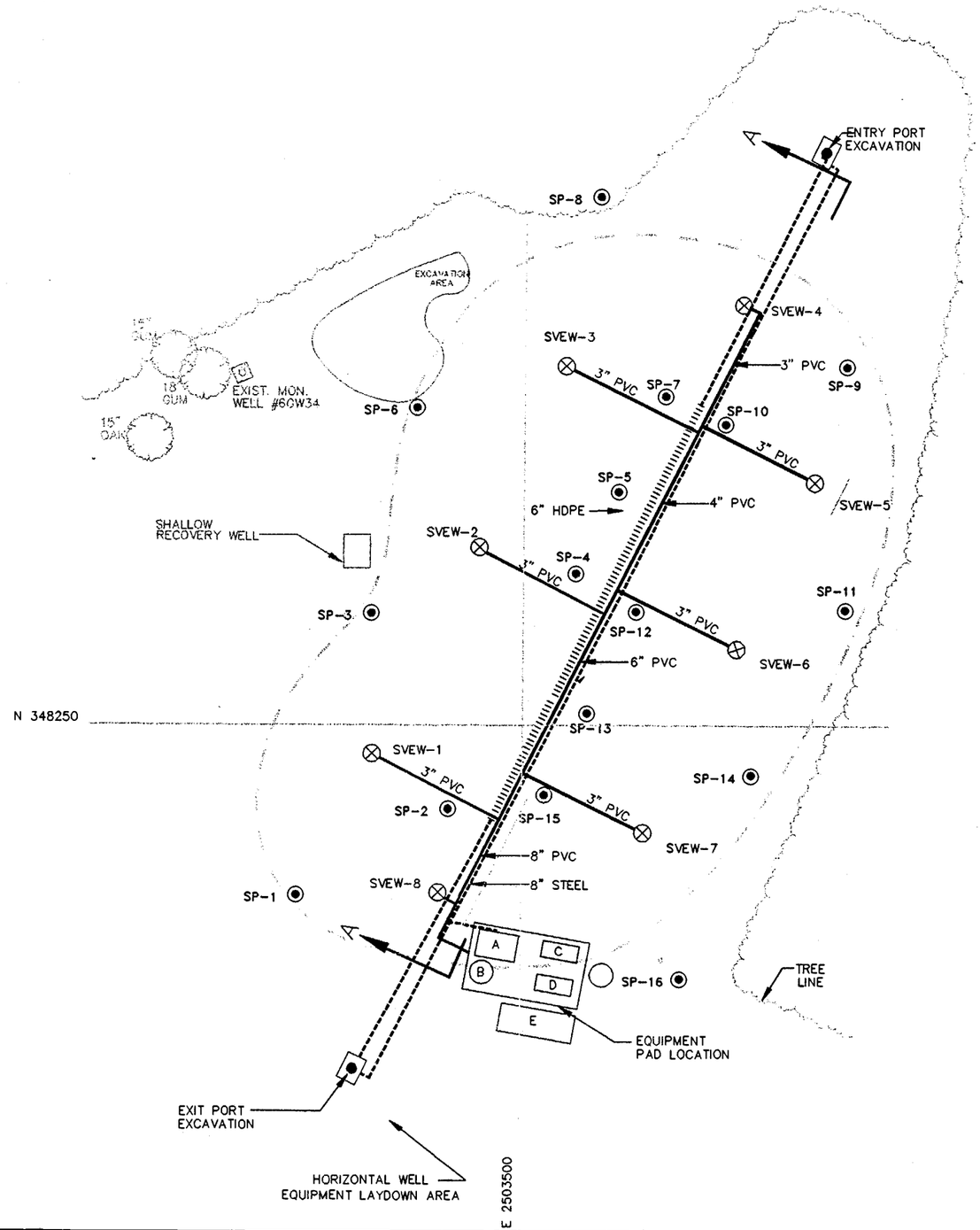
DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND
ATLANTIC DIVISION
NAVAL STATION NORFOLK, VIRGINIA
LANTDIV RAC CONTRACT N62470-93-D-3032 DELIVERY ORDER NO. 0015
OPERABLE UNIT NO. 2 MARINE CORPS BASE, CAMP LEJEUNE, N.C.

FIGURE 3

INITIAL CONTAMINATED SOIL PLUME MAP (JULY, 1994)

DRAWING NUMBER: —
SHEET NUMBER: — of
DATE: —

00191M022



NORTH

LEGEND

- SOIL VAPOR PROBE
- APPROXIMATE EXTENT OF PCE EXCEEDING 10.5 ug/kg (REMEDIAL GOAL)
- GRAVELED AREA
- SVE WELL
- HORIZONTAL INJECTION SCREENED INTERVAL
- VACUUM PIPING
- INJECTION PIPING

NOTES:

1. ACCESS ROAD ALONG AXIS OF HORIZONTAL WELL WAS CLEARED, GRUBBED, AND SMOOTHED. A 200 FOOT LONG GEOMEMBRANE LINER INSTALLED ABOVE THE SCREENED SECTION OF THE WELL. SIX TO EIGHT INCHES OF GRAVEL PLACED FROM THE EXISTING DIRT ROAD TO THE EQUIPMENT LAYDOWN AREA.
2. EXTRACTION/INJECTION WELL LOCATIONS AND SOIL PROBE LOCATIONS ARE APPROXIMATE, TOPOGRAPHIC SURVEY NOT PERFORMED.
3. PROCESS COMPONENTS
   A. VACUUM EXTRACTION UNIT
   B. VAPOR PHASE CARBON VESSEL (6,000 lbs)
   C. GENERATOR
   D. FUEL TANK
   E. 20,000 GALLON FRAC TANK

-20 0 20 40 60
SCALE IN FEET
SCALE : 1" = 40-0'

OHM Remediation Services Corp.
Norcross, Georgia
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SUBMITTED: _____ PROJECT MANAGER: _____ DATE: _____
APPROVED: _____ SR. PROJECT ENGINEER _____ DATE: _____
APPROVED: _____ DEPT. MANAGER _____ DATE: _____

AT FULL SCALE (IF NOT 2"-SCALE ACCORDINGLY)
CADD FILE: LAYOUT, SHEET, RECORDER, FIELD.DWG
DRAWN: J. LANGE/J.COLLINS
DESIGNED: A. COLLINS
CHECKED: G. GILLES
CHECKED: _____

REVISIONS

ZONE	REV.	DESCRIPTION	BY	DATE	APP.
	1	INCORPORATING REVIEW COMMENTS	J.C.	2/3/95	J.D.
	2	INCORPORATING SOIL BORING LOCATIONS	J.L.	7/21/95	J.D.
	3	FINAL REPORT	G.G.	9/5/96	J.D.

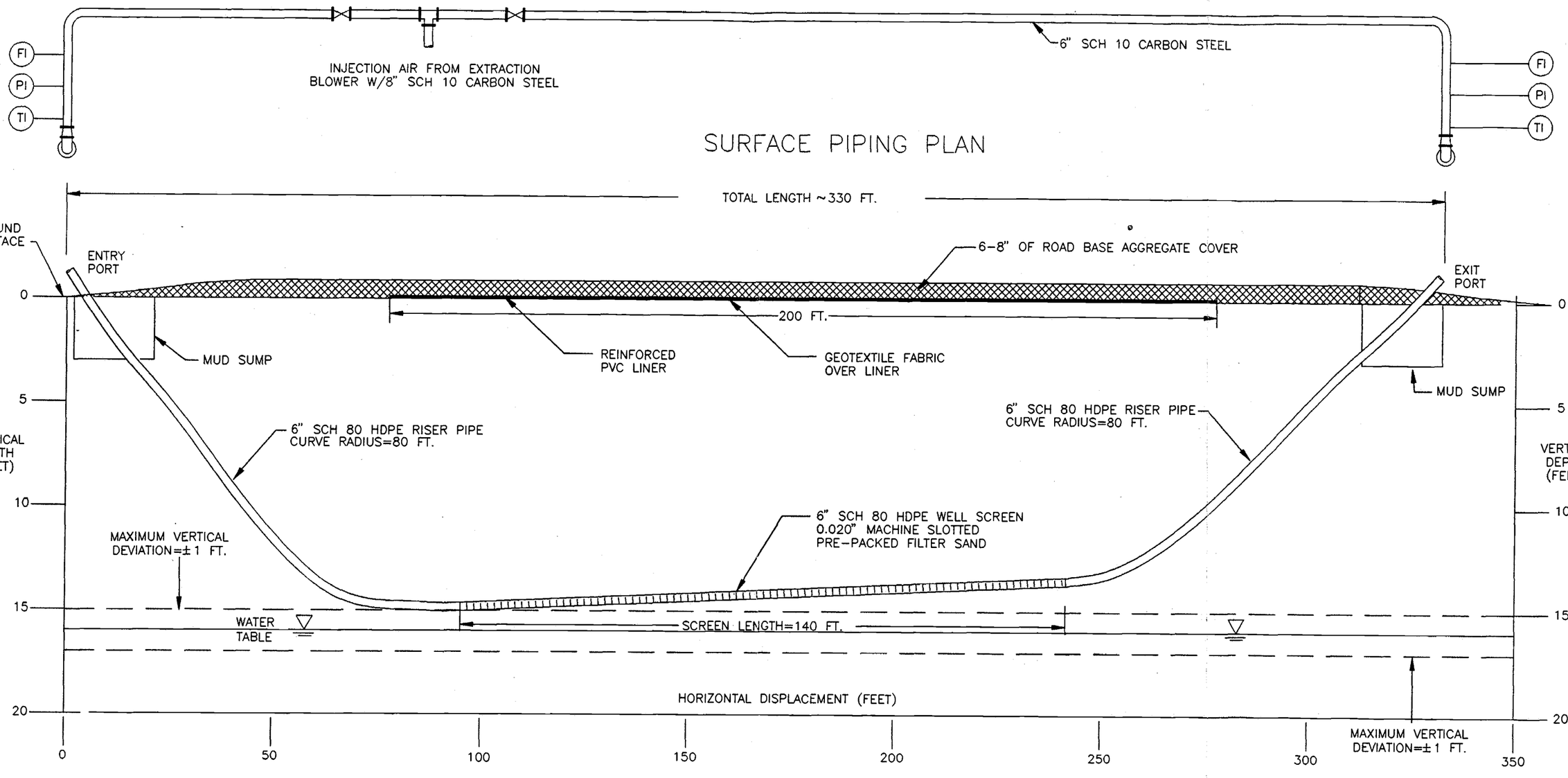
DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
ATLANTIC DIVISION
NAVAL STATION — NORFOLK, VIRGINIA
LANTDIV RAC CONTRACT N62470-93-D-3032 — DELIVERY ORDER NO. 0015
OPERABLE UNIT NO. 2 — MARINE CORPS BASE, CAMP LEJEUNE, N.C.

FIGURE 4

AOC-1 AREA A SVE SYSTEM LAYOUT AND MECHANICAL LAYOUT

DRAWING NUMBER: —
SHEET NUMBER: — of —
DATE: 2/3/95

00191M03Z



SURFACE PIPING PLAN

SECTION A-A

NOTES:

1. HORIZONTAL WELL COORDINATES OBTAINED FROM SUBSURFACE TRANSMITTER AND RECEIVER SIGNALS WERE PLOTTED FOR THIS CROSS SECTION
2. VERTICAL ELEVATION DEVIATES OVER SCREENED INTERVAL LESS THAN 1%

OHM Remediation Services Corp.
Norcross, Georgia
A Subsidiary of OHM Corporation

SUBMITTED: _____ PROJECT MANAGER: _____ DATE: _____
APPROVED: _____ SR. PROJECT ENGINEER _____ DATE: _____
APPROVED: _____ DEPT. MANAGER _____ DATE: _____

AT FULL SCALE (IF NOT 2"-SCALE ACCORDINGLY)
CADD FILE: [illegible]
DRAWN: J. LANGE/J. COLLINS
DESIGNED: A. COLLINS
CHECKED: G. GILLES
CHECKED: _____

REVISIONS

ZONE	REV.	DESCRIPTION	BY	DATE	APP.
	1	INCORPORATING REVIEW COMMENTS	J.C.	2/3/95	J.D.
	2	FINAL REPORT	G.G.	9/5/96	J.D.

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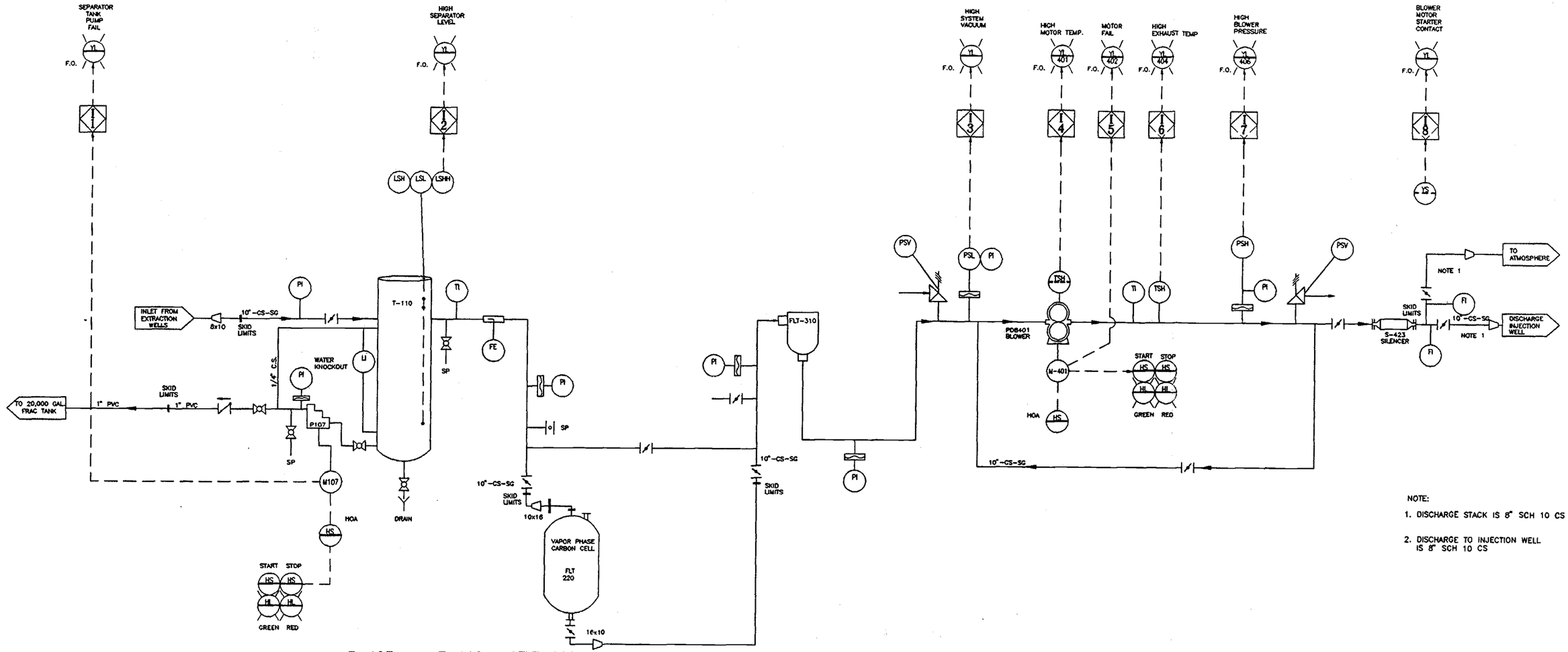
ATLANTIC DIVISION
NAVAL STATION — NORFOLK, VIRGINIA
LANTDIV RAC CONTRACT N62470-93-D-3032 — DELIVERY ORDER NO. 0015
OPERABLE UNIT NO. 2 — MARINE CORPS BASE, CAMP LEJEUNE, N.C.

FIGURE 5

HORIZONTAL WELL CONSTRUCTION DETAIL

DRAWING NUMBER:
SHEET NUMBER: _ of
DATE: 2/3/95

00191M04Z



NOTE:

1. DISCHARGE STACK IS 8" SCH 10 CS
2. DISCHARGE TO INJECTION WELL IS 8" SCH 10 CS

P-107

OBERDORFER 9000-R
LIQUID TRANSFER PUMP
10 GPM
20 PSIG
1 HP

T-110

VAPOR/LIQUID SEPARATOR
36" O.D. x 59"
50 GAL. CAP.

FLT-220A

VAPOR PHASE CARBON CELL
OHM
8' DIAMETER x 8' OAH
STEEL

FLT-310

PARTICULATE FILTER
STODDARD
F65-10

PDB-401

MD PNEUMATICS LOBE BLOWER 7021
1500 CFM
-15" Hg
1800 RPM, 100 HP
@ 190°F TEMP. RISE

S-423

UNIVERSAL SU-10
32 dBa REDUCTION

UTILITY CONNECTION

PROCESS INLET	10" 150# SCH 40 FLANGE
PROCESS OUTLET	10" 150# SCH 40 FLANGE
CARBON CELL INLET/OUTLET	10" 150# SCH 40 FLANGE
KNOCKOUT TANK DRAIN OUTLET	1" SCH 40 CS
ELECTRICAL SERVICE ENTRANCE	200 AMPS, 480/277V, 3ø, 60Hz

OHM Remediation Services Corp.
Norcross, Georgia
A Subsidiary of OHM Corporation

SUBMITTED: _____ PROJECT MANAGER: _____ DATE: _____
APPROVED: _____ SR. PROJECT ENGINEER _____ DATE: _____
APPROVED: _____ DEPT. MANAGER _____ DATE: _____

AT FULL SCALE (IF NOT 2"-SCALE ACCORDINGLY)
CADD FILE: [illegible]
DRAWN: J. LANGE
DESIGNED: A. COLLINS
CHECKED: G. GILLES
CHECKED: _____

REVISIONS

ZONE	REV.	DESCRIPTION	BY	DATE	APP.
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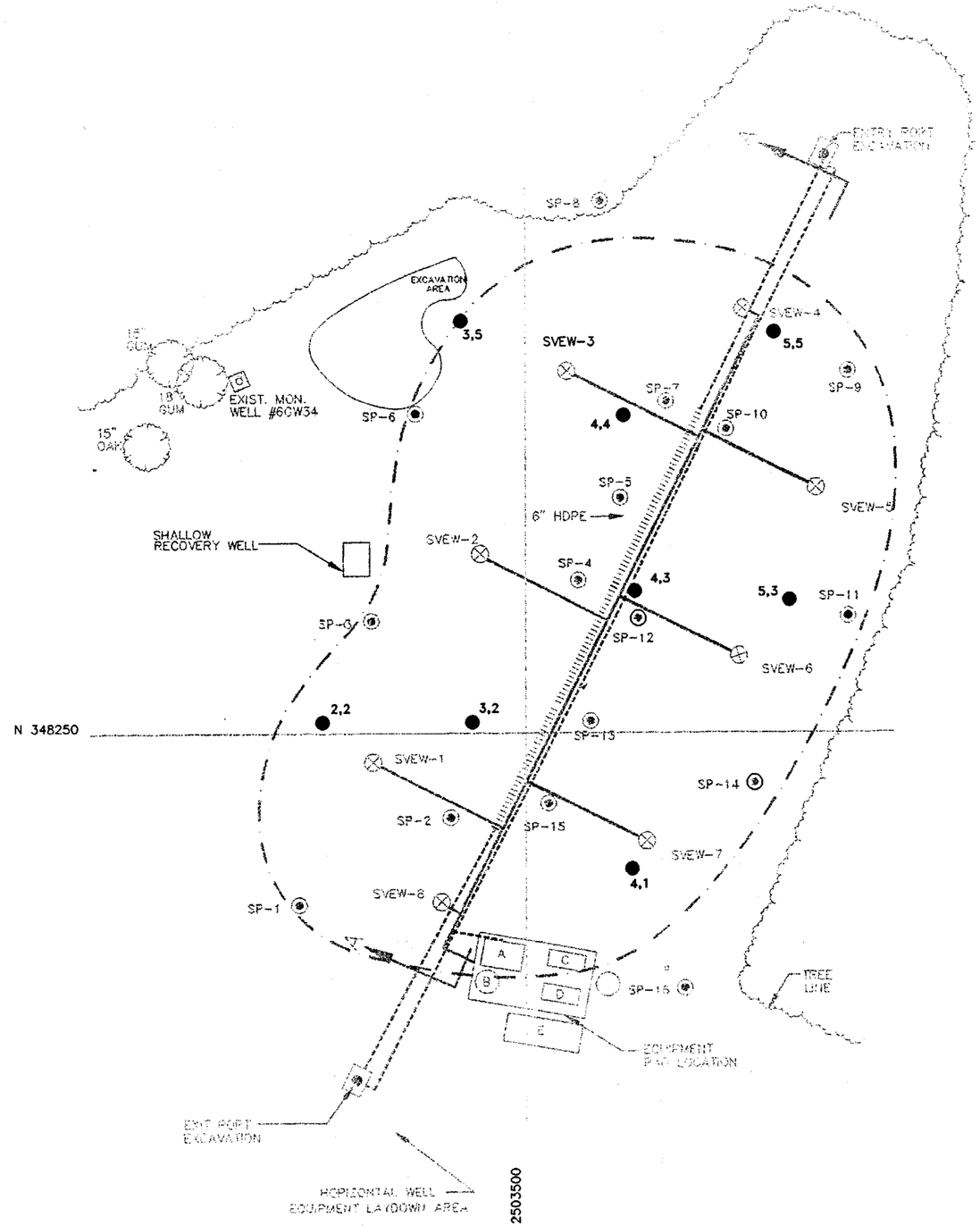
ATLANTIC DIVISION
NAVAL STATION — NORFOLK, VIRGINIA
LANTDIV RAC CONTRACT N62470-93-D-3032 — DELIVERY ORDER NO. 0015
OPERABLE UNIT NO. 2 — MARINE CORPS BASE, CAMP LEJEUNE, N.C.

FIGURE 6
PIPING AND INSTRUMENTATION DIAGRAM

DRAWING NUMBER:
SHEET NUMBER: _ of
DATE: -

00191M052



NORTH

SOIL BORING SAMPLE DEPTHS

(2,2)	(3,2)	(4,1)	(3,5)
2-3	3-4	2-3	2-3
9-10	9-10	9-10	9-10
14-16	14-16	14-16	14-16

(4,3)	(4,4)	(5,3)	(5,5)
2-3	3-4	2-3	2-3
9-10	9-10	9-10	9-10
14-16	14-16	14-16	14-16

LEGEND

- 5,3 ● CONFIRMATION SOIL BORINGS
- ⊙ SOIL VAPOR PROBE
- APPROXIMATE EXTENT OF PCE EXCEEDING 10.5 ug/kg (REMEDIAL GOAL)
- GRAVELED AREA
- ⊗ SVE WELL
- HORIZONTAL INJECTION SCREENED INTERVAL
- VACUUM PIPING
- INJECTION PIPING

NOTES:

1. ACCESS ROAD ALONG AXIS OF HORIZONTAL WELL WAS CLEARED, GRUBBED, AND SMOOTHED. A 200 FOOT LONG GEOMEMBRANE LINER INSTALLED ABOVE THE SCREENED SECTION OF THE WELL. SIX TO EIGHT INCHES OF GRAVEL PLACED FROM THE EXISTING DIRT ROAD TO THE EQUIPMENT LAYDOWN AREA.
2. EXTRACTION/INJECTION WELL LOCATIONS AND SOIL PROBE LOCATIONS ARE APPROXIMATE, TOPOGRAPHIC SURVEY NOT PERFORMED.
3. PROCESS COMPONENTS
   A. VACUUM EXTRACTION UNIT
   B. VAPOR PHASE CARBON VESSEL (6,000 lbs)
   C. GENERATOR
   D. FUEL TANK
   E. 20,000 GALLON FRAC TANK

-20 0 20 40 60
SCALE IN FEET
SCALE : 1" = 40-0'

OHM Remediation Services Corp.
Norcross,Georgia
A Subsidiary of OHM Corporation

SUBMITTED: _____ PROJECT MANAGER: DATE: _____
APPROVED: _____ SR. PROJECT ENGINEER: DATE: _____
APPROVED: _____ DEPT. MANAGER: DATE: _____

AT FULL SCALE (IF NOT 2"-SCALE ACCORDINGLY)
CADD FILE: L:\ARCDATA\ENV\LANTDIV\NAVY\OU2\M052.DWG
DRAWN: J. LANGE/J.COLLINS
DESIGNED: A. COLLINS
CHECKED: G. GILLES
CHECKED: _____

REVISIONS

ZONE	REV.	DESCRIPTION	BY	DATE	APP.
	1	INCORPORATING REVIEW COMMENTS	J.C.	2/3/95	J.D.
	2	INCORPORATING SOIL BORING LOCATIONS	J.L.	7/21/95	J.D.
	3	FINAL REPORT	G.G.	9/5/96	J.D.

DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND
ATLANTIC DIVISION
NAVAL STATION NORFOLK, VIRGINA
LANTDIV RAC CONTRACT N62470-93-D-3032 DELIVERY ORDER NO. 0015
OPERABLE UNIT NO. 2 MARINE CORPS BASE, CAMP LEJEUNE, N.C.

FIGURE 7

AOC-1 AREA A CONFIRMATION SOIL SAMPLING LOCATIONS

DRAWING NUMBER: —
SHEET NUMBER: — of
DATE: 2/3/95

Appendix A

Photographic Documentation

Project No. 16032
Contract No. N62470-93-D-3032
Delivery Order: 15
Location: Operable Unit No.2; Site 82; AOC-1; Area A
Description: Truck-mounted drill rig used to install eight vertical vapor extraction wells.

Project No. 16032
Contract No. N62470-93-D-3032
Delivery Order: 15
Location: Operable Unit No. 2; Site 82; AOC-1; Area A
Description: Cleared and grubbed soil treatment area after installation of access road, equipment pad, and eight vertical vapor extraction wells.

00191M064

Project No. 16032
Contract No. N62470-93-D-3032
Delivery Order: 15
Location: Operable Unit No. 2; Site 82; AOC-1; Area A
Description: Drilling rig used to install horizontal air injection well.

Project No. 16032
Contract No. N62470-93-D-3032
Delivery Order: 15
Location: Operable Unit No. 2; Site 82; AOC-1; Area A
Description: Back-reaming drill bit is being pulled back through the initial pilot hole from the exit port.

Project No. 16032
Contract No. N62470-93-D-3032
Delivery Order: 15
Location: Operable Unit No. 2; Site 82; AOC-1; Area A
Description: Soil probes used for collection of soil vapor samples and for measuring of subsurface vacuum levels.

Project No. 16032
Contract No. N62470-93-D-3032
Delivery Order: 15
Location: Operable Unit No 2; Site 82; AOC-1; Area A
Description: Soil probes SP-3A and SP-3B and magnihelic gauges used to measure subsurface vacuum.

00191M08Y

Project No.	16032
Contract No.	N62470-93-D-3032
Delivery Order:	15
Location:	Operable Unit No.2; Site 82; AOC-1; Area A
Description:	Flow measurements and vapor sampling being conducted at SVEW-3 wellhead.

Appendix B

Well Construction Records

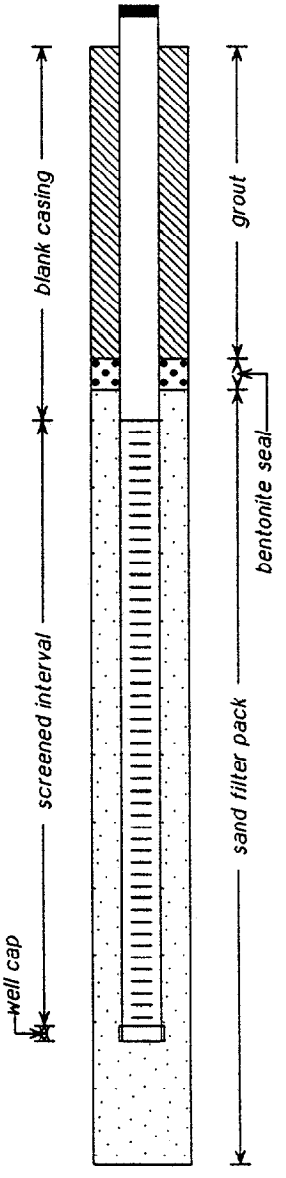
OHM Remediation Services Corp.

BORING RECORD

JOB NAME:	Camp Lejeune DO 15	BORING/WELL NUMBER:	SVEW-1
JOB NUMBER:	16032	DATE PERFORMED:	3/1/95
LOCATION:	MCB Camp Lejeune, NC	GROUND ELEVATION:	Not Recorded
DRILLING FIRM:	Groundwater Protection, Inc.	DEPTH OF BORING:	18 feet
DRILLING METHOD:	8 1/4" ID Hollow Stem Auger	DEPTH OF WELL:	16 feet
SAMPLING METHOD:	None	GROUNDWATER ATOB:	Not Encountered
WITNESS:	Andrew D. Collins, P.G.	GROUNDWATER (24Hr):	Not Encountered

DEPTH (feet)	LITHOLOGY SYMBOL	MATERIAL DESCRIPTION
		Silty sand, Top soil : Black, sand, some silt, abundant organic debris , moist, loose, soft; no odor
5		Sand : Brown, orange, fine-grained, moderately sorted, subrounded, some silt, trace clay, loose moist; no odor
10		
15		
		BORING TERMINATED AT 18 FEET BELOW GROUND SURFACE

WELL DIAGRAM



WELL CONSTRUCTION DATA:

4" ID, 0.020" wire-wrapped well screen
4" ID SCH 40 PVC Riser
4" SCH 40 PVC Bottom Plug

Borehole Diameter = 11 inches

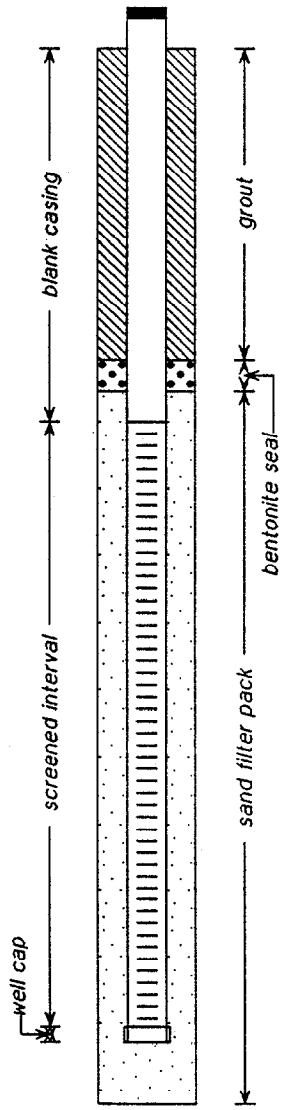
OHM Remediation Services Corp.

BORING RECORD

JOB NAME:	Camp Lejeune DO 15	BORING/WELL NUMBER:	SVEW-2
JOB NUMBER:	16032	DATE PERFORMED:	2/28/95
LOCATION:	MCB Camp Lejeune, NC	GROUND ELEVATION:	Not Recorded
DRILLING FIRM:	Groundwater Protection, Inc.	DEPTH OF BORING:	17 feet
DRILLING METHOD:	8 1/4" ID Hollow Stem Auger	DEPTH OF WELL:	16 feet
SAMPLING METHOD:	None	GROUNDWATER ATOB:	Not Encountered
WITNESS:	Andrew D. Collins, P.G.	GROUNDWATER (24Hr):	Not Encountered

DEPTH (feet)	LITHOLOGY SYMBOL	MATERIAL DESCRIPTION
		Silty sand : Black, fine-grained sand, abundant silt, some clay, abundant organic debris, moist, soft, loose; no odor
5		Sand : Tan, orange, light brown, fine to medium grain, moderately sorted, some silt, trace clay, loose, soft, moist; no odor
10		
15		BORING TERMINATED AT 17 FEET BELOW GROUND SURFACE

WELL DIAGRAM



WELL CONSTRUCTION DATA:

4" ID, 0.020" wire-wrapped well screen
4" ID SCH 40 PVC Riser
4" SCH 40 PVC Bottom Plug

Borehole Diameter = 11 inches

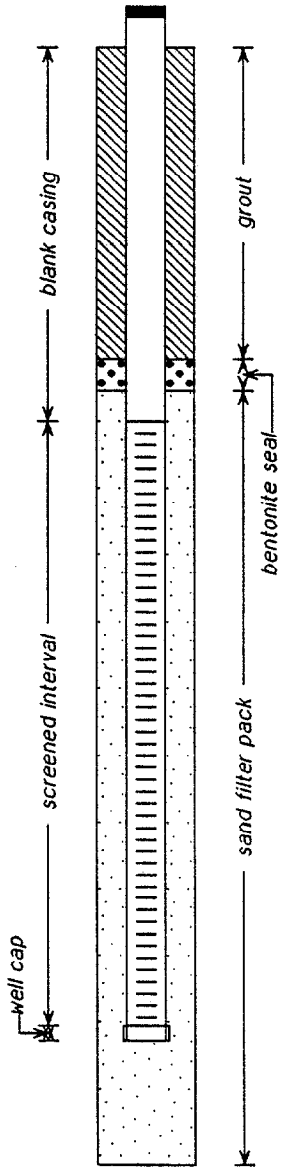
OHM Remediation Services Corp.

BORING RECORD

JOB NAME:	Camp Lejeune DO 15	BORING/WELL NUMBER:	SVEW-3
JOB NUMBER:	16032	DATE PERFORMED:	3/1/95
LOCATION:	MCB Camp Lejeune, NC	GROUND ELEVATION:	Not Recorded
DRILLING FIRM:	Groundwater Protection, Inc.	DEPTH OF BORING:	18 feet
DRILLING METHOD:	8 1/4" ID Hollow Stem Auger	DEPTH OF WELL:	16 feet
SAMPLING METHOD:	None	GROUNDWATER ATOB:	Not Encountered
WITNESS:	Andrew D. Collins, P.G.	GROUNDWATER (24Hr):	Not Encountered

DEPTH (feet)	LITHOLOGY SYMBOL	MATERIAL DESCRIPTION
		Silty sand : Black, fine-grained, abundant organic debris, abundant silt, some clay, moist, soft, loose, dry to moist; no odor
		Sand : Brown, tan, fine to medium grained, moderately sorted, subrounded, some silt, trace clay, soft, loose, moist; no odor
5		
		Sand : Tan, orange, fine grained, moderately to well sorted, subrounded, trace silt, trace clay, soft, loose, moist; no odor
10		
15		Sand : Dark brown, fine to medium grained, moderately sorted, subrounded, some silt, soft, loose, moist; no odor
		Sand : Tan, orange, medium grained, moderately sorted, subrounded, trace silt, soft, loose, moist; no odor
		BORING TERMINATED AT 18 FEET BELOW GROUND SURFACE

WELL DIAGRAM



WELL CONSTRUCTION DATA:

4" ID, 0.020" wire-wrapped well screen
4" ID SCH 40 PVC Riser
4" SCH 40 PVC Bottom Plug

Borehole Diameter = 11 inches

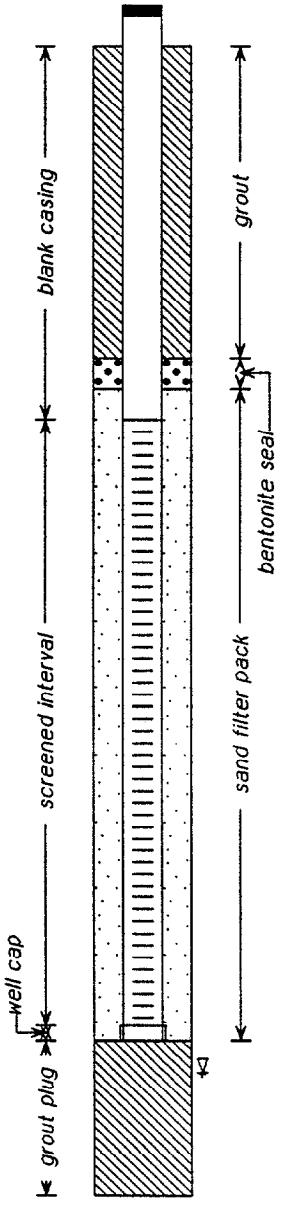
OHM Remediation Services Corp.

BORING RECORD

JOB NAME:	Camp Lejeune DO 15	BORING/WELL NUMBER:	SVEW-4
JOB NUMBER:	16032	DATE PERFORMED:	2/28/95
LOCATION:	MCB Camp Lejeune, NC	GROUND ELEVATION:	Not Recorded
DRILLING FIRM:	Groundwater Protection, Inc.	DEPTH OF BORING:	18.5 feet
DRILLING METHOD:	8 1/4" ID Hollow Stem Auger	DEPTH OF WELL:	16 feet
SAMPLING METHOD:	None	GROUNDWATER ATOB:	16.5 feet
WITNESS:	Andrew D. Collins, P.G.	GROUNDWATER (24Hr):	Not Encountered

DEPTH (feet)	LITHOLOGY SYMBOL	MATERIAL DESCRIPTION
5		Sand : Yellow, tan, fine-grained, moderately sort, subrounded, some silt, moist; no odor
10		Sand : Dark brown, fine to medium grained, moderately sorted, subrounded, some silt, moist; no odor
15		Sand : Tan, fine to medium grained, coarsens downward, well sorted, trace silt, moist to wet; no odor
		BORING TERMINATED AT 18.5 FEET BELOW GROUND SURFACE

WELL DIAGRAM



WELL CONSTRUCTION DATA:

4" ID, 0.020" wire-wrapped well screen
4" ID SCH 40 PVC Riser
4" SCH 40 PVC Bottom Plug

Borehole Diameter = 11 inches

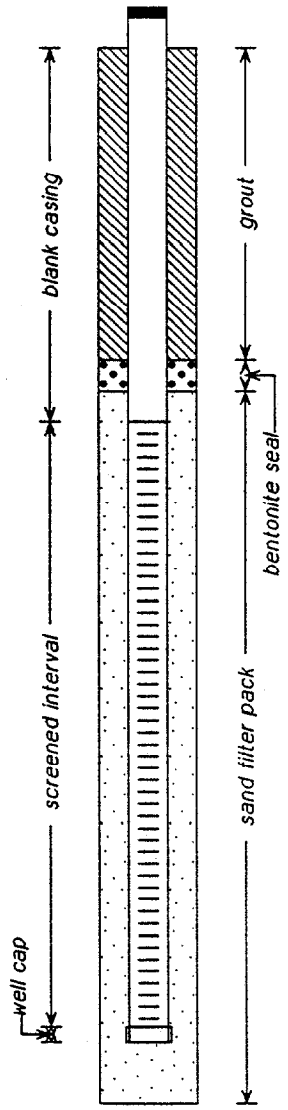
OHM Remediation Services Corp.

BORING RECORD

JOB NAME:	Camp Lejeune DO 15	BORING/WELL NUMBER:	SVEW-5
JOB NUMBER:	16032	DATE PERFORMED:	2/28/95
LOCATION:	MCB Camp Lejeune, NC	GROUND ELEVATION:	Not Recorded
DRILLING FIRM:	Groundwater Protection, Inc.	DEPTH OF BORING:	17 feet
DRILLING METHOD:	8 1/4" ID Hollow Stem Auger	DEPTH OF WELL:	16 feet
SAMPLING METHOD:	None	GROUNDWATER ATOB:	Not Encountered
WITNESS:	Andrew D. Collins, P.G.	GROUNDWATER (24Hr):	Not Encountered

DEPTH (feet)	LITHOLOGY SYMBOL	MATERIAL DESCRIPTION
		Silty sand : Black, fine-grained, abundant organics, abundant silt, trace clay, loose, moist; no odor
5		Sand : Tan, orange, fine grained, well to moderately sorted, subrounded, some silt, loose, moist; no odor
10		
15		BORING TERMINATED AT 17 FEET BELOW GROUND SURFACE

WELL DIAGRAM



WELL CONSTRUCTION DATA:

4" ID, 0.020" continuously slotted well screen
4" ID SCH 40 PVC Riser
4" SCH 40 PVC Bottom Plug

Borehole Diameter = 11 inches

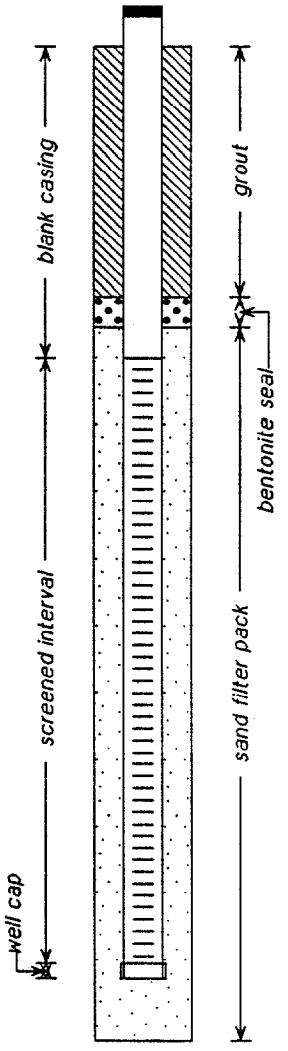
OHM Remediation Services Corp.

BORING RECORD

JOB NAME:	Camp Lejeune DO 15	BORING/WELL NUMBER:	SVEW-6
JOB NUMBER:	16032	DATE PERFORMED:	2/28/95
LOCATION:	MCB Camp Lejeune, NC	GROUND ELEVATION:	Not Recorded
DRILLING FIRM:	Groundwater Protection, Inc.	DEPTH OF BORING:	16 feet
DRILLING METHOD:	8 1/4" ID Hollow Stem Auger	DEPTH OF WELL:	15 feet
SAMPLING METHOD:	None	GROUNDWATER ATOB:	Not Encountered
WITNESS:	Andrew D. Collins, P.G.	GROUNDWATER (24Hr):	Not Encountered

DEPTH (feet)	LITHOLOGY SYMBOL	MATERIAL DESCRIPTION
		Silty sand : Black, fine-grained, abundant organics, abundant silt, trace clay, loose, moist; no odor
5		Sand : Light brown, orange, fine-grained, well sorted, trace silt, loose, moist; no odor
10		
15		BORING TERMINATED AT 16 FEET BELOW GROUND SURFACE

WELL DIAGRAM



WELL CONSTRUCTION DATA:

4" ID, 0.020" continuously slotted well screen
4" ID SCH 40 PVC Riser
4" SCH 40 PVC Bottom Plug

Borehole Diameter = 11 inches

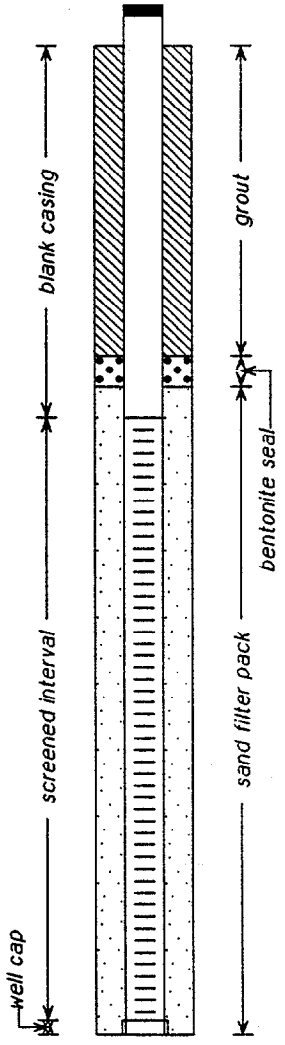
OHM Remediation Services Corp.

BORING RECORD

JOB NAME:	Camp Lejeune DO 15	BORING/WELL NUMBER:	SVEW-7
JOB NUMBER:	16032	DATE PERFORMED:	2/28/95
LOCATION:	MCB Camp Lejeune, NC	GROUND ELEVATION:	Not Recorded
DRILLING FIRM:	Groundwater Protection, Inc.	DEPTH OF BORING:	16 feet
DRILLING METHOD:	8 1/4" ID Hollow Stem Auger	DEPTH OF WELL:	16 feet
SAMPLING METHOD:	None	GROUNDWATER ATOB:	Not Encountered
WITNESS:	Andrew D. Collins, P.G.	GROUNDWATER (24Hr):	Not Encountered

DEPTH (feet)	LITHOLOGY SYMBOL	MATERIAL DESCRIPTION
		Silty sand : Black, some organics, some silt, loose, moist; no odor
5		Sand : Light brown, gray, fine-grained, well sorted, loose, moist; no odor
10		Sand : Orange, light brown, fine-grained, well-sorted, rounded, loose, moist; no odor
15		*BORING TERMINATED AT 16 FEET BELOW GROUND SURFACE*

WELL DIAGRAM



WELL CONSTRUCTION DATA:

4" ID, 0.020" wire-wrapped well screen
4" ID SCH 40 PVC Riser
4" SCH 40 PVC Bottom Plug

Borehole Diameter = 11 inches

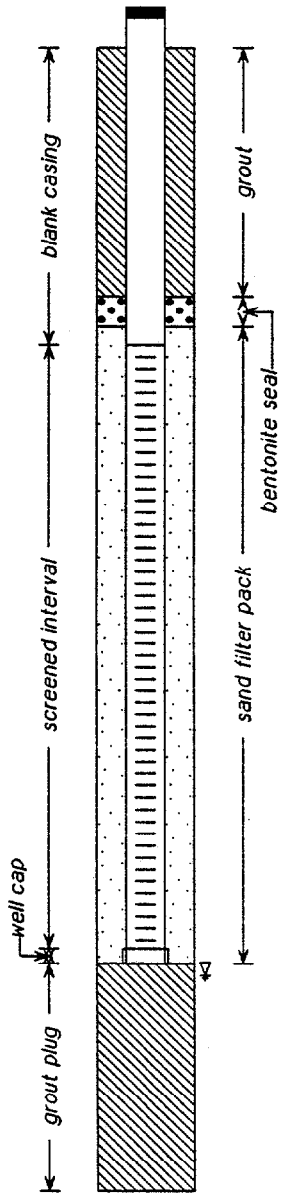
OHM Remediation Services Corp.

BORING RECORD

JOB NAME:	Camp Lejeune DO 15	BORING/WELL NUMBER:	SVEW-8
JOB NUMBER:	16032	DATE PERFORMED:	2/28/95
LOCATION:	MCB Camp Lejeune, NC	GROUND ELEVATION:	Not Recorded
DRILLING FIRM:	Groundwater Protection, Inc.	DEPTH OF BORING:	18.5 feet
DRILLING METHOD:	8 1/4" ID Hollow Stem Auger	DEPTH OF WELL:	14.8 feet
SAMPLING METHOD:	None	GROUNDWATER ATOB:	15 feet
WITNESS:	Andrew D. Collins, P.G.	GROUNDWATER (24Hr):	Not Encountered

DEPTH (feet)	LITHOLOGY SYMBOL	MATERIAL DESCRIPTION
		Sand, silt : Black, brown, fine-grained, poorly sorted, abundant silt, trace clay
5		Sand : Yellow, light brown, fine-grained, moderately sorted, loose, some silt, moist; no odor
10		
15		Silty Sand : Tan, orange, fine-grained, abundant silt, trace clay, slightly cohesive, moist to wet; no odor
		BORING TERMINATED AT 18.5 FEET BELOW GROUND SURFACE

WELL DIAGRAM



WELL CONSTRUCTION DATA:

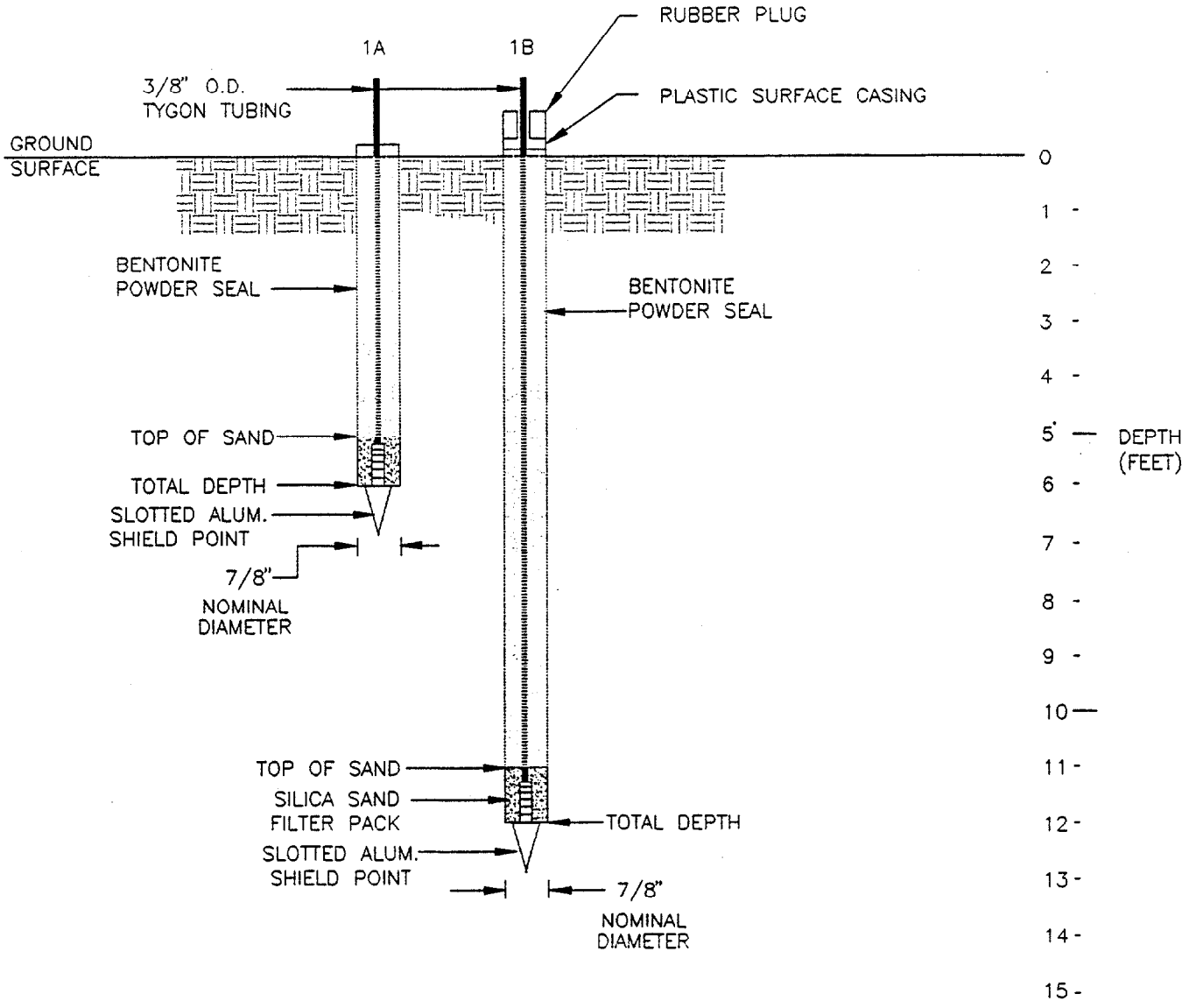
4" ID, 0.020" wire-wrapped well screen
4" ID SCH 40 PVC Riser
4" SCH 40 PVC Bottom Plug

Borehole Diameter = 11 inches

Appendix C

Soil Probe Construction Records

SOIL PROBE CLUSTER



* INSTALLED 3/7/95

NOT TO SCALE

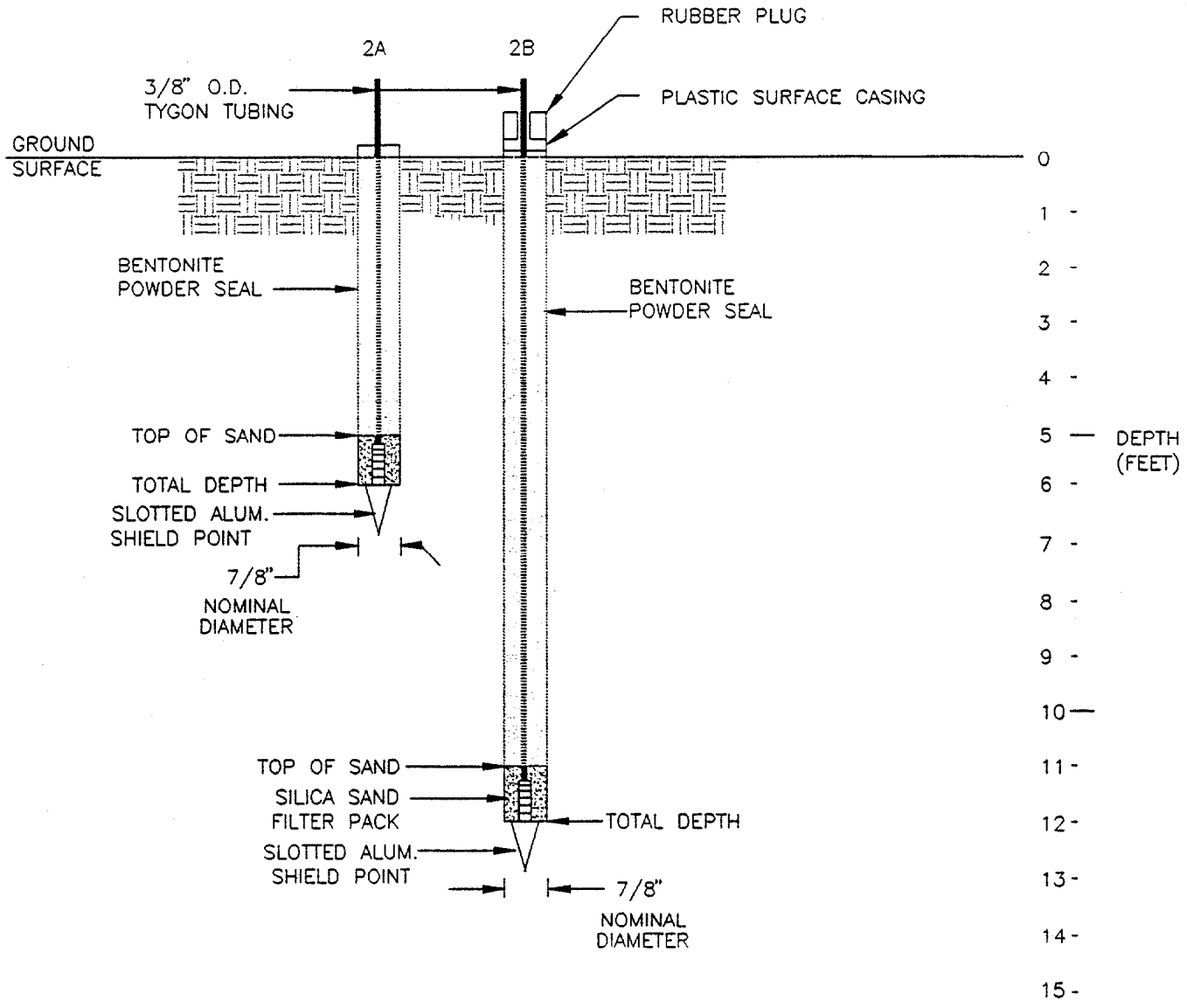
OHM Remediation Services Corp. NORCROSS, GEORGIA A SUBSIDIARY OF OHM CORPORATION		
DRAWN BY	J. LANGE	8/15/96
CHECKED BY	–	DATE
APPROVED BY	–	DATE
REV. 0	SHEET # –	PROJECT NO. 16032

FIGURE 1

SOIL PROBE CLUSTER SP-1
OU NO. 2, SITE 82, AOC-1
MCB CAMP LEJEUNE, NORTH CAROLINA

D:\OHM\LANTDIV\SVE\ORD\sp-1a.DWG

SOIL PROBE CLUSTER



* INSTALLED 3/5/95

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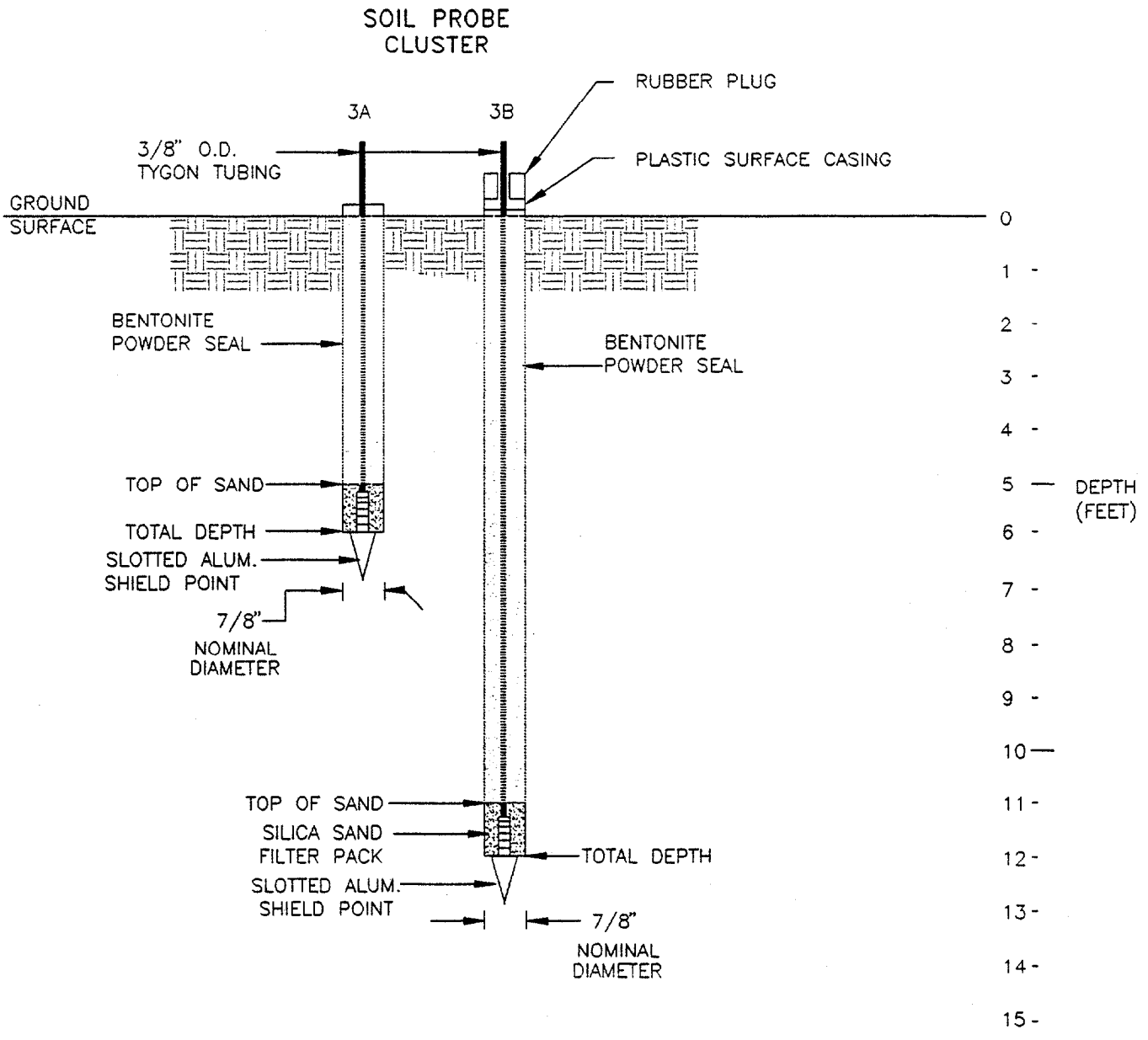
OHM Remediation Services Corp. NORCROSS, GEORGIA A SUBSIDIARY OF OHM CORPORATION		
DRAWN BY	J. LANGE	8/15/96
CHECKED BY	–	DATE
APPROVED BY	–	DATE
REV. 0	SHEET # –	PROJECT NO. 16032

FIGURE 2

SOIL PROBE CLUSTER SP-1
OU NO. 2, SITE 82, AOC-1
MCB CAMP LEJEUNE, NORTH CAROLINA

D:\OHM\LANTDIV\SVE\...ORD\sp-2a.DWG



* INSTALLED 3/7/95

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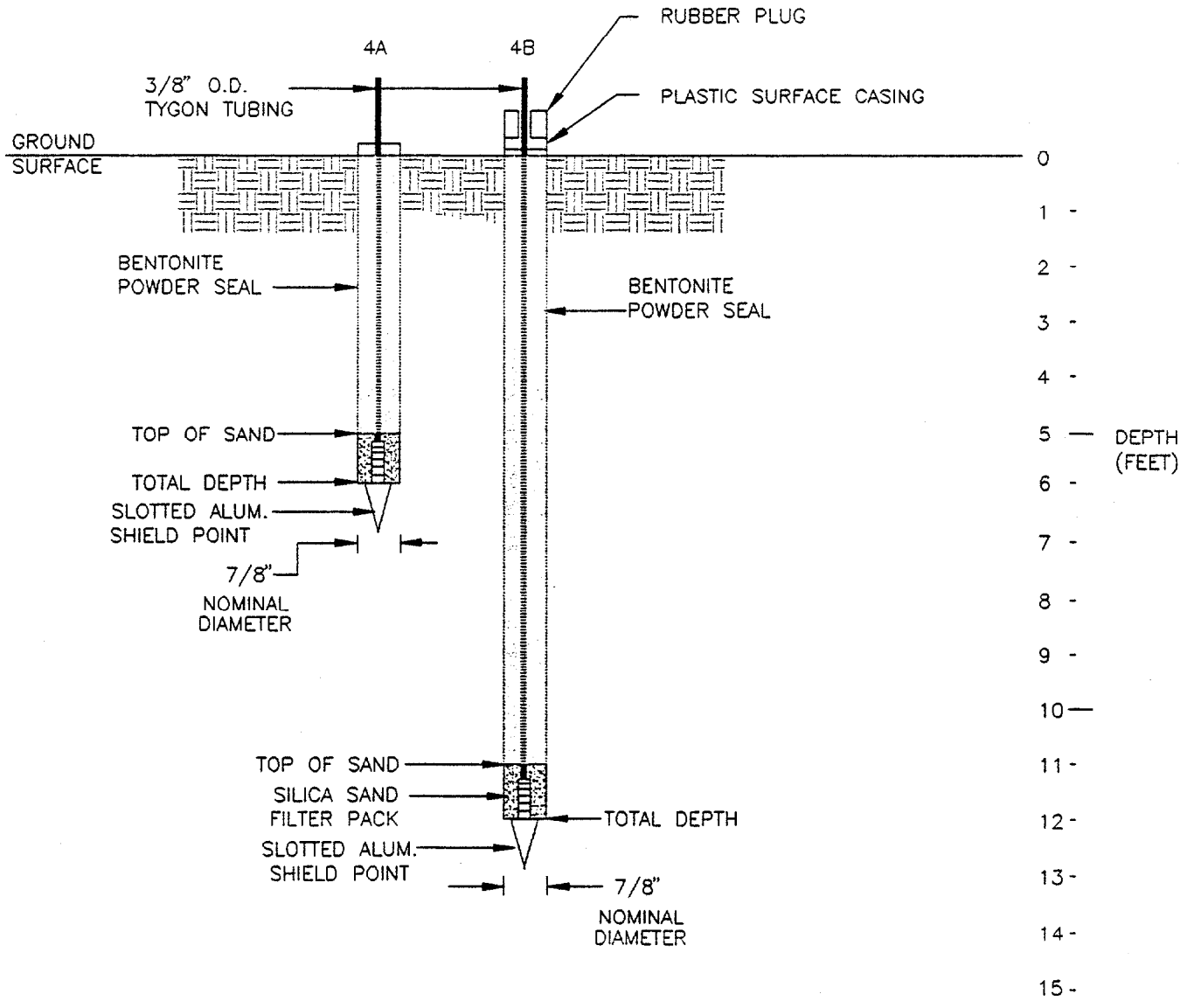
OHM Remediation Services Corp. NORCROSS, GEORGIA A SUBSIDIARY OF OHM CORPORATION		
DRAWN BY	J. LANGE	8/15/96
CHECKED BY	_	DATE
APPROVED BY	_	DATE
REV. 0	SHEET # _	PROJECT NO. 16032

FIGURE 3

SOIL PROBE CLUSTER SP-1
OU NO. 2, SITE 82, AOC-1
MCB CAMP LEJEUNE, NORTH CAROLINA

D:\OHM\LANTDIV\SVE_ORD\sp-3a.DWG

SOIL PROBE CLUSTER



* INSTALLED 3/6/95

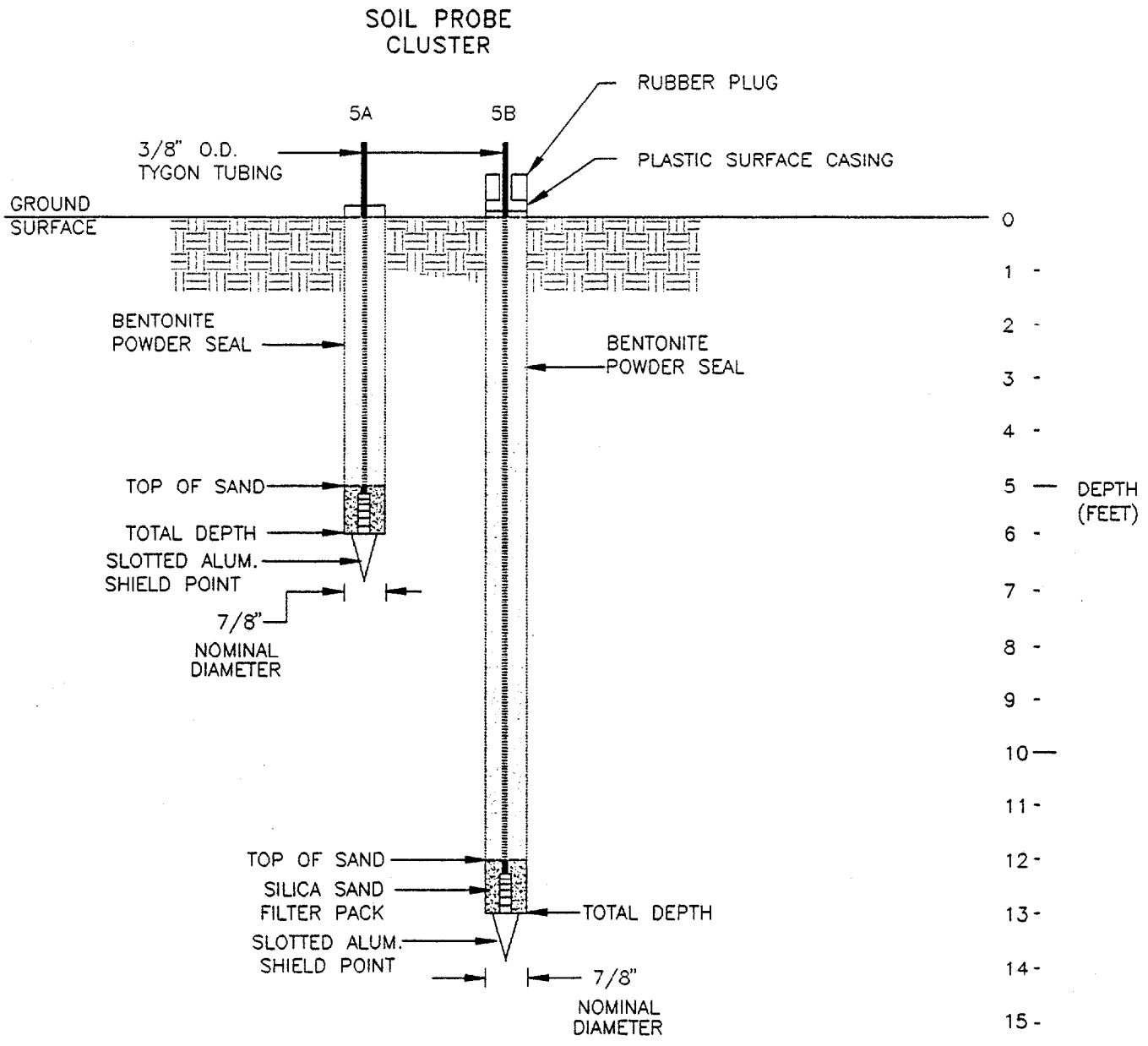
NOT TO SCALE

OHM Remediation Services Corp. NORCROSS, GEORGIA A SUBSIDIARY OF OHM CORPORATION		
DRAWN BY	J. LANGE	8/15/96
CHECKED BY	_	DATE
APPROVED BY	_	DATE
REV. 0	SHEET # _	PROJECT NO. 16032

FIGURE 4

SOIL PROBE CLUSTER SP-1
OU NO. 2, SITE 82, AOC-1
MCB CAMP LEJEUNE, NORTH CAROLINA

D:\OHM\LANTDIV\SVE\ORD\sp-4a.DWG



* INSTALLED 3/6/95

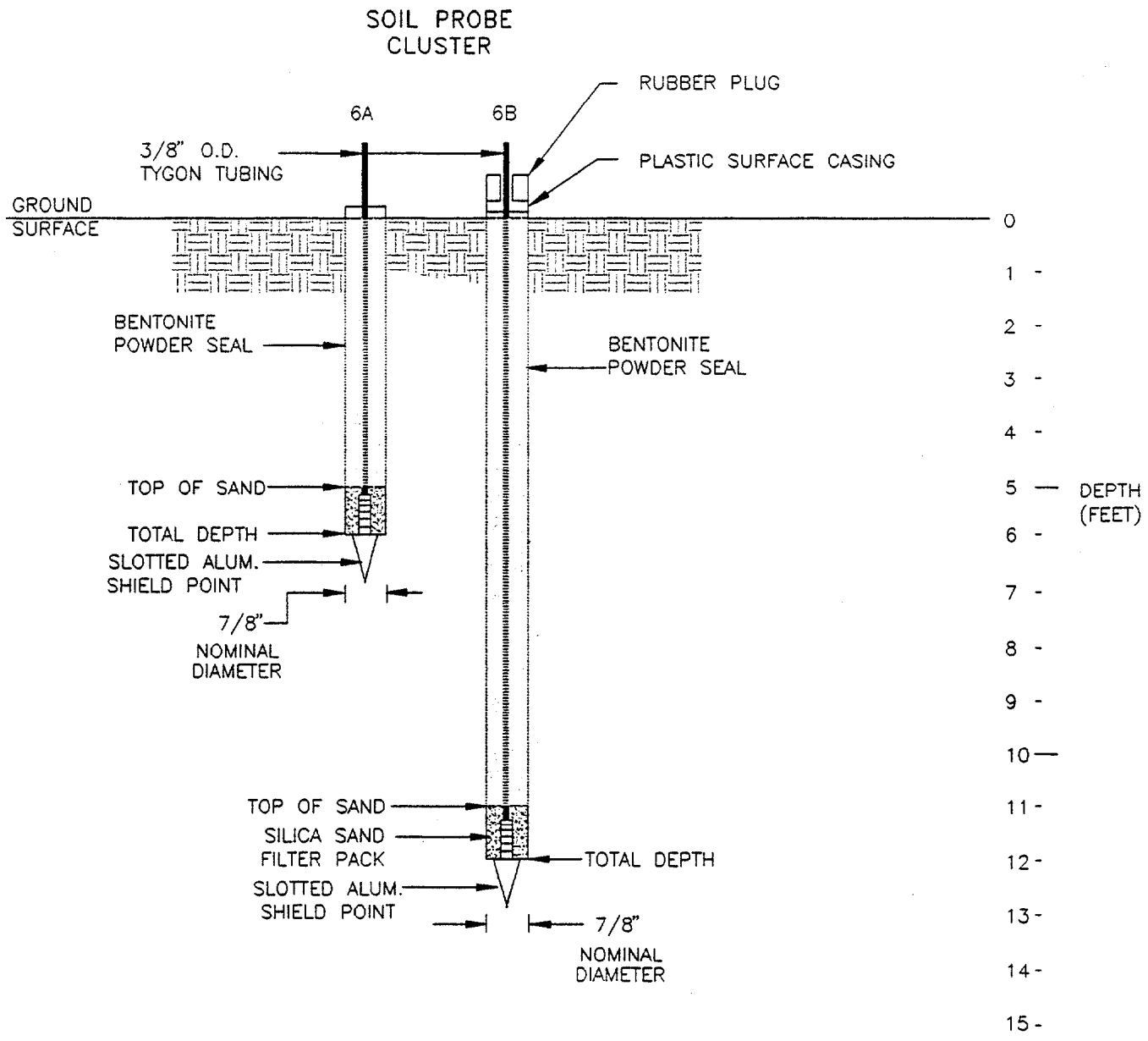
NOT TO SCALE

OHM Remediation Services Corp. NORCROSS, GEORGIA A SUBSIDIARY OF OHM CORPORATION		
DRAWN BY	J. LANGE	8/15/96
CHECKED BY	_	DATE
APPROVED BY	_	DATE
REV. 0	SHEET # _	PROJECT NO. 16032

FIGURE 5

SOIL PROBE CLUSTER SP-1
OU NO. 2, SITE 82, AOC-1
MCB CAMP LEJEUNE, NORTH CAROLINA

D:\OHM\LANTDIV\SVE...ORD\sp-5a.DWG



* INSTALLED 3/7/95

NOT TO SCALE

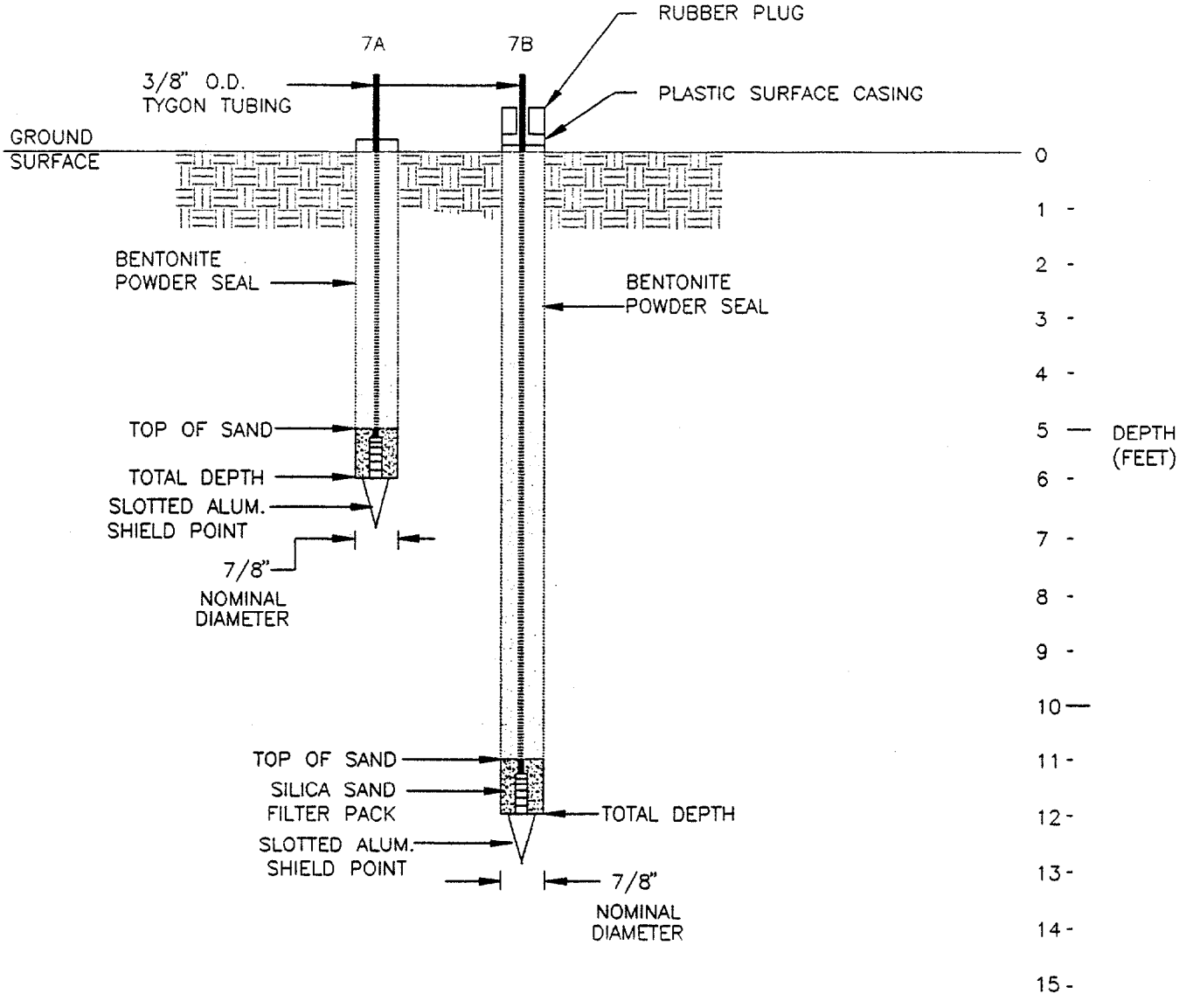
OHM Remediation Services Corp. NORCROSS, GEORGIA A SUBSIDIARY OF OHM CORPORATION		
DRAWN BY	J. LANGE	8/15/96
CHECKED BY	–	DATE
APPROVED BY	–	DATE
REV. 0	SHEET # –	PROJECT NO. 16032

FIGURE 6

SOIL PROBE CLUSTER SP-1
OU NO. 2, SITE 82, AOC-1
MCB CAMP LEJEUNE, NORTH CAROLINA

D:\OHM\LANTDIV\SVE\...JRD\sp-6a.DWG

SOIL PROBE CLUSTER



* INSTALLED 3/6/95

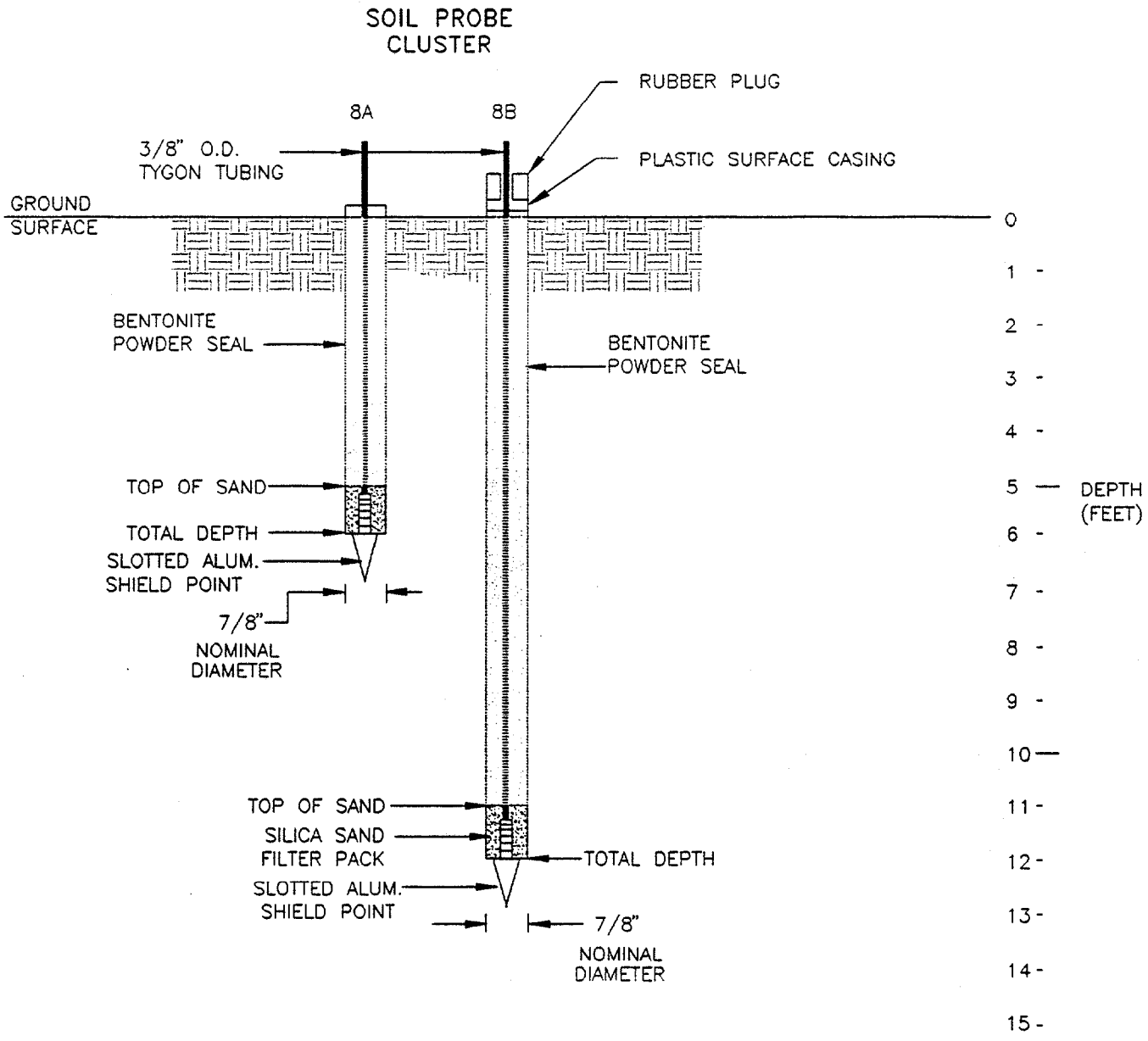
NOT TO SCALE

OHM Remediation Services Corp. NORCROSS, GEORGIA A SUBSIDIARY OF OHM CORPORATION			
DRAWN BY	J. LANGE	8/15/96	
CHECKED BY	–	DATE	
APPROVED BY	–	DATE	
REV. 0	SHEET # –	PROJECT NO. 16032	

FIGURE 7

SOIL PROBE CLUSTER SP-1
OU NO. 2, SITE 82, AOC-1
MCB CAMP LEJEUNE, NORTH CAROLINA

D:\OHM\LANTDIV\SV
RD\sp-7a.DWG



* INSTALLED 3/7/95

NOT TO SCALE

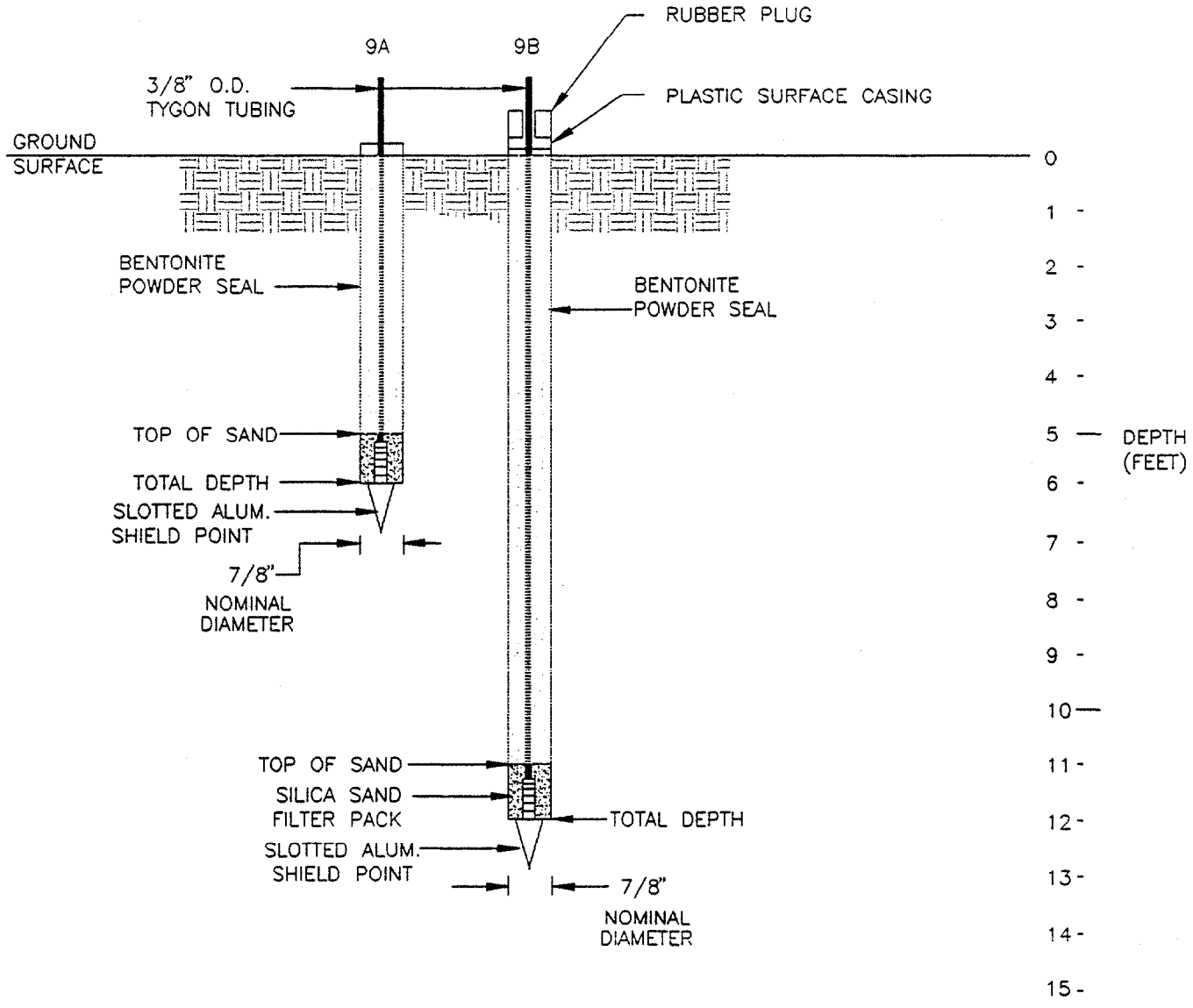
OHM Remediation Services Corp. NORCROSS, GEORGIA A SUBSIDIARY OF OHM CORPORATION		
DRAWN BY	J. LANGE	8/15/96
CHECKED BY	_	DATE
APPROVED BY	_	DATE
REV. 0 / SHEET # _ / PROJECT NO.		16032

FIGURE 8

SOIL PROBE CLUSTER SP-1
OU NO. 2, SITE 82, AOC-1
MCB CAMP LEJEUNE, NORTH CAROLINA

D:\OHM\LANTDIV\SVE\RD\sp-8a.DWG

SOIL PROBE CLUSTER



* INSTALLED 3/7/95

NOT TO SCALE

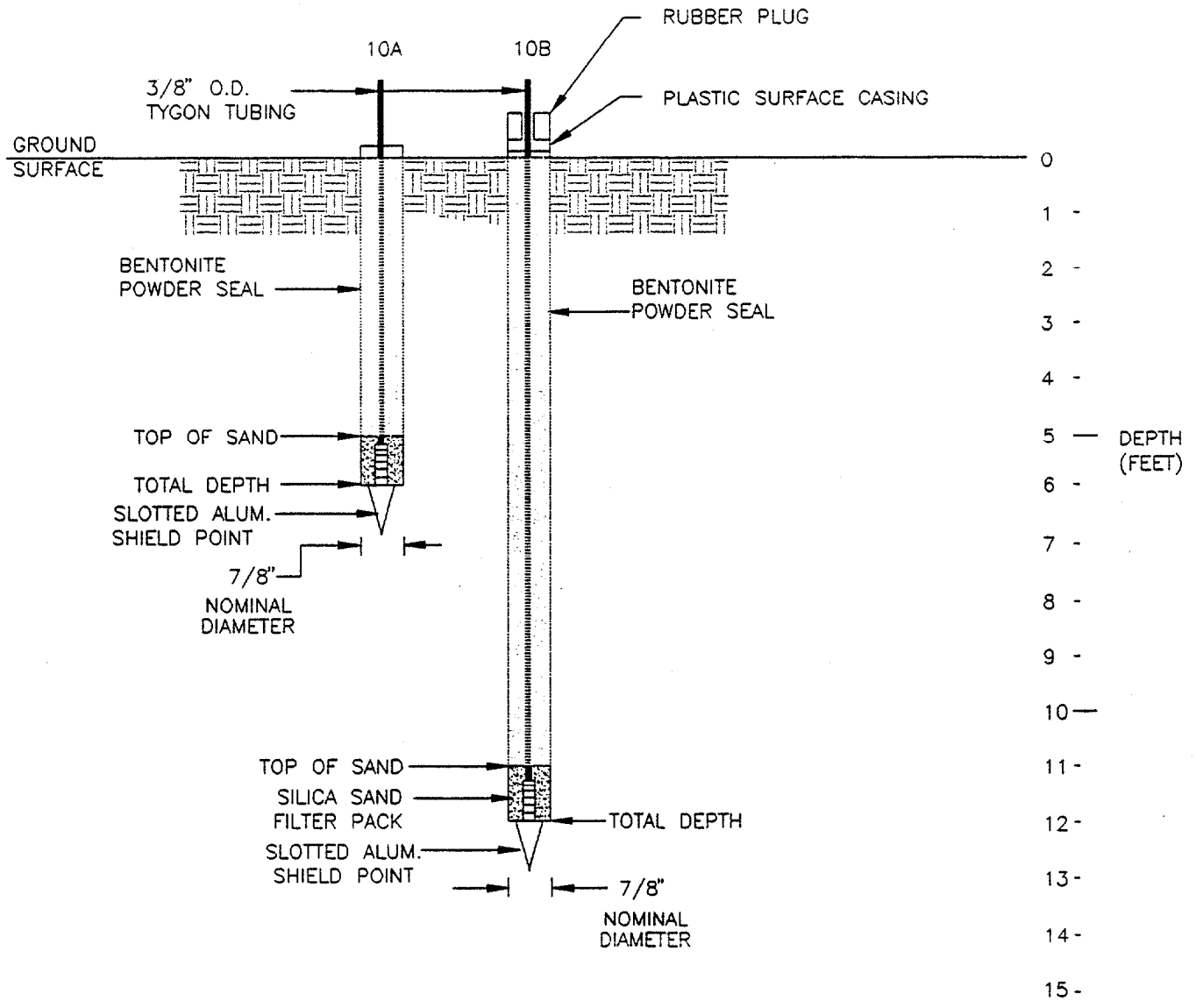
OHM Remediation Services Corp. NORCROSS, GEORGIA A SUBSIDIARY OF OHM CORPORATION		
DRAWN BY	J. LANGE	8/15/96
CHECKED BY	_	DATE
APPROVED BY	_	DATE
REV. 0	SHEET # _	PROJECT NO. 16032

FIGURE 9

SOIL PROBE CLUSTER SP-1
OU NO. 2, SITE 82, AOC-1
MCB CAMP LEJEUNE, NORTH CAROLINA

D:\OHM\LANTDIV\SVE RO\sp-9a.DWG

SOIL PROBE CLUSTER



* INSTALLED 3/6/95
* INSTALLED 3/7/95

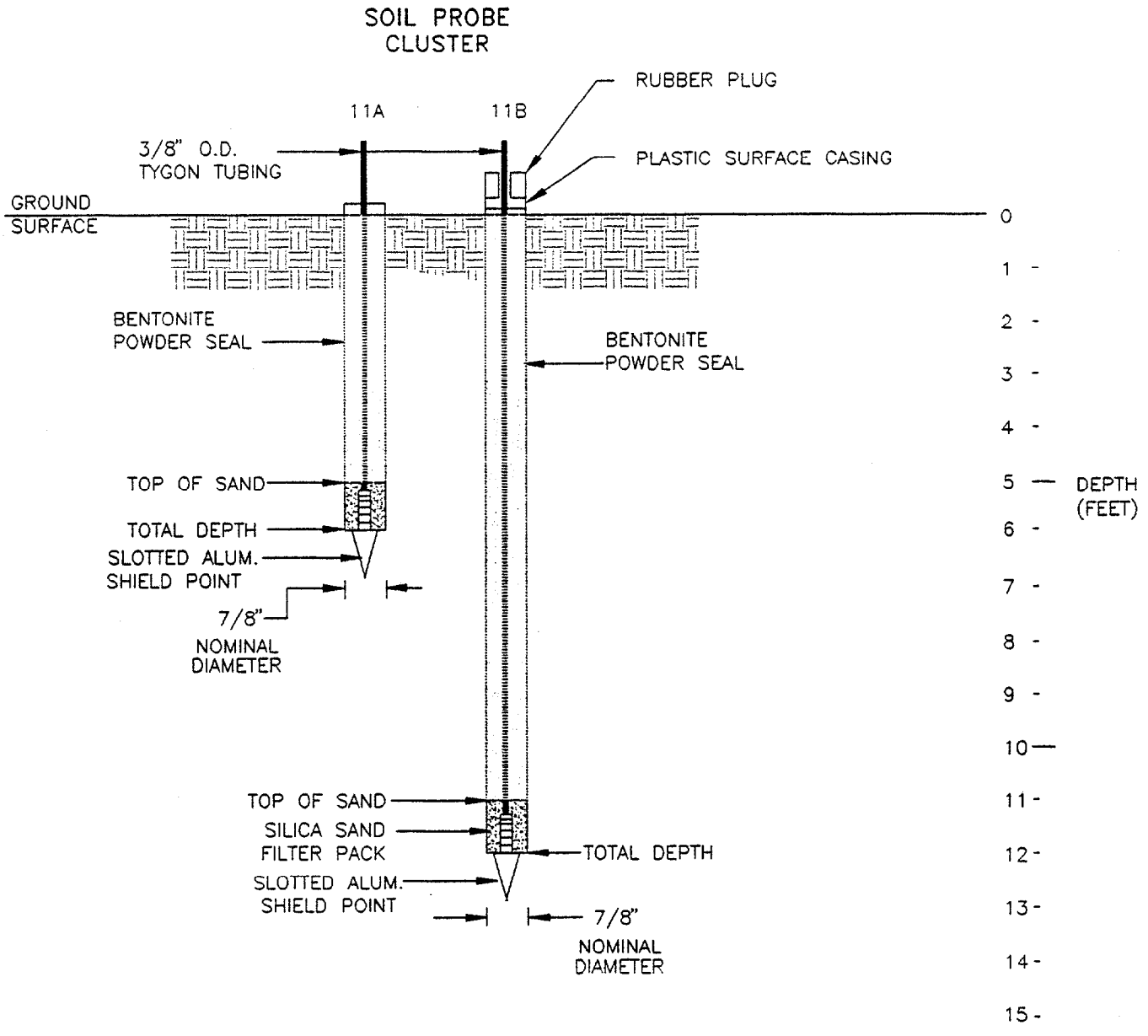
NOT TO SCALE

OHM Remediation Services Corp. NORCROSS, GEORGIA A SUBSIDIARY OF OHM CORPORATION		
DRAWN BY	J. LANGE	8/15/96
CHECKED BY	_	DATE
APPROVED BY	_	DATE
REV. 0	SHEET # _	PROJECT NO. 16032

FIGURE 10

SOIL PROBE CLUSTER SP-1
OU NO. 2, SITE 82, AOC-1
MCB CAMP LEJEUNE, NORTH CAROLINA

D:\OHM\LANTDIV\SVE\SP-10a.DWG



* INSTALLED 3/7/95

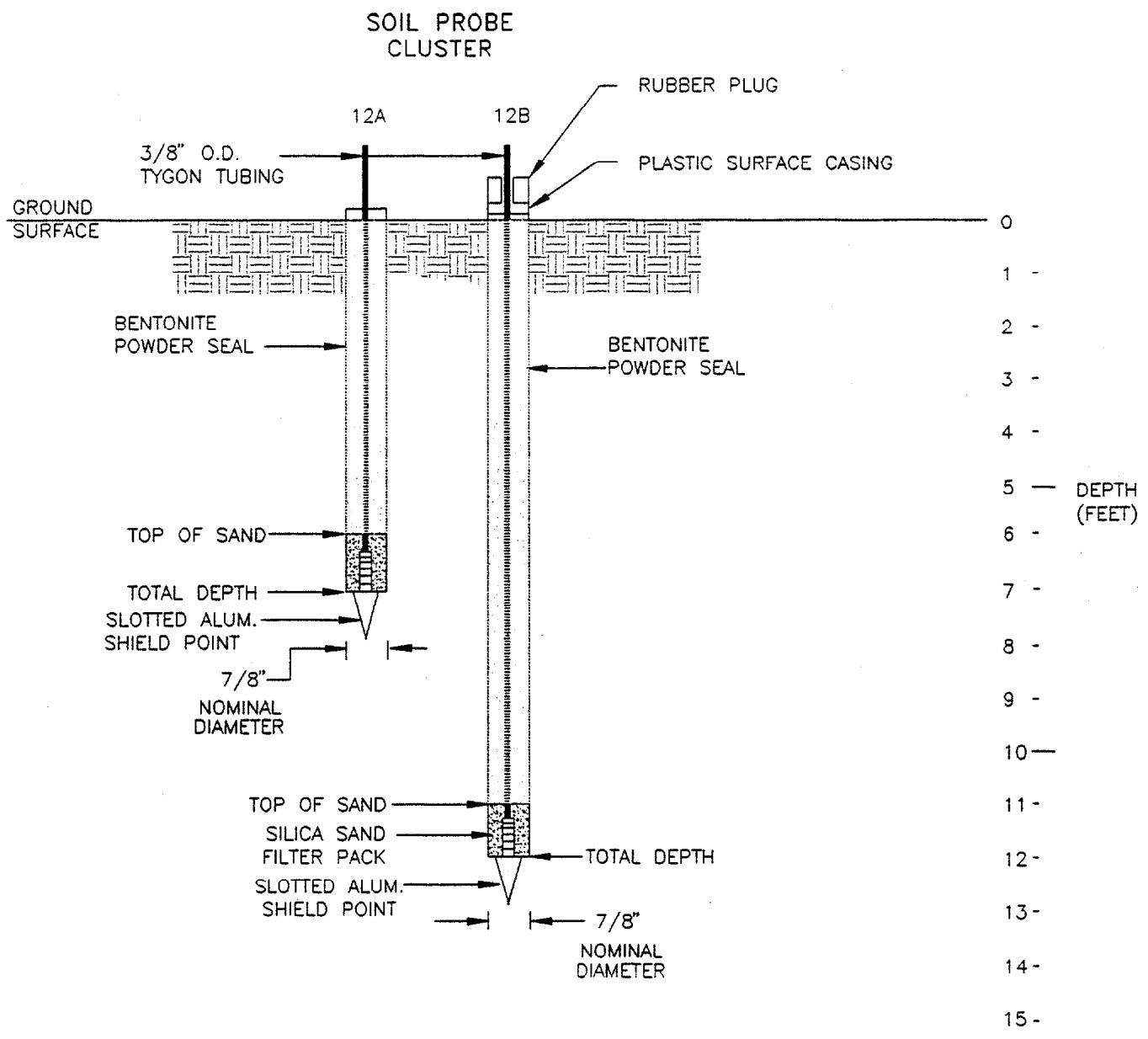
NOT TO SCALE

OHM Remediation Services Corp. NORCROSS, GEORGIA A Subsidiary of OHM Corporation		
DRAWN BY	J. LANGE	8/15/96
CHECKED BY	_	DATE
APPROVED BY	_	DATE
REV. 0	SHEET # _	PROJECT NO. 16032

FIGURE 11

SOIL PROBE CLUSTER SP-1
OU NO. 2, SITE 82, AOC-1
MCB CAMP LEJEUNE, NORTH CAROLINA

D:\OHM\LANTDIV\SVE\RD\sp-11a.DWG



* INSTALLED 3/6/95

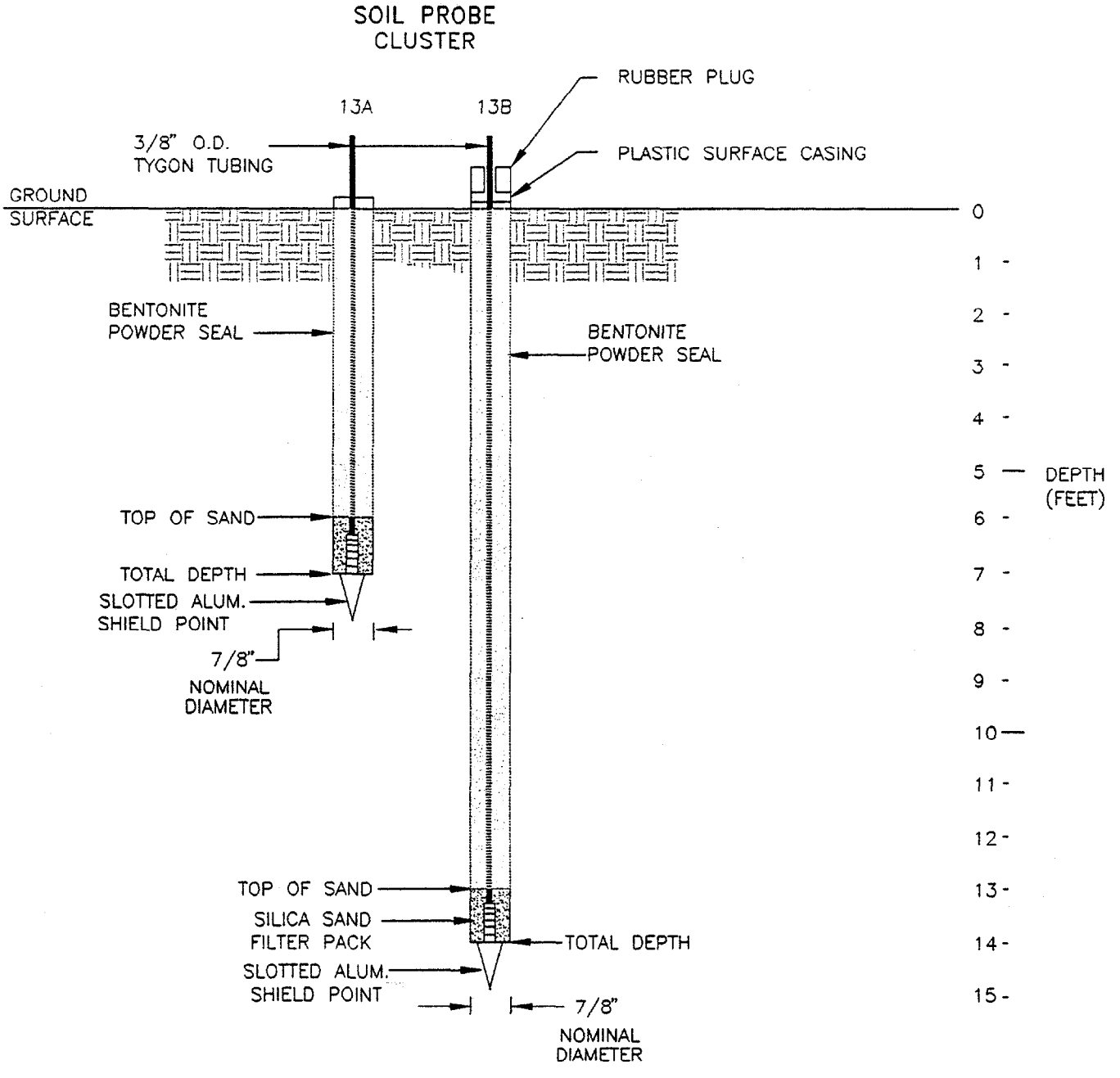
NOT TO SCALE

OHM Remediation Services Corp. NORCROSS, GEORGIA A SUBSIDIARY OF OHM CORPORATION		
DRAWN BY	J. LANGE	8/15/96
CHECKED BY	_	DATE
APPROVED BY	_	DATE
REV. 0	SHEET # _	PROJECT NO. 16032

FIGURE 12

SOIL PROBE CLUSTER SP-1
OU NO. 2, SITE 82, AOC-1
MCB CAMP LEJEUNE, NORTH CAROLINA

D:\OHM\LANTDIV\SVE RD\sp-12a.DWG



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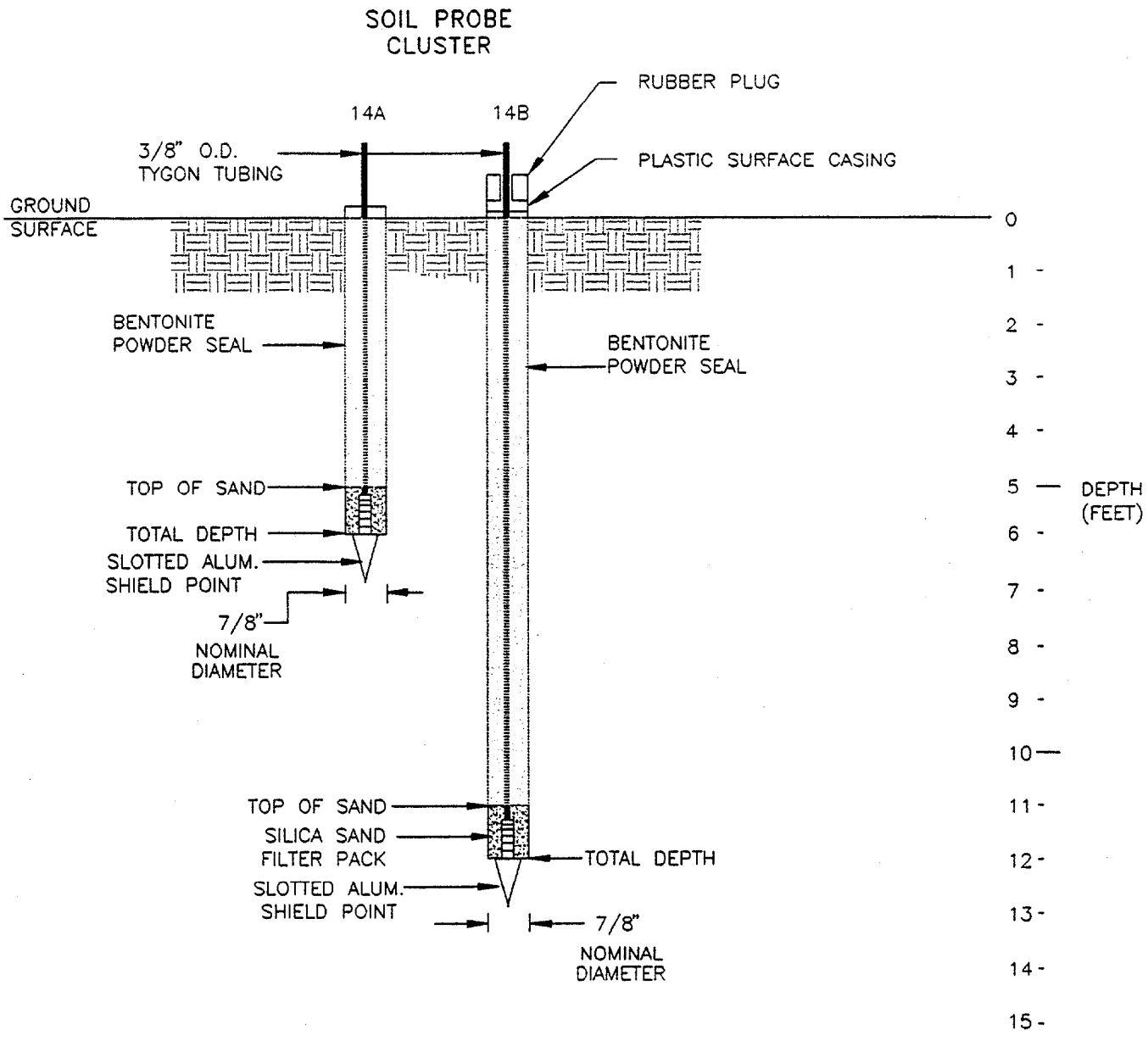
DRAWN BY	J. LANGE	8/15/96
CHECKED BY	_	DATE
APPROVED BY	_	DATE
REV. 0	SHEET # _	PROJECT NO. 16032

FIGURE 13

SOIL PROBE CLUSTER SP-1
OU NO. 2, SITE 82, AOC-1
MCB CAMP LEJEUNE, NORTH CAROLINA

D:\OHM\LANTDIV\SVE...\OU\sp-13a.DWG



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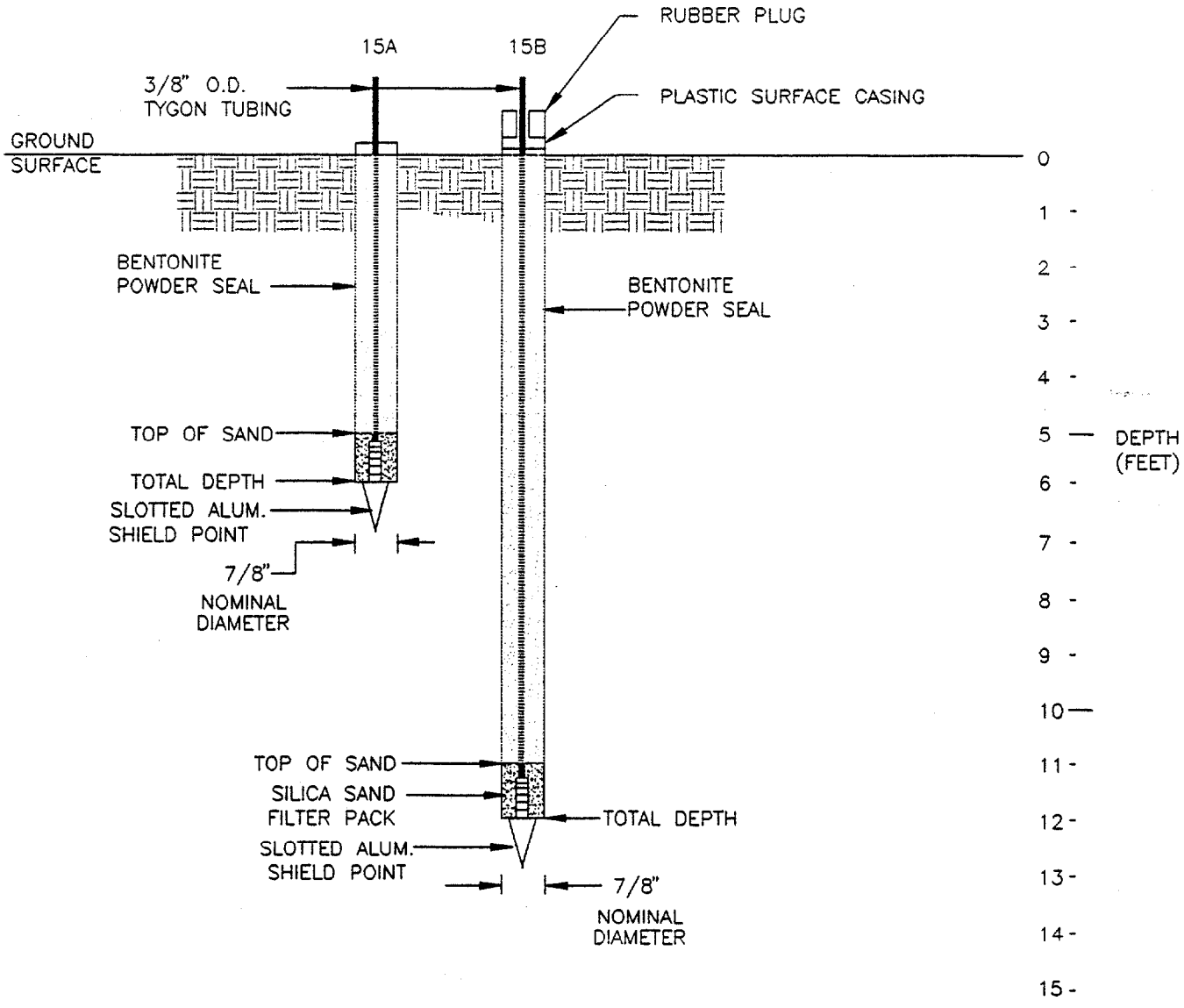
OHM Remediation Services Corp. NORCROSS, GEORGIA A Subsidiary of OHM Corporation		
DRAWN BY	J. LANGE	8/15/96
CHECKED BY	–	DATE
APPROVED BY	–	DATE
REV. 0	SHEET # –	PROJECT NO. 16032

FIGURE 14

SOIL PROBE CLUSTER SP-1
OU NO. 2, SITE 82, AOC-1
MCB CAMP LEJEUNE, NORTH CAROLINA

D:\OHM\LANTDIV\SVE\RD\sp-14a.DWG

SOIL PROBE CLUSTER



* INSTALLED 3/5/95

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OHM Remediation Services Corp. NORCROSS, GEORGIA A SUBSIDIARY OF OHM CORPORATION		
DRAWN BY	J. LANGE	8/15/96
CHECKED BY	_	DATE
APPROVED BY	_	DATE
REV. 0	SHEET # _	PROJECT NO. 16032

FIGURE 15

SOIL PROBE CLUSTER SP-1
OU NO. 2, SITE 82, AOC-1
MCB CAMP LEJEUNE, NORTH CAROLINA

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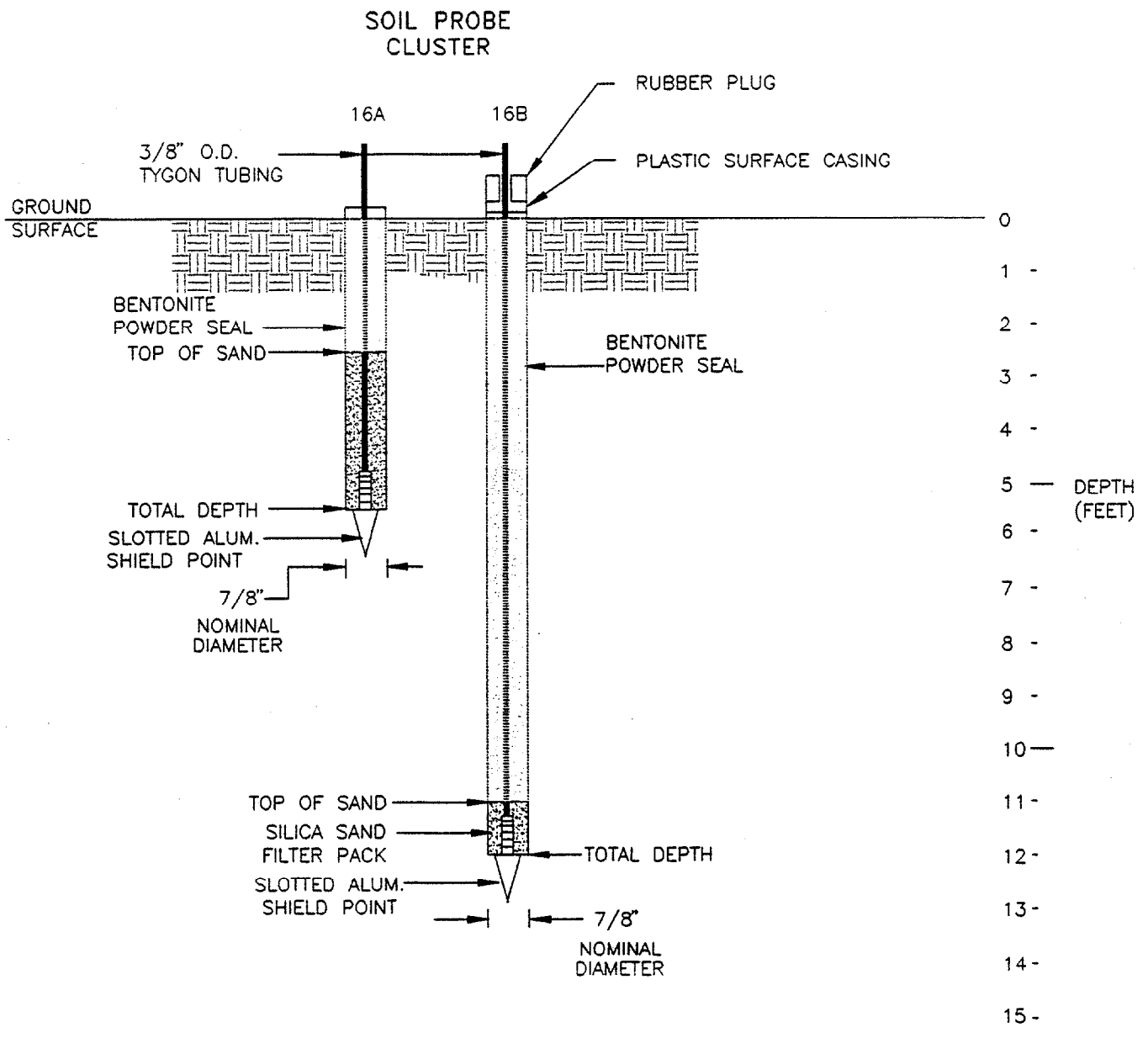


* INSTALLED 3/7/95

NOT TO SCALE

OHM Remediation Services Corp. NORCROSS, GEORGIA A SUBSIDIARY OF OHM CORPORATION		
DRAWN BY	J. LANGE	8/15/96
CHECKED BY	_	DATE
APPROVED BY	_	DATE
REV. 0	SHEET # _	PROJECT NO. 16032

FIGURE 16

SOIL PROBE CLUSTER SP-1
OU NO. 2, SITE 82, AOC-1
MCB CAMP LEJEUNE, NORTH CAROLINA

D:\OHM\LANTDIV\SVE\ D\sp-16a.DWG

Appendix D

On-Site Vapor Analytical Data

Table 3.4 Extracted Vapor Analyses					
Sample Name	Date Sampled	Benzene (ug/L)	Ethylbenzene (ug/L)	Tetrachloroethene (ug/L)	Trichloroethene (ug/L)
SVEW-1	4/3/95	11	ND	561.5	9
SVEW-1	4/3/95	13.3	ND	199	6.7
SVEW-1	4/5/95	19	ND	72	ND
SVEW-1	4/6/95	10.5	1.5	88	5
SVEW-1	4/6/95	11.5	2	79.5	5.5
SVEW-1	4/7/95	8.3	3.7	165.7	5
SVEW-1	4/7/95	7.7	3.3	168	4.7
SVEW-1	4/8/95	6	5	213.5	4.5
SVEW-1	4/10/95	6	5	231.8	4.5
SVEW-1	4/11/95	10	7	300.5	6
SVEW-1	4/12/95	6.9	6	257.7	4.6
SVEW-1	4/18/95	20	9	291	ND
SVEW-1	4/19/95	7.3	5.3	223.7	4.3
SVEW-1	4/21/95	7.3	3	141	4
SVEW-1	4/24/95	2	1.5	227.5	ND
SVEW-1	4/26/95	2	0.8	317.6	1.6
SVEW-1	4/28/95	2	1	212	1
SVEW-1	5/2/95	21	1	224	ND
SVEW-1	5/4/95	ND	ND	434	ND
SVEW-1	5/11/95	ND	ND	584	3
SVEW-1	5/25/95	ND	ND	582	3
SVEW-1	6/12/95	ND	ND	656	ND
SVEW-1D	6/12/95	ND	ND	744	ND
SVEW-1	6/22/95	ND	ND	447	ND
SVEW-1	7/13/95	ND	ND	65	ND
SVEW-1	8/25/95	3	ND	36.1	ND
SVEW-2	4/4/95	31	2	279	11
SVEW-2	4/4/95	33	6	610	11

Table 3.4 Extracted Vapor Analyses					
Sample Name	Date Sampled	Benzene (ug/L)	Ethylbenzene (ug/L)	Tetrachloroethene (ug/L)	Trichloroethene (ug/L)
SVEW-2	4/5/95	196	3	899	ND
SVEW-2	4/6/95	24	5	158	ND
SVEW-2	4/6/95	38	4	151	11
SVEW-2	4/7/95	66	33	967	33
SVEW-2	4/7/95	35.3	14	469.3	18
SVEW-2	4/8/95	25	2	98	ND
SVEW-2	4/10/95	191	33	820	ND
SVEW-2	4/11/95	190	ND	214	ND
SVEW-2	4/12/95	187	ND	187	ND
SVEW-2	4/18/95	38	ND	98	ND
SVEW-2	4/19/95	26	29	846	17
SVEW-2	4/21/95	15.3	10.7	287.3	7.3
SVEW-2	4/24/95	6	4	528	ND
SVEW-2	4/26/95	3	3	168	ND
SVEW-2	4/28/95	6	6	134	ND
SVEW-2	5/2/95	39	5.4	842	ND
SVEW-2	5/4/95	ND	ND	3256	ND
SVEW-2	5/11/95	ND	ND	6106.7	ND
SVEW-2	5/25/95	ND	ND	6294	ND
SVEW-2	6/12/95	ND	ND	5008	ND
SVEW-2	6/22/95	ND	ND	5008	ND
SVEW-2	7/13/95	ND	ND	619	ND
SVEW-2	8/25/95	14.3	ND	452.4	1.7
SVEW-3	4/4/95	20	7	167	ND
SVEW-3	4/4/95	11	1	132	ND
SVEW-3	4/5/95	5.6	2.8	116.6	2.6
SVEW-3	4/6/95	5.4	3.2	85	2.2
SVEW-3	4/6/95	6.4	4.2	118.4	3
SVEW-3	4/7/95	6	3.2	75	2.2

Table 3.4 Extracted Vapor Analyses					
Sample Name	Date Sampled	Benzene (ug/L)	Ethylbenzene (ug/L)	Tetrachloroethene (ug/L)	Trichloroethene (ug/L)
SVEW-3	4/7/95	5.4	3.8	83.8	2.4
SVEW-3	4/8/95	5.2	5.8	117.4	2.6
SVEW-3	4/10/95	4.2	2.8	66.6	ND
SVEW-3	4/11/95	10	14	241.6	5.2
SVEW-3	4/12/95	4.4	8.6	105	ND
SVEW-3	4/18/95	4.4	1.6	144	2.2
SVEW-3	4/19/95	4.4	9.8	124.8	2
SVEW-3	4/21/95	4.2	7.6	106.8	ND
SVEW-3	4/24/95	0.8	0.8	142.6	ND
SVEW-3	4/26/95	0.6	0.6	117.2	ND
SVEW-3	4/28/95	0.6	0.4	35.8	ND
SVEW-3	5/2/95	148.8	0.4	35.4	ND
SVEW-3	5/4/95	ND	ND	115	ND
SVEW-3	5/11/95	ND	ND	128.9	ND
SVEW-3	5/25/95	ND	ND	108	ND
SVEW-3	6/22/95	ND	ND	46	ND
SVEW-3	7/13/95	ND	ND	7.5	ND
SVEW-3	8/25/95	10.6	ND	11	ND
SVEW-4	4/4/95	10	3	55.5	ND
SVEW-4	4/4/95	6.7	2.3	50.3	ND
SVEW-4	4/5/95	4	0.8	23	ND
SVEW-4	4/6/95	4	2.2	46.6	ND
SVEW-4	4/6/95	4.2	1.8	40.2	ND
SVEW-4	4/7/95	4	2	30.8	ND
SVEW-4	4/7/95	4.4	3.2	57.4	2
SVEW-4	4/8/95	4	1.6	56.4	ND
SVEW-4	4/10/95	4	4.2	57.6	ND
SVEW-4	4/11/95	3.8	2.2	30	ND
SVEW-4	4/12/95	4.2	3.6	65.4	ND

Table 3.4 Extracted Vapor Analyses					
Sample Name	Date Sampled	Benzene (ug/L)	Ethylbenzene (ug/L)	Tetrachloroethene (ug/L)	Trichloroethene (ug/L)
SVEW-4	4/18/95	4.2	9.8	108.2	ND
SVEW-4	4/19/95	4.2	6.4	76.4	ND
SVEW-4	4/21/95	4.2	10.8	117.6	ND
SVEW-4	4/24/95	0.6	0.4	68.2	0.6
SVEW-4	4/26/95	0.6	1	12.8	ND
SVEW-4	4/28/95	0.8	1.8	23.6	ND
SVEW-4	5/2/95	185.4	0.4	37.4	ND
SVEW-4	5/4/95	ND	ND	217	ND
SVEW-4	5/11/95	ND	ND	142.5	ND
SVEW-4	5/25/95	ND	ND	74	ND
SVEW-4	6/12/95	ND	ND	101	ND
SVEW-4	6/22/95	ND	ND	68	ND
SVEW-4	7/13/95	ND	ND	5.6	ND
SVEW-4	8/25/95	4.3	ND	2.6	ND
SVEW-5	4/4/95	4	1.2	18.2	ND
SVEW-5	4/5/95	3.8	3.4	65	ND
SVEW-5	4/6/95	3.8	1.2	20	ND
SVEW-5	4/6/95	3.8	1	18.4	ND
SVEW-5	4/7/95	4.2	1	15.4	ND
SVEW-5	4/7/95	4.4	0.8	24.4	ND
SVEW-5	4/8/95	4.2	2.4	41.4	ND
SVEW-5	4/10/95	9.2	15.6	286	4.8
SVEW-5	4/11/95	4.2	3.8	100.4	2
SVEW-5	4/12/95	6.6	8.9	152	3.1
SVEW-5	4/18/95	4	3	41.8	ND
SVEW-5	4/19/95	4.2	5.4	56	ND
SVEW-5	4/21/95	4	3.4	42.2	ND
SVEW-5	4/24/95	0.8	1	168.8	0.6
SVEW-5	4/26/95	0.6	1.8	21.2	ND

Table 3.4 Extracted Vapor Analyses					
Sample Name	Date Sampled	Benzene (ug/L)	Ethylbenzene (ug/L)	Tetrachloroethene (ug/L)	Trichloroethene (ug/L)
SVEW-5	4/28/96	0.6	2	30.5	ND
SVEW-5	5/2/95	13.2	0.4	65.8	0.6
SVEW-5	5/4/95	ND	ND	31	ND
SVEW-5	5/11/95	ND	ND	332.5	ND
SVEW-5	5/25/95	ND	ND	33.2	ND
SVEW-5	6/12/95	ND	ND	41	ND
SVEW-5	6/22/95	ND	ND	67	ND
SVEW-5	7/13/95	ND	ND	0.62	ND
SVEW-5	8/25/95	2.1	ND	1.4	ND
SVEW-6	4/4/95	4.2	1.4	23.6	ND
SVEW-6	4/5/95	3.8	2.2	50.8	ND
SVEW-6	4/6/95	3.8	1	18.8	ND
SVEW-6	4/6/95	4	1.8	39.8	ND
SVEW-6	4/7/95	4	0.4	13.8	ND
SVEW-6	4/7/95	4.2	1.4	26.2	ND
SVEW-6	4/8/95	4.2	1.8	32.6	ND
SVEW-6	4/10/95	4.2	1.8	29	ND
SVEW-6	4/11/95	4	3.2	41	ND
SVEW-6	4/12/95	4.2	4.6	100.4	ND
SVEW-6	4/18/95	4	1.8	31.6	ND
SVEW-6	4/19/95	4.4	8.4	104	2
SVEW-6	4/21/95	4.4	11.6	181.4	2.2
SVEW-6	4/24/95	0.6	1.2	17	ND
SVEW-6	4/26/95	0.8	0.6	92.4	ND
SVEW-6	4/28/95	0.6	1.6	17.8	ND
SVEW-6	5/2/95	9.4	1	18.4	ND
SVEW-6	5/4/95	ND	ND	102	ND
SVEW-6	5/11/95	ND	ND	237.5	ND
SVEW-6	5/25/95	ND	ND	25	ND

Table 3.4 Extracted Vapor Analyses					
Sample Name	Date Sampled	Benzene (ug/L)	Ethylbenzene (ug/L)	Tetrachloroethene (ug/L)	Trichloroethene (ug/L)
SVEW-6	6/12/95	ND	ND	30	ND
SVEW-6	6/22/95	ND	ND	21	ND
SVEW-6	7/13/95	ND	ND	1.7	ND
SVEW-6	8/25/95	2.2	ND	1.6	ND
SVEW-7	4/4/95	4	1.4	25.2	ND
SVEW-7	4/4/95	3.8	1.2	28.6	ND
SVEW-7	4/5/95	3.8	0.6	18	ND
SVEW-7	4/6/95	3.8	1	22.4	ND
SVEW-7	4/6/95	4.2	1.4	31.6	ND
SVEW-7	4/7/95	4	0.8	17.8	ND
SVEW-7	4/7/95	4	0.8	17.6	ND
SVEW-7	4/8/95	4	1.2	22.2	ND
SVEW-7	4/10/95	3.8	1.6	21.2	ND
SVEW-7	4/11/95	11	10.5	225	5.5
SVEW-7	4/12/95	4	5.2	54	ND
SVEW-7	4/18/95	4.2	4.6	74.2	ND
SVEW-7	4/19/96	4.2	7.6	77.6	ND
SVEW-7	4/21/95	3.8	2.4	28.2	ND
SVEW-7	4/24/95	0.6	1.2	11.4	ND
SVEW-7	4/26/95	0.6	1.2	21.8	ND
SVEW-7	4/28/95	0.6	2.4	26	ND
SVEW-7	5/2/95	7.8	0.4	64.6	ND
SVEW-7	5/4/95	ND	ND	543	ND
SVEW-7	5/11/95	ND	ND	44.8	ND
SVEW-7	5/25/95	ND	ND	28	ND
SVEW-7	6/12/95	ND	ND	35	ND
SVEW-7	6/22/95	ND	ND	47	ND
SVEW-7	7/13/95	ND	ND	1.9	ND
SVEW-7	8/25/95	44.3	ND	1.6	0.7

Table 3.4 Extracted Vapor Analyses					
Sample Name	Date Sampled	Benzene (ug/L)	Ethylbenzene (ug/L)	Tetrachloroethene (ug/L)	Trichloroethene (ug/L)
SVEW-8	4/3/95	5.2	1.4	78.2	2.2
SVEW-8	4/3/95	6.8	ND	97.2	2.4
SVEW-8	4/5/95	4	1.2	36.2	ND
SVEW-8	4/6/95	3.8	1	26.6	ND
SVEW-8	4/6/95	4.2	0.4	32.8	ND
SVEW-8	4/7/95	3.8	0.6	9.8	ND
SVEW-8	4/7/95	4	0.5	10.8	ND
SVEW-8	4/8/95	4	1.6	25.2	ND
SVEW-8	4/10/95	4	2.6	61.6	ND
SVEW-8	4/11/95	4	5.8	342	2.2
SVEW-8	4/12/95	4.4	2.2	26.6	ND
SVEW-8	4/18/95	8	11.7	220	4.3
SVEW-8	4/19/95	4.6	6	64	ND
SVEW-8	4/21/95	4.2	2.2	25.2	ND
SVEW-8	4/24/95	0.8	1	170.8	0.6
SVEW-8	4/26/95	1.2	0.6	114.6	0.8
SVEW-8	4/28/95	0.8	0.6	111.4	0.8
SVEW-8	5/2/95	9	0.2	36.2	ND
SVEW-8	5/4/95	ND	2.6	400	ND
SVEW-8	5/11/95	ND	ND	149.3	ND
SVEW-8	5/25/95	ND	ND	63	ND
SVEW-8	6/12/95	ND	ND	129	ND
SVEW-8	6/22/95	ND	ND	156	ND
SVEW-8	7/13/95	ND	ND	4.3	0.26
SVEW-8	8/25/95	54.8	ND	0.8	ND
System Total	4/5/95	12	5.2	199.2	6
System Total	4/6/95	11	8.3	240	6.3
System Total	4/6/95	12	3	81.5	ND
System Total	4/7/95	11.6	1.2	44.4	4.4

Table 3.4 Extracted Vapor Analyses					
Sample Name	Date Sampled	Benzene (ug/L)	Ethylbenzene (ug/L)	Tetrachloroethene (ug/L)	Trichloroethene (ug/L)
System Total	4/7/95	18	12.7	326.7	9.3
System Total	4/8/95	11	6.7	207.3	6
System Total	4/10/95	7.4	5.7	168.3	4.3
System Total	4/11/95	15.5	17.5	458.5	10.5
System Total	4/12/95	9.2	5.6	151.6	4.4
System Total	4/18/95	7.7	9.3	198.7	4.3
System Total	4/19/95	7.7	14.7	296	4.7
System Total	4/21/95	7.7	12.7	245.7	4.3
System Total	4/24/95	2	2.5	484.5	1.5
System Total	4/26/95	1.7	1.7	292	1
System Total	4/28/95	0.7	1.3	252.7	1.3
System Total	5/2/95	15.3	2	298.7	1
System Total	5/4/95	ND	ND	543	ND
System Total	5/11/95	ND	ND	583.5	ND
System Total	5/25/95	ND	ND	541	ND
System Total	6/12/95	ND	ND	433	ND
System Total	6/22/95	ND	ND	311	ND
System Total	7/13/95	ND	ND	55.3	0.6
System Total	8/25/95	18.2	ND	33.6	ND
Discharge Stack	4/5/95	3.8	0.8	31.8	ND
Discharge Stack	4/6/95	3.6	0.8	14.8	ND
Discharge Stack	4/6/95	5.7	1.1	18.3	ND
Discharge Stack	4/7/95	4	0.6	14.8	ND
Discharge Stack	4/8/95	4	2	32.8	ND
Discharge Stack	4/10/95	4	0.8	14.8	ND
Discharge Stack	4/11/95	4.6	5.6	95	2
Discharge Stack	4/12/95	5.2	2	26.4	ND
Discharge Stack	4/18/95	5.6	4.4	42.8	2.2
Discharge Stack	4/19/95	5.4	7.4	67.6	2.2

Table 3.4 Extracted Vapor Analyses					
Sample Name	Date Sampled	Benzene (ug/L)	Ethylbenzene (ug/L)	Tetrachloroethene (ug/L)	Trichloroethene (ug/L)
Discharge Stack	4/21/95	4.8	1.8	23.8	2.2
Discharge Stack	4/24/95	1.2	0.4	59.8	1
Discharge Stack	4/26/95	0.8	1.8	39.8	0.6
Discharge Stack	4/28/95	1	1.8	50.8	1.2
Discharge Stack	4/28/95	1.2	0.4	82.2	1.4
Discharge Stack	5/2/95	10.2	1	147.4	1.2
Discharge Stack	5/4/95	ND	ND	68	ND
Discharge Stack	5/11/95	ND	ND	74.6	ND
Discharge Stack	5/25/95	ND	ND	149	ND
Discharge Stack	6/12/95	ND	ND	217	ND
Discharge Stack	6/22/95	ND	ND	183	ND
Discharge Stack	7/13/95	ND	ND	8.94	0.26
Discharge Stack	8/25/95	5.6	ND	ND	ND

Appendix E

Off-Site Vapor Analytical Data

Quanterra Environmental Services

Quanterra Incorporated
5815 Middlebrook Pike
Knoxville, Tennessee 37921

615 588-6401 Telephone
615 584-4315 Fax

OHM Remediation Services Corporation
5335 Triangle Parkway, Suite 450
Norcross, GA 30092
Attn: Missy Art

April 13, 1995

Job Number: 3276

This is the Certificate of Analysis for the following samples:

Client Project ID:	Camp Lejeune DO-15 / 16032
Date Received by Lab:	April 4, 1995
Number of Samples:	Three (3)
Sample Type:	Air

I. Introduction

On April 4, 1995, three (3) air samples arrived at Quanterra Environmental Services, Knoxville, Tennessee, from OHM Remediation Services, Corporation, Norcross, Georgia. The samples were collected on April 3, 1995, and were labeled as follows:

Client Sample ID	Lab Sample ID
CLJ15-V-05B	AE8870
CLJ15-V-10A	AE8871
CLJ15-V-15B	AE8872

II. Analytical Results/Methodology

The analytical results for this report are presented by analytical test. The data will include sample identification information, the analytical results, and the appropriate detection limits.

The samples were analyzed for volatile organic compounds by gas chromatography/mass spectroscopy (GC/MS) based on EPA method TO-14.

Reviewed and Approved:

Kenneth Mueller
Project Manager

Quanterra Environmental Services

III. Quality Control

Routine laboratory level I QC was followed.

IV. Comments

Sample CLJ15-V-05B was broken upon receipt.

Cross Reference Table for Work Order #: 3276

Client Sample ID	Description	Lab ID	QC	Test Description
CLJ15-V-05B	VAPOR SAMPLE IN 2ML TEDLA	AE8870		ON HOLD
CLJ15-V-10A	VAPOR SAMPLE IN 2ML TEDLA	AE8871		TO-14 (VOA) CANISTER ANALYSIS BY GC/MS NEESA LEVEL C DATA PKG, GCMS TESTS
CLJ15-V-15B	VAPOR SAMPLE IN 2ML TEDLA	AE8872		TO-14 (VOA) CANISTER ANALYSIS BY GC/MS NEESA LEVEL C DATA PKG, GCMS TESTS

SAMPLE RECEIPT DOCUMENTATION

OHM Corporation

COC NO. "0003775"

CHAIN-OF-CUSTODY RECORD

WO # 3276
RL # 3318

Form 00
Field Technical Servic
Rev. 08/

Nº 116107

O.H. MATERIALS CORP. • P.O. BOX 551 • FINDLAY, OH 45839-0551 • 419-423-3526

PROJECT NAME: Camp Lejeune DO-15	PROJECT LOCATION: Camp Lejeune, NC
PROJ. NO.: 16032	PROJECT CONTACT: Randy Smith
PROJECT TELEPHONE NO.: 910451 1809	
CLIENT'S REPRESENTATIVE:	PROJECT MANAGER/SUPERVISOR: Randy Smith / Jim Dunn

ITEM NO.	SAMPLE NUMBER	DATE	TIME	COMP	GRAB	SAMPLE DESCRIPTION (INCLUDE MATRIX AND POINT OF SAMPLE)	NUMBER OF CONTAINERS	ANALYSIS DESIRED (INDICATE SEPARATE CONTAINERS) T.O. 14	REMARKS
1	CLJ15-V-05B	4/3/95	0805		X	Vapor sample in 2mL Tedlar bag	1	X	Rec'd broken KMK 4-4-95 * Rec'd at 3 °c with custody seal intact KMK 4/4/95
2	CLJ15-V-10A	4/3/95	0810		X	Vapor sample in 2mL Tedlar bag	1	X	
3	CLJ15-V-15B	4/3/95	0825		X	Vapor sample in 2mL Tedlar bag	1	X	
4									
5									
6									
7									
8									
9									
10									

TRANSFER NUMBER	ITEM NUMBER	TRANSFERS RELINQUISHED BY	TRANSFERS ACCEPTED BY	DATE	TIME
1	3	Missy Art	FedEx	4/3/95	1010
2			Kenya Klemm	4/4/95	08:50
3					
4					

REMARKS

14 day TAT
Please fax results to 9104511809.

Missy Art
SAMPLER'S SIGNATURE

LAB COPY

0000004

Client: OHM
Workorder: 3276

TO-14 Volatile Organics

Client Sample ID: CLJ15-V-10A

Lab Sample ID: AE8871DL

Analysis Date: 04/12/95

Dilution Factor: 130.3

CAS #	Compound	Result ppb(V/V)	Detection Limit
75-71-8	Dichlorodifluoromethane	ND	26
76-14-2	1,2-Dichlorotetrafluoroethane	ND	26
74-87-3	Chloromethane	ND	26
75-01-4	Vinyl Chloride	ND	26
74-83-9	Bromomethane	ND	26
75-00-3	Chloroethane	ND	26
75-69-4	Trichlorofluoromethane	ND	26
75-35-4	1,1-Dichloroethene	ND	26
76-13-1	1,1,2-Trichlorotrifluoroethane	ND	39
75-09-2	Methylene Chloride	ND	39
75-34-3	1,1-Dichloroethane	ND	26
156-59-2	cis-1,2-Dichloroethene	ND	26
67-66-3	Chloroform	180	26
71-55-6	1,1,1-Trichloroethane	ND	26
56-23-5	Carbon Tetrachloride	ND	26
71-43-2	Benzene	ND	26
107-06-2	1,2-Dichloroethane	ND	26
79-01-6	Trichloroethene	400	26
78-87-5	1,2-Dichloropropane	ND	26
10061-01-5	cis-1,3-Dichloropropene	ND	26
108-88-3	Toluene	ND	26
10061-02-6	trans-1,3-Dichloropropene	ND	26
79-00-5	1,1,2-Trichloroethane	ND	26
127-18-4	Tetrachloroethene	3600	26
106-93-4	1,2-Dibromoethane	ND	26
108-90-7	Chlorobenzene	ND	26
100-41-4	Ethylbenzene	ND	26
136777-61-2	m/p-Xylene	ND	26
95-47-6	o-Xylene	ND	26
100-42-5	Styrene	ND	26
79-34-5	1,1,2,2-Tetrachloroethane	54	26
108-67-8	1,3,5-Trimethylbenzene	ND	26
95-63-6	1,2,4-Trimethylbenzene	ND	26
541-73-1	1,3-Dichlorobenzene	ND	26

Client: OHM
Workorder: 3276

TO-14 Volatile Organics

Client Sample ID: CLJ15-V-10A

Lab Sample ID: AE8871DL

Analysis Date: 04/12/95

Dilution Factor: 130.3

CAS #	Compound	Result ppb(V/V)	Detection Limit
106-46-7	1,4-Dichlorobenzene	ND	26
95-50-1	1,2-Dichlorobenzene	ND	26
100-44-7	Benzyl Chloride	ND	26
120-82-1	1,2,4-Trichlorobenzene	ND	26
87-68-3	Hexachlorobutadiene	ND	26

Surrogate Compound	% Recovery
D4-1,2-Dichloroethane	104
D8-Toluene	109
Bromofluorobenzene	97

Client: OHM
Workorder: 3276

TO-14 Volatile Organics

Client Sample ID: CLJ15-V-15B

Lab Sample ID: AE9872DL

Analysis Date: 04/12/95

Dilution Factor: 1816

CAS #	Compound	Result ppb(V/V)	Detection Limit
75-71-8	Dichlorodifluoromethane	ND	360
76-14-2	1,2-Dichlorotetrafluoroethane	ND	360
74-87-3	Chloromethane	ND	360
75-01-4	Vinyl Chloride	ND	360
74-83-9	Bromomethane	ND	360
75-00-3	Chloroethane	ND	360
75-69-4	Trichlorofluoromethane	ND	360
75-35-4	1,1-Dichloroethene	ND	360
76-13-1	1,1,2-Trichlorotrifluoroethane	ND	540
75-09-2	Methylene Chloride	ND	540
75-34-3	1,1-Dichloroethane	ND	360
156-59-2	cis-1,2-Dichloroethene	ND	360
67-66-3	Chloroform	ND	360
71-55-6	1,1,1-Trichloroethane	ND	360
56-23-5	Carbon Tetrachloride	ND	360
71-43-2	Benzene	ND	360
107-06-2	1,2-Dichloroethane	ND	360
79-01-6	Trichloroethene	ND	360
78-87-5	1,2-Dichloropropane	ND	360
10061-01-5	cis-1,3-Dichloropropene	ND	360
108-88-3	Toluene	ND	360
10061-02-6	trans-1,3-Dichloropropene	ND	360
79-00-5	1,1,2-Trichloroethane	ND	360
127-18-4	Tetrachloroethene	38000	360
106-93-4	1,2-Dibromoethane	ND	360
108-90-7	Chlorobenzene	ND	360
100-41-4	Ethylbenzene	ND	360
136777-61-2	m/p-Xylene	ND	360
95-47-6	o-Xylene	ND	360
100-42-5	Styrene	ND	360
79-34-5	1,1,2,2-Tetrachloroethane	ND	360
108-67-8	1,3,5-Trimethylbenzene	ND	360
95-63-6	1,2,4-Trimethylbenzene	ND	360
541-73-1	1,3-Dichlorobenzene	ND	360

Client: OHM
Workorder: 3276

TO-14 Volatile Organics

Client Sample ID: CLJ15-V-15B

Lab Sample ID: AE8872DL

Analysis Date: 04/12/95

Dilution Factor: 1816

CAS #	Compound	Result ppb(V/V)	Detection Limit
106-46-7	1,4-Dichlorobenzene	ND	360
95-50-1	1,2-Dichlorobenzene	ND	360
100-44-7	Benzyl Chloride	ND	360
120-82-1	1,2,4-Trichlorobenzene	ND	360
87-68-3	Hexachlorobutadiene	ND	360

Surrogate Compound	% Recovery
D4-1,2-Dichloroethane	104
D8-Toluene	109
Bromofluorobenzene	106

Client: OHM
Workorder: 3276

TO-14 Volatile Organics

Client Sample ID: SYSTEM BLANK

Lab Sample ID: ABLKL9

Analysis Date: 04/11/95

Dilution Factor: 1

CAS #	Compound	Result ppb(V/V)	Detection Limit
75-71-8	Dichlorodifluoromethane	ND	0.20
76-14-2	1,2-Dichlorotetrafluoroethane	ND	0.20
74-87-3	Chloromethane	ND	0.20
75-01-4	Vinyl Chloride	ND	0.20
74-83-9	Bromomethane	ND	0.20
75-00-3	Chloroethane	ND	0.20
75-69-4	Trichlorofluoromethane	ND	0.20
75-35-4	1,1-Dichloroethene	ND	0.20
76-13-1	1,1,2-Trichlorotrifluoroethane	ND	0.30
75-09-2	Methylene Chloride	ND	0.30
75-34-3	1,1-Dichloroethane	ND	0.20
156-59-2	cis-1,2-Dichloroethene	ND	0.20
67-66-3	Chloroform	ND	0.20
71-55-6	1,1,1-Trichloroethane	ND	0.20
56-23-5	Carbon Tetrachloride	ND	0.20
71-43-2	Benzene	ND	0.20
107-06-2	1,2-Dichloroethane	ND	0.20
79-01-6	Trichloroethene	ND	0.20
78-87-5	1,2-Dichloropropane	ND	0.20
10061-01-5	cis-1,3-Dichloropropene	ND	0.20
108-88-3	Toluene	ND	0.20
10061-02-6	trans-1,3-Dichloropropene	ND	0.20
79-00-5	1,1,2-Trichloroethane	ND	0.20
127-18-4	Tetrachloroethene	ND	0.20
106-93-4	1,2-Dibromoethane	ND	0.20
108-90-7	Chlorobenzene	ND	0.20
100-41-4	Ethylbenzene	ND	0.20
136777-61-2	m/p-Xylene	ND	0.20
95-47-6	o-Xylene	ND	0.20
100-42-5	Styrene	ND	0.20
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.20
108-67-8	1,3,5-Trimethylbenzene	ND	0.20
95-63-6	1,2,4-Trimethylbenzene	ND	0.20
541-73-1	1,3-Dichlorobenzene	ND	0.20

Client: OHM
Workorder: 3276

TO-14 Volatile Organics

Client Sample ID: SYSTEM BLANK

Lab Sample ID: ABLKL9

Analysis Date: 04/11/95

Dilution Factor: 1

CAS #	Compound	Result ppb(V/V)	Detection Limit
106-46-7	1,4-Dichlorobenzene	ND	0.20
95-50-1	1,2-Dichlorobenzene	ND	0.20
100-44-7	Benzyl Chloride	ND	0.20
120-82-1	1,2,4-Trichlorobenzene	ND	0.20
87-68-3	Hexachlorobutadiene	ND	0.20

Surrogate Compound	% Recovery
D4-1,2-Dichloroethane	101
D8-Toluene	103
Bromofluorobenzene	97

2B
VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: Quanterra Knoxville Contract: OHM CAMP LEJEUNE

Lab Code: ITSTU Case No.: SAS No.: SDG No.:3276

Level:(low/med) LOW

	EPA SAMPLE NO.	SMC1 (TOL) #	SMC2 (BFB) #	SMC3 (DCE) #	OTHER	TOT OUT
1	SYSTEM BLAN	103	97	101		0
2	CLJ15-V-10A	109	97	104		0
3	CLJ15-V-15B	109	106	104		0

	QC LIMITS
SMC1 (TOL) = D8-Toluene	(70 - 130)
SMC2 (BFB) = Bromofluorobenzene	(70 - 130)
SMC3 (DCE) = D4-1,2-Dichloroethane	(70 - 130)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

4A

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

SYSTEM BLAN

Lab Name: Quanterra Knoxville Contract: OHM CAMP LEJEUNE

Lab Code: ITSTU Case No.: SAS No.: SDG No.: 3276

Lab File ID: ABLKL9 Lab Sample ID: BLANK

Date Analyzed: 04/11/95 Time Analyzed: 17:49

Instrument ID: M

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
1	CLJ15-V-10A	AE8871	AE8871DL	1:05
2	CLJ15-V-15B	AE8872	AE8872DL	1:35

COMMENTS:

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Quanterra Knoxville Contract: OHM CAMP LEJEUNE

Lab Code: ITSTU Case No.: SAS No.: SDG No.: 3276

Lab File ID: BF0328M BFB Injection Date: 03/28/95

Instrument ID.: M BFB Injection Time: 11:34

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	28.4
75	30.0 - 66.0% of mass 95	49.6
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.5
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 120.0% of mass 95	73.9
175	4.0 - 9.0 % of mass 174	5.1 (6.9)1
176	93.0 - 101.0% of mass 174	71.7 (97.0)1
177	5.0 - 9.0% of mass 176	4.5 (6.3)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	VSTD50	VSTD50	LW0328M1	03/28/95	12:49
2	VSTD100	VSTD100	ML0328M	03/28/95	13:18
3	VSTD250	VSTD250	MD0328M	03/28/95	14:36
4	VSTD375	VSTD375	MH0328M	03/28/95	15:17
5	VSTD500	VSTD500	HI0328M	03/28/95	15:47

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Quanterra Knoxville Contract: OHM CAMP LEJEUNE

Lab Code: ITSTU Case No.: SAS No.: SDG No.: 3276

Lab File ID: BF0411M BFB Injection Date: 04/11/95

Instrument ID.: M BFB Injection Time: 15:32

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	26.1
75	30.0 - 66.0% of mass 95	49.7
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 120.0% of mass 95	77.7
175	4.0 - 9.0 % of mass 174	5.3 (6.9)1
176	93.0 - 101.0% of mass 174	76.0 (97.9)1
177	5.0 - 9.0% of mass 176	5.0 (6.5)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	VSTD250	VSTD250	MD0411M	04/11/95	16:15
2	SYSTEM BLAN	BLANK	ABLKL9	04/11/95	17:49
3	CLJ15-V-10A	AE8871	AE8871DL	04/12/95	1:05
4	CLJ15-V-15B	AE8872	AE8872DL	04/12/95	1:35

6A
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Quanterra Knoxville Contract: OHM CAMP LEJEUNE

Lab Code: ITSTU Case No.: SDG No.: 3276

Instrument ID: M Calibration Date(s): 03/28/95 03/28/95

Calibration Times: 12:49 15:47

LAB FILE ID: RF001=LW0328M1 RF005=ML0328M
RF010=MD0328M RF025=MH0328M RF050=HI0328M

COMPOUND	RF001	RF005	RF010	RF025	RF050	$\overline{RRF}$	% RSD
Dichlorodifluoromethane	3.399	3.453	4.237	3.494	2.967	3.510	13.0
1,2-Dichlorotetrafluoroetha	2.189	2.267	2.782	2.224	1.902	2.273	14.0
Chloromethane	0.459	0.510	0.629	0.527	0.468	0.519	13.1
Vinyl Chloride	1.476	1.544	1.857	1.561	1.389	1.565	11.3
Bromomethane	1.541	1.597	1.868	1.551	1.332	1.578	12.2
Chloroethane	0.788	0.857	0.955	0.838	0.729	0.833	10.1
Trichlorofluoromethane	3.263	3.295	3.696	3.084	3.032	3.274	8.0
1,1-Dichloroethene	1.313	1.331	1.508	1.445	1.362	1.392	5.9
1,1,2-Trichlorotrifluoroeth	3.516	3.081	3.340	3.004	2.605	3.109	11.2
Methylene Chloride	1.569	1.310	1.363	1.312	1.244	1.360	9.2
1,1-Dichloroethane	3.111	3.217	3.402	3.245	3.014	3.198	4.6
cis-1,2-Dichloroethene	1.366	1.450	1.587	1.561	1.540	1.501	6.1
Chloroform	3.231	3.281	3.742	3.439	3.199	3.378	6.6
1,1,1-Trichloroethane	3.041	3.239	3.590	3.404	3.030	3.261	7.4
Carbon Tetrachloride	0.797	0.787	0.864	0.752	0.645	0.769	10.4
Benzene	0.760	0.837	0.864	0.880	0.828	0.834	5.5
1,2-Dichloroethane	0.450	0.508	0.532	0.511	0.464	0.493	7.0
Trichloroethene	0.415	0.418	0.472	0.447	0.416	0.434	5.8
1,2-Dichloropropane	0.341	0.397	0.408	0.408	0.373	0.385	7.4
cis-1,3-Dichloropropene	0.574	0.687	0.682	0.694	0.664	0.660	7.5
Toluene	0.838	0.940	1.003	1.002	0.941	0.945	7.1
trans-1,3-Dichloropropene	0.455	0.559	0.591	0.600	0.573	0.556	10.5
1,1,2-Trichloroethane	0.349	0.405	0.422	0.412	0.394	0.396	7.2
Tetrachloroethene	0.250	0.259	0.317	0.287	0.256	0.274	10.2
1,2-Dibromoethane	0.649	0.744	0.785	0.787	0.740	0.741	7.6
Chlorobenzene	0.739	0.835	0.863	0.892	0.869	0.840	7.1
Ethylbenzene	1.127	1.322	1.335	1.416	1.338	1.308	8.2
m/p-Xylene	0.881	1.049	1.067	1.121	1.062	1.036	8.8
o-Xylene	0.889	1.032	1.066	1.114	1.016	1.023	8.2
Styrene	0.579	0.718	0.689	0.735	0.722	0.689	9.2
1,1,2,2-Tetrachloroethane	0.706	0.854	0.846	0.944	0.941	0.858	11.3
1,3,5-Trimethylbenzene	0.955	1.185	1.219	1.322	1.238	1.184	11.6
1,2,4-Trimethylbenzene	0.973	1.196	1.216	1.332	1.236	1.191	11.1
1,3-Dichlorobenzene	0.652	0.791	0.789	0.853	0.855	0.788	10.5
1,4-Dichlorobenzene	0.663	0.799	0.789	0.854	0.841	0.789	9.6
1,2-Dichlorobenzene	0.608	0.744	0.729	0.807	0.824	0.742	11.5
Benzyl Chloride	0.751	1.052	1.141	1.318	1.182	1.089	19.5
1,2,4-Trichlorobenzene	0.081	0.162	0.170	0.186	0.179	0.156	27.4
Hexachlorobutadiene	0.198	0.285	0.298	0.313	0.284	0.276	16.3
D4-1,2-Dichloroethane	0.213	0.223	0.222	0.219	0.222	0.220	1.9
D8-Toluene	0.941	0.949	0.988	0.950	0.918	0.949	2.7
Bromofluorobenzene	0.663	0.691	0.711	0.768	0.758	0.718	6.2

7A
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Quanterra Knoxville Contract: OHM CAMP LEJEUNE

Lab Code: ITSTU Case No.: SAS No.: SDG No.: 3276

Instrument ID: M Calibration Date: 04/11/95 Time: 16:15

Lab File ID: MD0411M Init. Calib. Date(s): 03/28/95 03/28/95

COMPOUND	$\overline{RRF}$	RRF10	%D
Dichlorodifluoromethane	3.510	3.335	5.0
1,2-Dichlorotetrafluoroetha	2.273	2.220	2.3
Chloromethane	0.519	0.460	11.3
Vinyl Chloride	1.565	1.366	12.7
Bromomethane	1.578	1.423	9.8
Chloroethane	0.833	0.674	19.1
Trichlorofluoromethane	3.274	2.784	15.0
1,1-Dichloroethene	1.392	1.363	2.1
1,1,2-Trichlorotrifluoroeth	3.109	2.869	7.7
Methylene Chloride	1.360	1.226	9.8
1,1-Dichloroethane	3.198	2.910	9.0
cis-1,2-Dichloroethene	1.501	1.483	1.2
Chloroform	3.378	3.347	0.9
1,1,1-Trichloroethane	3.261	3.246	0.5
Carbon Tetrachloride	0.769	0.695	9.6
Benzene	0.834	0.862	3.4
1,2-Dichloroethane	0.493	0.475	3.7
Trichloroethene	0.434	0.418	3.6
1,2-Dichloropropane	0.385	0.394	2.2
cis-1,3-Dichloropropene	0.660	0.670	1.5
Toluene	0.945	0.938	0.7
trans-1,3-Dichloropropene	0.556	0.529	4.8
1,1,2-Trichloroethane	0.396	0.380	4.1
Tetrachloroethene	0.274	0.252	8.0
1,2-Dibromoethane	0.741	0.760	2.6
Chlorobenzene	0.840	0.881	4.9
Ethylbenzene	1.308	1.464	12.0
m/p-Xylene	1.036	1.166	12.5
o-Xylene	1.023	1.126	10.0
Styrene	0.689	0.738	7.2
1,1,2,2-Tetrachloroethane	0.858	0.958	11.6
1,3,5-Trimethylbenzene	1.184	1.413	19.4
1,2,4-Trimethylbenzene	1.191	1.444	21.3
1,3-Dichlorobenzene	0.788	0.895	13.6
1,4-Dichlorobenzene	0.789	0.879	11.4
1,2-Dichlorobenzene	0.742	0.856	15.3
Benzyl Chloride	1.089	1.348	23.8
1,2,4-Trichlorobenzene	0.156	0.217	39.5
Hexachlorobutadiene	0.276	0.335	21.6
D4-1,2-Dichloroethane	0.220	0.211	4.0
D8-Toluene	0.949	0.923	2.8
Bromofluorobenzene	0.718	0.766	6.7

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Quanterra Knoxville Contract: OHM CAMP LEJEUNE

Lab Code: ITSTU Case No.: SAS No.: SDG No.: 3276

Lab File ID (Standard): MD0411M Date Analyzed: 04/11/95

Instrument ID: M Time Analyzed: ~~11:34~~ 16:15

4/13/95

		IS1(BCM) AREA #	RT #	IS2(DFB) AREA #	RT #	IS3(CBZ) AREA #	RT #
	12 HOUR STD	13638.	6:39	63614.	8:35	63037.	14:09
	UPPER LIMIT	27276.	7: 9	127228.	9: 5	126074.	14:39
	LOWER LIMIT	6819.	6: 9	31807.	8: 5	31519.	13:39
	EPA SAMPLE NO.						
1	SYSTEM BLAN	13048.	6:38	61205.	8:34	57327.	14:08
2	CLJ15-V-10A	13346.	6:39	61431.	8:35	52943.	14:09
3	CLJ15-V-15B	12529.	6:38	57457.	8:35	50216.	14:09

IS1 (BCM) = BROMOCHLOROMETHANE
IS2 (DFB) = 1,4-DIFLUOROBENZENE
IS3 (CBZ) = CHLOROBENZENE-D5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

PROJECT REVIEW CHECKLIST

	Project Code: OHM - Camp LeJeune	Comments:
✓	1. Tests assigned correctly by coding department.	
✓	2. Report format described correctly on sample receipt log (SRL).	
✓	3. Field sample numbers on SRL match client's paperwork.	
✓	4. Special instructions adequately described on SRL.	
✓	5. Client Chain-of-Custody (C-O-C) signed by coding personnel.	
✓	6. QC level correctly defined and noted on SRL.	
✓	7. Sample condition checked by coding and documented on SRL and client's C-O-C.	
✓	8. Work Order checklist is correct.	
✓	9. Correct due date assigned.	
✓	10. Contract number (project name) listed correctly on SRL.	
✓	11. Are any NCM or CUR required.	CUR # 3775 Sample CLS15-V-0513 broken upon rec
✓	12. Proper and complete paperwork present for subcontracted analyses.	
✓	13. Client Specific QC: YES_____ NO_____ IF NO, OMIT 14, 15	
	14. Is SDG in project file.	
	15. Is QC properly assigned.	

Reviewed by: Ken Mueller Date: 4/5/95

Action Needed: _____

Corrected by: _____ Date: _____

REVISION DATE: May 23, 1994

Quanterra Incorporated
5815 Middlebrook Pike
Knoxville, Tennessee 37921

615 588-6401 Telephone
615 584-4315 Fax

OHM Remediation Services Corporation
5335 Triangle Parkway, Suite 450
Norcross, GA 30092
Attn: Missy Art

April 25, 1995

Job Number: 3331

This is the Certificate of Analysis for the following sample:

Client Project ID:	Camp Lejeune D.O. 15 / 16032
Date Received by Lab:	April 12, 1995
Number of Samples:	One (1)
Sample Type:	Air

I. Introduction

On April 12, 1995, one (1) air sample arrived at Quanterra Environmental Services, Knoxville, Tennessee, from OHM Remediation Services, Corporation, Norcross, Georgia. The sample was collected on April 10, 1995, and was labeled as follows:

Client Sample ID	Lab Sample ID
SVEW-4	AE9633

II. Analytical Results/Methodology

The analytical results for this report are presented by analytical test. The data will include sample identification information, the analytical results, and the appropriate detection limits.

The sample was analyzed for volatile organic compounds by gas chromatography/mass spectroscopy (GC/MS) based on EPA method TO-14.

Reviewed and Approved:

Kenneth Mueller
Project Manager

Quanterra Environmental Services

III. Quality Control

Routine laboratory level I QC was followed.

Cross Reference Table for Work Order #: 3331

Client Sample ID	Description	Lab ID	QC	Test Description
SVEW-4	VAPOR SAMPLE IN 2ML TEDLA	AE9633		TO-14 (VOA) CANISTER ANALYSIS BY GC/MS NEESA LEVEL C DATA PKG, GCMS TESTS

OHM Corporation

COC NO. *0003625*

CHAIN-OF-CUSTODY RECORD

WO # 3331
3396
RL

Form 0019
Field Technical Services
Rev. 08/89

Nº 116108

O.H. MATERIALS CORP. • P.O. BOX 551 • FINDLAY, OH 45839-0551 • 419-423-3526

PROJECT NAME	PROJECT LOCATION
Camp Lejeune D.O. 15	Camp Lejeune, NC
PROJ. NO.	**PROJECT CONTACT**	**PROJECT TELEPHONE NO.**
16032	Randy Smith	9104571809
CLIENT'S REPRESENTATIVE	**PROJECT MANAGER/SUPERVISOR**
	Jim Dunn

ITEM NO.	SAMPLE NUMBER	DATE	TIME	COMP	GRAB	SAMPLE DESCRIPTION (INCLUDE MATRIX AND POINT OF SAMPLE)	NUMBER OF CONTAINERS	ANALYSIS DESIRED (INDICATE SEPARATE CONTAINERS) T.O. 14	REMARKS
1	SVEW-4	4/10/95	1133		X	Vapor sample	1	X	Recd @ 10°C w/custody Seals Intact BPB 4/12/95
2									
3									
4									
5									
6									
7									
8									
9									
10									

TRANSFER NUMBER	ITEM NUMBER	TRANSFERS RELINQUISHED BY	TRANSFERS ACCEPTED BY	DATE	TIME
1	1	Missy Art		4/11/95	1445
2			Bryan Blanquist TASH	4/12/95	850
3					
4					

REMARKS

14 day TAT
Fax results to site 9104571809.
Missy Art 4/11/95

SAMPLER'S SIGNATURE

LAB COPY

0000004

Client: OHM
Workorder: 3331

TO-14 Volatile Organics

Client Sample ID: SVEW-4

Lab Sample ID: AE9633DL

Analysis Date: 04/24/95

Dilution Factor: 1437

CAS #	Compound	Result ppb(V/V)	Detection Limit
75-71-8	Dichlorodifluoromethane	ND	290
76-14-2	1,2-Dichlorotetrafluoroethane	ND	290
74-87-3	Chloromethane	ND	290
75-01-4	Vinyl Chloride	ND	290
74-83-9	Bromomethane	ND	290
75-00-3	Chloroethane	ND	290
75-69-4	Trichlorofluoromethane	ND	290
75-35-4	1,1-Dichloroethene	ND	290
76-13-1	1,1,2-Trichlorotrifluoroethane	ND	430
75-09-2	Methylene Chloride	ND	430
75-34-3	1,1-Dichloroethane	ND	290
156-59-2	cis-1,2-Dichloroethene	ND	290
67-66-3	Chloroform	ND	290
71-55-6	1,1,1-Trichloroethane	ND	290
56-23-5	Carbon Tetrachloride	ND	290
71-43-2	Benzene	ND	290
107-06-2	1,2-Dichloroethane	ND	290
79-01-6	Trichloroethene	ND	290
78-87-5	1,2-Dichloropropane	ND	290
10061-01-5	cis-1,3-Dichloropropene	ND	290
108-88-3	Toluene	ND	290
10061-02-6	trans-1,3-Dichloropropene	ND	290
79-00-5	1,1,2-Trichloroethane	ND	290
127-18-4	Tetrachloroethene	11000	290
106-93-4	1,2-Dibromoethane	ND	290
108-90-7	Chlorobenzene	ND	290
100-41-4	Ethylbenzene	ND	290
136777-61-2	m/p-Xylene	ND	290
95-47-6	o-Xylene	ND	290
100-42-5	Styrene	ND	290
79-34-5	1,1,2,2-Tetrachloroethane	ND	290
108-67-8	1,3,5-Trimethylbenzene	ND	290
95-63-6	1,2,4-Trimethylbenzene	ND	290
541-73-1	1,3-Dichlorobenzene	ND	290

Client: OHM
Workorder: 3331

TO-14 Volatile Organics

Client Sample ID: SVEW-4

Lab Sample ID: AE9633DL

Analysis Date: 04/24/95

Dilution Factor: 1437

CAS #	Compound	Result ppb(V/V)	Detection Limit
106-46-7	1,4-Dichlorobenzene	ND	290
95-50-1	1,2-Dichlorobenzene	ND	290
100-44-7	Benzyl Chloride	ND	290
120-82-1	1,2,4-Trichlorobenzene	ND	290
87-68-3	Hexachlorobutadiene	ND	290

Surrogate Compound	% Recovery
D4-1,2-Dichloroethane	99
D8-Toluene	103
Bromofluorobenzene	103

Client: OHM
Workorder: 3331

TO-14 Volatile Organics

Client Sample ID: SYSTEM BLANK

Lab Sample ID: ABLKP4

Analysis Date: 04/24/95

Dilution Factor: 1

CAS #	Compound	Result ppb(V/V)	Detection Limit
75-71-8	Dichlorodifluoromethane	ND	0.20
76-14-2	1,2-Dichlorotetrafluoroethane	ND	0.20
74-87-3	Chloromethane	ND	0.20
75-01-4	Vinyl Chloride	ND	0.20
74-83-9	Bromomethane	ND	0.20
75-00-3	Chloroethane	ND	0.20
75-69-4	Trichlorofluoromethane	ND	0.20
75-35-4	1,1-Dichloroethene	ND	0.20
76-13-1	1,1,2-Trichlorotrifluoroethane	ND	0.30
75-09-2	Methylene Chloride	ND	0.30
75-34-3	1,1-Dichloroethane	ND	0.20
156-59-2	cis-1,2-Dichloroethene	ND	0.20
67-66-3	Chloroform	ND	0.20
71-55-6	1,1,1-Trichloroethane	ND	0.20
56-23-5	Carbon Tetrachloride	ND	0.20
71-43-2	Benzene	ND	0.20
107-06-2	1,2-Dichloroethane	ND	0.20
79-01-6	Trichloroethene	ND	0.20
78-87-5	1,2-Dichloropropane	ND	0.20
10061-01-5	cis-1,3-Dichloropropene	ND	0.20
108-88-3	Toluene	ND	0.20
10061-02-6	trans-1,3-Dichloropropene	ND	0.20
79-00-5	1,1,2-Trichloroethane	ND	0.20
127-18-4	Tetrachloroethene	ND	0.20
106-93-4	1,2-Dibromoethane	ND	0.20
108-90-7	Chlorobenzene	ND	0.20
100-41-4	Ethylbenzene	ND	0.20
136777-61-2	m/p-Xylene	ND	0.20
95-47-6	o-Xylene	ND	0.20
100-42-5	Styrene	ND	0.20
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.20
108-67-8	1,3,5-Trimethylbenzene	ND	0.20
95-63-6	1,2,4-Trimethylbenzene	ND	0.20
541-73-1	1,3-Dichlorobenzene	ND	0.20

Client: OHM
Workorder: 3331

TO-14 Volatile Organics

Client Sample ID: SYSTEM BLANK

Lab Sample ID: ABLKP4

Analysis Date: 04/24/95

Dilution Factor: 1

CAS #	Compound	Result ppb(V/V)	Detection Limit
106-46-7	1,4-Dichlorobenzene	ND	0.20
95-50-1	1,2-Dichlorobenzene	ND	0.20
100-44-7	Benzyl Chloride	ND	0.20
120-82-1	1,2,4-Trichlorobenzene	ND	0.20
87-68-3	Hexachlorobutadiene	ND	0.20

Surrogate Compound	% Recovery
D4-1,2-Dichloroethane	99
D8-Toluene	98
Bromofluorobenzene	98

2B

VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: Quanterra Knoxville Contract: OHM CAMP LEJEUNE

Lab Code: ITSTU Case No.: SAS No.: SDG No.:3331

Level:(low/med) LOW

	EPA SAMPLE NO.	SMC1 (TOL) #	SMC2 (BFB) #	SMC3 (DCE) #	OTHER	TOT OUT
1	SYSTEM BLAN	98	98	99		0
2	SVEW-4	103	103	99		0

		QC LIMITS
SMC1 (TOL)	= D8-Toluene	(70 - 130)
SMC2 (BFB)	= Bromofluorobenzene	(70 - 130)
SMC3 (DCE)	= D4-1,2-Dichloroethane	(70 - 130)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

4A

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

SYSTEM BLAN

Lab Name: Quanterra Knoxville Contract: OHM CAMP LEJEUNE

Lab Code: ITSTU Case No.: SAS No.: SDG No.: 3331

Lab File ID: ABLKP4 Lab Sample ID: BLANK

Date Analyzed: 04/24/95 Time Analyzed: 18:51

Instrument ID: M

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
1	SVEW-4	AE9633	AE9633DL	19:22

COMMENTS:

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Quanterra Knoxville Contract: OHM CAMP LEJEUNE

Lab Code: ITSTU Case No.: SAS No.: SDG No.: 3331

Lab File ID: BF0413M\ BFB Injection Date: 04/13/95

Instrument ID.: M BFB Injection Time: 23:00

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	27.0
75	30.0 - 66.0% of mass 95	51.1
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.5
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 120.0% of mass 95	72.8
175	4.0 - 9.0 % of mass 174	5.1 (7.0)1
176	93.0 - 101.0% of mass 174	72.9 (100.2)1
177	5.0 - 9.0% of mass 176	4.6 (6.3)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	VSTD50	VSTD50	LW0413M3	04/14/95	0:09
2	VSTD100	VSTD100	ML0413M1	04/14/95	0:37
3	VSTD250	VSTD250	MD0413M1	04/14/95	1:09
4	VSTD375	VSTD375	MH0413M1	04/14/95	1:37
5	VSTD500	VSTD500	HI0413M1	04/14/95	2:06

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Quanterra Knoxville Contract: OHM CAMP LEJEUNE

Lab Code: ITSTU Case No.: SAS No.: SDG No.: 3331

Lab File ID: BF0424M BFB Injection Date: 04/24/95

Instrument ID.: M BFB Injection Time: 15:04

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	28.7
75	30.0 - 66.0% of mass 95	54.4
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 120.0% of mass 95	76.1
175	4.0 - 9.0 % of mass 174	5.3 (6.9)1
176	93.0 - 101.0% of mass 174	75.1 (98.7)1
177	5.0 - 9.0% of mass 176	4.9 (6.6)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	VSTD250	VSTD250	MD0424M	04/24/95	15:51
2	SYSTEM BLAN	BLANK	ABLKP4	04/24/95	18:51
3	SVEW-4	AE9633	AE9633DL	04/24/95	19:22

6A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Quanterra Knoxville Contract: OHM CAMP LEJEUNE

Lab Code: ITSTU Case No.: SDG No.: 3331

Instrument ID: M Calibration Date(s): 04/14/95 04/14/95

Calibration Times: 0:09 2:06

LAB FILE ID: RF001=LW0413M3 RF005=ML0413M1
RF010=MD0413M1 RF025=MH0413M1 RF050=HI0413M1

COMPOUND	RF001	RF005	RF010	RF025	RF050	$\overline{RRF}$	% RSD
Dichlorodifluoromethane	3.691	3.372	3.449	3.085	2.833	3.286	10.1
1,2-Dichlorotetrafluoroetha	2.406	2.275	2.293	2.078	1.886	2.188	9.4
Chloromethane	0.454	0.449	0.461	0.433	0.418	0.443	3.9
Vinyl Chloride	1.462	1.360	1.415	1.264	1.208	1.342	7.8
Bromomethane	1.524	1.491	1.518	1.309	1.230	1.414	9.6
Chloroethane	0.706	0.697	0.714	0.625	0.596	0.668	8.0
Trichlorofluoromethane	3.026	2.810	2.795	2.534	2.353	2.704	9.7
1,1-Dichloroethene	1.427	1.334	1.351	1.290	1.248	1.330	5.1
1,1,2-Trichlorotrifluoroeth	3.507	2.929	2.861	2.486	2.359	2.828	15.9
Methylene Chloride	1.532	1.264	1.221	1.114	1.078	1.242	14.4
1,1-Dichloroethane	3.073	2.895	2.845	2.613	2.468	2.779	8.6
cis-1,2-Dichloroethene	1.461	1.438	1.498	1.443	1.414	1.451	2.2
Chloroform	3.647	3.403	3.456	3.178	3.008	3.338	7.5
1,1,1-Trichloroethane	3.236	3.225	3.386	3.114	2.989	3.190	4.6
Carbon Tetrachloride	0.732	0.744	0.727	0.674	0.596	0.695	8.8
Benzene	0.941	0.889	0.909	0.887	0.811	0.887	5.4
1,2-Dichloroethane	0.526	0.502	0.506	0.458	0.440	0.486	7.4
Trichloroethene	0.423	0.417	0.439	0.427	0.409	0.423	2.7
1,2-Dichloropropane	0.403	0.390	0.403	0.386	0.342	0.385	6.5
cis-1,3-Dichloropropene	0.630	0.643	0.689	0.670	0.636	0.654	3.8
Toluene	1.028	0.987	0.995	0.949	0.871	0.966	6.2
trans-1,3-Dichloropropene	0.471	0.518	0.551	0.532	0.495	0.513	6.1
1,1,2-Trichloroethane	0.410	0.396	0.402	0.377	0.346	0.386	6.6
Tetrachloroethene	0.273	0.269	0.266	0.248	0.218	0.255	8.9
1,2-Dibromoethane	0.789	0.783	0.787	0.747	0.663	0.754	7.1
Chlorobenzene	0.934	0.905	0.899	0.891	0.812	0.888	5.1
Ethylbenzene	1.569	1.495	1.509	1.413	1.256	1.448	8.4
m/p-Xylene	1.263	1.197	1.202	1.130	0.995	1.157	8.8
o-Xylene	1.303	1.220	1.191	1.086	0.920	1.144	12.9
Styrene	0.742	0.747	0.752	0.723	0.688	0.730	3.6
1,1,2,2-Tetrachloroethane	0.968	1.012	0.963	0.915	0.798	0.931	8.8
1,3,5-Trimethylbenzene	1.420	1.474	1.471	1.375	1.169	1.382	9.1
1,2,4-Trimethylbenzene	1.475	1.502	1.472	1.364	1.151	1.393	10.4
1,3-Dichlorobenzene	0.890	0.910	0.903	0.877	0.801	0.876	5.0
1,4-Dichlorobenzene	0.917	0.906	0.910	0.851	0.763	0.869	7.5
1,2-Dichlorobenzene	0.837	0.848	0.862	0.832	0.754	0.827	5.1
Benzyl Chloride	1.077	1.299	1.379	1.324	1.055	1.227	12.2
1,2,4-Trichlorobenzene	0.145	0.161	0.187	0.190	0.153	0.167	12.1
Hexachlorobutadiene	0.264	0.291	0.316	0.294	0.226	0.278	12.4
D4-1,2-Dichloroethane	0.215	0.214	0.212	0.210	0.204	0.211	2.1
D8-Toluene	0.955	0.948	0.946	0.921	0.872	0.928	3.7
Bromofluorobenzene	0.778	0.797	0.781	0.765	0.706	0.765	4.6

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Quanterra Knoxville Contract: OHM CAMP LEJEUNE

Lab Code: ITSTU Case No.: SAS No.: SDG No.: 3331

Instrument ID: M Calibration Date: 04/24/95 Time: 15:51

Lab File ID: MD0424M Init. Calib. Date(s): 04/14/95 04/14/95

COMPOUND	$\overline{RRF}$	RRF10	%D
Dichlorodifluoromethane	3.286	3.650	11.1
1,2-Dichlorotetrafluoroetha	2.188	2.391	9.3
Chloromethane	0.443	0.438	1.1
Vinyl Chloride	1.342	1.349	0.5
Bromomethane	1.414	1.387	1.9
Chloroethane	0.668	0.624	6.5
Trichlorofluoromethane	2.704	2.872	6.2
1,1-Dichloroethene	1.330	1.260	5.3
1,1,2-Trichlorotrifluoroeth	2.828	2.805	0.8
Methylene Chloride	1.242	1.137	8.4
1,1-Dichloroethane	2.779	2.833	2.0
cis-1,2-Dichloroethene	1.451	1.394	3.9
Chloroform	3.338	3.444	3.2
1,1,1-Trichloroethane	3.190	3.458	8.4
Carbon Tetrachloride	0.695	0.792	14.0
Benzene	0.887	0.857	3.4
1,2-Dichloroethane	0.486	0.531	9.2
Trichloroethene	0.423	0.419	0.9
1,2-Dichloropropane	0.385	0.379	1.5
cis-1,3-Dichloropropene	0.654	0.667	2.1
Toluene	0.966	0.922	4.6
trans-1,3-Dichloropropene	0.513	0.542	5.6
1,1,2-Trichloroethane	0.386	0.367	5.0
Tetrachloroethene	0.255	0.279	9.5
1,2-Dibromoethane	0.754	0.743	1.4
Chlorobenzene	0.888	0.856	3.6
Ethylbenzene	1.448	1.435	0.9
m/p-Xylene	1.157	1.171	1.2
o-Xylene	1.144	1.151	0.6
Styrene	0.730	0.716	2.0
1,1,2,2-Tetrachloroethane	0.931	0.916	1.6
1,3,5-Trimethylbenzene	1.382	1.487	7.6
1,2,4-Trimethylbenzene	1.393	1.533	10.1
1,3-Dichlorobenzene	0.876	0.936	6.8
1,4-Dichlorobenzene	0.869	0.908	4.4
1,2-Dichlorobenzene	0.827	0.883	6.8
Benzyl Chloride	1.227	1.448	18.0
1,2,4-Trichlorobenzene	0.167	0.210	25.6
Hexachlorobutadiene	0.278	0.366	31.6
D4-1,2-Dichloroethane	0.211	0.231	9.5
D8-Toluene	0.928	0.931	0.3
Bromofluorobenzene	0.765	0.800	4.5

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Quanterra Knoxville Contract: OHM CAMP LEJEUNE

Lab Code: ITSTU Case No.: SAS No.: SDG No.: 3331

Lab File ID (Standard): MD0424M Date Analyzed: 04/24/95

Instrument ID: M Time Analyzed: ~~23:00~~ 15:51

		IS1(BCM) AREA	#	RT	#	IS2(DFB) AREA	#	RT	#	IS3(CBZ) AREA	#	RT	#
	12 HOUR STD	9840.		6:39		44332.		8:35		43757.		14:08	
	UPPER LIMIT	19680.		7: 9		88664.		9: 5		87514.		14:38	
	LOWER LIMIT	4920.		6: 9		22166.		8: 5		21879.		13:38	
	EPA SAMPLE NO.												
1	SYSTEM BLAN	9825.		6:39		44961.		8:35		41750.		14:09	
2	SVEW-4	9609.		6:38		44186.		8:35		39496.		14:08	

IS1 (BCM) = BROMOCHLOROMETHANE
IS2 (DFB) = 1,4-DIFLUOROBENZENE
IS3 (CBZ) = CHLOROBENZENE-D5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

Quanterra Incorporated
5815 Middlebrook Pike
Knoxville, Tennessee 37921

615 588-6401 Telephone
615 584-4315 Fax

OHM Remediation Services Corporation
5335 Triangle Parkway, Suite 450
Norcross, GA 30092
Attn: Missy Art

May 10, 1995

Job Number: 3512

This is the Certificate of Analysis for the following samples:

Client Project ID:	Camp Lejeune D.O. 15 / 16032
Date Received by Lab:	May 5, 1995
Number of Samples:	Ten (10)
Sample Type:	Air

I. Introduction

On May 5, 1995, ten (10) air samples arrived at Quanterra Environmental Services, Knoxville, Tennessee, from OHM Remediation Services, Corporation, Norcross, Georgia. The samples were collected on May 4, 1995, and were labeled as follows:

Client Sample ID	Lab Sample ID	Client Sample ID	Lab Sample ID
SVEW-1	AF2079	SVEW-6	AF2084
SVEW-2	AF2080	SVEW-7	AF2085
SVEW-3	AF2081	SVEW-8	AF2086
SVEW-4	AF2082	System Total	AF2087
SVEW-5	AF2083	Discharge Stake	AF2088

II. Analytical Results/Methodology

The analytical results for this report are presented by analytical test. The data will include sample identification information, the analytical results, and the appropriate detection limits.

Reviewed and Approved:

Kenneth Mueller
Project Manager

Quanterra Environmental Services

II. Analytical Results/Methodology (Continued)

The samples were analyzed for volatile organic compounds by gas chromatography/mass spectroscopy (GC/MS) based on EPA method TO-14.

III. Quality Control

Routine laboratory level I QC was followed.

Client: OHM
Workorder: 3512

TO-14 Volatile Organics

Client Sample ID: SVEW-1

Lab Sample ID: AF2079DL

Analysis Date: 05/09/95

Dilution Factor: 6288

CAS #	Compound	Result ppb(V/V)	Detection Limit
75-71-8	Dichlorodifluoromethane	ND	1300
76-14-2	1,2-Dichlorotetrafluoroethane	ND	1300
74-87-3	Chloromethane	ND	1300
75-01-4	Vinyl Chloride	ND	1300
74-83-9	Bromomethane	ND	1300
75-00-3	Chloroethane	ND	1300
75-69-4	Trichlorofluoromethane	ND	1300
75-35-4	1,1-Dichloroethene	ND	1300
76-13-1	1,1,2-Trichlorotrifluoroethane	ND	1900
75-09-2	Methylene Chloride	ND	1900
75-34-3	1,1-Dichloroethane	ND	1300
156-59-2	cis-1,2-Dichloroethene	ND	1300
67-66-3	Chloroform	ND	1300
71-55-6	1,1,1-Trichloroethane	ND	1300
56-23-5	Carbon Tetrachloride	ND	1300
71-43-2	Benzene	ND	1300
107-06-2	1,2-Dichloroethane	ND	1300
79-01-6	Trichloroethene	ND	1300
78-87-5	1,2-Dichloropropane	ND	1300
10061-01-5	cis-1,3-Dichloropropene	ND	1300
108-88-3	Toluene	ND	1300
10061-02-6	trans-1,3-Dichloropropene	ND	1300
79-00-5	1,1,2-Trichloroethane	ND	1300
127-18-4	Tetrachloroethene	64000	1300
106-93-4	1,2-Dibromoethane	ND	1300
108-90-7	Chlorobenzene	ND	1300
100-41-4	Ethylbenzene	ND	1300
136777-61-2	m/p-Xylene	ND	1300
95-47-6	o-Xylene	ND	1300
100-42-5	Styrene	ND	1300
79-34-5	1,1,2,2-Tetrachloroethane	ND	1300
108-67-8	1,3,5-Trimethylbenzene	ND	1300
95-63-6	1,2,4-Trimethylbenzene	ND	1300
541-73-1	1,3-Dichlorobenzene	ND	1300

Client: OHM
Workorder: 3512

TO-14 Volatile Organics

Client Sample ID: SVEW-1

Lab Sample ID: AF2079DL

Analysis Date: 05/09/95

Dilution Factor: 6288

CAS #	Compound	Result ppb(V/V)	Detection Limit
106-46-7	1,4-Dichlorobenzene	ND	1300
95-50-1	1,2-Dichlorobenzene	ND	1300
100-44-7	Benzyl Chloride	ND	1300
120-82-1	1,2,4-Trichlorobenzene	ND	1300
87-68-3	Hexachlorobutadiene	ND	1300

Surrogate Compound	% Recovery
D4-1,2-Dichloroethane	98
D8-Toluene	110
Bromofluorobenzene	103

Client: OHM
Workorder: 3512

TO-14 Volatile Organics

Client Sample ID: SVEW-1

Lab Sample ID: AF2079D2

Analysis Date: 05/09/95

Dilution Factor: 6288

CAS #	Compound	Result ppb(V/V)	Detection Limit
75-71-8	Dichlorodifluoromethane	ND	1300
76-14-2	1,2-Dichlorotetrafluoroethane	ND	1300
74-87-3	Chloromethane	ND	1300
75-01-4	Vinyl Chloride	ND	1300
74-83-9	Bromomethane	ND	1300
75-00-3	Chloroethane	ND	1300
75-69-4	Trichlorofluoromethane	ND	1300
75-35-4	1,1-Dichloroethene	ND	1300
76-13-1	1,1,2-Trichlorotrifluoroethane	ND	1900
75-09-2	Methylene Chloride	ND	1900
75-34-3	1,1-Dichloroethane	ND	1300
156-59-2	cis-1,2-Dichloroethene	ND	1300
67-66-3	Chloroform	ND	1300
71-55-6	1,1,1-Trichloroethane	ND	1300
56-23-5	Carbon Tetrachloride	ND	1300
71-43-2	Benzene	ND	1300
107-06-2	1,2-Dichloroethane	ND	1300
79-01-6	Trichloroethene	ND	1300
78-87-5	1,2-Dichloropropane	ND	1300
10061-01-5	cis-1,3-Dichloropropene	ND	1300
108-88-3	Toluene	ND	1300
10061-02-6	trans-1,3-Dichloropropene	ND	1300
79-00-5	1,1,2-Trichloroethane	ND	1300
127-18-4	Tetrachloroethene	64000	1300
106-93-4	1,2-Dibromoethane	ND	1300
108-90-7	Chlorobenzene	ND	1300
100-41-4	Ethylbenzene	ND	1300
136777-61-2	m/p-Xylene	ND	1300
95-47-6	o-Xylene	ND	1300
100-42-5	Styrene	ND	1300
79-34-5	1,1,2,2-Tetrachloroethane	ND	1300
108-67-8	1,3,5-Trimethylbenzene	ND	1300
95-63-6	1,2,4-Trimethylbenzene	ND	1300
541-73-1	1,3-Dichlorobenzene	ND	1300

Client: OHM
Workorder: 3512

TO-14 Volatile Organics

Client Sample ID: SVEW-1

Lab Sample ID: AF2079D2

Analysis Date: 05/09/95

Dilution Factor: 6288

CAS #	Compound	Result ppb(V/V)	Detection Limit
106-46-7	1,4-Dichlorobenzene	ND	1300
95-50-1	1,2-Dichlorobenzene	ND	1300
100-44-7	Benzyl Chloride	ND	1300
120-82-1	1,2,4-Trichlorobenzene	ND	1300
87-68-3	Hexachlorobutadiene	ND	1300

Surrogate Compound	% Recovery
D4-1,2-Dichloroethane	98
D8-Toluene	108
Bromofluorobenzene	102

Client: OHM
Workorder: 3512

Duplicate Recovery of Volatile Organics

Client Sample ID: SVEW-1

Lab Sample ID: AF2079DL Analysis Date: 05/09/95

Duplicate Sample ID: AF2079D2 Analysis Date: 05/09/95

Dilution Factor: 6288 Units: ppb(V/V)

Compound	Sample Amount	Duplicate Amount	%RPD
Dichlorodifluoromethane	ND	ND	NA
1,2-Dichlorotetrafluoroethane	ND	ND	NA
Chloromethane	ND	ND	NA
Vinyl Chloride	ND	ND	NA
Bromomethane	ND	ND	NA
Chloroethane	ND	ND	NA
Trichlorofluoromethane	ND	ND	NA
1,1-Dichloroethene	ND	ND	NA
1,1,2-Trichlorotrifluoroethane	ND	ND	NA
Methylene Chloride	ND	ND	NA
1,1-Dichloroethane	ND	ND	NA
cis-1,2-Dichloroethene	ND	ND	NA
Chloroform	ND	ND	NA
1,1,1-Trichloroethane	ND	ND	NA
Carbon Tetrachloride	ND	ND	NA
Benzene	ND	ND	NA
1,2-Dichloroethane	ND	ND	NA
Trichloroethene	ND	ND	NA
1,2-Dichloropropane	ND	ND	NA
cis-1,3-Dichloropropene	ND	ND	NA
Toluene	ND	ND	NA
trans-1,3-Dichloropropene	ND	ND	NA
1,1,2-Trichloroethane	ND	ND	NA
Tetrachloroethene	64500	63900	1
1,2-Dibromoethane	ND	ND	NA
Chlorobenzene	ND	ND	NA
Ethylbenzene	ND	ND	NA
m/p-Xylene	ND	ND	NA
o-Xylene	ND	ND	NA
Styrene	ND	ND	NA
1,1,2,2-Tetrachloroethane	ND	ND	NA
1,3,5-Trimethylbenzene	ND	ND	NA

Instrument M

Client: OHM
Workorder: 3512

Duplicate Recovery of Volatile Organics

Client Sample ID: SVEW-1

Lab Sample ID: AF2079DL Analysis Date: 05/09/95

Duplicate Sample ID: AF2079D2 Analysis Date: 05/09/95

Dilution Factor: 6288 Units: ppb(V/V)

Compound	Sample Amount	Duplicate Amount	%RPD
1,2,4-Trimethylbenzene.....	ND	ND	NA
1,3-Dichlorobenzene.....	ND	ND	NA
1,4-Dichlorobenzene.....	ND	ND	NA
1,2-Dichlorobenzene.....	ND	ND	NA
Benzyl Chloride.....	ND	ND	NA
1,2,4-Trichlorobenzene.....	ND	ND	NA
Hexachlorobutadiene.....	ND	ND	NA

Surrogate Compound	Run % Recovery	Duplicate % Recovery
D4-1,2-Dichloroethane.....	98	98
D8-Toluene.....	110	108
Bromofluorobenzene.....	103	102

Instrument M

Client: OHM
Workorder: 3512

TO-14 Volatile Organics

Client Sample ID: SVEW-2

Lab Sample ID: AF2080DL

Analysis Date: 05/09/95

Dilution Factor: 18200

CAS #	Compound	Result ppb(V/V)	Detection Limit
75-71-8	Dichlorodifluoromethane	ND	3600
76-14-2	1,2-Dichlorotetrafluoroethane	ND	3600
74-87-3	Chloromethane	ND	3600
75-01-4	Vinyl Chloride	ND	3600
74-83-9	Bromomethane	ND	3600
75-00-3	Chloroethane	ND	3600
75-69-4	Trichlorofluoromethane	ND	3600
75-35-4	1,1-Dichloroethene	ND	3600
76-13-1	1,1,2-Trichlorotrifluoroethane	ND	5500
75-09-2	Methylene Chloride	ND	5500
75-34-3	1,1-Dichloroethane	ND	3600
156-59-2	cis-1,2-Dichloroethene	ND	3600
67-66-3	Chloroform	ND	3600
71-55-6	1,1,1-Trichloroethane	ND	3600
56-23-5	Carbon Tetrachloride	ND	3600
71-43-2	Benzene	ND	3600
107-06-2	1,2-Dichloroethane	ND	3600
79-01-6	Trichloroethene	ND	3600
78-87-5	1,2-Dichloropropane	ND	3600
10061-01-5	cis-1,3-Dichloropropene	ND	3600
108-88-3	Toluene	ND	3600
10061-02-6	trans-1,3-Dichloropropene	ND	3600
79-00-5	1,1,2-Trichloroethane	ND	3600
127-18-4	Tetrachloroethene	480000	3600
106-93-4	1,2-Dibromoethane	ND	3600
108-90-7	Chlorobenzene	ND	3600
100-41-4	Ethylbenzene	ND	3600
136777-61-2	m/p-Xylene	31000	3600
95-47-6	o-Xylene	24000	3600
100-42-5	Styrene	ND	3600
79-34-5	1,1,2,2-Tetrachloroethane	ND	3600
108-67-8	1,3,5-Trimethylbenzene	ND	3600
95-63-6	1,2,4-Trimethylbenzene	3700	3600
541-73-1	1,3-Dichlorobenzene	ND	3600

Client: OHM
Workorder: 3512

TO-14 Volatile Organics

Client Sample ID: SVEW-2

Lab Sample ID: AF2080DL

Analysis Date: 05/09/95

Dilution Factor: 18200

CAS #	Compound	Result ppb(V/V)	Detection Limit
106-46-7	1,4-Dichlorobenzene	ND	3600
95-50-1	1,2-Dichlorobenzene	ND	3600
100-44-7	Benzyl Chloride	ND	3600
120-82-1	1,2,4-Trichlorobenzene	ND	3600
87-68-3	Hexachlorobutadiene	ND	3600

Surrogate Compound	% Recovery
D4-1,2-Dichloroethane	99
D8-Toluene	113
Bromofluorobenzene	104

Client: OHM
Workorder: 3512

TO-14 Volatile Organics

Client Sample ID: SVEW-3

Lab Sample ID: AF2081DL

Analysis Date: 05/09/95

Dilution Factor: 7945

CAS #	Compound	Result ppb(V/V)	Detection Limit
75-71-8	Dichlorodifluoromethane	ND	1600
76-14-2	1,2-Dichlorotetrafluoroethane	ND	1600
74-87-3	Chloromethane	ND	1600
75-01-4	Vinyl Chloride	ND	1600
74-83-9	Bromomethane	ND	1600
75-00-3	Chloroethane	ND	1600
75-69-4	Trichlorofluoromethane	ND	1600
75-35-4	1,1-Dichloroethene	ND	1600
76-13-1	1,1,2-Trichlorotrifluoroethane	ND	2400
75-09-2	Methylene Chloride	ND	2400
75-34-3	1,1-Dichloroethane	ND	1600
156-59-2	cis-1,2-Dichloroethene	ND	1600
67-66-3	Chloroform	ND	1600
71-55-6	1,1,1-Trichloroethane	ND	1600
56-23-5	Carbon Tetrachloride	ND	1600
71-43-2	Benzene	ND	1600
107-06-2	1,2-Dichloroethane	ND	1600
79-01-6	Trichloroethene	ND	1600
78-87-5	1,2-Dichloropropane	ND	1600
10061-01-5	cis-1,3-Dichloropropene	ND	1600
108-88-3	Toluene	3000	1600
10061-02-6	trans-1,3-Dichloropropene	ND	1600
79-00-5	1,1,2-Trichloroethane	ND	1600
127-18-4	Tetrachloroethene	17000	1600
106-93-4	1,2-Dibromoethane	ND	1600
108-90-7	Chlorobenzene	ND	1600
100-41-4	Ethylbenzene	ND	1600
136777-61-2	m/p-Xylene	ND	1600
95-47-6	o-Xylene	ND	1600
100-42-5	Styrene	ND	1600
79-34-5	1,1,2,2-Tetrachloroethane	ND	1600
108-67-8	1,3,5-Trimethylbenzene	ND	1600
95-63-6	1,2,4-Trimethylbenzene	ND	1600
541-73-1	1,3-Dichlorobenzene	ND	1600

Client: OHM
Workorder: 3512

TO-14 Volatile Organics

Client Sample ID: SVEW-3

Lab Sample ID: AF2081DL

Analysis Date: 05/09/95

Dilution Factor: 7945

CAS #	Compound	Result ppb(V/V)	Detection Limit
106-46-7	1,4-Dichlorobenzene	ND	1600
95-50-1	1,2-Dichlorobenzene	ND	1600
100-44-7	Benzyl Chloride	ND	1600
120-82-1	1,2,4-Trichlorobenzene	ND	1600
87-68-3	Hexachlorobutadiene	ND	1600

Surrogate Compound	% Recovery
D4-1,2-Dichloroethane	101
D8-Toluene	103
Bromofluorobenzene	100

Client: OHM
Workorder: 3512

TO-14 Volatile Organics

Client Sample ID: SVEW-4

Lab Sample ID: AF2082DL

Analysis Date: 05/09/95

Dilution Factor: 7186

CAS #	Compound	Result ppb(V/V)	Detection Limit
75-71-8	Dichlorodifluoromethane	ND	1400
76-14-2	1,2-Dichlorotetrafluoroethane	ND	1400
74-87-3	Chloromethane	ND	1400
75-01-4	Vinyl Chloride	ND	1400
74-83-9	Bromomethane	ND	1400
75-00-3	Chloroethane	ND	1400
75-69-4	Trichlorofluoromethane	ND	1400
75-35-4	1,1-Dichloroethene	ND	1400
76-13-1	1,1,2-Trichlorotrifluoroethane	ND	2200
75-09-2	Methylene Chloride	ND	2200
75-34-3	1,1-Dichloroethane	ND	1400
156-59-2	cis-1,2-Dichloroethene	ND	1400
67-66-3	Chloroform	ND	1400
71-55-6	1,1,1-Trichloroethane	ND	1400
56-23-5	Carbon Tetrachloride	ND	1400
71-43-2	Benzene	ND	1400
107-06-2	1,2-Dichloroethane	ND	1400
79-01-6	Trichloroethene	ND	1400
78-87-5	1,2-Dichloropropane	ND	1400
10061-01-5	cis-1,3-Dichloropropene	ND	1400
108-88-3	Toluene	ND	1400
10061-02-6	trans-1,3-Dichloropropene	ND	1400
79-00-5	1,1,2-Trichloroethane	ND	1400
127-18-4	Tetrachloroethene	32000	1400
106-93-4	1,2-Dibromoethane	ND	1400
108-90-7	Chlorobenzene	ND	1400
100-41-4	Ethylbenzene	ND	1400
136777-61-2	m/p-Xylene	3600	1400
95-47-6	o-Xylene	3300	1400
100-42-5	Styrene	ND	1400
79-34-5	1,1,2,2-Tetrachloroethane	ND	1400
108-67-8	1,3,5-Trimethylbenzene	ND	1400
95-63-6	1,2,4-Trimethylbenzene	ND	1400
541-73-1	1,3-Dichlorobenzene	ND	1400

Client: OHM
Workorder: 3512

TO-14 Volatile Organics

Client Sample ID: SVEW-4

Lab Sample ID: AF2082DL

Analysis Date: 05/09/95

Dilution Factor: 7186

CAS #	Compound	Result ppb(V/V)	Detection Limit
106-46-7	1,4-Dichlorobenzene	ND	1400
95-50-1	1,2-Dichlorobenzene	ND	1400
100-44-7	Benzyl Chloride	ND	1400
120-82-1	1,2,4-Trichlorobenzene	ND	1400
87-68-3	Hexachlorobutadiene	ND	1400

Surrogate Compound	% Recovery
D4-1,2-Dichloroethane	101
D8-Toluene	105
Bromofluorobenzene	99

Client: OHM
Workorder: 3512

TO-14 Volatile Organics

Client Sample ID: SVEW-5

Lab Sample ID: AF2083DL

Analysis Date: 05/09/95

Dilution Factor: 4111

CAS #	Compound	Result ppb(V/V)	Detection Limit
75-71-8	Dichlorodifluoromethane	ND	820
76-14-2	1,2-Dichlorotetrafluoroethane	ND	820
74-87-3	Chloromethane	ND	820
75-01-4	Vinyl Chloride	ND	820
74-83-9	Bromomethane	ND	820
75-00-3	Chloroethane	ND	820
75-69-4	Trichlorofluoromethane	ND	820
75-35-4	1,1-Dichloroethene	ND	820
76-13-1	1,1,2-Trichlorotrifluoroethane	ND	1200
75-09-2	Methylene Chloride	ND	1200
75-34-3	1,1-Dichloroethane	ND	820
156-59-2	cis-1,2-Dichloroethene	ND	820
67-66-3	Chloroform	ND	820
71-55-6	1,1,1-Trichloroethane	ND	820
56-23-5	Carbon Tetrachloride	ND	820
71-43-2	Benzene	ND	820
107-06-2	1,2-Dichloroethane	ND	820
79-01-6	Trichloroethene	ND	820
78-87-5	1,2-Dichloropropane	ND	820
10061-01-5	cis-1,3-Dichloropropene	ND	820
108-88-3	Toluene	ND	820
10061-02-6	trans-1,3-Dichloropropene	ND	820
79-00-5	1,1,2-Trichloroethane	ND	820
127-18-4	Tetrachloroethene	4600	820
106-93-4	1,2-Dibromoethane	ND	820
108-90-7	Chlorobenzene	ND	820
100-41-4	Ethylbenzene	ND	820
136777-61-2	m/p-Xylene	ND	820
95-47-6	o-Xylene	ND	820
100-42-5	Styrene	ND	820
79-34-5	1,1,2,2-Tetrachloroethane	ND	820
108-67-8	1,3,5-Trimethylbenzene	ND	820
95-63-6	1,2,4-Trimethylbenzene	ND	820
541-73-1	1,3-Dichlorobenzene	ND	820

Client: OHM
Workorder: 3512

TO-14 Volatile Organics

Client Sample ID: SVEW-5

Lab Sample ID: AF2083DL

Analysis Date: 05/09/95

Dilution Factor: 4111

CAS #	Compound	Result ppb(V/V)	Detection Limit
106-46-7	1,4-Dichlorobenzene	ND	820
95-50-1	1,2-Dichlorobenzene	ND	820
100-44-7	Benzyl Chloride	ND	820
120-82-1	1,2,4-Trichlorobenzene	ND	820
87-68-3	Hexachlorobutadiene	ND	820

Surrogate Compound	% Recovery
D4-1,2-Dichloroethane	101
D8-Toluene	106
Bromofluorobenzene	101

Client: OHM
Workorder: 3512

TO-14 Volatile Organics

Client Sample ID: SVEW-6

Lab Sample ID: AF2084DL

Analysis Date: 05/09/95

Dilution Factor: 3282

CAS #	Compound	Result ppb(V/V)	Detection Limit
75-71-8	Dichlorodifluoromethane	ND	660
76-14-2	1,2-Dichlorotetrafluoroethane	ND	660
74-87-3	Chloromethane	ND	660
75-01-4	Vinyl Chloride	ND	660
74-83-9	Bromomethane	ND	660
75-00-3	Chloroethane	ND	660
75-69-4	Trichlorofluoromethane	ND	660
75-35-4	1,1-Dichloroethene	ND	660
76-13-1	1,1,2-Trichlorotrifluoroethane	ND	980
75-09-2	Methylene Chloride	ND	980
75-34-3	1,1-Dichloroethane	ND	660
156-59-2	cis-1,2-Dichloroethene	ND	660
67-66-3	Chloroform	ND	660
71-55-6	1,1,1-Trichloroethane	ND	660
56-23-5	Carbon Tetrachloride	ND	660
71-43-2	Benzene	ND	660
107-06-2	1,2-Dichloroethane	ND	660
79-01-6	Trichloroethene	ND	660
78-87-5	1,2-Dichloropropane	ND	660
10061-01-5	cis-1,3-Dichloropropene	ND	660
108-88-3	Toluene	ND	660
10061-02-6	trans-1,3-Dichloropropene	ND	660
79-00-5	1,1,2-Trichloroethane	ND	660
127-18-4	Tetrachloroethene	15000	660
106-93-4	1,2-Dibromoethane	ND	660
108-90-7	Chlorobenzene	ND	660
100-41-4	Ethylbenzene	ND	660
136777-61-2	m/p-Xylene	1900	660
95-47-6	o-Xylene	1700	660
100-42-5	Styrene	ND	660
79-34-5	1,1,2,2-Tetrachloroethane	ND	660
108-67-8	1,3,5-Trimethylbenzene	ND	660
95-63-6	1,2,4-Trimethylbenzene	ND	660
541-73-1	1,3-Dichlorobenzene	ND	660

Client: OHM
Workorder: 3512

TO-14 Volatile Organics

Client Sample ID: SVEW-6

Lab Sample ID: AF2084DL

Analysis Date: 05/09/95

Dilution Factor: 3282

CAS #	Compound	Result ppb(V/V)	Detection Limit
106-46-7	1,4-Dichlorobenzene	ND	660
95-50-1	1,2-Dichlorobenzene	ND	660
100-44-7	Benzyl Chloride	ND	660
120-82-1	1,2,4-Trichlorobenzene	ND	660
87-68-3	Hexachlorobutadiene	ND	660

Surrogate Compound	% Recovery
D4-1,2-Dichloroethane	102
D8-Toluene	107
Bromofluorobenzene	102

Client: OHM
Workorder: 3512

TO-14 Volatile Organics

Client Sample ID: SVEW-7

Lab Sample ID: AF2085DL

Analysis Date: 05/09/95

Dilution Factor: 2753

CAS #	Compound	Result ppb(V/V)	Detection Limit
75-71-8	Dichlorodifluoromethane	ND	550
76-14-2	1,2-Dichlorotetrafluoroethane	ND	550
74-87-3	Chloromethane	ND	550
75-01-4	Vinyl Chloride	ND	550
74-83-9	Bromomethane	ND	550
75-00-3	Chloroethane	ND	550
75-69-4	Trichlorofluoromethane	ND	550
75-35-4	1,1-Dichloroethene	ND	550
76-13-1	1,1,2-Trichlorotrifluoroethane	ND	830
75-09-2	Methylene Chloride	ND	830
75-34-3	1,1-Dichloroethane	ND	550
156-59-2	cis-1,2-Dichloroethene	ND	550
67-66-3	Chloroform	ND	550
71-55-6	1,1,1-Trichloroethane	ND	550
56-23-5	Carbon Tetrachloride	ND	550
71-43-2	Benzene	ND	550
107-06-2	1,2-Dichloroethane	ND	550
79-01-6	Trichloroethene	ND	550
78-87-5	1,2-Dichloropropane	ND	550
10061-01-5	cis-1,3-Dichloropropene	ND	550
108-88-3	Toluene	ND	550
10061-02-6	trans-1,3-Dichloropropene	ND	550
79-00-5	1,1,2-Trichloroethane	ND	550
127-18-4	Tetrachloroethene	80000	550
106-93-4	1,2-Dibromoethane	ND	550
108-90-7	Chlorobenzene	ND	550
100-41-4	Ethylbenzene	610	550
136777-61-2	m/p-Xylene	8600	550
95-47-6	o-Xylene	7400	550
100-42-5	Styrene	ND	550
79-34-5	1,1,2,2-Tetrachloroethane	ND	550
108-67-8	1,3,5-Trimethylbenzene	1500	550
95-63-6	1,2,4-Trimethylbenzene	1800	550
541-73-1	1,3-Dichlorobenzene	ND	550

Client: OHM
Workorder: 3512

TO-14 Volatile Organics

Client Sample ID: SVEW-7

Lab Sample ID: AF2085DL

Analysis Date: 05/09/95

Dilution Factor: 2753

CAS #	Compound	Result ppb(V/V)	Detection Limit
106-46-7	1,4-Dichlorobenzene	ND	550
95-50-1	1,2-Dichlorobenzene	ND	550
100-44-7	Benzyl Chloride	ND	550
120-82-1	1,2,4-Trichlorobenzene	ND	550
87-68-3	Hexachlorobutadiene	ND	550

Surrogate Compound	% Recovery
D4-1,2-Dichloroethane	102
D8-Toluene	110
Bromofluorobenzene	104

Client: OHM
Workorder: 3512

TO-14 Volatile Organics

Client Sample ID: SVEW-8

Lab Sample ID: AF2086DL

Analysis Date: 05/09/95

Dilution Factor: 2911

CAS #	Compound	Result ppb(V/V)	Detection Limit
75-71-8	Dichlorodifluoromethane	ND	580
76-14-2	1,2-Dichlorotetrafluoroethane	ND	580
74-87-3	Chloromethane	ND	580
75-01-4	Vinyl Chloride	ND	580
74-83-9	Bromomethane	ND	580
75-00-3	Chloroethane	ND	580
75-69-4	Trichlorofluoromethane	ND	580
75-35-4	1,1-Dichloroethene	ND	580
76-13-1	1,1,2-Trichlorotrifluoroethane	ND	870
75-09-2	Methylene Chloride	ND	870
75-34-3	1,1-Dichloroethane	ND	580
156-59-2	cis-1,2-Dichloroethene	ND	580
67-66-3	Chloroform	ND	580
71-55-6	1,1,1-Trichloroethane	ND	580
56-23-5	Carbon Tetrachloride	ND	580
71-43-2	Benzene	ND	580
107-06-2	1,2-Dichloroethane	ND	580
79-01-6	Trichloroethene	ND	580
78-87-5	1,2-Dichloropropane	ND	580
10061-01-5	cis-1,3-Dichloropropene	ND	580
108-88-3	Toluene	ND	580
10061-02-6	trans-1,3-Dichloropropene	ND	580
79-00-5	1,1,2-Trichloroethane	ND	580
127-18-4	Tetrachloroethene	59000	580
106-93-4	1,2-Dibromoethane	ND	580
108-90-7	Chlorobenzene	ND	580
100-41-4	Ethylbenzene	ND	580
136777-61-2	m/p-Xylene	5800	580
95-47-6	o-Xylene	5300	580
100-42-5	Styrene	ND	580
79-34-5	1,1,2,2-Tetrachloroethane	ND	580
108-67-8	1,3,5-Trimethylbenzene	1000	580
95-63-6	1,2,4-Trimethylbenzene	1200	580
541-73-1	1,3-Dichlorobenzene	ND	580

Client: OHM
Workorder: 3512

TO-14 Volatile Organics

Client Sample ID: SVEW-8

Lab Sample ID: AF2086DL

Analysis Date: 05/09/95

Dilution Factor: 2911

CAS #	Compound	Result ppb(V/V)	Detection Limit
106-46-7	1,4-Dichlorobenzene	ND	580
95-50-1	1,2-Dichlorobenzene	ND	580
100-44-7	Benzyl Chloride	ND	580
120-82-1	1,2,4-Trichlorobenzene	ND	580
87-68-3	Hexachlorobutadiene	ND	580

Surrogate Compound	% Recovery
D4-1,2-Dichloroethane	101
D8-Toluene	109
Bromofluorobenzene	104

Client: OHM
Workorder: 3512

TO-14 Volatile Organics

Client Sample ID: SYSTEM TOTAL

Lab Sample ID: AF2087DL

Analysis Date: 05/10/95

Dilution Factor: 3072

CAS #	Compound	Result ppb(V/V)	Detection Limit
75-71-8	Dichlorodifluoromethane	ND	610
76-14-2	1,2-Dichlorotetrafluoroethane	ND	610
74-87-3	Chloromethane	ND	610
75-01-4	Vinyl Chloride	ND	610
74-83-9	Bromomethane	ND	610
75-00-3	Chloroethane	ND	610
75-69-4	Trichlorofluoromethane	ND	610
75-35-4	1,1-Dichloroethene	ND	610
76-13-1	1,1,2-Trichlorotrifluoroethane	ND	920
75-09-2	Methylene Chloride	ND	920
75-34-3	1,1-Dichloroethane	ND	610
156-59-2	cis-1,2-Dichloroethene	ND	610
67-66-3	Chloroform	ND	610
71-55-6	1,1,1-Trichloroethane	ND	610
56-23-5	Carbon Tetrachloride	ND	610
71-43-2	Benzene	ND	610
107-06-2	1,2-Dichloroethane	ND	610
79-01-6	Trichloroethene	ND	610
78-87-5	1,2-Dichloropropane	ND	610
10061-01-5	cis-1,3-Dichloropropene	ND	610
108-88-3	Toluene	ND	610
10061-02-6	trans-1,3-Dichloropropene	ND	610
79-00-5	1,1,2-Trichloroethane	ND	610
127-18-4	Tetrachloroethene	80000	610
106-93-4	1,2-Dibromoethane	ND	610
108-90-7	Chlorobenzene	ND	610
100-41-4	Ethylbenzene	ND	610
136777-61-2	m/p-Xylene	5500	610
95-47-6	o-Xylene	4700	610
100-42-5	Styrene	ND	610
79-34-5	1,1,2,2-Tetrachloroethane	ND	610
108-67-8	1,3,5-Trimethylbenzene	820	610
95-63-6	1,2,4-Trimethylbenzene	950	610
541-73-1	1,3-Dichlorobenzene	ND	610

Client: OHM
Workorder: 3512

TO-14 Volatile Organics

Client Sample ID: SYSTEM TOTAL

Lab Sample ID: AF2087DL

Analysis Date: 05/10/95

Dilution Factor: 3072

CAS #	Compound	Result ppb(V/V)	Detection Limit
106-46-7	1,4-Dichlorobenzene	ND	610
95-50-1	1,2-Dichlorobenzene	ND	610
100-44-7	Benzyl Chloride	ND	610
120-82-1	1,2,4-Trichlorobenzene	ND	610
87-68-3	Hexachlorobutadiene	ND	610

Surrogate Compound	% Recovery
D4-1,2-Dichloroethane	100
D8-Toluene	108
Bromofluorobenzene	102

Client: OHM
Workorder: 3512

TO-14 Volatile Organics

Client Sample ID: DISCHARGE STAKE

Lab Sample ID: AF2088DL

Analysis Date: 05/10/95

Dilution Factor: 3946

CAS #	Compound	Result ppb (V/V)	Detection Limit
75-71-8	Dichlorodifluoromethane	ND	790
76-14-2	1,2-Dichlorotetrafluoroethane	ND	790
74-87-3	Chloromethane	ND	790
75-01-4	Vinyl Chloride	ND	790
74-83-9	Bromomethane	ND	790
75-00-3	Chloroethane	ND	790
75-69-4	Trichlorofluoromethane	ND	790
75-35-4	1,1-Dichloroethene	ND	790
76-13-1	1,1,2-Trichlorotrifluoroethane	ND	1200
75-09-2	Methylene Chloride	ND	1200
75-34-3	1,1-Dichloroethane	ND	790
156-59-2	cis-1,2-Dichloroethene	ND	790
67-66-3	Chloroform	ND	790
71-55-6	1,1,1-Trichloroethane	ND	790
56-23-5	Carbon Tetrachloride	ND	790
71-43-2	Benzene	ND	790
107-06-2	1,2-Dichloroethane	ND	790
79-01-6	Trichloroethene	ND	790
78-87-5	1,2-Dichloropropane	ND	790
10061-01-5	cis-1,3-Dichloropropene	ND	790
108-88-3	Toluene	ND	790
10061-02-6	trans-1,3-Dichloropropene	ND	790
79-00-5	1,1,2-Trichloroethane	ND	790
127-18-4	Tetrachloroethene	10000	790
106-93-4	1,2-Dibromoethane	ND	790
108-90-7	Chlorobenzene	ND	790
100-41-4	Ethylbenzene	ND	790
136777-61-2	m/p-Xylene	ND	790
95-47-6	o-Xylene	ND	790
100-42-5	Styrene	ND	790
79-34-5	1,1,2,2-Tetrachloroethane	ND	790
108-67-8	1,3,5-Trimethylbenzene	ND	790
95-63-6	1,2,4-Trimethylbenzene	ND	790
541-73-1	1,3-Dichlorobenzene	ND	790

Client: OHM
Workorder: 3512

TO-14 Volatile Organics

Client Sample ID: DISCHARGE STAKE

Lab Sample ID: AF2088DL

Analysis Date: 05/10/95

Dilution Factor: 3946

CAS #	Compound	Result ppb(V/V)	Detection Limit
106-46-7	1,4-Dichlorobenzene	ND	790
95-50-1	1,2-Dichlorobenzene	ND	790
100-44-7	Benzyl Chloride	ND	790
120-82-1	1,2,4-Trichlorobenzene	ND	790
87-68-3	Hexachlorobutadiene	ND	790

Surrogate Compound	% Recovery
D4-1,2-Dichloroethane	101
D8-Toluene	106
Bromofluorobenzene	96

Client: OHM
Workorder: 3512

TO-14 Volatile Organics

Client Sample ID: SYSTEM BLANK

Lab Sample ID: ABLKS2

Analysis Date: 05/09/95

Dilution Factor: 1

CAS #	Compound	Result ppb (V/V)	Detection Limit
75-71-8	Dichlorodifluoromethane	ND	0.20
76-14-2	1,2-Dichlorotetrafluoroethane	ND	0.20
74-87-3	Chloromethane	ND	0.20
75-01-4	Vinyl Chloride	ND	0.20
74-83-9	Bromomethane	ND	0.20
75-00-3	Chloroethane	ND	0.20
75-69-4	Trichlorofluoromethane	ND	0.20
75-35-4	1,1-Dichloroethene	ND	0.20
76-13-1	1,1,2-Trichlorotrifluoroethane	ND	0.30
75-09-2	Methylene Chloride	ND	0.30
75-34-3	1,1-Dichloroethane	ND	0.20
156-59-2	cis-1,2-Dichloroethene	ND	0.20
67-66-3	Chloroform	ND	0.20
71-55-6	1,1,1-Trichloroethane	ND	0.20
56-23-5	Carbon Tetrachloride	ND	0.20
71-43-2	Benzene	ND	0.20
107-06-2	1,2-Dichloroethane	ND	0.20
79-01-6	Trichloroethene	ND	0.20
78-87-5	1,2-Dichloropropane	ND	0.20
10061-01-5	cis-1,3-Dichloropropene	ND	0.20
108-88-3	Toluene	ND	0.20
10061-02-6	trans-1,3-Dichloropropene	ND	0.20
79-00-5	1,1,2-Trichloroethane	ND	0.20
127-18-4	Tetrachloroethene	ND	0.20
106-93-4	1,2-Dibromoethane	ND	0.20
108-90-7	Chlorobenzene	ND	0.20
100-41-4	Ethylbenzene	ND	0.20
136777-61-2	m/p-Xylene	ND	0.20
95-47-6	o-Xylene	ND	0.20
100-42-5	Styrene	ND	0.20
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.20
108-67-8	1,3,5-Trimethylbenzene	ND	0.20
95-63-6	1,2,4-Trimethylbenzene	ND	0.20
541-73-1	1,3-Dichlorobenzene	ND	0.20

Client: OHM
Workorder: 3512

TO-14 Volatile Organics

Client Sample ID: SYSTEM BLANK

Lab Sample ID: ABLKS2

Analysis Date: 05/09/95

Dilution Factor: 1

CAS #	Compound	Result ppb (V/V)	Detection Limit
106-46-7	1,4-Dichlorobenzene	ND	0.20
95-50-1	1,2-Dichlorobenzene	ND	0.20
100-44-7	Benzyl Chloride	ND	0.20
120-82-1	1,2,4-Trichlorobenzene	ND	0.20
87-68-3	Hexachlorobutadiene	ND	0.20

Surrogate Compound	% Recovery
D4-1,2-Dichloroethane	98
D8-Toluene	110
Bromofluorobenzene	103

Cross Reference Table for Work Order #: 3512

Client Sample ID	Description	Lab ID	QC	Test Description
SVEW-1	TEDLAR BAGS- 1L	AF2079		TO-14 (VOA) CANISTER ANALYSIS BY GC/MS NEESA LEVEL C DATA PKG, GCMS TESTS
SVEW-2	TEDLAR BAGS- 1L	AF2080		TO-14 (VOA) CANISTER ANALYSIS BY GC/MS NEESA LEVEL C DATA PKG, GCMS TESTS
SVEW-3	TEDLAR BAGS- 1L	AF2081		TO-14 (VOA) CANISTER ANALYSIS BY GC/MS NEESA LEVEL C DATA PKG, GCMS TESTS
SVEW-4	TEDLAR BAGS- 1L	AF2082		TO-14 (VOA) CANISTER ANALYSIS BY GC/MS NEESA LEVEL C DATA PKG, GCMS TESTS
SVEW-5	TEDLAR BAGS- 1L	AF2083		TO-14 (VOA) CANISTER ANALYSIS BY GC/MS NEESA LEVEL C DATA PKG, GCMS TESTS
SVEW-6	TEDLAR BAGS- 1L	AF2084		TO-14 (VOA) CANISTER ANALYSIS BY GC/MS NEESA LEVEL C DATA PKG, GCMS TESTS
SVEW-7	TEDLAR BAGS- 1L	AF2085		TO-14 (VOA) CANISTER ANALYSIS BY GC/MS NEESA LEVEL C DATA PKG, GCMS TESTS
SVEW-8	TEDLAR BAGS- 1L	AF2086		TO-14 (VOA) CANISTER ANALYSIS BY GC/MS NEESA LEVEL C DATA PKG, GCMS TESTS
SYSTEM TOTAL	TEDLAR BAGS- 1L	AF2087		TO-14 (VOA) CANISTER ANALYSIS BY GC/MS NEESA LEVEL C DATA PKG, GCMS TESTS
DISCHARGE STAKE	TEDLAR BAGS- 1L	AF2088		TO-14 (VOA) CANISTER ANALYSIS BY GC/MS NEESA LEVEL C DATA PKG, GCMS TESTS

OHM Corporation

W.O. # 3512

COC NO. *0004011*

R.L. # 3530

COPY

CHAIN-OF-CUSTODY RECORD

Form 0019
Field Technical Services
Rev. 08/89

Fed Ex: 3224507856

144109

O.H. MATERIALS CORP. • P.O. BOX 551 • FINDLAY, OH 45839-0551 • 419-423-3526

PROJECT NAME	PROJECT LOCATION
Camp Lejeune PO 15	Camp Lejeune

PROJ. NO.	PROJECT CONTACT	PROJECT TELEPHONE NO.
16032	Randy Smith	910-451-1809

CLIENT'S REPRESENTATIVE	PROJECT MANAGER/SUPERVISOR
Van Marshburn	Jim Dunn / Randy Smith

ITEM NO.	SAMPLE NUMBER	DATE	TIME	COMP	GRAB	SAMPLE DESCRIPTION (INCLUDE MATRIX AND POINT OF SAMPLE)	NUMBER OF CONTAINERS	ANALYSIS DESIRED (INDICATE SEPARATE CONTAINERS) TO 14	REMARKS
1	SVEW-1	5/4	15:57		X	Well head Sample	1 TB	X	
2	SVEW-2	5/4	16:00		X	" "	1 TB	X	
3	SVEW-3	5/4	16:06		X	" "	1 TB	X	
4	SVEW-4	5/4	16:09		X	" "	1 TB	X	
5	SVEW-5	5/4	16:11		X	" "	1 TB	X	
6	SVEW-6	5/4	16:13		X	" "	1 TB	X	
7	SVEW-7	5/4	16:16		X	" "	1 TB	X	
8	SVEW-8	5/4	16:20		X	" "	1 TB	X	Recd at 12°C. without custody Seals BSA 5/5/95
9	System Total	5/4	16:22		X	Total of Influent Air (System Total)	1 TB	X	
10	Discharge Stake	5/4	16:24		X	Discharge Stake	TTB	X	

TRANSFER NUMBER	ITEM NUMBER	TRANSFERS RELINQUISHED BY	TRANSFERS ACCEPTED BY	DATE	TIME
1	1 ~ 10	Randy Smith	Fed-EX	5/4/95	18:00
2			Ben Anderson	5/5/95	08:30
3					
4					

REMARKS

5 day TAT

Please Fax data AS SOON AS YOU have data to 910-451-1809

If you have any problem please call me A.S.A.P

SAMPLER'S SIGNATURE

Marrow R. Grant #4720

Page 1800444-2407 9/81 14 96 FAX results ASAP

GCMS VOLATILES DATA
QC SUMMARY

2B
VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: Quanterra Knoxville Contract: OHM CAMP LEJEUNE

Lab Code: ITSTU Case No.: SAS No.: SDG No.:3512

Level:(low/med) LOW

	EPA SAMPLE NO.	SMC1 (TOL) #	SMC2 (BFB) #	SMC3 (DCE) #	OTHER	TOT OUT
1	SYSTEM BLAN	110	103	98		0
2	SVEW-1	110	103	98		0
3	SVEW-1	108	102	98		0
4	SVEW-2	113	104	99		0
5	SVEW-3	103	100	101		0
6	SVEW-4	105	99	101		0
7	SVEW-5	106	101	101		0
8	SVEW-6	107	102	102		0
9	SVEW-7	110	104	102		0
10	SVEW-8	109	104	101		0
11	SYSTEM TOTA	108	102	100		0
12	DISCHARGE S	106	96	101		0

	QC LIMITS
SMC1 (TOL) = D8-Toluene	(70 - 130)
SMC2 (BFB) = Bromofluorobenzene	(70 - 130)
SMC3 (DCE) = D4-1,2-Dichloroethane	(70 - 130)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

4A

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

SYSTEM BLAN

Lab Name: Quanterra Knoxville Contract: OHM CAMP LEJEUNE

Lab Code: ITSTU Case No.: SAS No.: SDG No.: 3512

Lab File ID: ABLKS2 Lab Sample ID: BLANK

Date Analyzed: 05/09/95 Time Analyzed: 16:53

Instrument ID: M

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
1	SVEW-1	AF2079	AF2079DL	19:30
2	SVEW-1	AF2079	AF2079D2	20:07
3	SVEW-2	AF2080	AF2080DL	20:36
4	SVEW-3	AF2081	AF2081DL	21:05
5	SVEW-4	AF2082	AF2082DL	21:34
6	SVEW-5	AF2083	AF2083DL	22:04
7	SVEW-6	AF2084	AF2084DL	22:33
8	SVEW-7	AF2085	AF2085DL	23:02
9	SVEW-8	AF2086	AF2086DL	23:31
10	SYSTEM TOTA	AF2087	AF2087DL	0:00
11	DISCHARGE S	AF2088	AF2088DL	1:01

COMMENTS:

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Quanterra Knoxville Contract: OHM CAMP LEJEUNE

Lab Code: ITSTU Case No.: SAS No.: SDG No.: 3512

Lab File ID: BF0508M BFB Injection Date: 05/08/95

Instrument ID.: M BFB Injection Time: 20:33

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	30.3
75	30.0 - 66.0% of mass 95	49.9
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.0
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 120.0% of mass 95	73.5
175	4.0 - 9.0 % of mass 174	5.2 (7.1)1
176	93.0 - 101.0% of mass 174	73.1 (99.5)1
177	5.0 - 9.0% of mass 176	4.8 (6.6)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	VSTD50	VSTD50	LW0508M	05/08/95	20:57
2	VSTD100	VSTD100	ML0508M	05/08/95	21:54
3	VSTD250	VSTD250	MD0508M	05/08/95	22:24
4	VSTD375	VSTD375	MH0508M	05/08/95	22:52
5	VSTD500	VSTD500	HI0508M	05/08/95	23:22

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Quanterra Knoxville Contract: OHM CAMP LEJEUNE

Lab Code: ITSTU Case No.: SAS No.: SDG No.: 3512

Lab File ID: BF0509M BFB Injection Date: 05/09/95

Instrument ID.: M BFB Injection Time: 15:13

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	31.4
75	30.0 - 66.0% of mass 95	53.4
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 120.0% of mass 95	70.2
175	4.0 - 9.0 % of mass 174	4.9 (7.0)1
176	93.0 - 101.0% of mass 174	68.9 (98.2)1
177	5.0 - 9.0% of mass 176	4.4 (6.4)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	VSTD250	VSTD250	MD0509M	05/09/95	15:56
2	SYSTEM BLAN	BLANK	ABLKS2	05/09/95	16:53
3	SVEW-1	AF2079	AF2079DL	05/09/95	19:30
4	SVEW-1	AF2079	AF2079D2	05/09/95	20:07
5	SVEW-2	AF2080	AF2080DL	05/09/95	20:36
6	SVEW-3	AF2081	AF2081DL	05/09/95	21:05
7	SVEW-4	AF2082	AF2082DL	05/09/95	21:34
8	SVEW-5	AF2083	AF2083DL	05/09/95	22:04
9	SVEW-6	AF2084	AF2084DL	05/09/95	22:33
10	SVEW-7	AF2085	AF2085DL	05/09/95	23:02
11	SVEW-8	AF2086	AF2086DL	05/09/95	23:31
12	SYSTEM TOTA	AF2087	AF2087DL	05/10/95	0:00
13	DISCHARGE S	AF2088	AF2088DL	05/10/95	1:01

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Quanterra Knoxville Contract: OHM CAMP LEJEUNE

Lab Code: ITSTU Case No.: SAS No.: SDG No.: 3512

Lab File ID (Standard): MD0509M Date Analyzed: 05/09/95

Instrument ID: M Time Analyzed: ~~20:33~~ 15:56 VK 5/10/95

		IS1(BCM) AREA	#	RT	#	IS2(DFB) AREA	#	RT	#	IS3(CBZ) AREA	#	RT	#
	12 HOUR STD	6938.		6:40		35970.		8:37		41522.		14:10	
	UPPER LIMIT	13876.		7:10		71940.		9: 7		83044.		14:40	
	LOWER LIMIT	3469.		6:10		17985.		8: 7		20761.		13:40	
	EPA SAMPLE NO.												
1	SYSTEM BLAN	7145.		6:37		36213.		8:34		38039.		14:08	
2	SVEW-1	7209.		6:37		35470.		8:34		35691.		14:08	
3	SVEW-1	6630.		6:38		33630.		8:35		34582.		14:09	
4	SVEW-2	6545.		6:37		34654.		8:34		35395.		14:08	
5	SVEW-3	6574.		6:37		34768.		8:34		35411.		14:08	
6	SVEW-4	6734.		6:38		34925.		8:35		34928.		14:09	
7	SVEW-5	6657.		6:39		34811.		8:35		35598.		14:09	
8	SVEW-6	6657.		6:38		34015.		8:35		34498.		14:09	
9	SVEW-7	6607.		6:38		34182.		8:35		34562.		14:09	
10	SVEW-8	6798.		6:38		34694.		8:35		33531.		14:09	
11	SYSTEM TOTA	6501.		6:38		33699.		8:35		33097.		14:09	
12	DISCHARGE S	6705.		6:37		34849.		8:34		36931.		14:07	

IS1 (BCM) = BROMOCHLOROMETHANE
IS2 (DFB) = 1,4-DIFLUOROBENZENE
IS3 (CBZ) = CHLOROBENZENE-D5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

GCMS VOLATILES DATA, continued
SAMPLE DATA

Client: OHM
Workorder: 3512

TO-14 Volatile Organics

Client Sample ID: SVEW-1

Lab Sample ID: AF2079DL

Analysis Date: 05/09/95

Dilution Factor: 6288

CAS #	Compound	Result ppb (V/V)	Detection Limit
75-71-8	Dichlorodifluoromethane	ND	1300
76-14-2	1,2-Dichlorotetrafluoroethane	ND	1300
74-87-3	Chloromethane	ND	1300
75-01-4	Vinyl Chloride	ND	1300
74-83-9	Bromomethane	ND	1300
75-00-3	Chloroethane	ND	1300
75-69-4	Trichlorofluoromethane	ND	1300
75-35-4	1,1-Dichloroethene	ND	1300
76-13-1	1,1,2-Trichlorotrifluoroethane	ND	1900
75-09-2	Methylene Chloride	ND	1900
75-34-3	1,1-Dichloroethane	ND	1300
156-59-2	cis-1,2-Dichloroethene	ND	1300
67-66-3	Chloroform	ND	1300
71-55-6	1,1,1-Trichloroethane	ND	1300
56-23-5	Carbon Tetrachloride	ND	1300
71-43-2	Benzene	ND	1300
107-06-2	1,2-Dichloroethane	ND	1300
79-01-6	Trichloroethene	ND	1300
78-87-5	1,2-Dichloropropane	ND	1300
10061-01-5	cis-1,3-Dichloropropene	ND	1300
108-88-3	Toluene	ND	1300
10061-02-6	trans-1,3-Dichloropropene	ND	1300
79-00-5	1,1,2-Trichloroethane	ND	1300
127-18-4	Tetrachloroethene	64000	1300
106-93-4	1,2-Dibromoethane	ND	1300
108-90-7	Chlorobenzene	ND	1300
100-41-4	Ethylbenzene	ND	1300
136777-61-2	m/p-Xylene	ND	1300
95-47-6	o-Xylene	ND	1300
100-42-5	Styrene	ND	1300
79-34-5	1,1,2,2-Tetrachloroethane	ND	1300
108-67-8	1,3,5-Trimethylbenzene	ND	1300
95-63-6	1,2,4-Trimethylbenzene	ND	1300
541-73-1	1,3-Dichlorobenzene	ND	1300

Client: OHM
Workorder: 3512

TO-14 Volatile Organics

Client Sample ID: SVEW-1

Lab Sample ID: AF2079DL

Analysis Date: 05/09/95

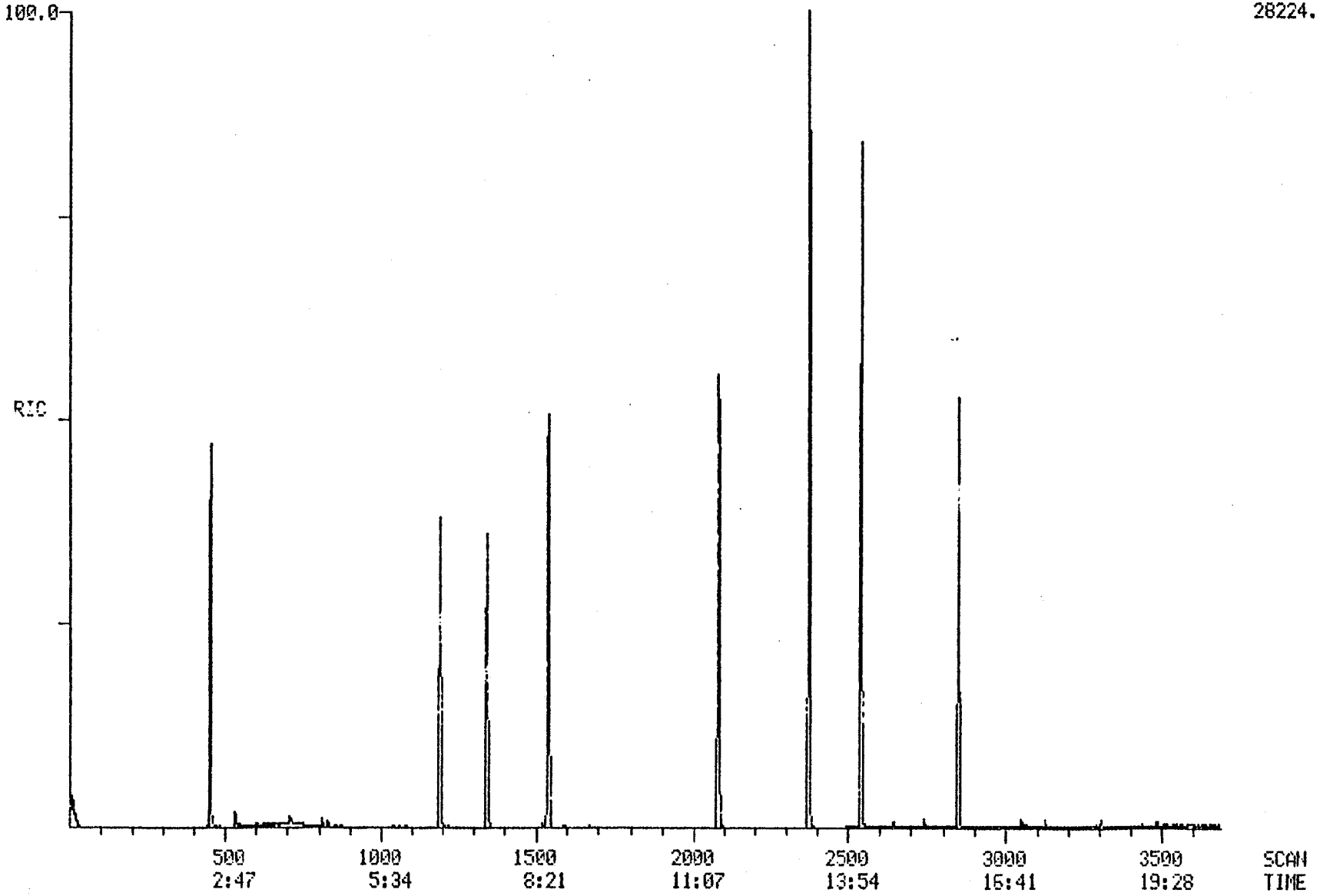
Dilution Factor: 6288

CAS #	Compound	Result ppb(V/V)	Detection Limit
106-46-7	1,4-Dichlorobenzene	ND	1300
95-50-1	1,2-Dichlorobenzene	ND	1300
100-44-7	Benzyl Chloride	ND	1300
120-82-1	1,2,4-Trichlorobenzene	ND	1300
87-68-3	Hexachlorobutadiene	ND	1300

Surrogate Compound	% Recovery
D4-1,2-Dichloroethane	98
D8-Toluene	110
Bromofluorobenzene	103

A0000008

RIC DAT4: AF2079DL #1 SCANS 1 TO 3686
05/09/95 19:30:00 CALI: AF2079DL #3
SAMPLE: M WO3512 #24405 SVEW-1 502ML
CONDS.: GC DESC=MB SCAN=DN DB-5 60M 45CM/SEC INST M METH TO-14
RANGE: G 1,3686 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3



Quantitation Report File: AF2079DL

Data: AF2079DL.T1
05/09/95 19:30:00
Sample: M W03512 #04405 SVEW-1 500ML
Conds.: GC DESC=MB SCAN=DN DB-5 60M 45CM/SEC INST M METH TO-14
Formula: POS5 Instrument: FINN Weight: 0.000
Submitted by: OHM Analyst: DCG/079 Acct. No.:

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name
1	BROMOCHLOROMETHANE
2	1,4-DIFLUOROBENZENE
3	D5-CHLOROBENZENE
4	D4-1,2-DICHLOROETHANE
5	D8-TOLUENE
6	BROMOFLUOROBENZENE
7	TETRACHLOROETHENE

VKS 5/10/95

Scan	Time	Area(Hght)	Amount		Name
1191	6:37	7209.	8.000	PPBV	BROMOCHLOROMETHANE
1540	8:34	35470.	8.000	PPBV	1,4-DIFLUOROBENZENE
2541	14:08	35691.	8.000	PPBV	D5-CHLOROBENZENE
1343	7:28	9118.	7.805	PPBV	D4-1,2-DICHLOROETHANE
2082	11:35	34199.	8.839	PPBV	D8-TOLUENE
2853	15:52	14791.	4.120	PPBV	BROMOFLUOROBENZENE
2374	13:12	14538.	10.255	PPBV	TETRACHLOROETHENE

DCG 5-10-95

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(A)	Ratio
1	6:40	0.99	1.000	1.00	8.00	8.00	1.000	1.000	1.00
2	8:37	0.99	1.000	1.00	8.00	8.00	1.000	1.000	1.00
3	14:10	1.00	1.000	1.00	8.00	8.00	1.000	1.000	1.00
4	7:31	0.99	0.873	1.00	7.80	8.00	0.257	0.263	0.98
5	11:37	1.00	0.821	1.00	8.84	8.00	0.958	0.867	1.10
6	15:54	1.00	1.122	1.00	4.12	4.00	0.829	0.805	1.03
7	13:14	1.00	0.934	1.00	10.26	10.00	0.326	0.318	1.03

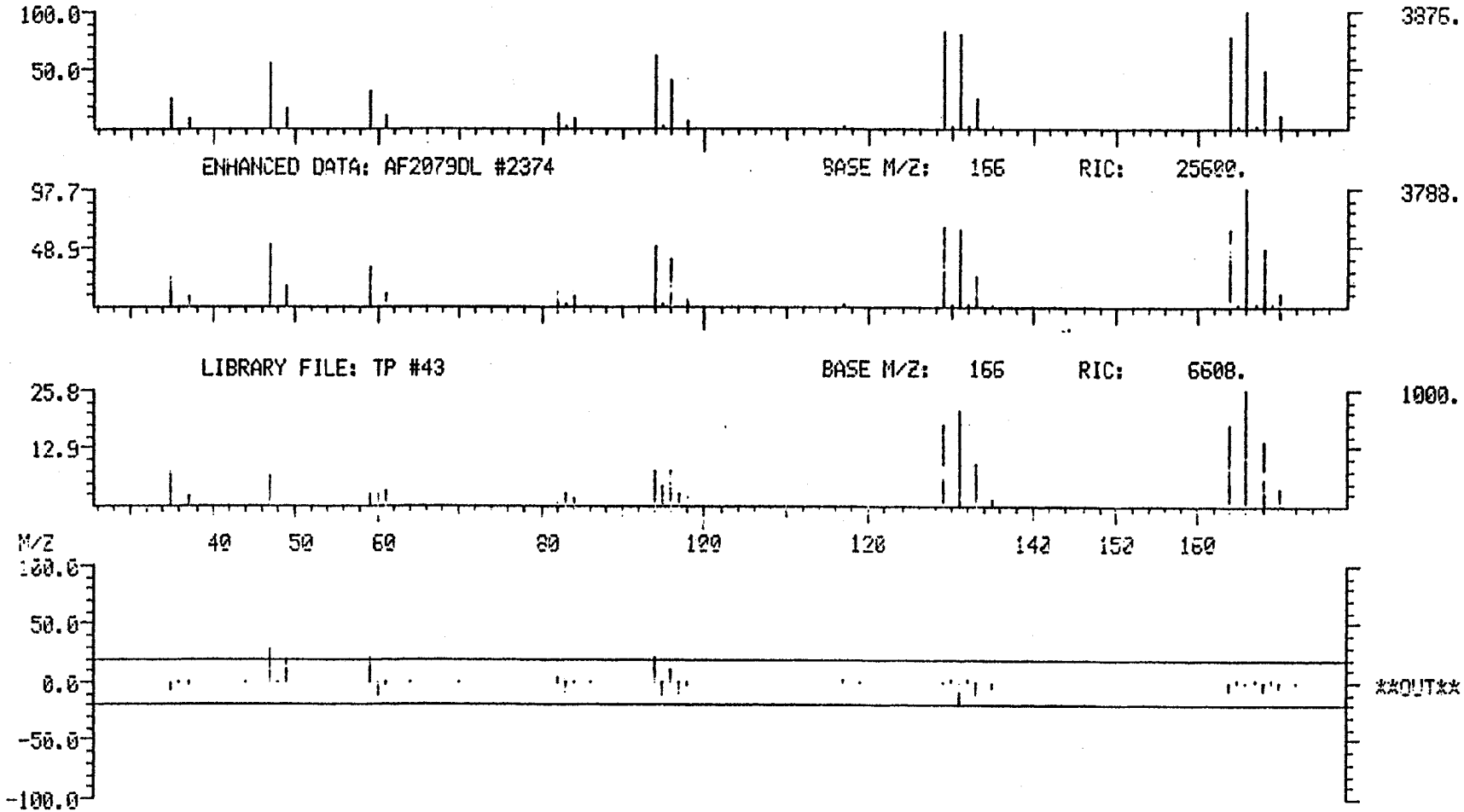
A0000010

DATA FILE: AF2079DL #2374
TARGET COMPOUND COMPARISON
COMPOUND: TETRACHLOROETHENE

LIBRARY FILE: TP #43
CALI: AF2079DL #3

RAW DATA: AF2079DL #2374
05/09/95 19:30

BASE M/Z: 166 RIC: 28224.



QA/QC REPORT

SAMPLE NAME: af2079d1
INJECT TIME: 18:02:48
DATE: Tue May 09 1995
METHOD: polar3.MPT
NAMELIST: dcg.nam
MANIFOLD POSITION: 5

VOC 11-145

PRESSURE BEFORE SAMPLING(PSIA) 26.6
AFTER SAMPLING(PSIA) 25.2

NG INT. STD INJECTED IS1(0) IS2(0) IS3(0) IS4(0) IS5(0)

PREHEAT MODULE 1 (Y) MODULE 2 (N) . CRYOFOCUS? (Y) . HEAT SAMPLE? (N)

CONDITIONS:

DURING CONCENTRATION	MAX TEMP	FINAL TEMP	TRAP/SEP TIME
M1 Glass Bead Cryotrap	-154	-160(-160)	302
M2 Sorbent Packed Cryotrap	-28	-30(-25)	253
Focusing Trap	-197	-200(-190)	150(150)

DESORB/TRANSFER/INJECT	PREHEAT	FINAL TEMP	TIME(secs)
M1 Glass Bead Cryotrap	-8(-10)	5(5)	253
M2 Sorbent Packed Cryotrap	69(100)	226(220)	150(150)
Focusing Trap	-200	73	300(300)

MEDIUM CONC./TRANSFERRED	VOLUME	FLOW(SCCM)	FINAL PSIA
Internal Standard	100(100)	100(100)	21.5
Sample	501(500)	125(125)	22.1
Sweep/Dry Purge	100(100)	99(100)	32.4
Transfer to Packed Col.	45(45)	10(10)	33.2
Packed Column Separation	0(0)	10(50)	33.2

SYSTEM BAKEOUT

	TEMPERATURE	TIME(min.)
M1 Glass Bead Cryotrap	164(160)	5(5)
M2 Sorbent Packed Cryotrap	225(220)	5(5)
Focusing Trap		

REGULATED ZONES	TEMPERATURE
8-PORT VALVE	151(150)
GC TRANSFER LINE	112(110)
MANIFOLD TRANSFER LINE	105(110)
16-POSITION SELECT VALVE	98(100)
SAMPLE CONTAINER	AMBIENT

Client: OHM
Workorder: 3512

TO-14 Volatile Organics

Client Sample ID: SVEW-1

Lab Sample ID: AF2079D2

Analysis Date: 05/09/95

Dilution Factor: 6288

CAS #	Compound	Result ppb(V/V)	Detection Limit
75-71-8	Dichlorodifluoromethane	ND	1300
76-14-2	1,2-Dichlorotetrafluoroethane	ND	1300
74-87-3	Chloromethane	ND	1300
75-01-4	Vinyl Chloride	ND	1300
74-83-9	Bromomethane	ND	1300
75-00-3	Chloroethane	ND	1300
75-69-4	Trichlorofluoromethane	ND	1300
75-35-4	1,1-Dichloroethene	ND	1300
76-13-1	1,1,2-Trichlorotrifluoroethane	ND	1900
75-09-2	Methylene Chloride	ND	1900
75-34-3	1,1-Dichloroethane	ND	1300
156-59-2	cis-1,2-Dichloroethene	ND	1300
67-66-3	Chloroform	ND	1300
71-55-6	1,1,1-Trichloroethane	ND	1300
56-23-5	Carbon Tetrachloride	ND	1300
71-43-2	Benzene	ND	1300
107-06-2	1,2-Dichloroethane	ND	1300
79-01-6	Trichloroethene	ND	1300
78-87-5	1,2-Dichloropropane	ND	1300
10061-01-5	cis-1,3-Dichloropropene	ND	1300
108-88-3	Toluene	ND	1300
10061-02-6	trans-1,3-Dichloropropene	ND	1300
79-00-5	1,1,2-Trichloroethane	ND	1300
127-18-4	Tetrachloroethene	64000	1300
106-93-4	1,2-Dibromoethane	ND	1300
108-90-7	Chlorobenzene	ND	1300
100-41-4	Ethylbenzene	ND	1300
136777-61-2	m/p-Xylene	ND	1300
95-47-6	o-Xylene	ND	1300
100-42-5	Styrene	ND	1300
79-34-5	1,1,2,2-Tetrachloroethane	ND	1300
108-67-8	1,3,5-Trimethylbenzene	ND	1300
95-63-6	1,2,4-Trimethylbenzene	ND	1300
541-73-1	1,3-Dichlorobenzene	ND	1300

Client: OHM
Workorder: 3512

TO-14 Volatile Organics

Client Sample ID: SVEW-1

Lab Sample ID: AF2079D2

Analysis Date: 05/09/95

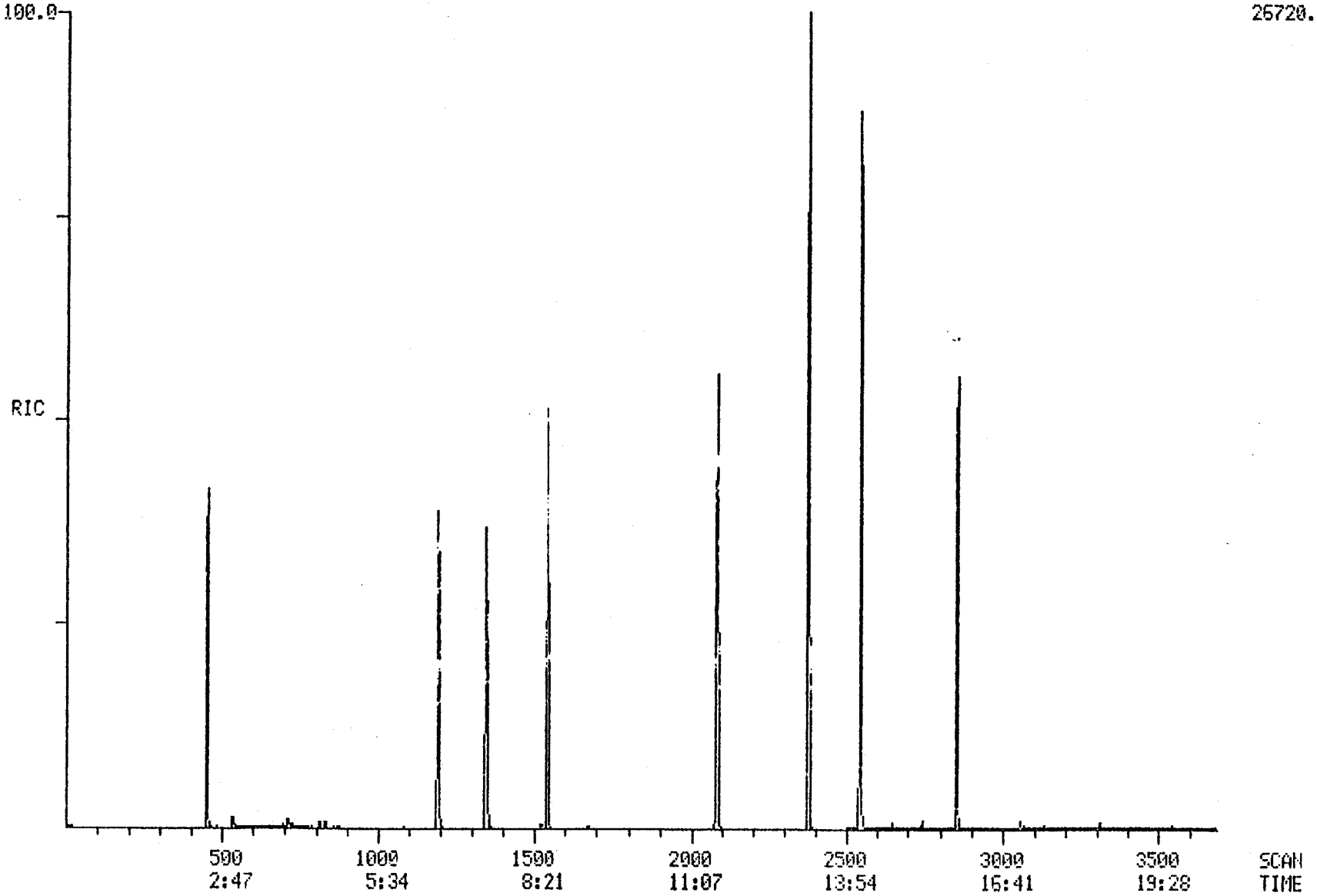
Dilution Factor: 6288

CAS #	Compound	Result ppb(V/V)	Detection Limit
106-46-7	1,4-Dichlorobenzene	ND	1300
95-50-1	1,2-Dichlorobenzene	ND	1300
100-44-7	Benzyl Chloride	ND	1300
120-82-1	1,2,4-Trichlorobenzene	ND	1300
87-68-3	Hexachlorobutadiene	ND	1300

Surrogate Compound	% Recovery
D4-1,2-Dichloroethane	98
D8-Toluene	108
Bromofluorobenzene	102

A0000014

RIC DATA: AF2079D2 #1 SCANS 1 TO 3686
05/09/95 20:07:00 CALI: AF2079D2 #3
SAMPLE: M WO3512 #04405 SVEX-1 500ML
CONDS.: GC DESC=MB SCAN=ON DB-5 60M 45CM/SEC INST M METH TO-14
RANGE: G 1,3686 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3



Quantitation Report File: AF2079D2

Data: AF2079D2.TI
05/09/95 20:07:00
Sample: M WO3512 #04405 SVEW-1 500ML
Conds.: GC DESC=MB SCAN=DN DB-5 60M 45CM/SEC INST M METH TO-14
Formula: POS5 Instrument: FINN Weight: 0.000
Submitted by: OHM Analyst: DCG/079 Acct. No.:

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name
1	BROMOCHLOROMETHANE
2	1,4-DIFLUOROBENZENE
3	D5-CHLOROBENZENE
4	D4-1,2-DICHLOROETHANE
5	D8-TOLUENE
6	BROMOFLUOROBENZENE
7	TETRACHLOROETHENE

VIC 5/10/95

Scan	Time	Area(Hght)	Amount	Name
1193	6:38	6630.	8.000 PPBV	BROMOCHLOROMETHANE
1543	8:35	33630.	8.000 PPBV	1,4-DIFLUOROBENZENE
2545	14:09	34582.	8.000 PPBV	D5-CHLOROBENZENE
1344	7:28	8666.	7.824 PPBV	D4-1,2-DICHLOROETHANE
2086	11:36	32525.	8.676 PPBV	D8-TOLUENE
2856	15:53	14255.	4.098 PPBV	BROMOFLUOROBENZENE
2377	13:13	13967.	10.169 PPBV	TETRACHLOROETHENE

DCG 5-10-95

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(A)	Ratio
1	6:40	0.99	1.000	1.00	8.00	8.00	1.000	1.000	1.00
2	8:37	1.00	1.000	1.00	8.00	8.00	1.000	1.000	1.00
3	14:10	1.00	1.000	1.00	8.00	8.00	1.000	1.000	1.00
4	7:31	0.99	0.873	1.00	7.82	8.00	0.258	0.263	0.98
5	11:37	1.00	0.821	1.00	8.68	8.00	0.941	0.867	1.08
6	15:54	1.00	1.122	1.00	4.10	4.00	0.824	0.805	1.02
7	13:14	1.00	0.934	1.00	10.17	10.00	0.323	0.318	1.02

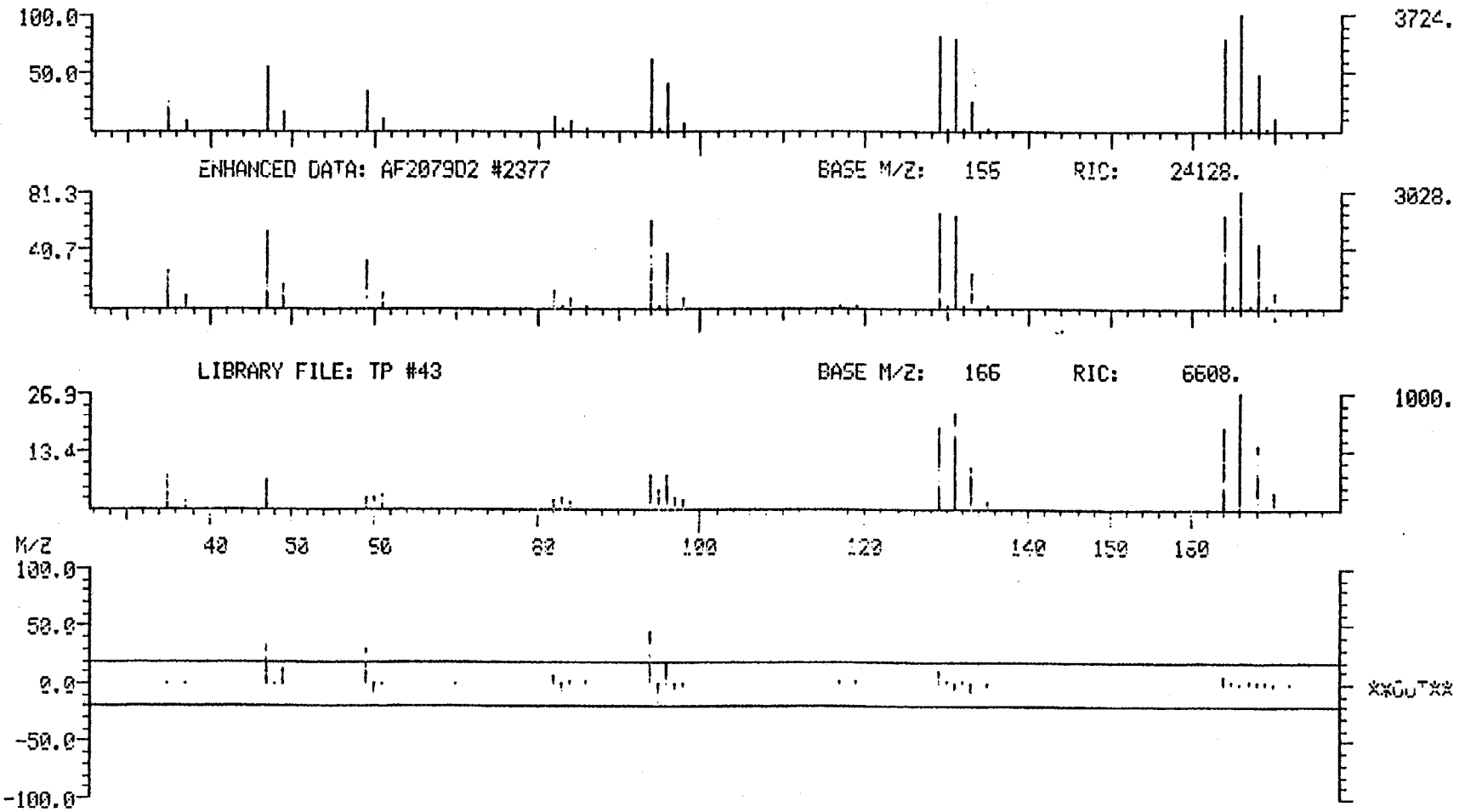
A0000016

DATA FILE: AF207902 #2377
TARGET COMPOUND COMPARISON
COMPOUND: TETRACHLOROETHENE

LIBRARY FILE: TP #43
CALI: AF207902 #3

RAW DATA: AF207902 #2377
05/09/95 20:07

BASE M/Z: 166 RIC: 26752.



QA/QC REPORT

SAMPLE NAME: af2079d2
INJECT TIME: 18:31:56
DATE: Tue May 09 1995
METHOD: polar3.MPT
NAMELIST: dcg.nam
MANIFOLD POSITION: 5

PRESSURE BEFORE SAMPLING(PSIA) 25.0
AFTER SAMPLING(PSIA) 23.5

NG INT. STD INJECTED IS1(0) IS2(0) IS3(0) IS4(0) IS5(0)

PREHEAT MODULE 1 (Y) MODULE 2 (N) , CRYOFOCUS? (Y) , HEAT SAMPLE? (N)

CONDITIONS:

DURING CONCENTRATION	MAX TEMP	FINAL TEMP	TRAP/SEP TIME
M1 Glass Bead Cryotrap	-157	-161(-160)	277
M2 Sorbent Packed Cryotrap	-29	-29(-25)	253
Focusing Trap	-198	-200(-190)	150(150)

DESORB/TRANSFER/INJECT	PREHEAT	FINAL TEMP	TIME(secs)
M1 Glass Bead Cryotrap	-9(-10)	5(5)	253
M2 Sorbent Packed Cryotrap	94(100)	224(220)	150(150)
Focusing Trap	-200	75	300(300)

MEDIUM CONC./TRANSFERRED	VOLUME	FLOW(SCCM)	FINAL PSIA
Internal Standard	100(100)	101(100)	21.4
Sample	501(500)	124(125)	20.3
Sweep/Dry Purge	101(100)	99(100)	32.5
Transfer to Packed Col.	45(45)	10(10)	33.2
Packed Column Separation	0(0)	10(50)	33.2

SYSTEM BAKEOUT

	TEMPERATURE	TIME(min.)
M1 Glass Bead Cryotrap	159(160)	5(5)
M2 Sorbent Packed Cryotrap	225(220)	5(5)
Focusing Trap		

REGULATED ZONES	TEMPERATURE
8-PORT VALVE	149(150)
GC TRANSFER LINE	110(110)
MANIFOLD TRANSFER LINE	105(110)
16-POSITION SELECT VALVE	99(100)
SAMPLE CONTAINER	AMBIENT

Client: OHM
Workorder: 3512

TO-14 Volatile Organics

Client Sample ID: SVEW-2

Lab Sample ID: AF2080DL

Analysis Date: 05/09/95

Dilution Factor: 18200

CAS #	Compound	Result ppb(V/V)	Detection Limit
75-71-8	Dichlorodifluoromethane	ND	3600
76-14-2	1,2-Dichlorotetrafluoroethane	ND	3600
74-87-3	Chloromethane	ND	3600
75-01-4	Vinyl Chloride	ND	3600
74-83-9	Bromomethane	ND	3600
75-00-3	Chloroethane	ND	3600
75-69-4	Trichlorofluoromethane	ND	3600
75-35-4	1,1-Dichloroethene	ND	3600
76-13-1	1,1,2-Trichlorotrifluoroethane	ND	5500
75-09-2	Methylene Chloride	ND	5500
75-34-3	1,1-Dichloroethane	ND	3600
156-59-2	cis-1,2-Dichloroethene	ND	3600
67-66-3	Chloroform	ND	3600
71-55-6	1,1,1-Trichloroethane	ND	3600
56-23-5	Carbon Tetrachloride	ND	3600
71-43-2	Benzene	ND	3600
107-06-2	1,2-Dichloroethane	ND	3600
79-01-6	Trichloroethene	ND	3600
78-87-5	1,2-Dichloropropane	ND	3600
10061-01-5	cis-1,3-Dichloropropene	ND	3600
108-88-3	Toluene	ND	3600
10061-02-6	trans-1,3-Dichloropropene	ND	3600
79-00-5	1,1,2-Trichloroethane	ND	3600
127-18-4	Tetrachloroethene	480000	3600
106-93-4	1,2-Dibromoethane	ND	3600
108-90-7	Chlorobenzene	ND	3600
100-41-4	Ethylbenzene	ND	3600
136777-61-2	m/p-Xylene	31000	3600
95-47-6	o-Xylene	24000	3600
100-42-5	Styrene	ND	3600
79-34-5	1,1,2,2-Tetrachloroethane	ND	3600
108-67-8	1,3,5-Trimethylbenzene	ND	3600
95-63-6	1,2,4-Trimethylbenzene	3700	3600
541-73-1	1,3-Dichlorobenzene	ND	3600

Client: OHM
Workorder: 3512

TO-14 Volatile Organics

Client Sample ID: SVEW-2

Lab Sample ID: AF2080DL

Analysis Date: 05/09/95

Dilution Factor: 18200

CAS #	Compound	Result ppb(V/V)	Detection Limit
106-46-7	1,4-Dichlorobenzene	ND	3600
95-50-1	1,2-Dichlorobenzene	ND	3600
100-44-7	Benzyl Chloride	ND	3600
120-82-1	1,2,4-Trichlorobenzene	ND	3600
87-68-3	Hexachlorobutadiene	ND	3600

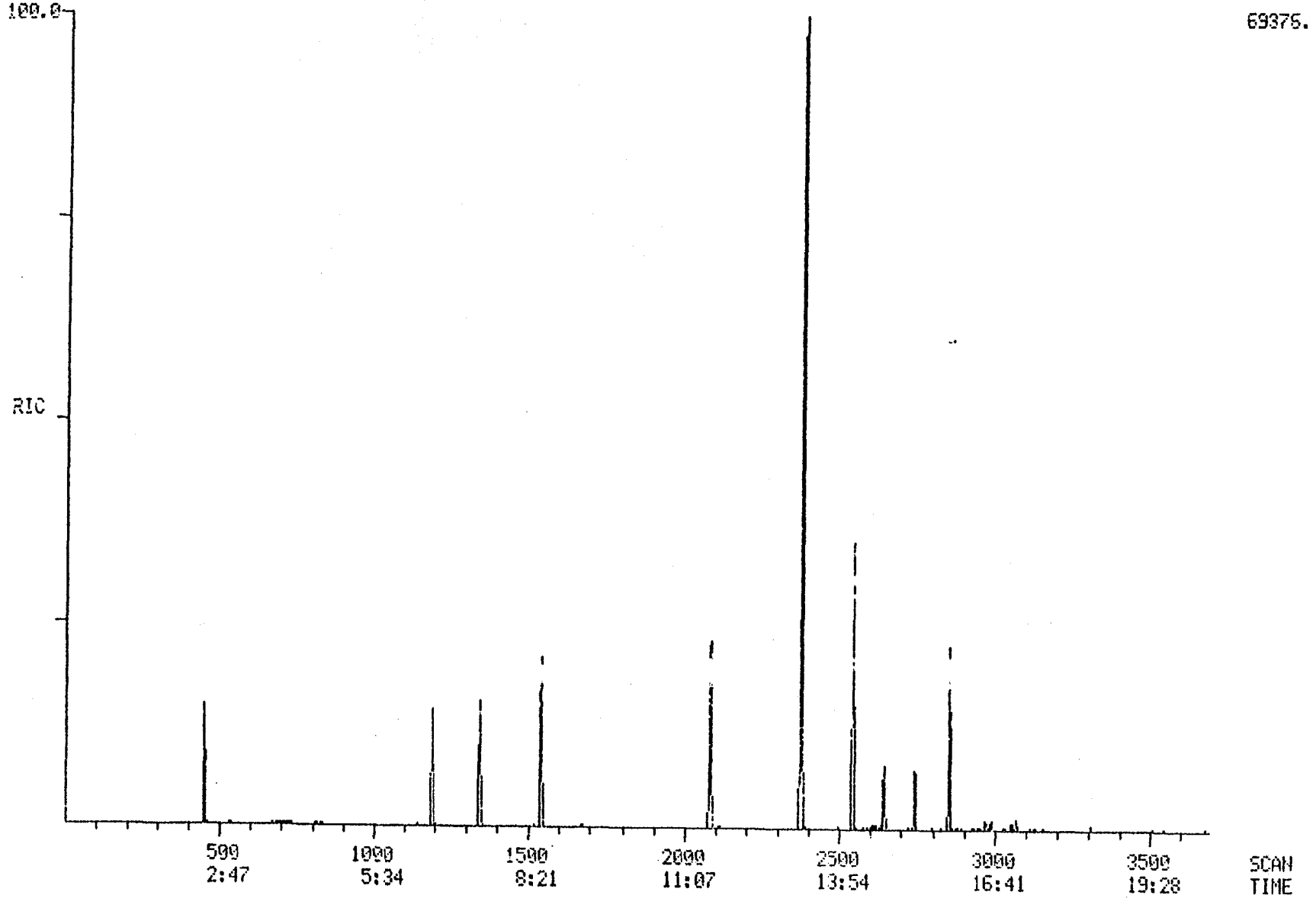
Surrogate Compound	% Recovery
D4-1,2-Dichloroethane	99
D8-Toluene	113
Bromofluorobenzene	104

A0000020

RIC
05/09/95 20:36:00
SAMPLE: M WQ3512 #9202: SVEX-2 520ML
CONDS.: GC DESC=MB SCAN=DN DB-5 60M 45CM/SEC INST M METH TO-14
RANGE: G 1,3686 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: AF2080DL #1
CALI: AF2080DL #3

SCANS 1 TO 3686



Quantitation Report File: AF2080DL

Data: AF2080DL.T1
05/09/95 20:36:00
Sample: M W03512 #92021 SVEW-2 500ML
Conds.: GC DESC=MB SCAN=DN DB-5 60M 45CM/SEC INST M METH TO-14
Formula: POS6 Instrument: FINN Weight: 0.000
Submitted by: OHM Analyst: DCG/079 Acct. No.:

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name
1	BROMOCHLOROMETHANE
2	1,4-DIFLUOROBENZENE
3	D5-CHLOROBENZENE
4	D4-1,2-DICHLOROETHANE
5	D8-TOLUENE
6	BROMOFLUOROBENZENE
7	TETRACHLOROETHENE
8	M-XYLENE (FOR P-)
9	O-XYLENE
10	1,2,4-TRIMETHYLBENZENE

VK 5/10/95

Scan	Time	Area(Hght)	Amount		Name
1191	6:37	6545.	8.000	PPBV	BROMOCHLOROMETHANE
1541	8:34	34654.	8.000	PPBV	1,4-DIFLUOROBENZENE
2542	14:08	35395.	8.000	PPBV	D5-CHLOROBENZENE
1343	7:28	9068.	7.945	PPBV	D4-1,2-DICHLOROETHANE
2084	11:35	34589.	9.015	PPBV	D8-TOLUENE
2854	15:52	14877.	4.179	PPBV	BROMOFLUOROBENZENE
2376	13:13	37352.	26.569	PPBV	TETRACHLOROETHENE
2646	14:43	10261.	1.698	PPBV	M-XYLENE (FOR P-)
2744	15:16	7812.	1.331	PPBV	O-XYLENE
3070	17:04	1596.	0.204	PPBV	1,2,4-TRIMETHYLBENZENE

DCG 5-10-95

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(A)	Ratio
1	6:40	0.99	1.000	1.00	8.00	8.00	1.000	1.000	1.00
2	8:37	1.00	1.000	1.00	8.00	8.00	1.000	1.000	1.00
3	14:10	1.00	1.000	1.00	8.00	8.00	1.000	1.000	1.00
4	7:31	0.99	0.873	1.00	7.94	8.00	0.262	0.263	0.99
5	11:37	1.00	0.821	1.00	9.01	8.00	0.977	0.867	1.13
6	15:54	1.00	1.122	1.00	4.18	4.00	0.841	0.805	1.04
7	13:14	1.00	0.934	1.00	26.57	10.00	0.844	0.318	2.66
8	14:44	1.00	1.040	1.00	1.70	10.00	0.232	1.366	0.17
9	15:17	1.00	1.079	1.00	1.33	10.00	0.177	1.326	0.13
10	17:05	1.00	1.207	1.00	0.20	10.00	0.036	1.770	0.02

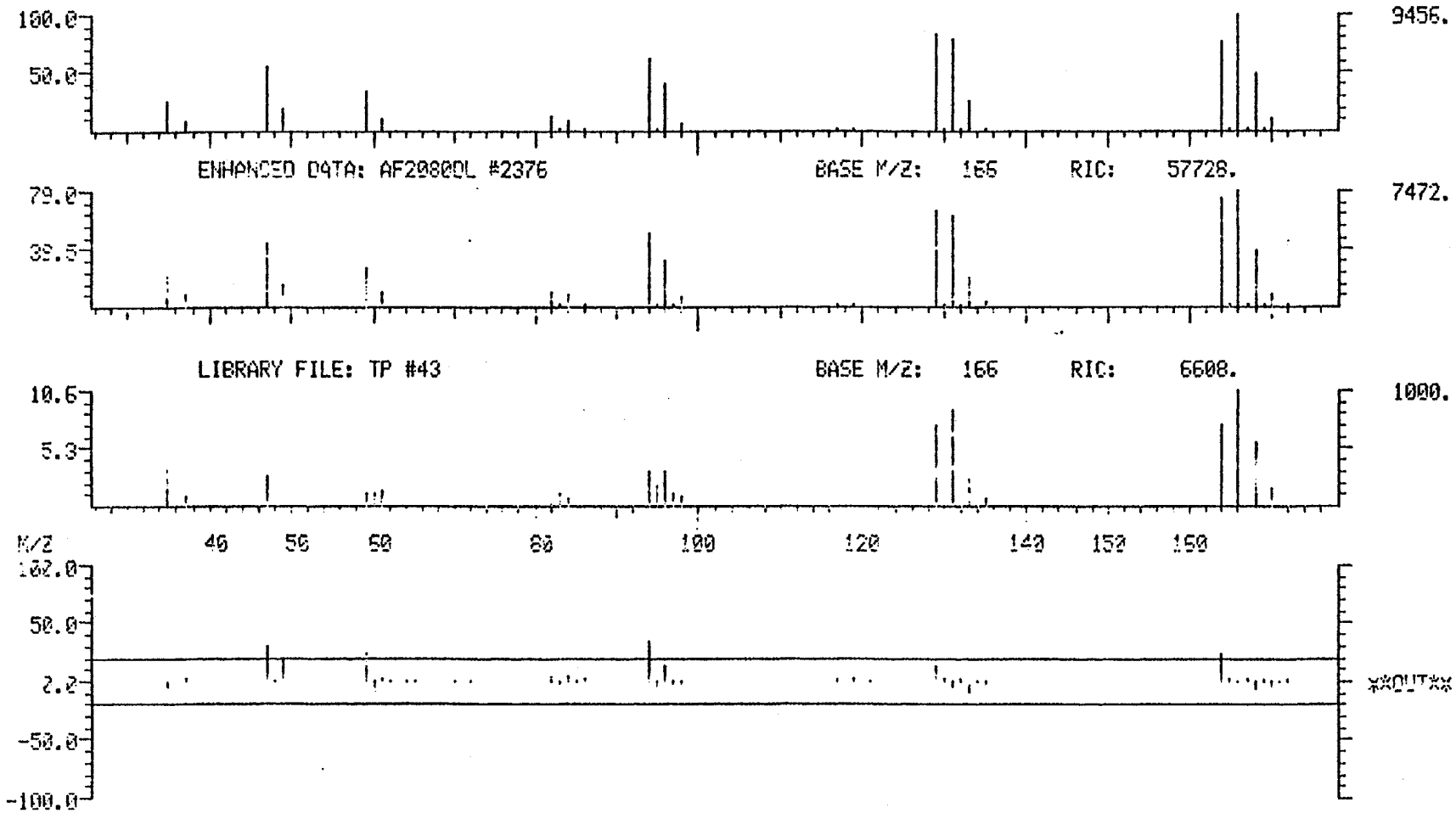
A0000022

DATA FILE: AF2080DL #2376
TARGET COMPOUND COMPARISON
COMPOUND: TETRACHLOROETHENE

LIBRARY FILE: TP #43
CALI: AF2080DL #3

RAW DATA: AF2080DL #2376
05/05/95 20:36

BASE M/Z: 165 RIC: 59504.



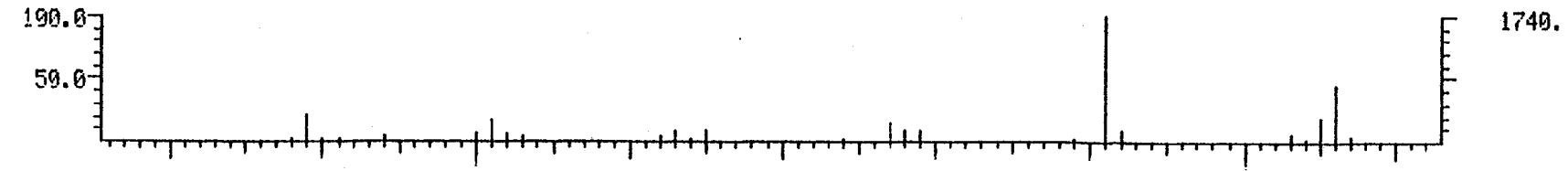
A0000023

DATA FILE: AF2080DL #2646
TARGET COMPOUND COMPARISON
COMPOUND: M-XYLENE (FOR P-)

LIBRARY FILE: TP #48
CALI: AF2080DL #3

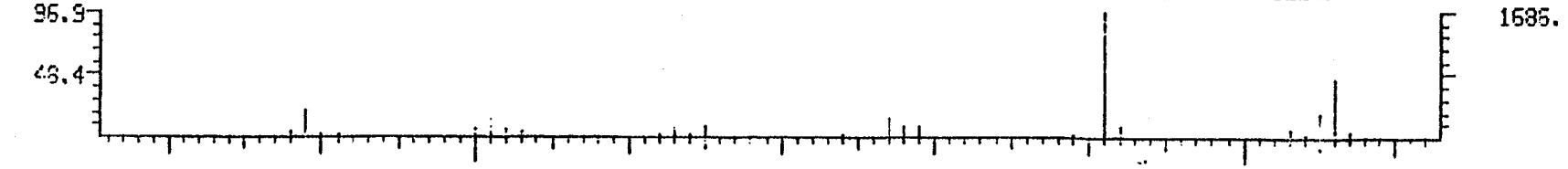
RAW DATA: AF2080DL #2645
05/09/95 20:36

BASE M/Z: 91 RIC: 5416.



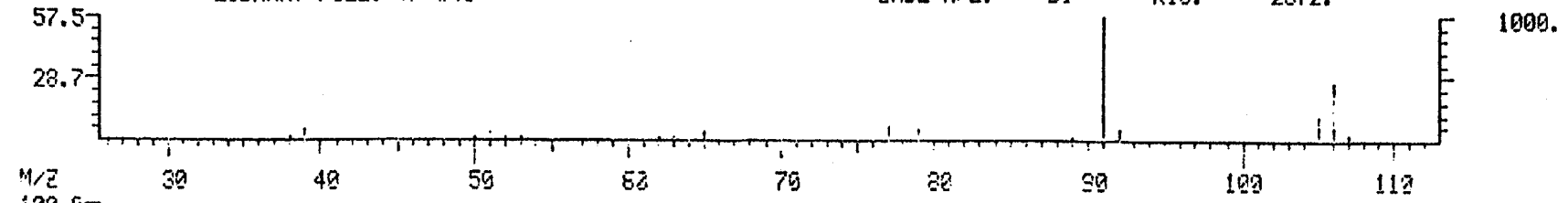
ENHANCED DATA: AF2080DL #2645

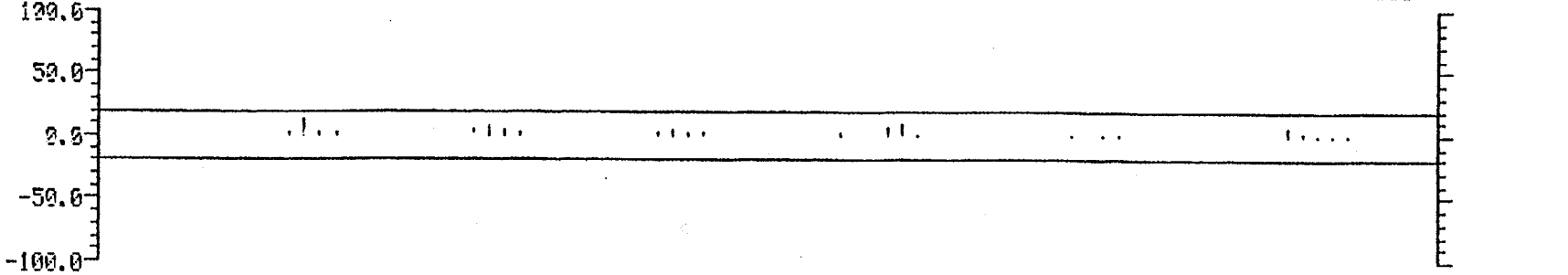
BASE M/Z: 91 RIC: 5224.



LIBRARY FILE: TP #48

BASE M/Z: 91 RIC: 2372.

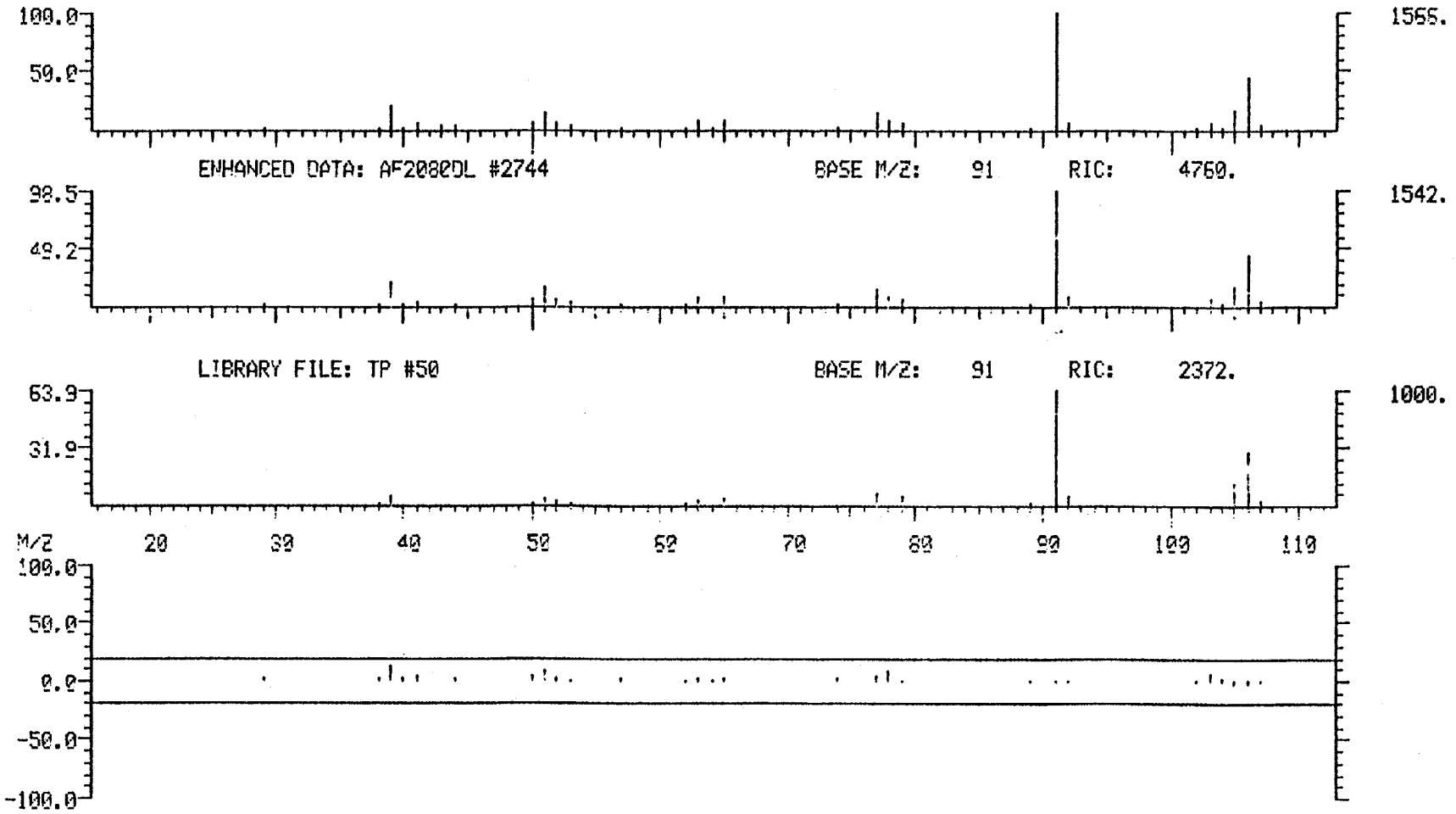




A0000024

DATA FILE: AF2080DL #2744 LIBRARY FILE: TP #50
TARGET COMPOUND COMPARISON CALI: AF2080DL #3
COMPOUND: O-XYLENE

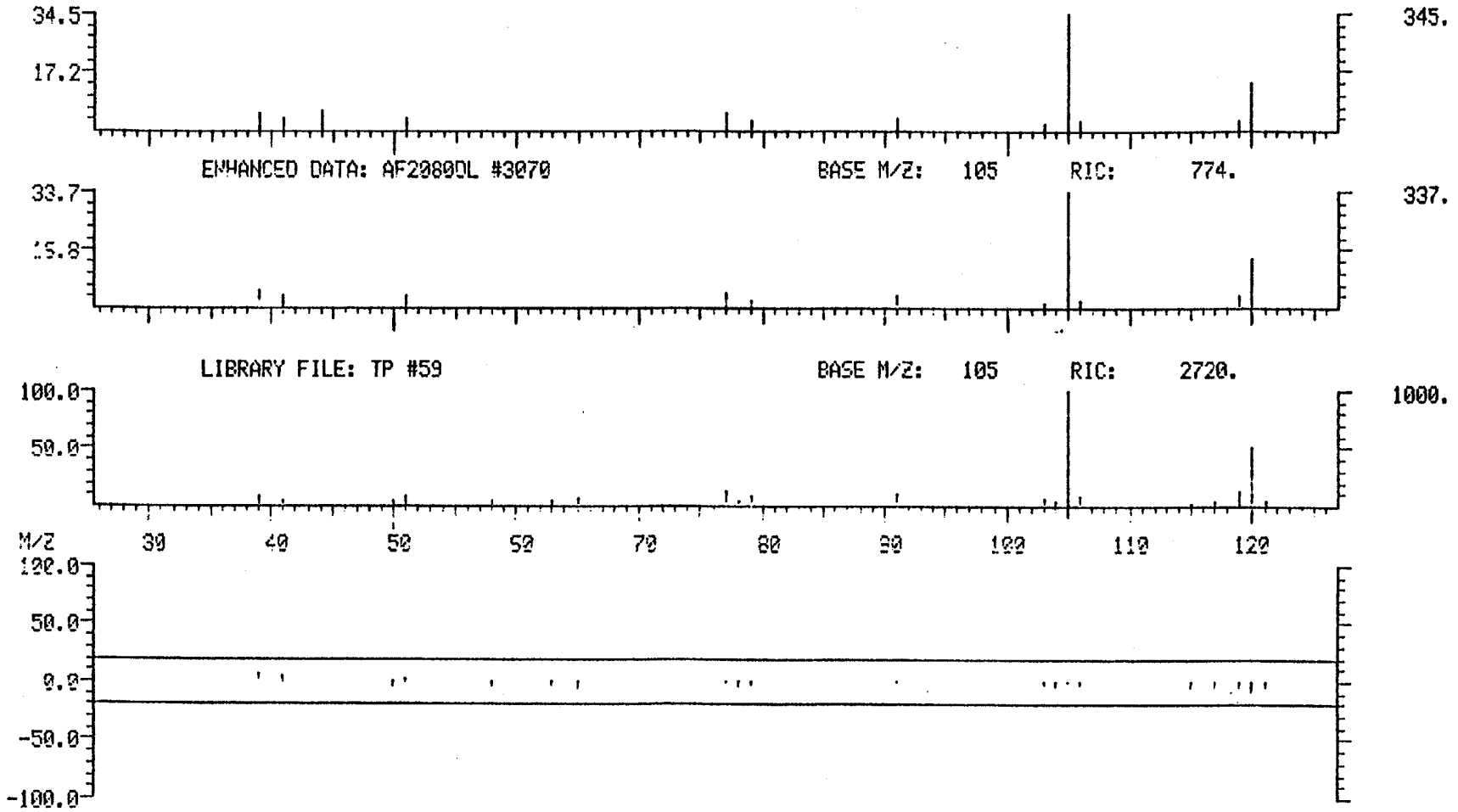
RAW DATA: AF2080DL #2744 BASE M/Z: 91 RIC: 4975.
05/09/95 20:35



A0000025

DATA FILE: AF2080DL #3070 LIBRARY FILE: TP #59
TARGET COMPOUND COMPARISON CALI: AF2080DL #3
COMPOUND: 1,2,4-TRIMETHYLBENZENE

RAW DATA: AF2080DL #3070 BASE M/Z: 105 RIC: 865.
05/09/95 20:35



QA/QC REPORT

SAMPLE NAME: af2080d1
INJECT TIME: 19:00:54
DATE: Tue May 09 1995
METHOD: polar3.MPT
NAMELIST: dcg.nam
MANIFOLD POSITION: 6

PRESSURE BEFORE SAMPLING(PSIA) 28.5
AFTER SAMPLING(PSIA) 27.0

NG INT. STD INJECTED IS1(0) IS2(0) IS3(0) IS4(0) IS5(0)

PREHEAT MODULE 1 (Y) MODULE 2 (N) . CRYOFOCUS? (Y) . HEAT SAMPLE? (N)

CONDITIONS:

DURING CONCENTRATION	MAX TEMP	FINAL TEMP	TRAP/SEP TIME
M1 Glass Bead Cryotrap	-158	-170(-160)	277
M2 Sorbent Packed Cryotrap	-29	-30(-25)	252
Focusing Trap	-200	-200(-190)	150(150)

DESORB/TRANSFER/INJECT	PREHEAT	FINAL TEMP	TIME(secs)
M1 Glass Bead Cryotrap	-5(-10)	16(5)	252
M2 Sorbent Packed Cryotrap	94(100)	224(220)	150(150)
Focusing Trap	-200	76	300(300)

MEDIUM CONC./TRANSFERRED	VOLUME	FLOW(SCCM)	FINAL PSIA
Internal Standard	100(100)	100(100)	21.0
Sample	500(500)	126(125)	23.8
Sweep/Dry Purge	101(100)	100(100)	32.4
Transfer to Packed Col.	45(45)	10(10)	33.2
Packed Column Separation	0(0)	10(50)	33.2

SYSTEM BAKEOUT

	TEMPERATURE	TIME(min.)
M1 Glass Bead Cryotrap	164(160)	5(5)
M2 Sorbent Packed Cryotrap	224(220)	5(5)
Focusing Trap		

REGULATED ZONES	TEMPERATURE
8-PORT VALVE	150(150)
GC TRANSFER LINE	110(110)
MANIFOLD TRANSFER LINE	106(110)
16-POSITION SELECT VALVE	102(100)
SAMPLE CONTAINER	AMBIENT

Client: OHM
Workorder: 3512

TO-14 Volatile Organics

Client Sample ID: SVEW-3

Lab Sample ID: AF2081DL

Analysis Date: 05/09/95

Dilution Factor: 7945

CAS #	Compound	Result ppb(V/V)	Detection Limit
75-71-8	Dichlorodifluoromethane	ND	1600
76-14-2	1,2-Dichlorotetrafluoroethane	ND	1600
74-87-3	Chloromethane	ND	1600
75-01-4	Vinyl Chloride	ND	1600
74-83-9	Bromomethane	ND	1600
75-00-3	Chloroethane	ND	1600
75-69-4	Trichlorofluoromethane	ND	1600
75-35-4	1,1-Dichloroethene	ND	1600
76-13-1	1,1,2-Trichlorotrifluoroethane	ND	2400
75-09-2	Methylene Chloride	ND	2400
75-34-3	1,1-Dichloroethane	ND	1600
156-59-2	cis-1,2-Dichloroethene	ND	1600
67-66-3	Chloroform	ND	1600
71-55-6	1,1,1-Trichloroethane	ND	1600
56-23-5	Carbon Tetrachloride	ND	1600
71-43-2	Benzene	ND	1600
107-06-2	1,2-Dichloroethane	ND	1600
79-01-6	Trichloroethene	ND	1600
78-87-5	1,2-Dichloropropane	ND	1600
10061-01-5	cis-1,3-Dichloropropene	ND	1600
108-88-3	Toluene	3000	1600
10061-02-6	trans-1,3-Dichloropropene	ND	1600
79-00-5	1,1,2-Trichloroethane	ND	1600
127-18-4	Tetrachloroethene	17000	1600
106-93-4	1,2-Dibromoethane	ND	1600
108-90-7	Chlorobenzene	ND	1600
100-41-4	Ethylbenzene	ND	1600
136777-61-2	m/p-Xylene	ND	1600
95-47-6	o-Xylene	ND	1600
100-42-5	Styrene	ND	1600
79-34-5	1,1,2,2-Tetrachloroethane	ND	1600
108-67-8	1,3,5-Trimethylbenzene	ND	1600
95-63-6	1,2,4-Trimethylbenzene	ND	1600
541-73-1	1,3-Dichlorobenzene	ND	1600

Client: OHM
Workorder: 3512

TO-14 Volatile Organics

Client Sample ID: SVEW-3

Lab Sample ID: AF2081DL

Analysis Date: 05/09/95

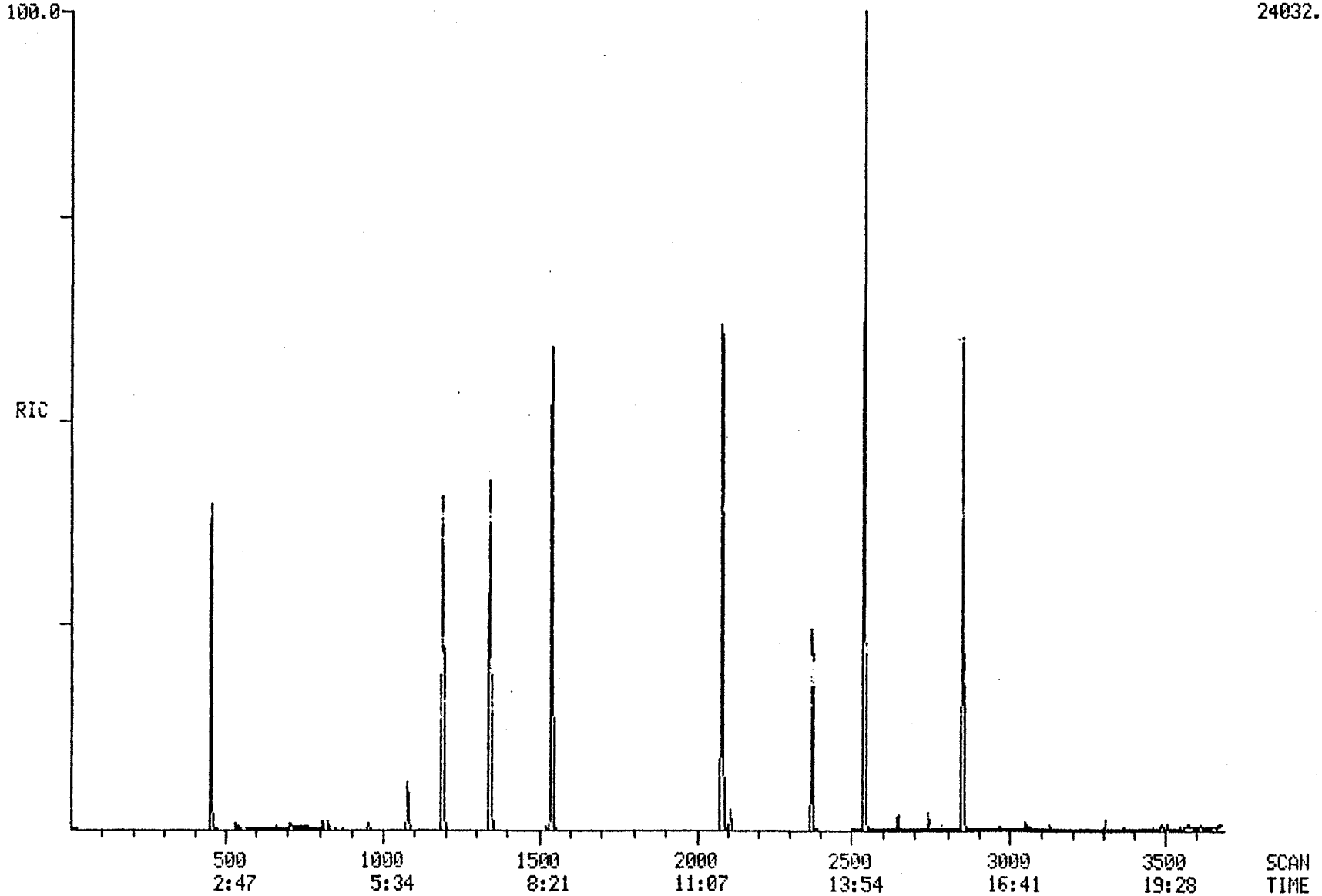
Dilution Factor: 7945

CAS #	Compound	Result ppb(V/V)	Detection Limit
106-46-7	1,4-Dichlorobenzene	ND	1600
95-50-1	1,2-Dichlorobenzene	ND	1600
100-44-7	Benzyl Chloride	ND	1600
120-82-1	1,2,4-Trichlorobenzene	ND	1600
87-68-3	Hexachlorobutadiene	ND	1600

Surrogate Compound	% Recovery
D4-1,2-Dichloroethane	101
D8-Toluene	103
Bromofluorobenzene	100

A0000029

RIC DATA: AF2081DL #1 SCANS 1 TO 3685
05/09/95 21:05:00 CALI: AF2081DL #3
SAMPLE: M W03512 #23282 SVEW-3 500ML
CONDS.: GC DESC=MB SCAN=DN DB-5 60M 45CM/SEC INST M METH TO-14
RANGE: G 1,3685 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3



Quantitation Report File: AF2081DL

Data: AF2081DL.TI
05/09/95 21:05:00
Sample: M WO3512 #93289 SVEW-3 500ML
Conds.: GC DESC=MB SCAN=DN DB-5 60M 45CM/SEC INST M METH TO-14
Formula: POS7 Instrument: FINN Weight: 0.000
Submitted by: OHM Analyst: DCG/079 Acct. No.:

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name
1	BROMOCHLOROMETHANE
2	1,4-DIFLUOROBENZENE
3	D5-CHLOROBENZENE
4	D4-1,2-DICHLOROETHANE
5	D8-TOLUENE
6	BROMOFLUOROBENZENE
7	TOLUENE
8	TETRACHLOROETHENE

VK 5/10/95

Scan	Time	Area(Hght)	Amount	Name
1191	6:37	6574.	8.000 PPBV	BROMOCHLOROMETHANE
1541	8:34	34768.	8.000 PPBV	1,4-DIFLUOROBENZENE
2541	14:08	35411.	8.000 PPBV	D5-CHLOROBENZENE
1343	7:28	9227.	8.057 PPBV	D4-1,2-DICHLOROETHANE
2083	11:35	31619.	8.237 PPBV	D8-TOLUENE
2853	15:52	14236.	3.997 PPBV	BROMOFLUOROBENZENE
2109	11:44	1655.	0.376 PPBV	TOLUENE
2374	13:12	3020.	2.147 PPBV	TETRACHLOROETHENE

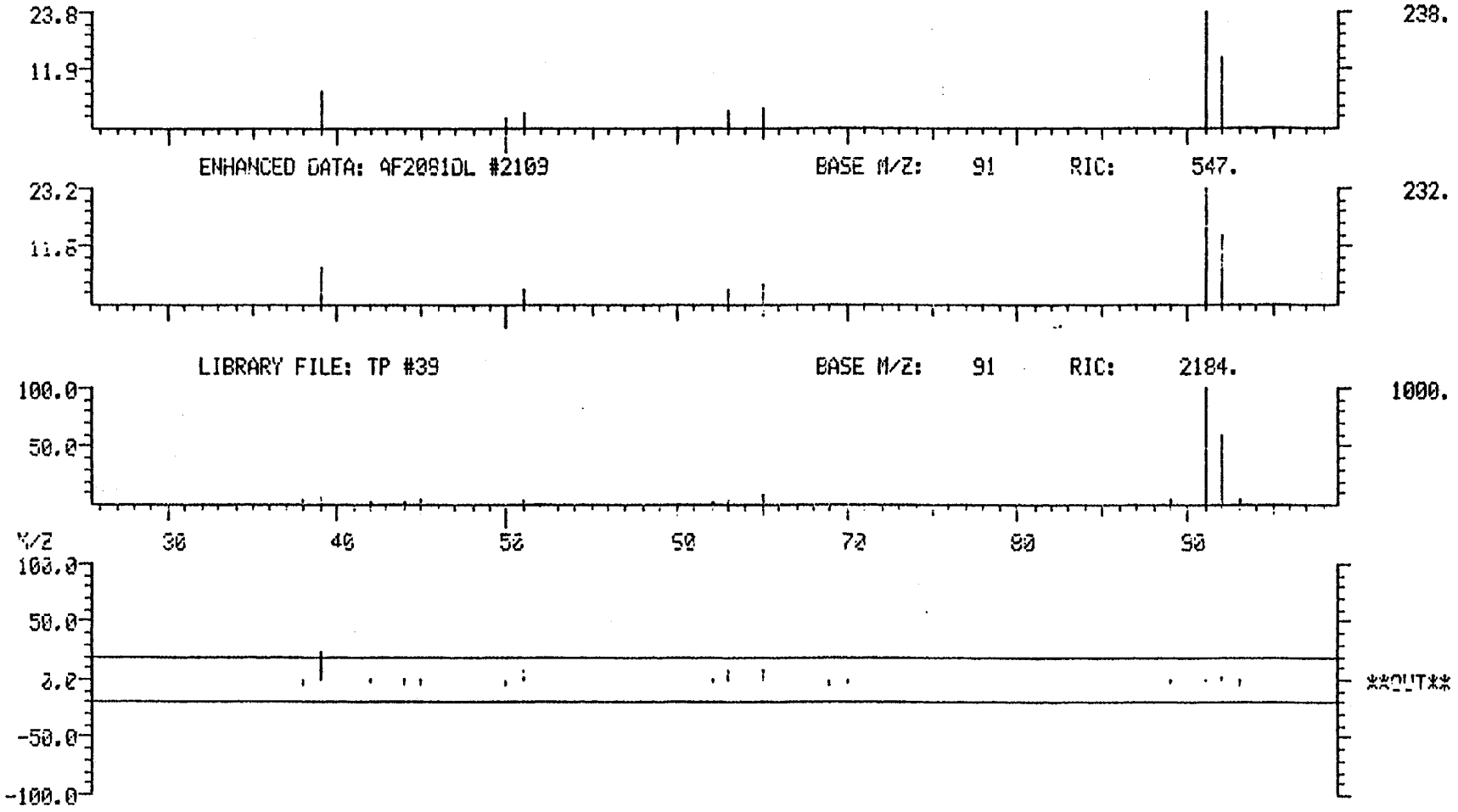
DCG 5-10-95

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(A)	Ratio
1	6:40	0.99	1.000	1.00	8.00	8.00	1.000	1.000	1.00
2	8:37	1.00	1.000	1.00	8.00	8.00	1.000	1.000	1.00
3	14:10	1.00	1.000	1.00	8.00	8.00	1.000	1.000	1.00
4	7:31	0.99	0.873	1.00	8.06	8.00	0.265	0.263	1.01
5	11:37	1.00	0.821	1.00	8.24	8.00	0.893	0.867	1.03
6	15:54	1.00	1.122	1.00	4.00	4.00	0.804	0.805	1.00
7	11:46	1.00	0.831	1.00	0.38	10.00	0.037	0.993	0.04
8	13:14	1.00	0.934	1.00	2.15	10.00	0.068	0.318	0.21

A0000031

DATA FILE: AF2081DL #2109 LIBRARY FILE: TP #39
TARGET COMPOUND COMPARISON CALI: AF2081DL #3
COMPOUND: TOLUENE

RAW DATA: AF2081DL #2109 BASE M/Z: 91 RIC: 581.
05/09/95 21:05



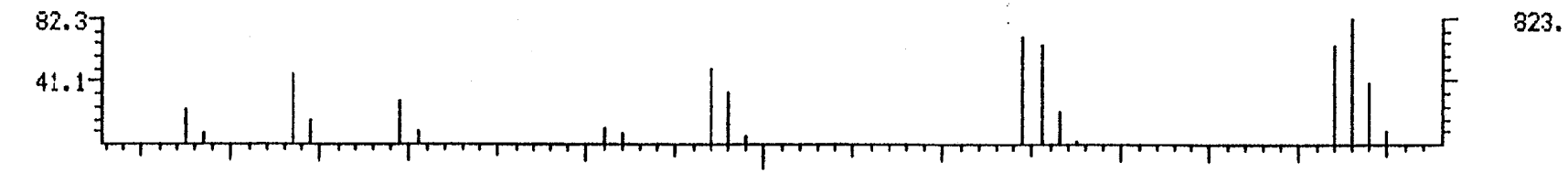
A0000032

DATA FILE: AF2081DL #2374
TARGET COMPOUND COMPARISON
COMPOUND: TETRACHLOROETHENE

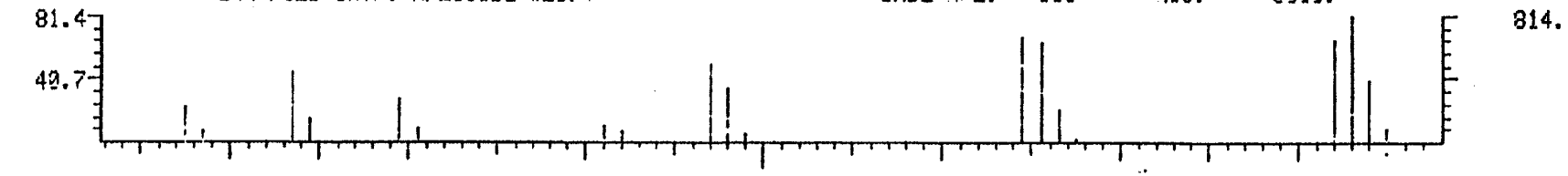
LIBRARY FILE: TP #43
CALI: AF2081DL #3

RAW DATA: AF2081DL #2374
05/09/95 21:05

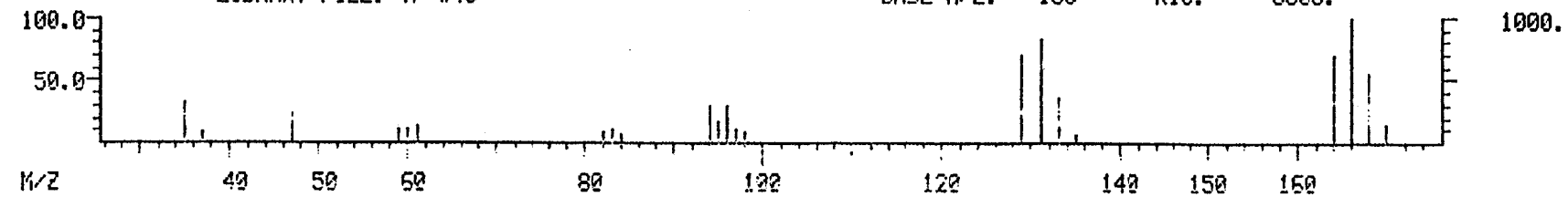
BASE M/Z: 166 RIC: 5864.

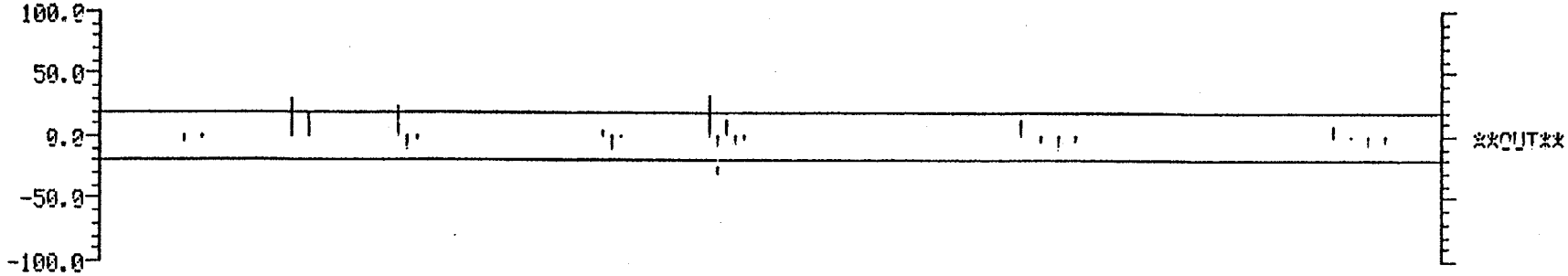


ENHANCED DATA: AF2081DL #2374 BASE M/Z: 166 RIC: 5815.



LIBRARY FILE: TP #43 BASE M/Z: 166 RIC: 6608.





QA/QC REPORT

SAMPLE NAME: af2081d1
INJECT TIME: 19:29:55
DATE: Tue May 09 1995
METHOD: polar3.MPT
NAMELIST: dcg.nam
MANIFOLD POSITION: 7

PRESSURE BEFORE SAMPLING(PSIA) 27.9
AFTER SAMPLING(PSIA) 26.3

NG INT. STD INJECTED IS1(0) IS2(0) IS3(0) IS4(0) IS5(0)

PREHEAT MODULE 1 (Y) MODULE 2 (N) , CRYOFOCUS? (Y) , HEAT SAMPLE? (N)

CONDITIONS:

DURING CONCENTRATION	MAX TEMP	FINAL TEMP	TRAP/SEP TIME
M1 Glass Bead Cryotrap	-158	-164(-160)	277
M2 Sorbent Packed Cryotrap	-29	-29(-25)	252
Focusing Trap	-190	-200(-190)	150(150)

DESORB/TRANSFER/INJECT	PREHEAT	FINAL TEMP	TIME(secs)
M1 Glass Bead Cryotrap	-9(-10)	22(5)	252
M2 Sorbent Packed Cryotrap	93(100)	224(220)	150(150)
Focusing Trap	-200	76	300(300)

MEDIUM CONC./TRANSFERRED	VOLUME	FLOW(SCCM)	FINAL PSIA
Internal Standard	100(100)	101(100)	21.1
Sample	500(500)	125(125)	23.0
Sweep/Dry Purge	100(100)	100(100)	32.2
Transfer to Packed Col.	45(45)	10(10)	33.2
Packed Column Separation	0(0)	10(50)	33.2

SYSTEM BAKEOUT

	TEMPERATURE	TIME(min.)
M1 Glass Bead Cryotrap	177(160)	5(5)
M2 Sorbent Packed Cryotrap	219(220)	5(5)
Focusing Trap		

REGULATED ZONES	TEMPERATURE
8-PORT VALVE	147(150)
GC TRANSFER LINE	110(110)
MANIFOLD TRANSFER LINE	108(110)
16-POSITION SELECT VALVE	98(100)
SAMPLE CONTAINER	AMBIENT

Client: OHM
Workorder: 3512

TO-14 Volatile Organics

Client Sample ID: SVEW-4

Lab Sample ID: AF2082DL

Analysis Date: 05/09/95

Dilution Factor: 7186

CAS #	Compound	Result ppb(V/V)	Detection Limit
75-71-8	Dichlorodifluoromethane	ND	1400
76-14-2	1,2-Dichlorotetrafluoroethane	ND	1400
74-87-3	Chloromethane	ND	1400
75-01-4	Vinyl Chloride	ND	1400
74-83-9	Bromomethane	ND	1400
75-00-3	Chloroethane	ND	1400
75-69-4	Trichlorofluoromethane	ND	1400
75-35-4	1,1-Dichloroethene	ND	1400
76-13-1	1,1,2-Trichlorotrifluoroethane	ND	2200
75-09-2	Methylene Chloride	ND	2200
75-34-3	1,1-Dichloroethane	ND	1400
156-59-2	cis-1,2-Dichloroethene	ND	1400
67-66-3	Chloroform	ND	1400
71-55-6	1,1,1-Trichloroethane	ND	1400
56-23-5	Carbon Tetrachloride	ND	1400
71-43-2	Benzene	ND	1400
107-06-2	1,2-Dichloroethane	ND	1400
79-01-6	Trichloroethene	ND	1400
78-87-5	1,2-Dichloropropane	ND	1400
10061-01-5	cis-1,3-Dichloropropene	ND	1400
108-88-3	Toluene	ND	1400
10061-02-6	trans-1,3-Dichloropropene	ND	1400
79-00-5	1,1,2-Trichloroethane	ND	1400
127-18-4	Tetrachloroethene	32000	1400
106-93-4	1,2-Dibromoethane	ND	1400
108-90-7	Chlorobenzene	ND	1400
100-41-4	Ethylbenzene	ND	1400
136777-61-2	m/p-Xylene	3600	1400
95-47-6	o-Xylene	3300	1400
100-42-5	Styrene	ND	1400
79-34-5	1,1,2,2-Tetrachloroethane	ND	1400
108-67-8	1,3,5-Trimethylbenzene	ND	1400
95-63-6	1,2,4-Trimethylbenzene	ND	1400
541-73-1	1,3-Dichlorobenzene	ND	1400

Client: OHM
Workorder: 3512

TO-14 Volatile Organics

Client Sample ID: SVEW-4

Lab Sample ID: AF2082DL

Analysis Date: 05/09/95

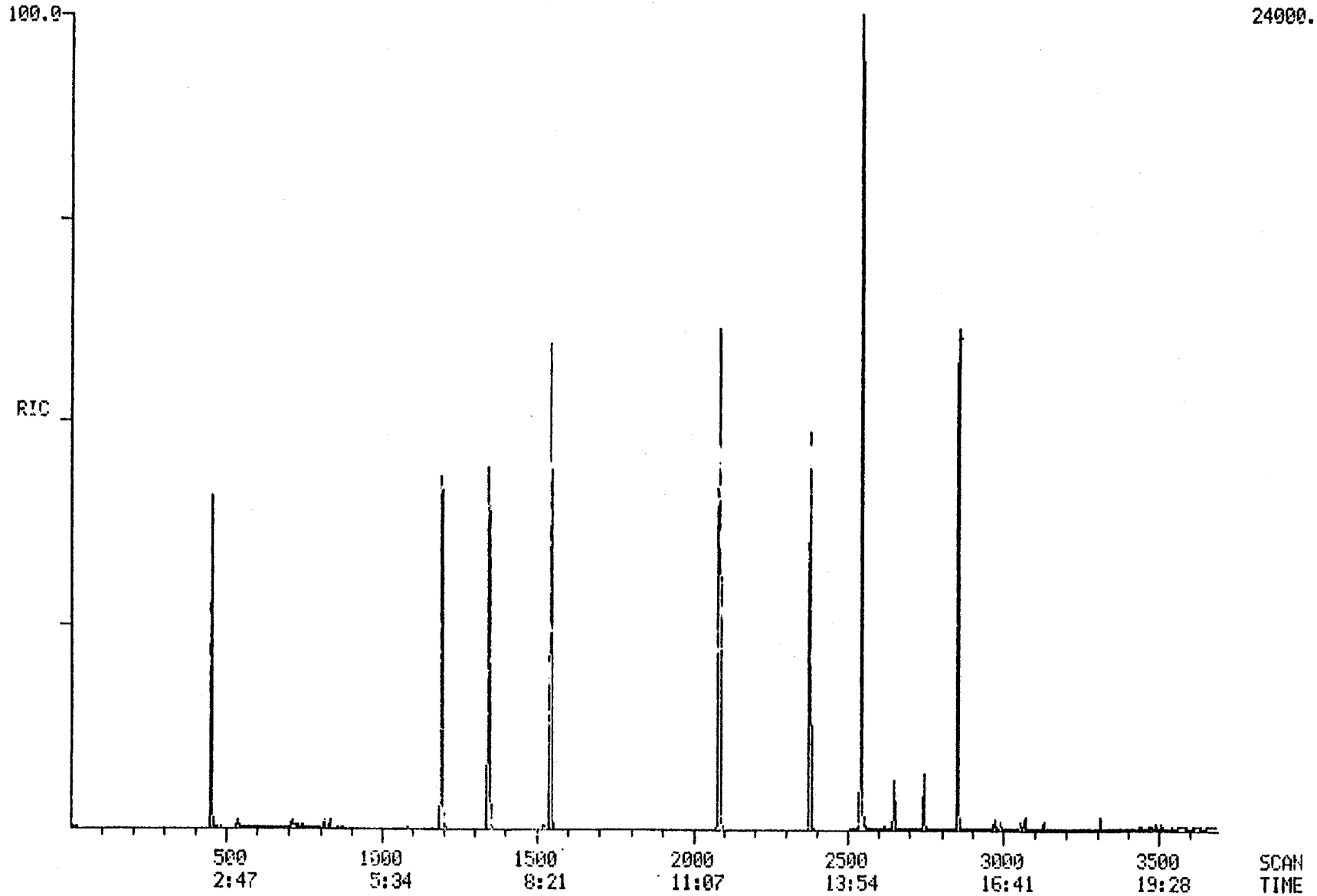
Dilution Factor: 7186

CAS #	Compound	Result ppb(V/V)	Detection Limit
106-46-7	1,4-Dichlorobenzene	ND	1400
95-50-1	1,2-Dichlorobenzene	ND	1400
100-44-7	Benzyl Chloride	ND	1400
120-82-1	1,2,4-Trichlorobenzene	ND	1400
87-68-3	Hexachlorobutadiene	ND	1400

Surrogate Compound	% Recovery
D4-1,2-Dichloroethane	101
D8-Toluene	105
Bromofluorobenzene	99

A0000036

RIC DATA: AF2082DL #1 SCANS 1 TO 3686
05/09/95 21:34:00 CALI: AF2082DL #3
SAMPLE: M WG3512 #23262 SVEN-4 500ML
CONDS.: GC DESC=MB SCAN=DN DB-5 60M 45CM/SEC INST M METH TO-14
RANGE: G 1,3686 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3



Quantitation Report File: AF2082DL

Data: AF2082DL.TI
05/09/95 21:34:00
Sample: M WO3512 #93262 SVEW-4 500ML
Conds.: GC DESC=MB SCAN=DN DB-5 60M 45CM/SEC INST M METH TO-14
Formula: POS8 Instrument: FINN Weight: 0.000
Submitted by: OHM Analyst: DCG/079 Acct. No.:

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name
1	BROMOCHLOROMETHANE
2	1,4-DIFLUOROBENZENE
3	D5-CHLOROBENZENE
4	D4-1,2-DICHLOROETHANE
5	D8-TOLUENE
6	BROMOFLUOROBENZENE
7	TETRACHLOROETHENE
8	M-XYLENE (FOR P-)
9	O-XYLENE

VK 5/10/95

Scan	Time	Area(Hght)	Amount	Name
1194	6:38	6734.	8.000 PPBV	BROMOCHLOROMETHANE
1543	8:35	34925.	8.000 PPBV	1,4-DIFLUOROBENZENE
2545	14:09	34928.	8.000 PPBV	D5-CHLOROBENZENE
1345	7:29	9253.	8.044 PPBV	D4-1,2-DICHLOROETHANE
2086	11:36	31708.	8.375 PPBV	D8-TOLUENE
2856	15:53	13962.	3.974 PPBV	BROMOFLUOROBENZENE
2377	13:13	6111.	4.405 PPBV	TETRACHLOROETHENE
2648	14:44	3020.	0.507 PPBV	M-XYLENE (FOR P-)
2746	15:16	2687.	0.464 PPBV	O-XYLENE

DCG 5-10-95

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(A)	Ratio
1	6:40	1.00	1.000	1.00	8.00	8.00	1.000	1.000	1.00
2	8:37	1.00	1.000	1.00	8.00	8.00	1.000	1.000	1.00
3	14:10	1.00	1.000	1.00	8.00	8.00	1.000	1.000	1.00
4	7:31	1.00	0.873	1.00	8.04	8.00	0.265	0.263	1.01
5	11:37	1.00	0.821	1.00	8.37	8.00	0.908	0.867	1.05
6	15:54	1.00	1.122	1.00	3.97	4.00	0.799	0.805	0.99
7	13:14	1.00	0.934	1.00	4.40	10.00	0.140	0.318	0.44
8	14:44	1.00	1.040	1.00	0.51	10.00	0.069	1.366	0.05
9	15:17	1.00	1.079	1.00	0.46	10.00	0.062	1.326	0.05

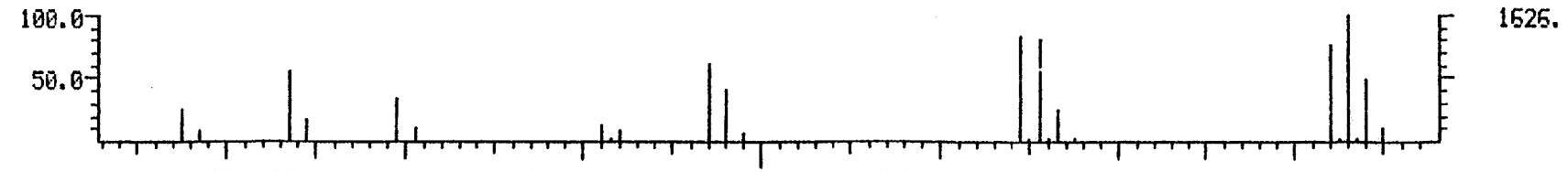
A0000038

DATA FILE: AF2082DL #2377
TARGET COMPOUND COMPARISON
COMPOUND: TETRACHLOROETHENE

LIBRARY FILE: TP #43
CALI: AF2082DL #3

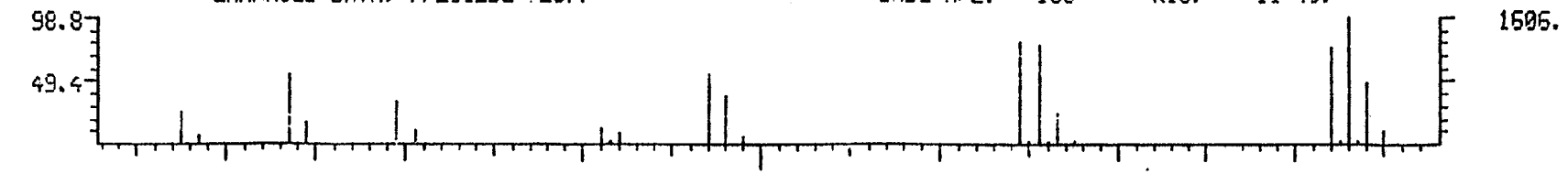
RAW DATA: AF2082DL #2377
05/09/95 21:34

BASE M/Z: 166 RIC: 11664.



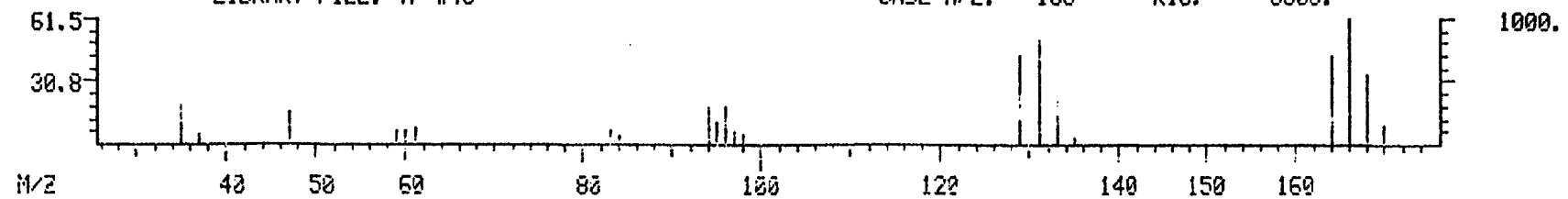
ENHANCED DATA: AF2082DL #2377

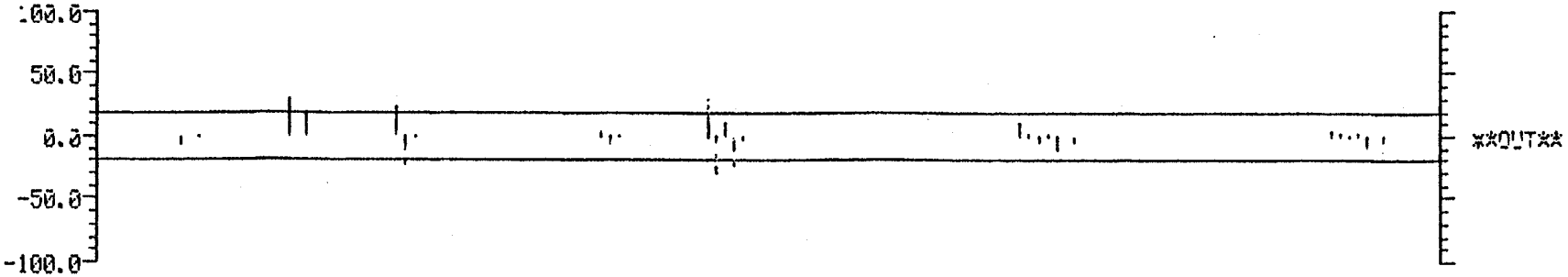
BASE M/Z: 166 RIC: 11440.



LIBRARY FILE: TP #43

BASE M/Z: 166 RIC: 6608.

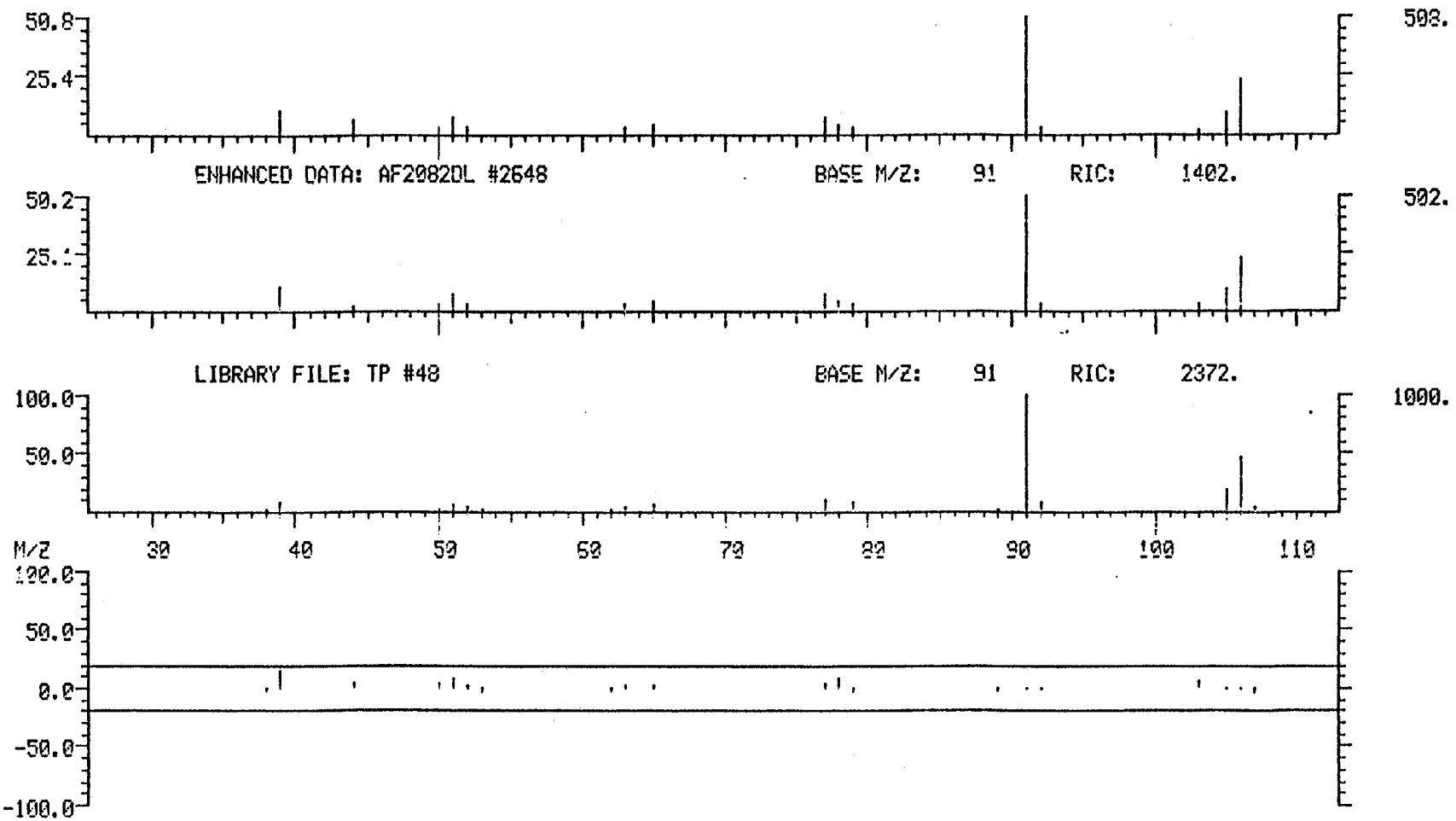




A0000039

DATA FILE: AF2082DL #2648 LIBRARY FILE: TP #48
TARGET COMPOUND COMPARISON CALI: AF2082DL #3
COMPOUND: M-XYLENE (FOR P-)

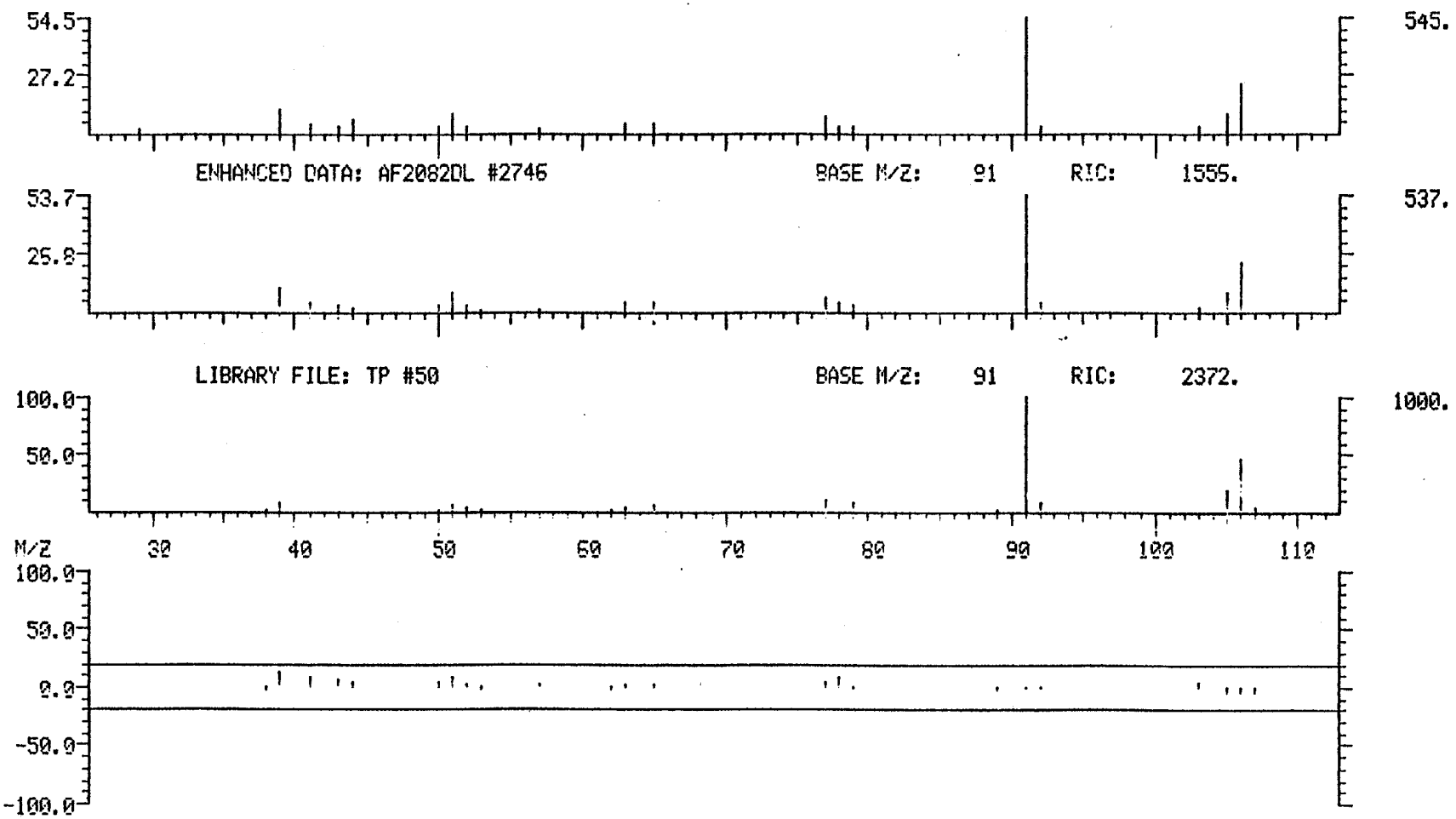
RAW DATA: AF2082DL #2648 BASE M/Z: 91 RIC: 1444.
05/09/95 21:34



A0000040

DATA FILE: AF2082DL #2746 LIBRARY FILE: TP #50
TARGET COMPOUND COMPARISON CALI: AF2082DL #3
COMPOUND: O-XYLENE

RAW DATA: AF2082DL #2746 BASE M/Z: 91 RIC: 1646.
05/09/95 21:34



QA/QC REPORT

SAMPLE NAME: af2082d1
INJECT TIME: 19:58:52
DATE: Tue May 09 1995
METHOD: polar3.MPT
NAMELIST: dcg.nam
MANIFOLD POSITION: 8

PRESSURE BEFORE SAMPLING(PSIA) 27.8
AFTER SAMPLING(PSIA) 26.2

NG INT. STD INJECTED IS1(0) IS2(0) IS3(0) IS4(0) IS5(0)

PREHEAT MODULE 1 (Y) MODULE 2 (N) . CRYOFOCUS? (Y) . HEAT SAMPLE? (N)

CONDITIONS:

DURING CONCENTRATION	MAX TEMP	FINAL TEMP	TRAP/SEP TIME
M1 Glass Bead Cryotrap	-152	-161(-160)	277
M2 Sorbent Packed Cryotrap	-28	-31(-25)	251
Focusing Trap	-200	-200(-190)	150(150)

DESORB/TRANSFER/INJECT	PREHEAT	FINAL TEMP	TIME(secs)
M1 Glass Bead Cryotrap	-4(-10)	15(5)	251
M2 Sorbent Packed Cryotrap	93(100)	220(220)	150(150)
Focusing Trap	-200	76	300(300)

MEDIUM CONC./TRANSFERRED	VOLUME	FLOW(SCCM)	FINAL PSIA
Internal Standard	100(100)	100(100)	20.9
Sample	500(500)	126(125)	21.5
Sweep/Dry Purge	100(100)	100(100)	32.3
Transfer to Packed Col.	45(45)	10(10)	33.3
Packed Column Separation	0(0)	10(50)	33.3

SYSTEM BAKEOUT

	TEMPERATURE	TIME(min.)
M1 Glass Bead Cryotrap	170(160)	5(5)
M2 Sorbent Packed Cryotrap	223(220)	5(5)
Focusing Trap		

REGULATED ZONES	TEMPERATURE
8-PORT VALVE	148(150)
GC TRANSFER LINE	109(110)
MANIFOLD TRANSFER LINE	108(110)
16-POSITION SELECT VALVE	100(100)
SAMPLE CONTAINER	AMBIENT

Client: OHM
Workorder: 3512

TO-14 Volatile Organics

Client Sample ID: SVEW-5

Lab Sample ID: AF2083DL

Analysis Date: 05/09/95

Dilution Factor: 4111

CAS #	Compound	Result ppb(V/V)	Detection Limit
75-71-8	Dichlorodifluoromethane	ND	820
76-14-2	1,2-Dichlorotetrafluoroethane	ND	820
74-87-3	Chloromethane	ND	820
75-01-4	Vinyl Chloride	ND	820
74-83-9	Bromomethane	ND	820
75-00-3	Chloroethane	ND	820
75-69-4	Trichlorofluoromethane	ND	820
75-35-4	1,1-Dichloroethene	ND	820
76-13-1	1,1,2-Trichlorotrifluoroethane	ND	1200
75-09-2	Methylene Chloride	ND	1200
75-34-3	1,1-Dichloroethane	ND	820
156-59-2	cis-1,2-Dichloroethene	ND	820
67-66-3	Chloroform	ND	820
71-55-6	1,1,1-Trichloroethane	ND	820
56-23-5	Carbon Tetrachloride	ND	820
71-43-2	Benzene	ND	820
107-06-2	1,2-Dichloroethane	ND	820
79-01-6	Trichloroethene	ND	820
78-87-5	1,2-Dichloropropane	ND	820
10061-01-5	cis-1,3-Dichloropropene	ND	820
108-88-3	Toluene	ND	820
10061-02-6	trans-1,3-Dichloropropene	ND	820
79-00-5	1,1,2-Trichloroethane	ND	820
127-18-4	Tetrachloroethene	4600	820
106-93-4	1,2-Dibromoethane	ND	820
108-90-7	Chlorobenzene	ND	820
100-41-4	Ethylbenzene	ND	820
136777-61-2	m/p-Xylene	ND	820
95-47-6	o-Xylene	ND	820
100-42-5	Styrene	ND	820
79-34-5	1,1,2,2-Tetrachloroethane	ND	820
108-67-8	1,3,5-Trimethylbenzene	ND	820
95-63-6	1,2,4-Trimethylbenzene	ND	820
541-73-1	1,3-Dichlorobenzene	ND	820

Client: OHM
Workorder: 3512

TO-14 Volatile Organics

Client Sample ID: SVEW-5

Lab Sample ID: AF2083DL

Analysis Date: 05/09/95

Dilution Factor: 4111

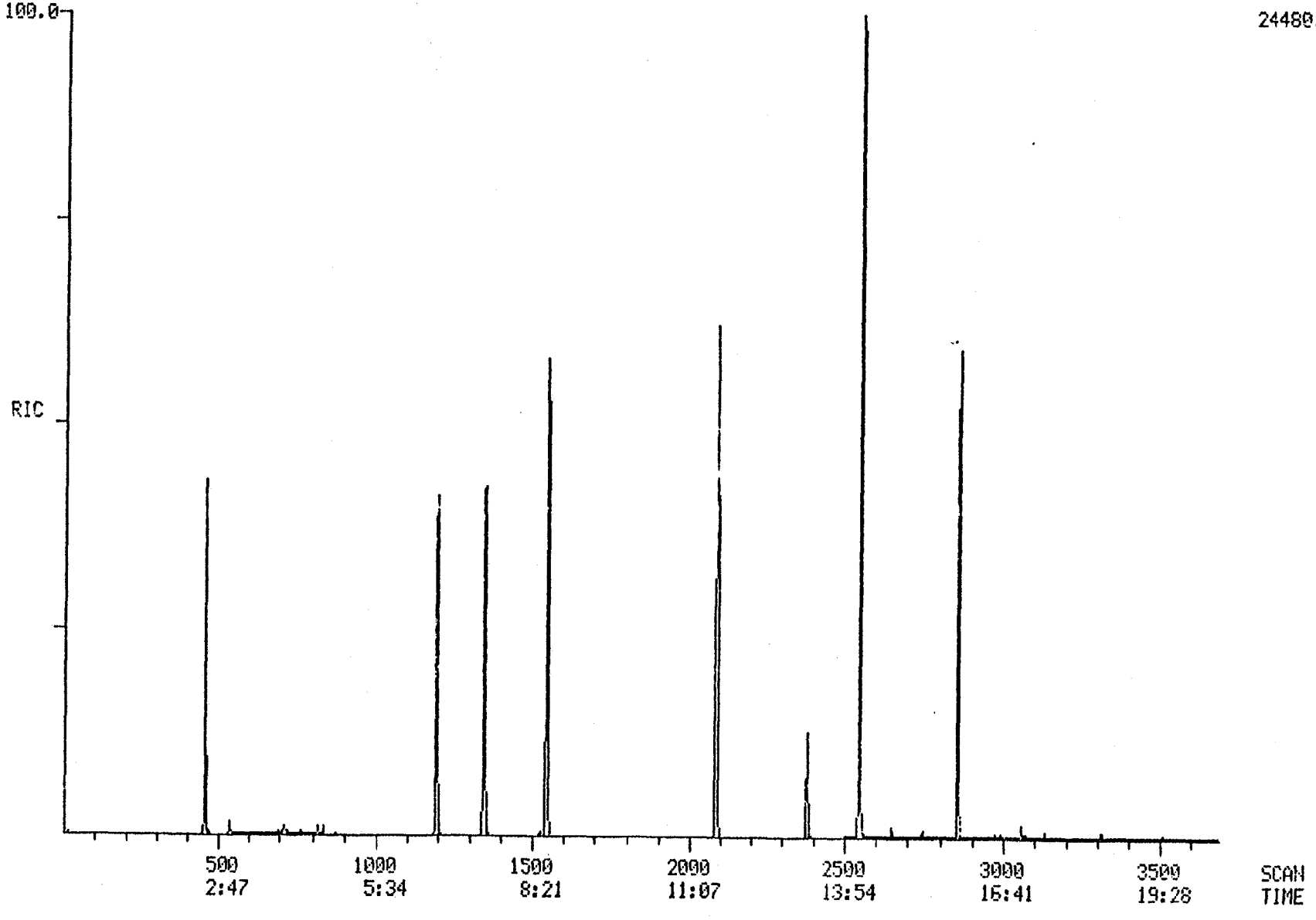
CAS #	Compound	Result ppb(V/V)	Detection Limit
106-46-7	1,4-Dichlorobenzene	ND	820
95-50-1	1,2-Dichlorobenzene	ND	820
100-44-7	Benzyl Chloride	ND	820
120-82-1	1,2,4-Trichlorobenzene	ND	820
87-68-3	Hexachlorobutadiene	ND	820

Surrogate Compound	% Recovery
D4-1,2-Dichloroethane	101
D8-Toluene	106
Bromofluorobenzene	101

A0000044

RIC
05/09/95 22:04:00
SAMPLE: M WC3512 #02303 SVEW-5 500ML
CONDS.: GC DESC=MB SCAN=DN DB-5 60M 45CM/SEC INST M METH TO-14
RANGE: G 1,3686 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: AF2083DL #1
CALI: AF2083DL #3
SCANS 1 TO 3686



Quantitation Report File: AF2083DL

Data: AF2083DL.TI
05/09/95 22:04:00
Sample: M W03512 #02303 SVEW-5 500ML
Conds.: GC DESC=MB SCAN=DN DB-5 60M 45CM/SEC INST M METH TO-14
Formula: POS9 Instrument: FINN Weight: 0.000
Submitted by: OHM Analyst: DCG/079 Acct. No.:

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name
1	BROMOCHLOROMETHANE
2	1,4-DIFLUOROBENZENE
3	D5-CHLOROBENZENE
4	D4-1,2-DICHLOROETHANE
5	D8-TOLUENE
6	BROMOFLUOROBENZENE
7	TETRACHLOROETHENE

VK 5/10/95

Scan	Time	Area(Hght)	Amount	Name
1195	6:39	6657.	8.000 PPBV	BROMOCHLOROMETHANE
1544	8:35	34811.	8.000 PPBV	1,4-DIFLUOROBENZENE
2545	14:09	35598.	8.000 PPBV	D5-CHLOROBENZENE
1346	7:29	9252.	8.069 PPBV	D4-1,2-DICHLOROETHANE
2087	11:36	32596.	8.447 PPBV	D8-TOLUENE
2856	15:53	14438.	4.032 PPBV	BROMOFLUOROBENZENE
2378	13:14	1579.	1.117 PPBV	TETRACHLOROETHENE

DCG 5-10-95

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(A)	Ratio
1	6:40	1.00	1.000	1.00	8.00	8.00	1.000	1.000	1.00
2	8:37	1.00	1.000	1.00	8.00	8.00	1.000	1.000	1.00
3	14:10	1.00	1.000	1.00	8.00	8.00	1.000	1.000	1.00
4	7:31	1.00	0.873	1.00	8.07	8.00	0.266	0.263	1.01
5	11:37	1.00	0.821	1.00	8.45	8.00	0.916	0.867	1.06
6	15:54	1.00	1.122	1.00	4.03	4.00	0.811	0.805	1.01
7	13:14	1.00	0.934	1.00	1.12	10.00	0.035	0.318	0.11

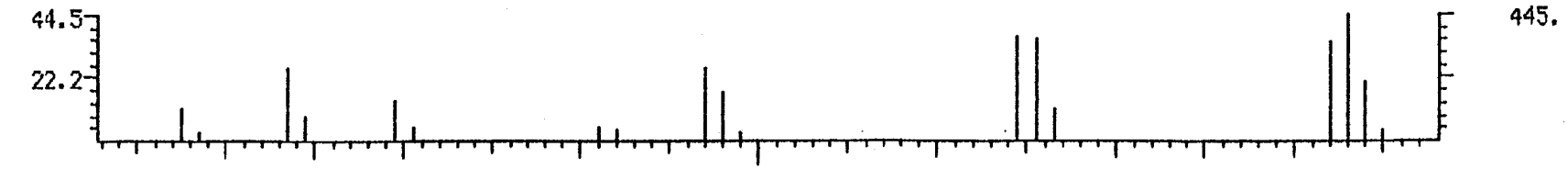
A0000046

DATA FILE: AF2083DL #2378
TARGET COMPOUND COMPARISON
COMPOUND: TETRACHLOROETHENE

LIBRARY FILE: TP #43
CALI: AF2083DL #3

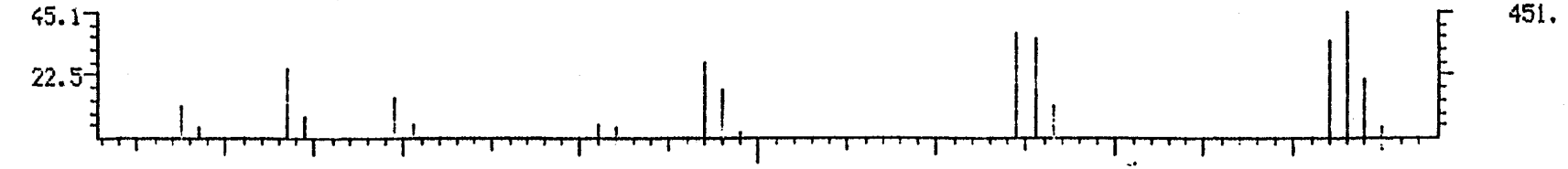
RAW DATA: AF2083DL #2378
05/09/95 22:04

BASE M/Z: 166 RIC: 3100.



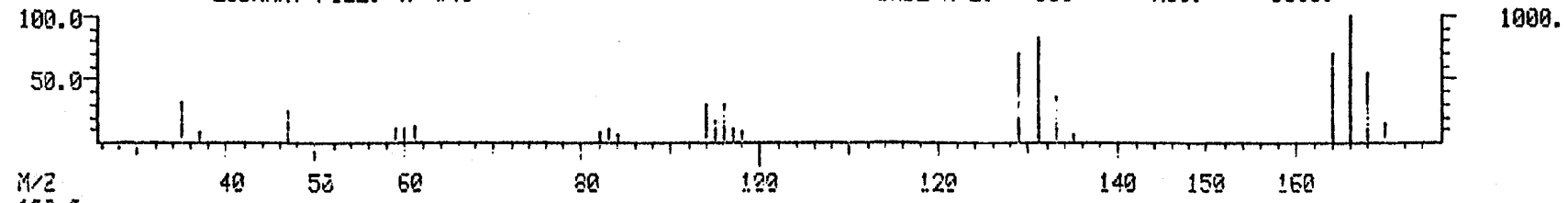
ENHANCED DATA: AF2083DL #2378

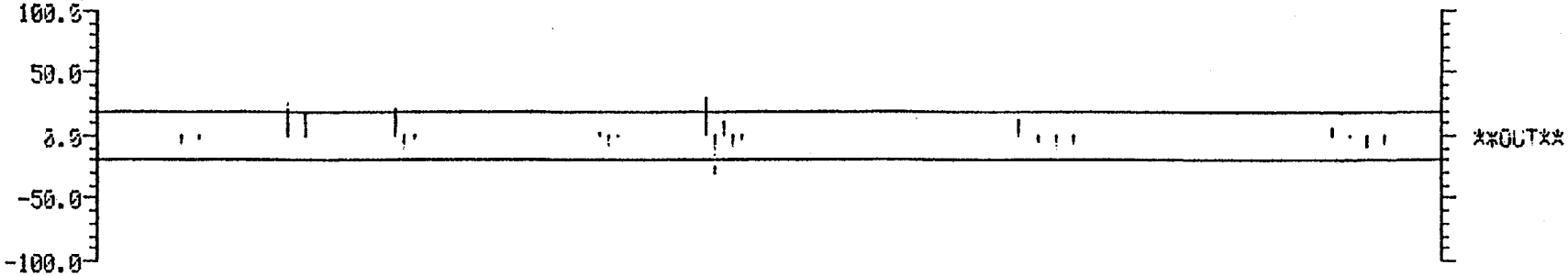
BASE M/Z: 166 RIC: 3112.



LIBRARY FILE: TP #43

BASE M/Z: 166 RIC: 6608.





QA/QC REPORT

SAMPLE NAME: af2083d1
INJECT TIME: 20:28:07
DATE: Tue May 09 1995
METHOD: polar3.MPT
NAMELIST: dcg.nam
MANIFOLD POSITION: 9

PRESSURE BEFORE SAMPLING(PSIA) 27.8
AFTER SAMPLING(PSIA) 26.3

NG INT. STD INJECTED IS1(0) IS2(0) IS3(0) IS4(0) IS5(0)

PREHEAT MODULE 1 (Y) MODULE 2 (N) . CRYOFOCUS? (Y) . HEAT SAMPLE? (N)

CONDITIONS:

DURING CONCENTRATION	MAX TEMP	FINAL TEMP	TRAP/SEP TIME
M1 Glass Bead Cryotrap	-156	-162(-160)	277
M2 Sorbent Packed Cryotrap	-28	-29(-25)	252
Focusing Trap	-194	-200(-190)	150(150)

DESORB/TRANSFER/INJECT	PREHEAT	FINAL TEMP	TIME(secs)
M1 Glass Bead Cryotrap	-8(-10)	17(5)	252
M2 Sorbent Packed Cryotrap	93(100)	221(220)	150(150)
Focusing Trap	-200	76	300(300)

MEDIUM CONC./TRANSFERRED	VOLUME	FLOW(SCCM)	FINAL PSIA
Internal Standard	100(100)	100(100)	20.8
Sample	500(500)	125(125)	23.7
Sweep/Dry Purge	101(100)	101(100)	32.6
Transfer to Packed Col.	45(45)	10(10)	33.3
Packed Column Separation	0(0)	10(50)	33.3

SYSTEM BAKEOUT

	TEMPERATURE	TIME(min.)
M1 Glass Bead Cryotrap	165(160)	5(5)
M2 Sorbent Packed Cryotrap	221(220)	5(5)
Focusing Trap		

REGULATED ZONES	TEMPERATURE
8-PORT VALVE	149(150)
GC TRANSFER LINE	109(110)
MANIFOLD TRANSFER LINE	108(110)
16-POSITION SELECT VALVE	100(100)
SAMPLE CONTAINER	AMBIENT

Client: OHM
Workorder: 3512

TO-14 Volatile Organics

Client Sample ID: SVEW-6

Lab Sample ID: AF2084DL

Analysis Date: 05/09/95

Dilution Factor: 3282

CAS #	Compound	Result ppb(V/V)	Detection Limit
75-71-8	Dichlorodifluoromethane	ND	660
76-14-2	1,2-Dichlorotetrafluoroethane	ND	660
74-87-3	Chloromethane	ND	660
75-01-4	Vinyl Chloride	ND	660
74-83-9	Bromomethane	ND	660
75-00-3	Chloroethane	ND	660
75-69-4	Trichlorofluoromethane	ND	660
75-35-4	1,1-Dichloroethene	ND	660
76-13-1	1,1,2-Trichlorotrifluoroethane	ND	980
75-09-2	Methylene Chloride	ND	980
75-34-3	1,1-Dichloroethane	ND	660
156-59-2	cis-1,2-Dichloroethene	ND	660
67-66-3	Chloroform	ND	660
71-55-6	1,1,1-Trichloroethane	ND	660
56-23-5	Carbon Tetrachloride	ND	660
71-43-2	Benzene	ND	660
107-06-2	1,2-Dichloroethane	ND	660
79-01-6	Trichloroethene	ND	660
78-87-5	1,2-Dichloropropane	ND	660
10061-01-5	cis-1,3-Dichloropropene	ND	660
108-88-3	Toluene	ND	660
10061-02-6	trans-1,3-Dichloropropene	ND	660
79-00-5	1,1,2-Trichloroethane	ND	660
127-18-4	Tetrachloroethene	15000	660
106-93-4	1,2-Dibromoethane	ND	660
108-90-7	Chlorobenzene	ND	660
100-41-4	Ethylbenzene	ND	660
136777-61-2	m/p-Xylene	1900	660
95-47-6	o-Xylene	1700	660
100-42-5	Styrene	ND	660
79-34-5	1,1,2,2-Tetrachloroethane	ND	660
108-67-8	1,3,5-Trimethylbenzene	ND	660
95-63-6	1,2,4-Trimethylbenzene	ND	660
541-73-1	1,3-Dichlorobenzene	ND	660

Client: OHM
Workorder: 3512

TO-14 Volatile Organics

Client Sample ID: SVEW-6

Lab Sample ID: AF2084DL

Analysis Date: 05/09/95

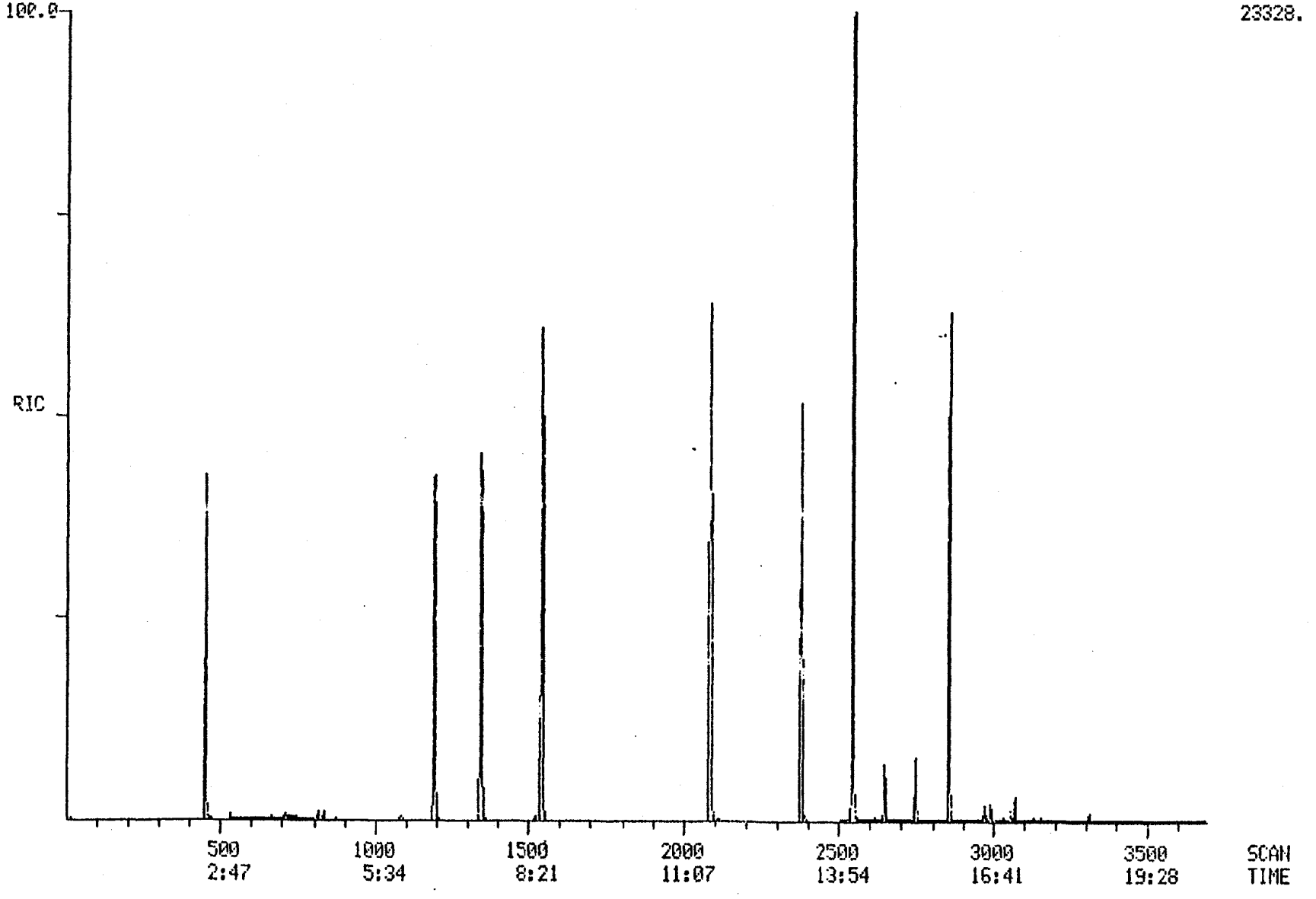
Dilution Factor: 3282

CAS #	Compound	Result ppb(V/V)	Detection Limit
106-46-7	1,4-Dichlorobenzene	ND	660
95-50-1	1,2-Dichlorobenzene	ND	660
100-44-7	Benzyl Chloride	ND	660
120-82-1	1,2,4-Trichlorobenzene	ND	660
87-68-3	Hexachlorobutadiene	ND	660

Surrogate Compound	% Recovery
D4-1,2-Dichloroethane	102
D8-Toluene	107
Bromofluorobenzene	102

A0000050

RIC DATA: AF2084DL #1 SCANS 1 TO 3686
05/09/95 22:33:00 CALI: AF2084DL #3
SAMPLE: M WO3512 #93245 SVEW-6 500ML
CONDS.: GC DESC=MB SCAN=DN DB-5 60M 45CM/SEC INST M METH TO-14
RANGE: G 1,3685 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3



Quantitation Report File: AF2084DL

Data: AF2084DL.ΓI
05/09/95 22:33:00
Sample: M WO3512 #93045 SVEW-6 500ML
Conds.: GC DESC=MB SCAN=DN DB-5 60M 45CM/SEC INST M METH TO-14
Formula: POS10 Instrument: FINN Weight: 0.000
Submitted by: OHM Analyst: DCG/079 Acct. No.:

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name
1	BROMOCHLOROMETHANE
2	1,4-DIFLUOROBENZENE
3	D5-CHLOROBENZENE
4	D4-1,2-DICHLOROETHANE
5	D8-TOLUENE
6	BROMOFLUOROBENZENE
7	TETRACHLOROETHENE
8	M-XYLENE (FOR P-)
9	O-XYLENE

VK 5/10/95

Scan	Time	Area(Hght)	Amount		Name
1194	6:38	6657.	8.000	PPBV	BROMOCHLOROMETHANE
1544	8:35	34015.	8.000	PPBV	1,4-DIFLUOROBENZENE
2545	14:09	34498.	8.000	PPBV	D5-CHLOROBENZENE
1346	7:29	9136.	8.155	PPBV	D4-1,2-DICHLOROETHANE
2087	11:36	32108.	8.586	PPBV	D8-TOLUENE
2857	15:53	14168.	4.083	PPBV	BROMOFLUOROBENZENE
2378	13:14	6284.	4.586	PPBV	TETRACHLOROETHENE
2649	14:44	3323.	0.564	PPBV	M-XYLENE (FOR P-)
2747	15:17	2956.	0.517	PPBV	O-XYLENE

DCG 5-10-95

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(A)	Ratio
1	6:40	1.00	1.000	1.00	8.00	8.00	1.000	1.000	1.00
2	8:37	1.00	1.000	1.00	8.00	8.00	1.000	1.000	1.00
3	14:10	1.00	1.000	1.00	8.00	8.00	1.000	1.000	1.00
4	7:31	1.00	0.873	1.00	8.15	8.00	0.269	0.263	1.02
5	11:37	1.00	0.821	1.00	8.59	8.00	0.931	0.867	1.07
6	15:54	1.00	1.122	1.00	4.08	4.00	0.821	0.805	1.02
7	13:14	1.00	0.934	1.00	4.59	10.00	0.146	0.318	0.46
8	14:44	1.00	1.040	1.00	0.56	10.00	0.077	1.366	0.06
9	15:17	1.00	1.079	1.00	0.52	10.00	0.069	1.326	0.05

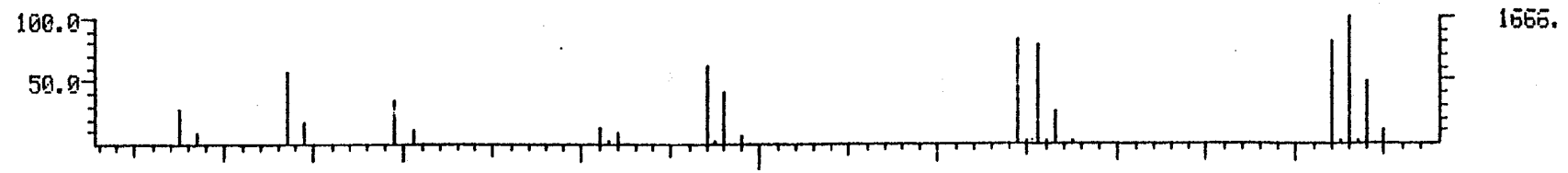
A0000052

DATA FILE: AF2084DL #2378
TARGET COMPOUND COMPARISON
COMPOUND: TETRACHLOROETHENE

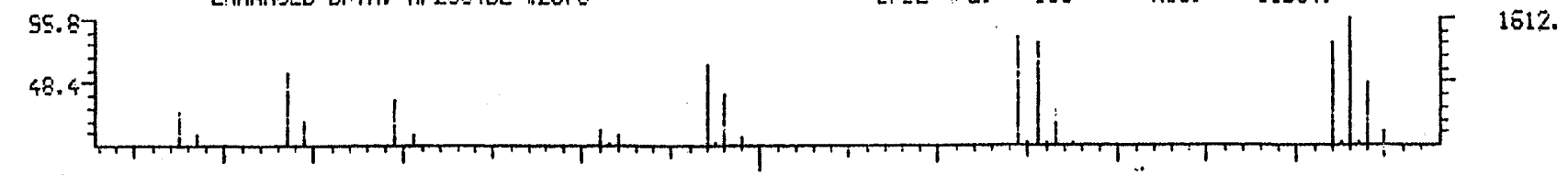
LIBRARY FILE: TP #43
CALI: AF2084DL #3

RAW DATA: AF2084DL #2378
05/09/95 22:33

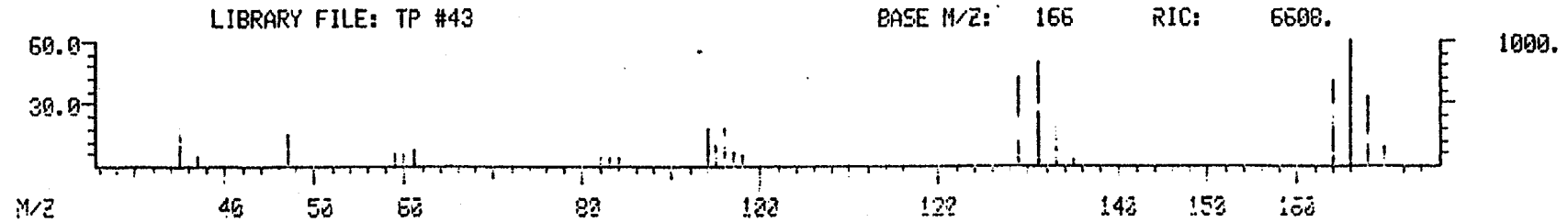
BASE M/Z: 166 RIC: 12080.

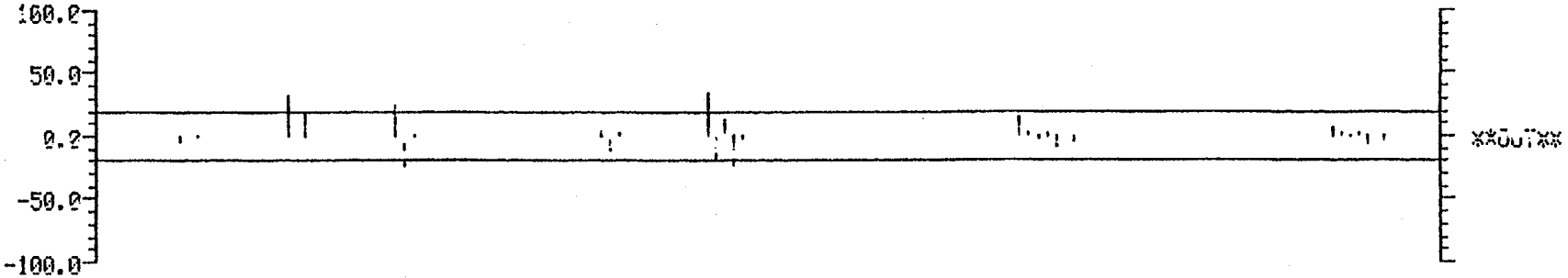


ENHANCED DATA: AF2084DL #2378 BASE M/Z: 166 RIC: 11504.



LIBRARY FILE: TP #43 BASE M/Z: 166 RIC: 6608.

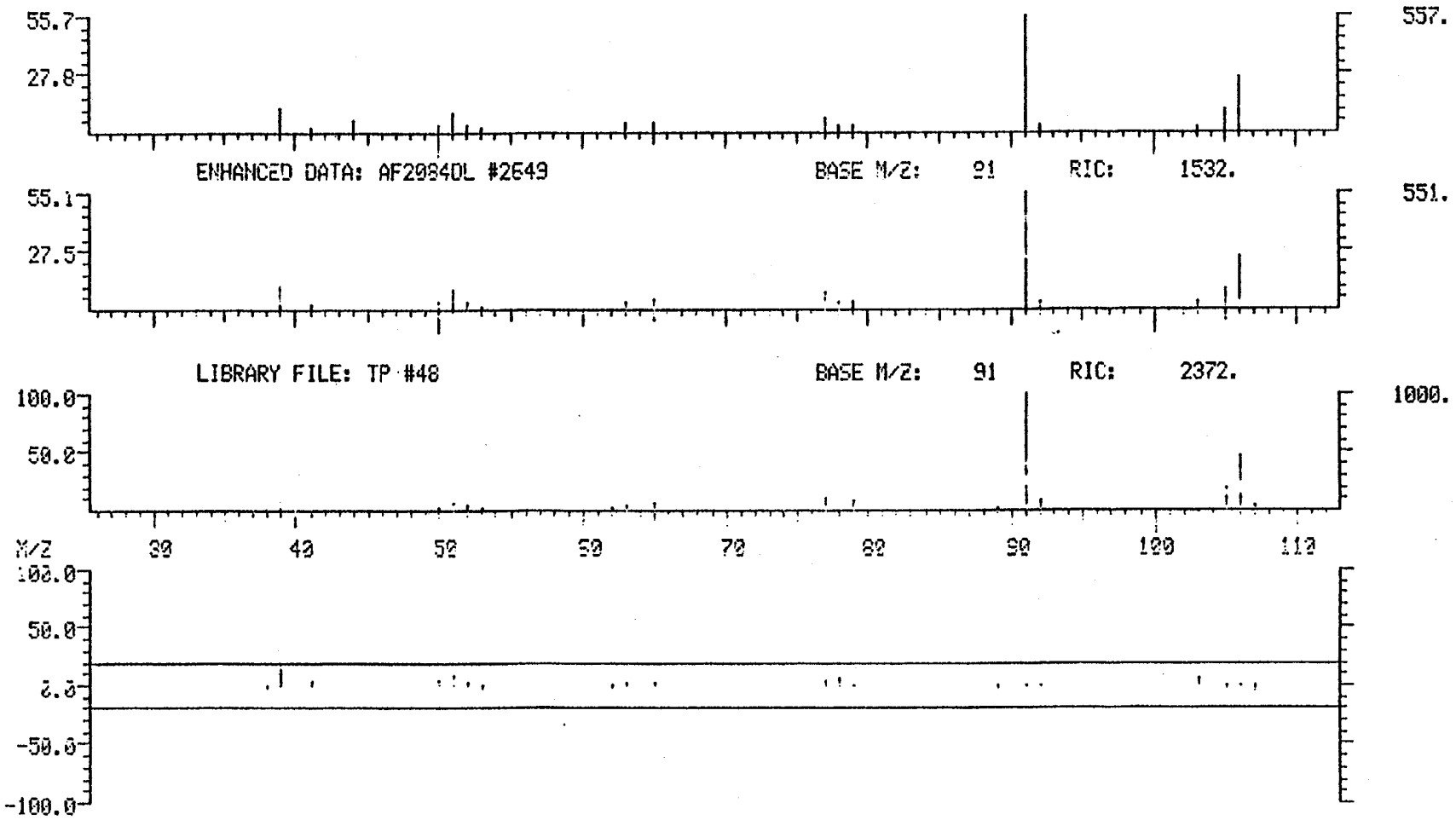




A0000053

DATA FILE: AF2084DL #2649 LIBRARY FILE: TP #48
TARGET COMPOUND COMPARISON CALI: AF2084DL #3
COMPOUND: M-XYLENE (FOR P-)

RAW DATA: AF2084DL #2649 BASE M/Z: 91 RIC: 1516.
05/09/95 22:33



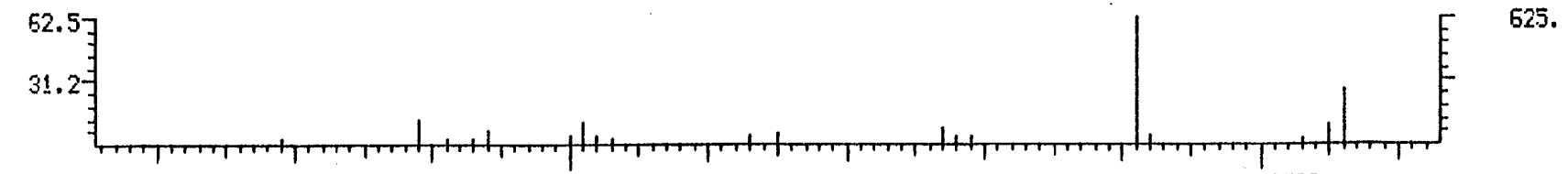
A0000054

DATA FILE: AF2084DL #2747
TARGET COMPOUND COMPARISON
COMPOUND: O-XYLENE

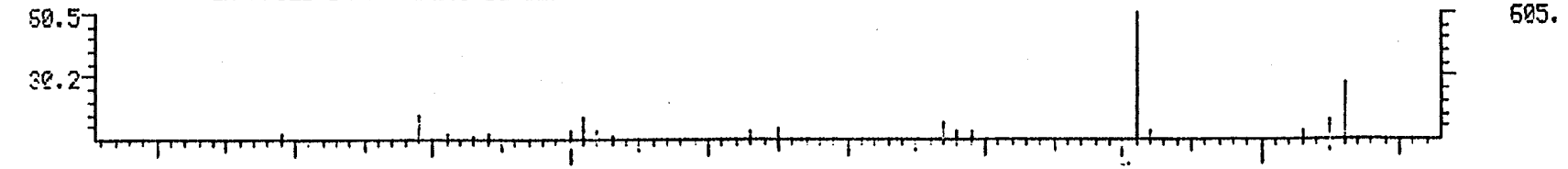
LIBRARY FILE: TP #50
CALI: AF2084DL #3

RAW DATA: AF2084DL #2747
05/09/95 22:33

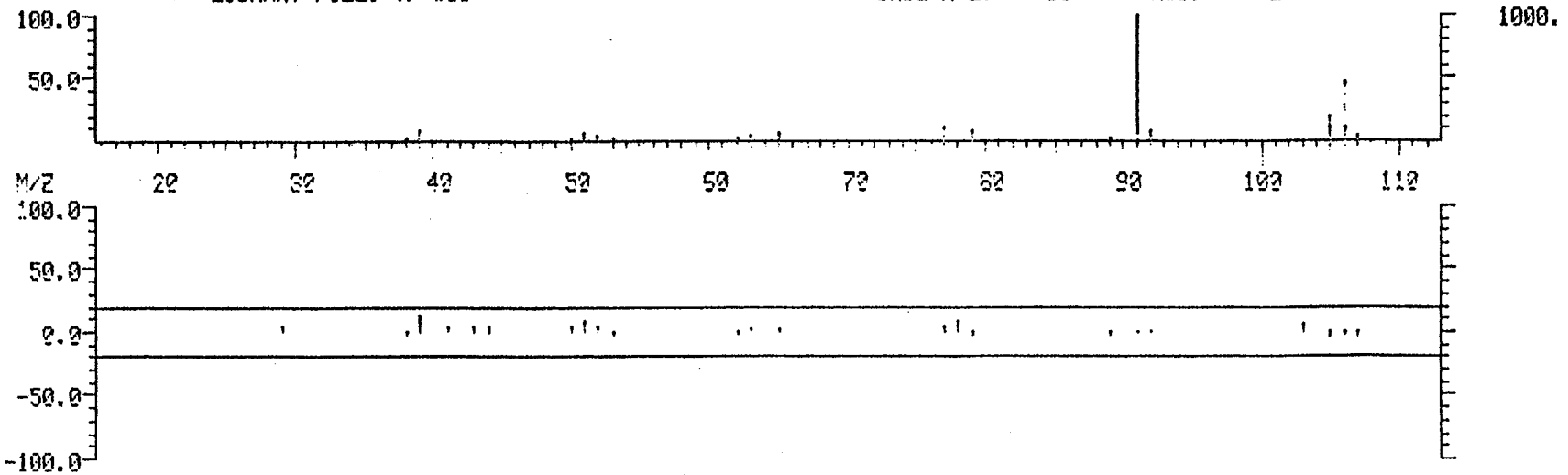
BASE M/Z: 91 RIC: 1800.



ENHANCED DATA: AF2084DL #2747 BASE M/Z: 91 RIC: 1732.



LIBRARY FILE: TP #50 BASE M/Z: 91 RIC: 2372.



QA/QC REPORT

SAMPLE NAME: af2084d1
INJECT TIME: 20:57:18
DATE: Tue May 09 1995
METHOD: polar3.MPT
NAMELIST: dcg.nam
MANIFOLD POSITION: 10

VK 5/10/95

PRESSURE BEFORE SAMPLING(PSIA) 28.2
AFTER SAMPLING(PSIA) . 26.7

NG INT. STD INJECTED IS1(0) IS2(0) IS3(0) IS4(0) IS5(0)

PREHEAT MODULE 1 (Y) MODULE 2 (N) . CRYOFOCUS? (Y) . HEAT SAMPLE? (N)

CONDITIONS:

DURING CONCENTRATION	MAX TEMP	FINAL TEMP	TRAP/SEP TIME
M1 Glass Bead Cryotrap	-150	-164(-160)	277
M2 Sorbent Packed Cryotrap	-29	-29(-25)	251
Focusing Trap	-196	-200(-190)	150(150)

DESORB/TRANSFER/INJECT	PREHEAT	FINAL TEMP	TIME(secs)
M1 Glass Bead Cryotrap	-8(-10)	11(5)	251
M2 Sorbent Packed Cryotrap	92(100)	220(220)	150(150)
Focusing Trap	-200	76	300(300)

MEDIUM CONC./TRANSFERRED	VOLUME	FLOW(SCCM)	FINAL PSIA
Internal Standard	100(100)	99(100)	20.7
Sample	500(500)	125(125)	23.6
Sweep/Dry Purge	100(100)	100(100)	32.6
Transfer to Packed Col.	45(45)	10(10)	33.3
Packed Column Separation	0(0)	10(50)	33.3

SYSTEM BAKEOUT

	TEMPERATURE	TIME(min.)
M1 Glass Bead Cryotrap	170(160)	5(5)
M2 Sorbent Packed Cryotrap	219(220)	5(5)
Focusing Trap		

REGULATED ZONES	TEMPERATURE
8-PORT VALVE	149(150)
GC TRANSFER LINE	111(110)
MANIFOLD TRANSFER LINE	109(110)
16-POSITION SELECT VALVE	100(100)
SAMPLE CONTAINER	AMBIENT

Client: OHM
Workorder: 3512

TO-14 Volatile Organics

Client Sample ID: SVEW-7

Lab Sample ID: AF2085DL

Analysis Date: 05/09/95

Dilution Factor: 2753

CAS #	Compound	Result ppb(V/V)	Detection Limit
75-71-8	Dichlorodifluoromethane	ND	550
76-14-2	1,2-Dichlorotetrafluoroethane	ND	550
74-87-3	Chloromethane	ND	550
75-01-4	Vinyl Chloride	ND	550
74-83-9	Bromomethane	ND	550
75-00-3	Chloroethane	ND	550
75-69-4	Trichlorofluoromethane	ND	550
75-35-4	1,1-Dichloroethene	ND	550
76-13-1	1,1,2-Trichlorotrifluoroethane	ND	830
75-09-2	Methylene Chloride	ND	830
75-34-3	1,1-Dichloroethane	ND	550
156-59-2	cis-1,2-Dichloroethene	ND	550
67-66-3	Chloroform	ND	550
71-55-6	1,1,1-Trichloroethane	ND	550
56-23-5	Carbon Tetrachloride	ND	550
71-43-2	Benzene	ND	550
107-06-2	1,2-Dichloroethane	ND	550
79-01-6	Trichloroethene	ND	550
78-87-5	1,2-Dichloropropane	ND	550
10061-01-5	cis-1,3-Dichloropropene	ND	550
108-88-3	Toluene	ND	550
10061-02-6	trans-1,3-Dichloropropene	ND	550
79-00-5	1,1,2-Trichloroethane	ND	550
127-18-4	Tetrachloroethene	80000	550
106-93-4	1,2-Dibromoethane	ND	550
108-90-7	Chlorobenzene	ND	550
100-41-4	Ethylbenzene	610	550
136777-61-2	m/p-Xylene	8600	550
95-47-6	o-Xylene	7400	550
100-42-5	Styrene	ND	550
79-34-5	1,1,2,2-Tetrachloroethane	ND	550
108-67-8	1,3,5-Trimethylbenzene	1500	550
95-63-6	1,2,4-Trimethylbenzene	1800	550
541-73-1	1,3-Dichlorobenzene	ND	550

Client: OHM
Workorder: 3512

TO-14 Volatile Organics

Client Sample ID: SVEW-7

Lab Sample ID: AF2085DL

Analysis Date: 05/09/95

Dilution Factor: 2753

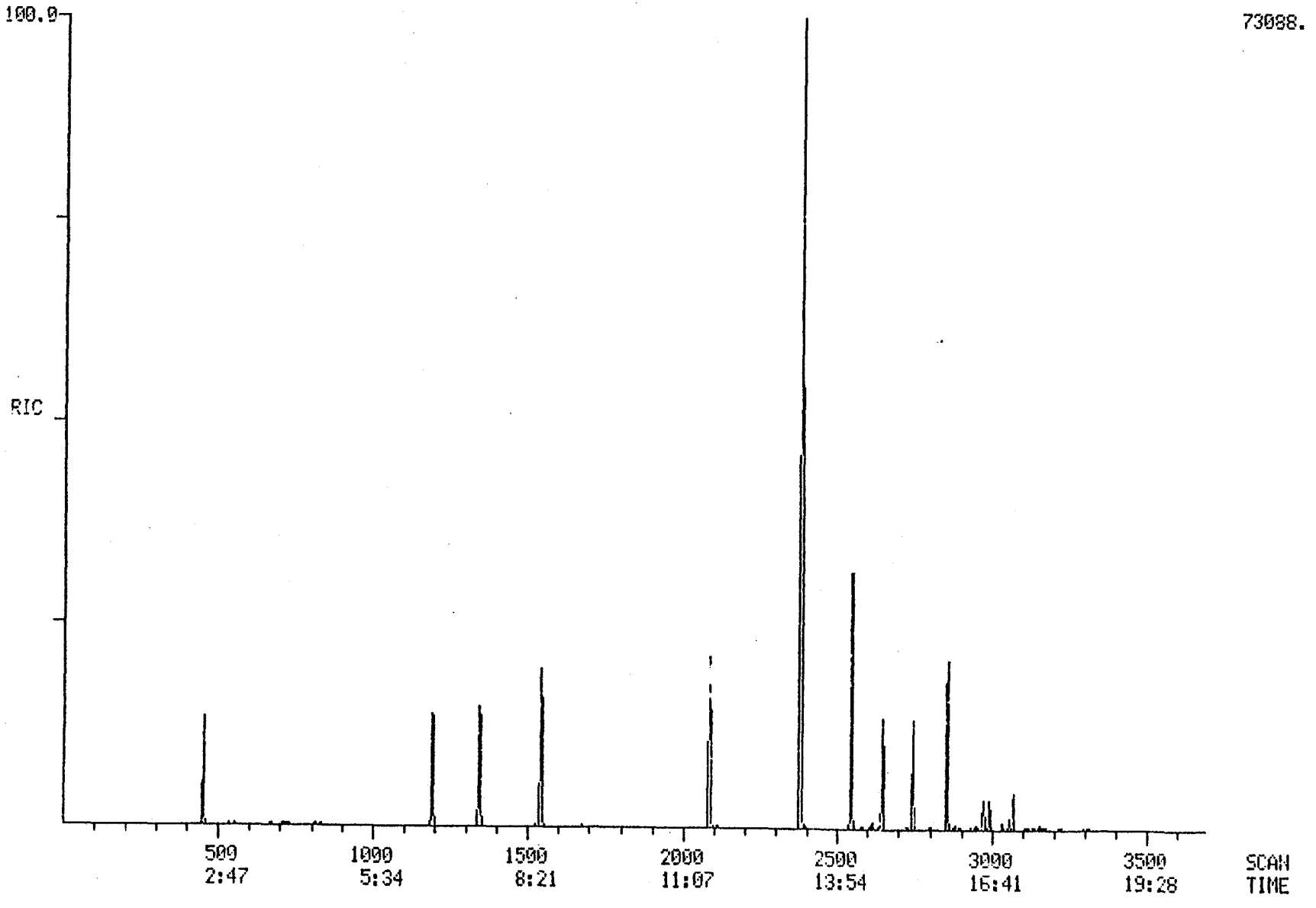
CAS #	Compound	Result ppb(V/V)	Detection Limit
106-46-7	1,4-Dichlorobenzene	ND	550
95-50-1	1,2-Dichlorobenzene	ND	550
100-44-7	Benzyl Chloride	ND	550
120-82-1	1,2,4-Trichlorobenzene	ND	550
87-68-3	Hexachlorobutadiene	ND	550

Surrogate Compound	% Recovery
D4-1,2-Dichloroethane	102
D8-Toluene	110
Bromofluorobenzene	104

A0000058

RIC
05/09/95 23:02:00
SAMPLE: M WO3512 #93148 SVEW-7 500ML
CONDS.: GC DESC=MB SCAN=DN DB-5 60M 45CM/SEC INST M METH TO-14
RANGE: G 1,3685 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: AF2085DL #1 SCANS 1 TO 3686
CALI: AF2085DL #3



Quantitation Report File: AF2085DL

Data: AF2085DL.TI
05/09/95 23:02:00
Sample: M W03512 #93148 SVEW-7 500ML
Conds.: GC DESC=MB SCAN=DN DB-5 60M 45CM/SEC INST M METH TO-14
Formula: POS12 Instrument: FINN Weight: 0.000
Submitted by: OHM Analyst: DCG/079 Acct. No.:

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name
1	BROMOCHLOROMETHANE
2	1,4-DIFLUOROBENZENE
3	D5-CHLOROBENZENE
4	D4-1,2-DICHLOROETHANE
5	D8-TOLUENE
6	BROMOFLUOROBENZENE
7	TETRACHLOROETHENE
8	ETHYLBENZENE
9	M-XYLENE (FOR P-)
10	O-XYLENE
11	1,3,5-TRIMETHYLBENZENE
12	1,2,4-TRIMETHYLBENZENE

VK 5/10/95

Scan	Time	Area(Hght)	Amount	Name
1194	6:38	6607.	8.000 PPBV	BROMOCHLOROMETHANE
1544	8:35	34182.	8.000 PPBV	1,4-DIFLUOROBENZENE
2545	14:09	34562.	8.000 PPBV	D5-CHLOROBENZENE
1346	7:29	9231.	8.199 PPBV	D4-1,2-DICHLOROETHANE
2087	11:36	33091.	8.832 PPBV	D8-TOLUENE
2857	15:53	14477.	4.165 PPBV	BROMOFLUOROBENZENE
2379	13:14	39689.	28.912 PPBV	TETRACHLOROETHENE
2617	14:33	1607.	0.221 PPBV	ETHYLBENZENE
2649	14:44	18356.	3.112 PPBV	M-XYLENE (FOR P-)
2747	15:17	15358.	2.680 PPBV	O-XYLENE
2994	16:39	4188.	0.557 PPBV	1,3,5-TRIMETHYLBENZENE
3072	17:05	5072.	0.663 PPBV	1,2,4-TRIMETHYLBENZENE

DCG 5-10-95

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(A)	Ratio
1	6:40	1.00	1.000	1.00	8.00	8.00	1.000	1.000	1.00
2	8:37	1.00	1.000	1.00	8.00	8.00	1.000	1.000	1.00
3	14:10	1.00	1.000	1.00	8.00	8.00	1.000	1.000	1.00
4	7:31	1.00	0.873	1.00	8.20	8.00	0.270	0.263	1.02
5	11:37	1.00	0.821	1.00	8.83	8.00	0.957	0.867	1.10
6	15:54	1.00	1.122	1.00	4.16	4.00	0.838	0.805	1.04
7	13:14	1.00	0.934	1.00	28.91	10.00	0.919	0.318	2.89
8	14:34	1.00	1.028	1.00	0.22	10.00	0.037	1.685	0.02
9	14:44	1.00	1.040	1.00	3.11	10.00	0.425	1.366	0.31
10	15:17	1.00	1.079	1.00	2.68	10.00	0.355	1.326	0.27
11	16:39	1.00	1.176	1.00	0.56	10.00	0.097	1.740	0.06
12	17:05	1.00	1.207	1.00	0.66	10.00	0.117	1.770	0.07

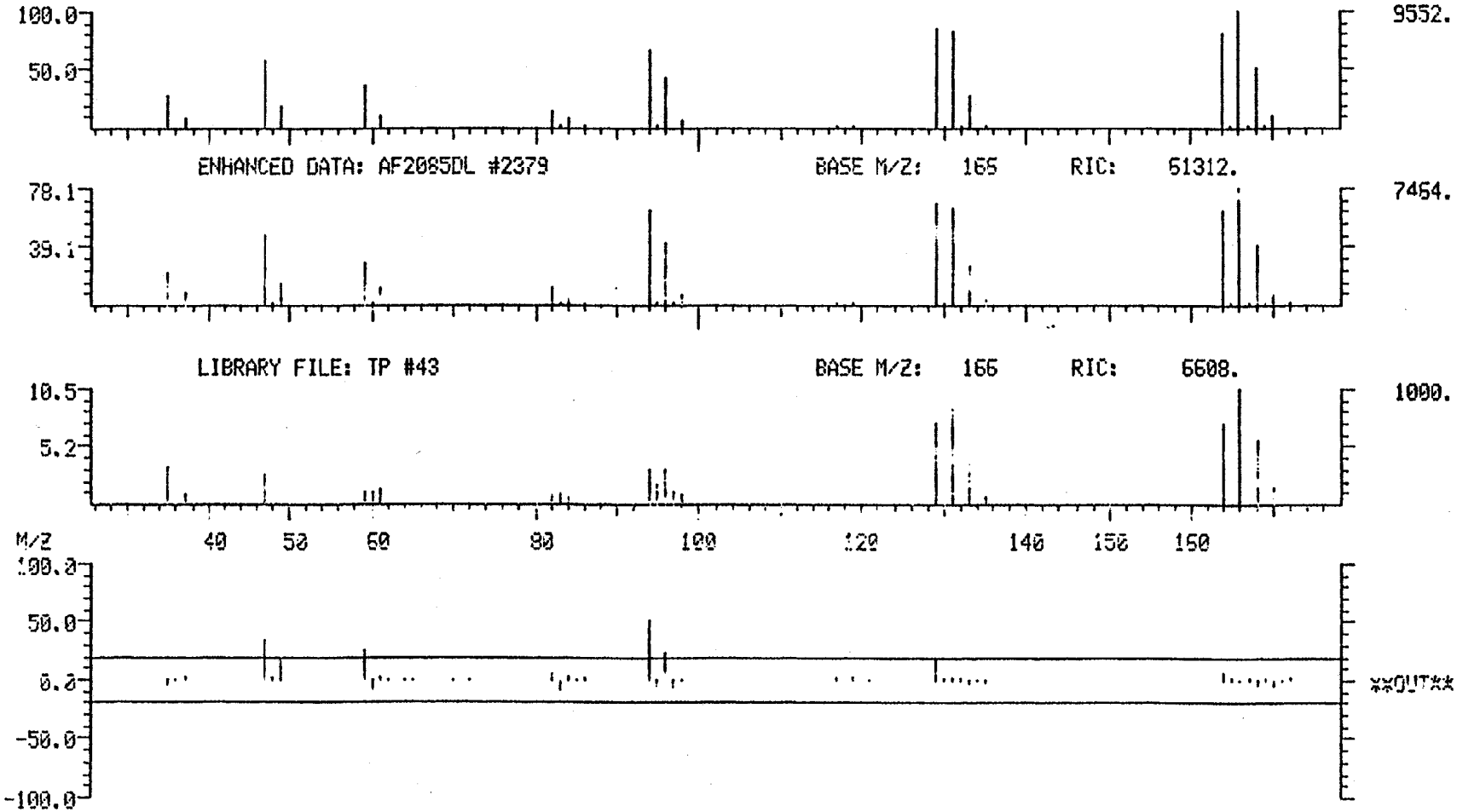
A0000060

DATA FILE: AF2085DL #2379
TARGET COMPOUND COMPARISON
COMPOUND: TETRACHLOROETHENE

LIBRARY FILE: TP #43
CALI: AF2085DL #3

RAW DATA: AF2085DL #2379
05/09/95 23:02

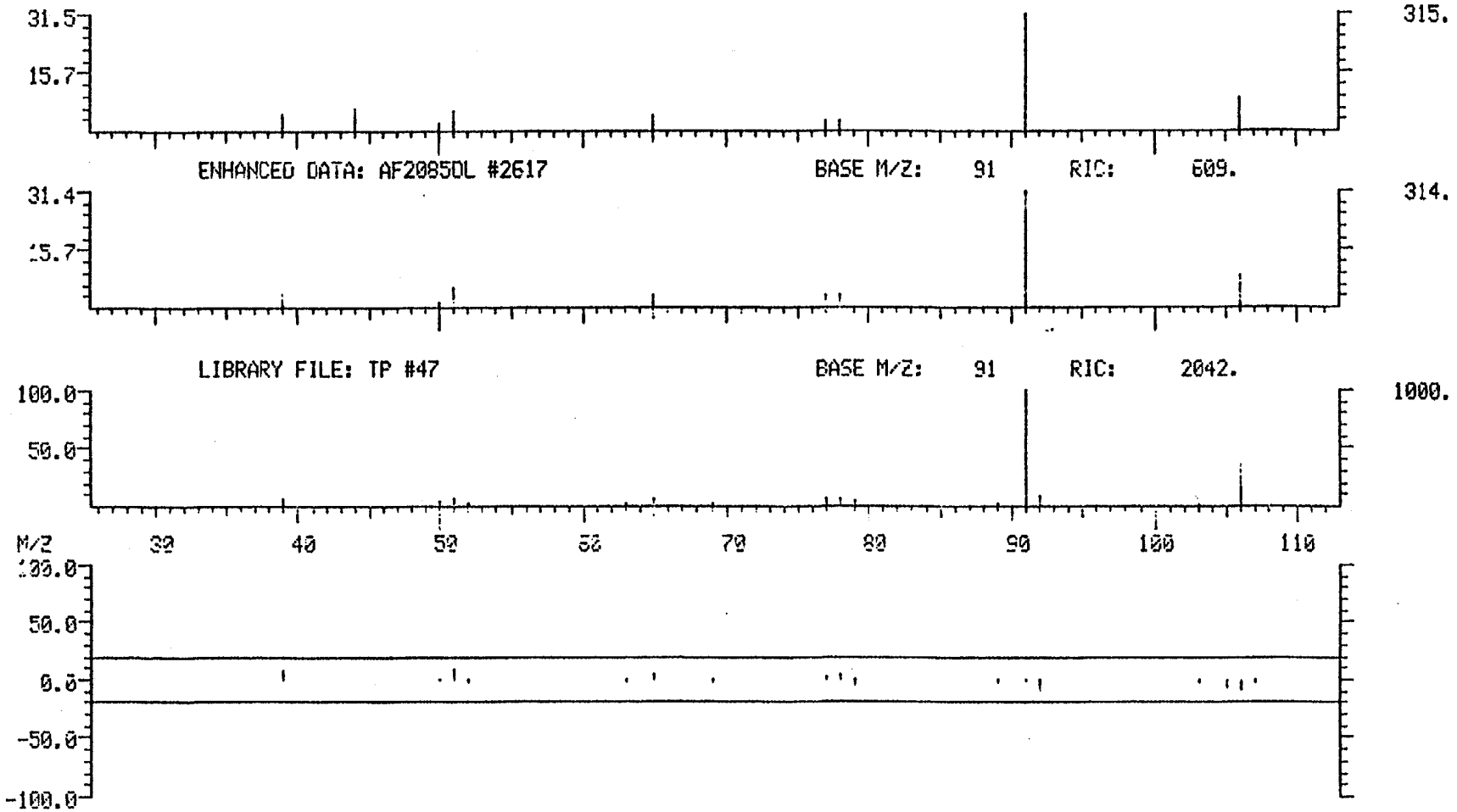
BASE M/Z: 166 RIC: 73216.



A0000061

DATA FILE: AF2085DL #2617 LIBRARY FILE: TP #47
TARGET COMPOUND COMPARISON CALI: AF2085DL #3
COMPOUND: ETHYLBENZENE

RAW DATA: AF2085DL #2617 BASE M/Z: 91 RIC: 678.
05/09/95 23:02



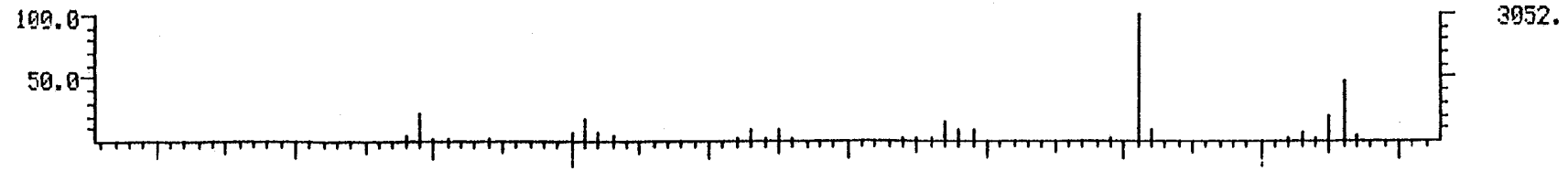
A0000062

DATA FILE: AF2085DL #2549
TARGET COMPOUND COMPARISON
COMPOUND: M-XYLENE (FOR P-)

LIBRARY FILE: TP #48
CALI: AF2085DL #3

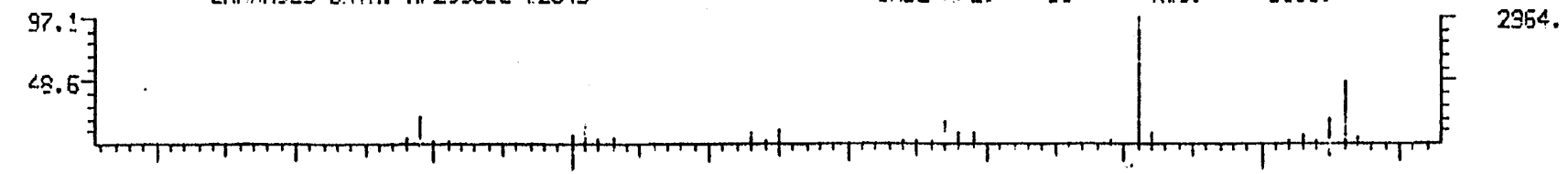
RAW DATA: AF2085DL #2649
05/09/95 23:02

BASE M/Z: 91 RIC: 9824.



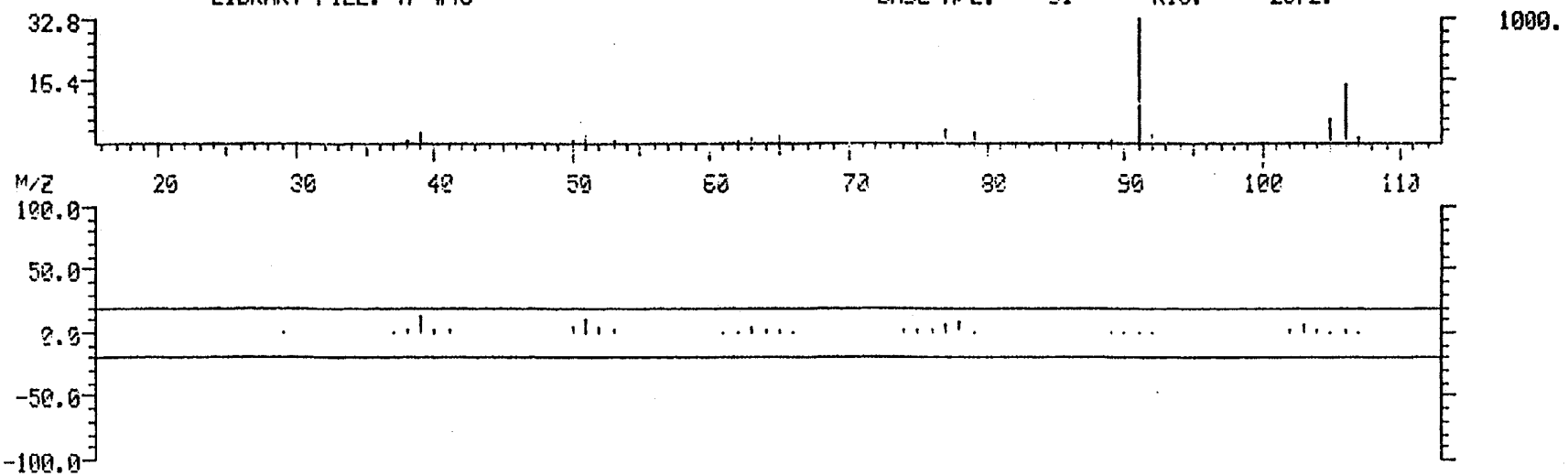
ENHANCED DATA: AF2085DL #2649

BASE M/Z: 91 RIC: 9558.



LIBRARY FILE: TP #48

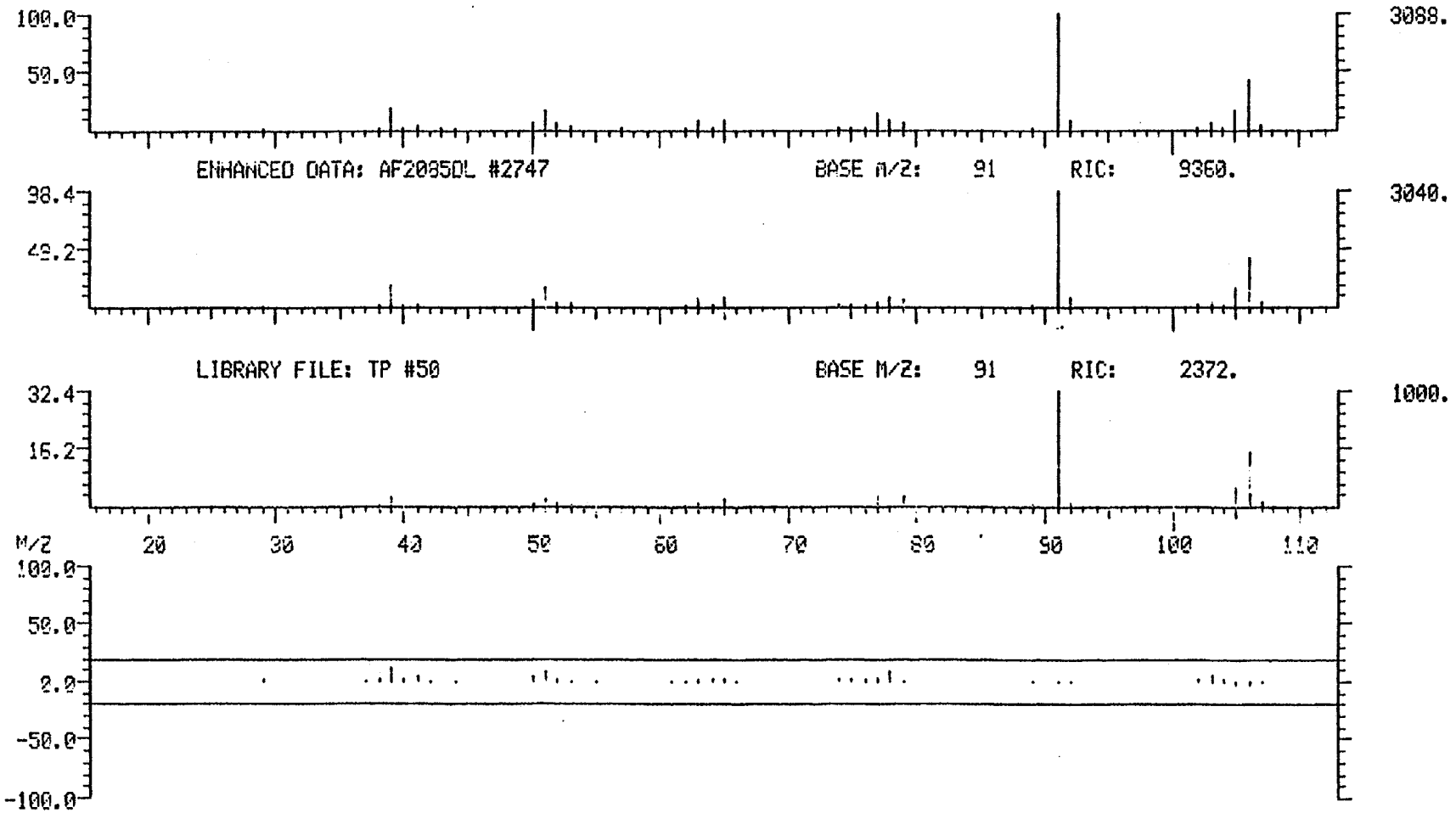
BASE M/Z: 91 RIC: 2372.



A0000063

DATA FILE: AF2085DL #2747 LIBRARY FILE: TP #50
TARGET COMPOUND COMPARISON CALI: AF2085DL #3
COMPOUND: O-XYLENE

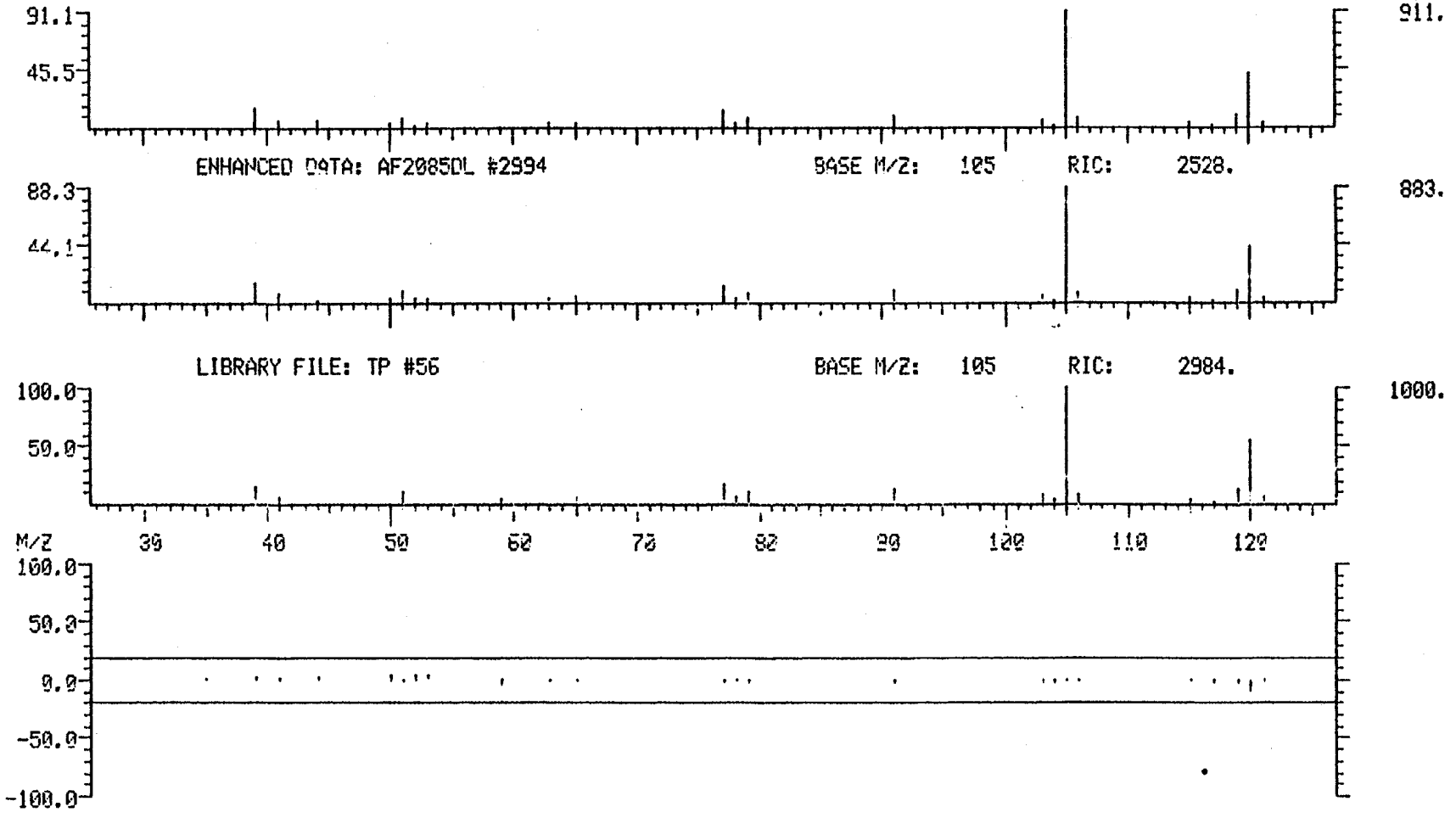
RAW DATA: AF2085DL #2747 BASE M/Z: 91 RIC: 9680.
05/09/95 23:02



A0000064

DATA FILE: AF2085DL #2954 LIBRARY FILE: TP #56
TARGET COMPOUND COMPARISON CALI: AF2085DL #3
COMPOUND: 1,3,5-TRIMETHYLBENZENE

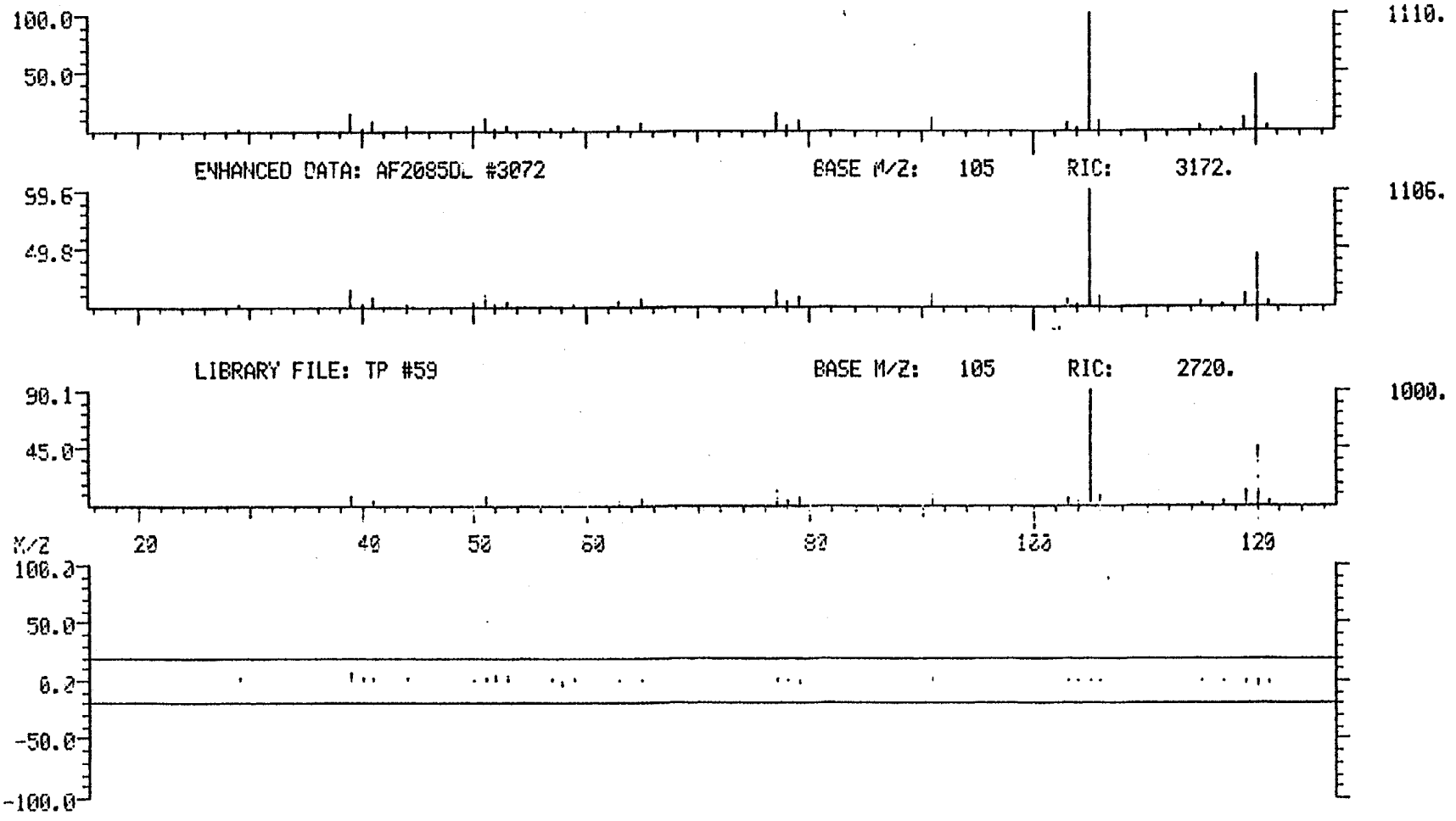
RAW DATA: AF2085DL #2994 BASE M/Z: 105 RIC: 2588.
05/09/95 23:02



A0000065

DATA FILE: AF2085DL #3072 LIBRARY FILE: TP #59
TARGET COMPOUND COMPARISON CALI: AF2085DL #3
COMPOUND: 1,2,4-TRIMETHYLBENZENE

RAW DATA: AF2085DL #3072 BASE M/Z: 105 RIC: 3252.
05/09/95 23:02



QA/QC REPORT

SAMPLE NAME: af2085d1
INJECT TIME: 21:26:28
DATE: Tue May 09 1995
METHOD: polar3.MPT
NAMELIST: dcg.nam
MANIFOLD POSITION: 12

PRESSURE BEFORE SAMPLING(PSIA) 27.4
AFTER SAMPLING(PSIA) 25.9

NG INT. STD INJECTED IS1(0) IS2(0) IS3(0) IS4(0) IS5(0)

PREHEAT MODULE 1 (Y) MODULE 2 (N) . CRYOFOCUS? (Y) . HEAT SAMPLE? (N)

CONDITIONS:

DURING CONCENTRATION	MAX TEMP	FINAL TEMP	TRAP/SEP TIME
M1 Glass Bead Cryotrap	-155	-172(-160)	278
M2 Sorbent Packed Cryotrap	-29	-30(-25)	253
Focusing Trap	-200	-200(-190)	150(150)

DESORB/TRANSFER/INJECT	PREHEAT	FINAL TEMP	TIME(secs)
M1 Glass Bead Cryotrap	-4(-10)	10(5)	253
M2 Sorbent Packed Cryotrap	92(100)	219(220)	150(150)
Focusing Trap	-200	75	300(300)

MEDIUM CONC./TRANSFERRED	VOLUME	FLOW(SCCM)	FINAL PSIA
Internal Standard	100(100)	100(100)	20.4
Sample	501(500)	126(125)	23.4
Sweep/Dry Purge	100(100)	99(100)	32.5
Transfer to Packed Col.	45(45)	10(10)	33.3
Packed Column Separation	0(0)	10(50)	33.3

SYSTEM BAKEOUT

	TEMPERATURE	TIME(min.)
M1 Glass Bead Cryotrap	165(160)	5(5)
M2 Sorbent Packed Cryotrap	222(220)	5(5)
Focusing Trap		

REGULATED ZONES	TEMPERATURE
8-PORT VALVE	149(150)
GC TRANSFER LINE	113(110)
MANIFOLD TRANSFER LINE	109(110)
16-POSITION SELECT VALVE	100(100)
SAMPLE CONTAINER	AMBIENT

Client: OHM
Workorder: 3512

TO-14 Volatile Organics

Client Sample ID: SVEW-8

Lab Sample ID: AF2086DL

Analysis Date: 05/09/95

Dilution Factor: 2911

CAS #	Compound	Result ppb(V/V)	Detection Limit
75-71-8	Dichlorodifluoromethane	ND	580
76-14-2	1,2-Dichlorotetrafluoroethane	ND	580
74-87-3	Chloromethane	ND	580
75-01-4	Vinyl Chloride	ND	580
74-83-9	Bromomethane	ND	580
75-00-3	Chloroethane	ND	580
75-69-4	Trichlorofluoromethane	ND	580
75-35-4	1,1-Dichloroethene	ND	580
76-13-1	1,1,2-Trichlorotrifluoroethane	ND	870
75-09-2	Methylene Chloride	ND	870
75-34-3	1,1-Dichloroethane	ND	580
156-59-2	cis-1,2-Dichloroethene	ND	580
67-66-3	Chloroform	ND	580
71-55-6	1,1,1-Trichloroethane	ND	580
56-23-5	Carbon Tetrachloride	ND	580
71-43-2	Benzene	ND	580
107-06-2	1,2-Dichloroethane	ND	580
79-01-6	Trichloroethene	ND	580
78-87-5	1,2-Dichloropropane	ND	580
10061-01-5	cis-1,3-Dichloropropene	ND	580
108-88-3	Toluene	ND	580
10061-02-6	trans-1,3-Dichloropropene	ND	580
79-00-5	1,1,2-Trichloroethane	ND	580
127-18-4	Tetrachloroethene	59000	580
106-93-4	1,2-Dibromoethane	ND	580
108-90-7	Chlorobenzene	ND	580
100-41-4	Ethylbenzene	ND	580
136777-61-2	m/p-Xylene	5800	580
95-47-6	o-Xylene	5300	580
100-42-5	Styrene	ND	580
79-34-5	1,1,2,2-Tetrachloroethane	ND	580
108-67-8	1,3,5-Trimethylbenzene	1000	580
95-63-6	1,2,4-Trimethylbenzene	1200	580
541-73-1	1,3-Dichlorobenzene	ND	580

Client: OHM
Workorder: 3512

TO-14 Volatile Organics

Client Sample ID: SVEW-8

Lab Sample ID: AF2086DL

Analysis Date: 05/09/95

Dilution Factor: 2911

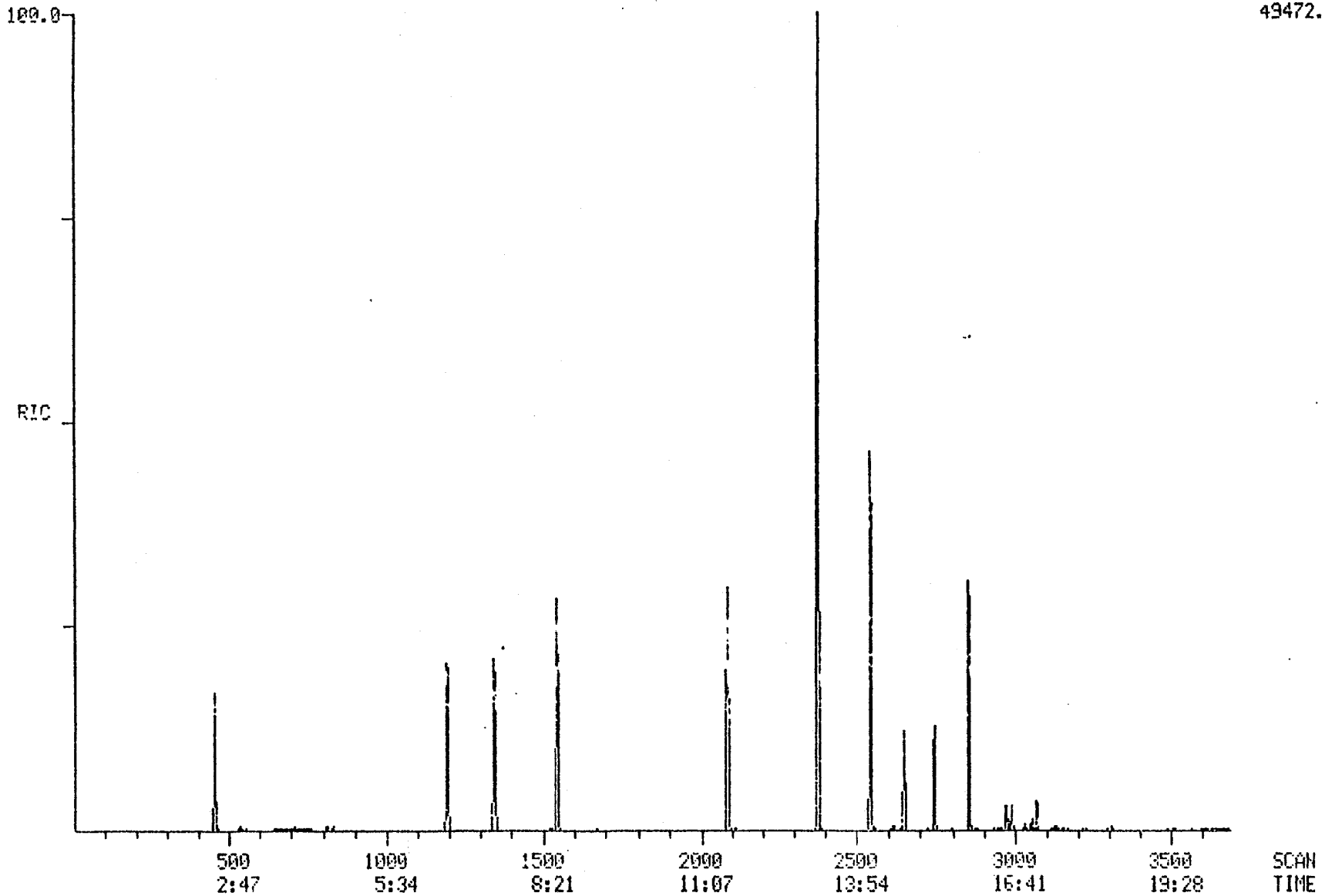
CAS #	Compound	Result ppb(V/V)	Detection Limit
106-46-7	1,4-Dichlorobenzene	ND	580
95-50-1	1,2-Dichlorobenzene	ND	580
100-44-7	Benzyl Chloride	ND	580
120-82-1	1,2,4-Trichlorobenzene	ND	580
87-68-3	Hexachlorobutadiene	ND	580

Surrogate Compound	% Recovery
D4-1,2-Dichloroethane	101
D8-Toluene	109
Bromofluorobenzene	104

A0000069

RIC
05/09/95 23:31:00
SAMPLE: % W03512 #2142 SVEW-8 500ML
CONDS.: GC DESC=MB SCAN=DN DB-5 60M 45CM/SEC INST M METH TO-14
RANGE: G 1,3685 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: AF2086DL #1 SCANS 1 TO 3686
CALI: AF2086DL #3



Quantitation Report File: AF2086DL

Data: AF2086DL.T1
05/09/95 23:31:00
Sample: M WO3512 #0140 SVEW-8 500ML
Conds.: GC DESC=MB SCAN=DN DB-5 60M 45CM/SEC INST M METH TO-14
Formula: POS13 Instrument: FINN Weight: 0.000
Submitted by: OHM Analyst: DCG/079 Acct. No.:

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name
1	BROMOCHLOROMETHANE
2	1,4-DIFLUOROBENZENE
3	D5-CHLOROBENZENE
4	D4-1,2-DICHLOROETHANE
5	D8-TOLUENE
6	BROMOFLUOROBENZENE
7	TETRACHLOROETHENE
8	M-XYLENE (FOR P-)
9	O-XYLENE
10	1,3,5-TRIMETHYLBENZENE
11	1,2,4-TRIMETHYLBENZENE

VK 5/10/95

Scan	Time	Area(Hght)	Amount		Name
1194	6:38	6798.	8.000	PPBV	BROMOCHLOROMETHANE
1543	8:35	34694.	8.000	PPBV	1,4-DIFLUOROBENZENE
2544	14:09	33531.	8.000	PPBV	D5-CHLOROBENZENE
1345	7:29	9265.	8.108	PPBV	D4-1,2-DICHLOROETHANE
2086	11:36	31767.	8.740	PPBV	D8-TOLUENE
2855	15:53	13997.	4.150	PPBV	BROMOFLUOROBENZENE
2377	13:13	26881.	20.184	PPBV	TETRACHLOROETHENE
2648	14:44	11496.	2.009	PPBV	M-XYLENE (FOR P-)
2746	15:16	10161.	1.828	PPBV	O-XYLENE
2992	16:38	2552.	0.350	PPBV	1,3,5-TRIMETHYLBENZENE
3071	17:05	3006.	0.405	PPBV	1,2,4-TRIMETHYLBENZENE

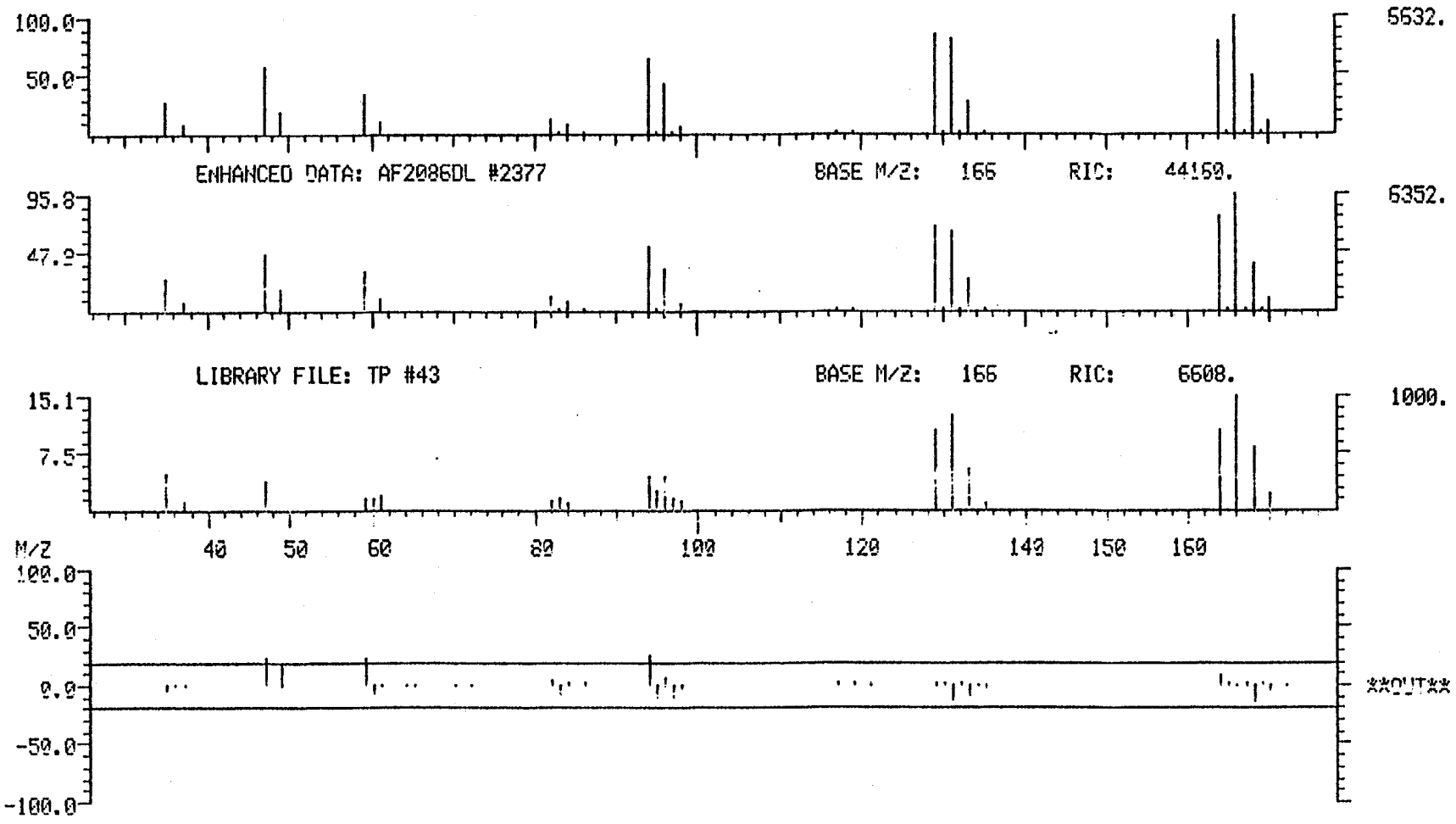
DCG 5-10-95

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(A)	Ratio
1	6:40	1.00	1.000	1.00	8.00	8.00	1.000	1.000	1.00
2	8:37	1.00	1.000	1.00	8.00	8.00	1.000	1.000	1.00
3	14:10	1.00	1.000	1.00	8.00	8.00	1.000	1.000	1.00
4	7:31	1.00	0.873	1.00	8.11	8.00	0.267	0.263	1.01
5	11:37	1.00	0.821	1.00	8.74	8.00	0.947	0.867	1.09
6	15:54	1.00	1.122	1.00	4.15	4.00	0.835	0.805	1.04
7	13:14	1.00	0.934	1.00	20.18	10.00	0.641	0.318	2.02
8	14:44	1.00	1.040	1.00	2.01	10.00	0.274	1.366	0.20
9	15:17	1.00	1.079	1.00	1.83	10.00	0.242	1.326	0.18
10	16:39	1.00	1.176	1.00	0.35	10.00	0.061	1.740	0.03
11	17:05	1.00	1.207	1.00	0.41	10.00	0.072	1.770	0.04

A0000071

DATA FILE: AF2086DL #2377 LIBRARY FILE: TP #43
TARGET COMPOUND COMPARISON CALI: AF2086DL #3
COMPOUND: TETRACHLOROETHENE

RAW DATA: AF2085DL #2377 BASE M/Z: 166 RIC: 49535.
05/09/95 23:31



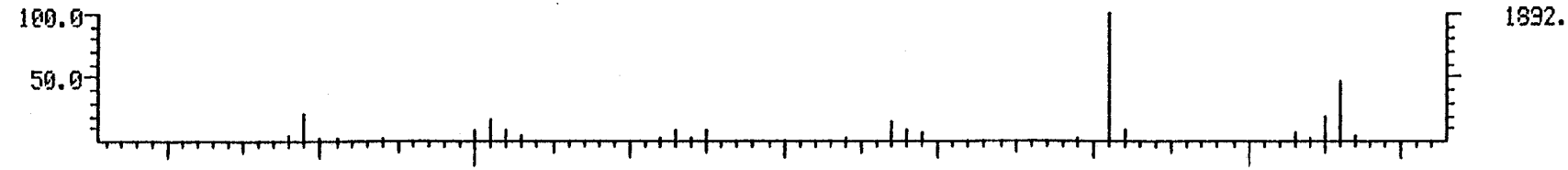
A0000072

DATA FILE: AF2086DL #2648
TARGET COMPOUND COMPARISON
COMPOUND: M-XYLENE (FOR P-)

LIBRARY FILE: TP #48
CALI: AF2086DL #3

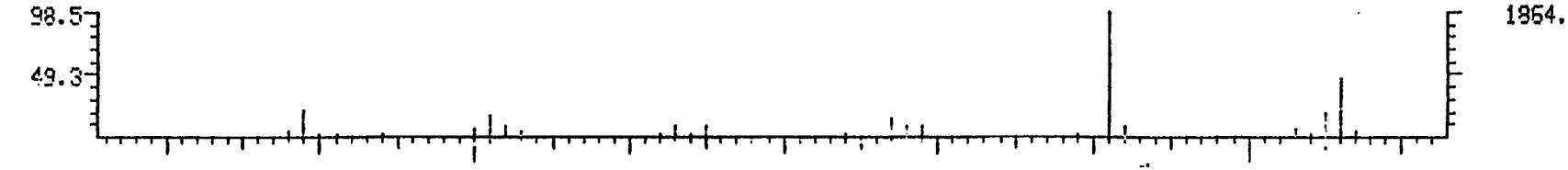
RAW DATA: AF2086DL #2648
05/09/95 23:31

BASE M/Z: 91 RIC: 5944.



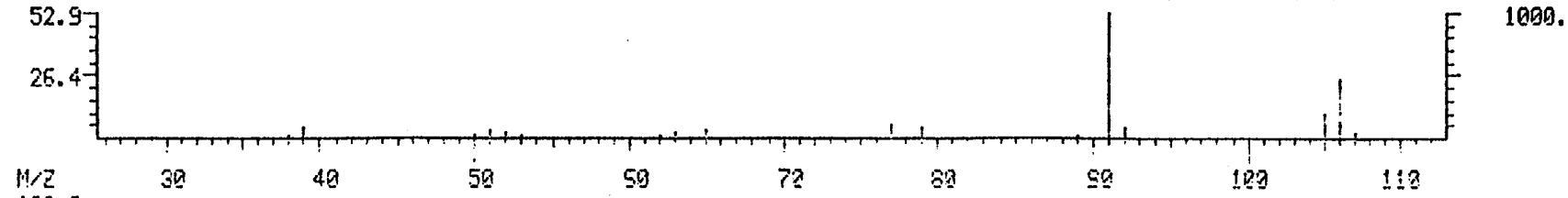
ENHANCED DATA: AF2086DL #2648

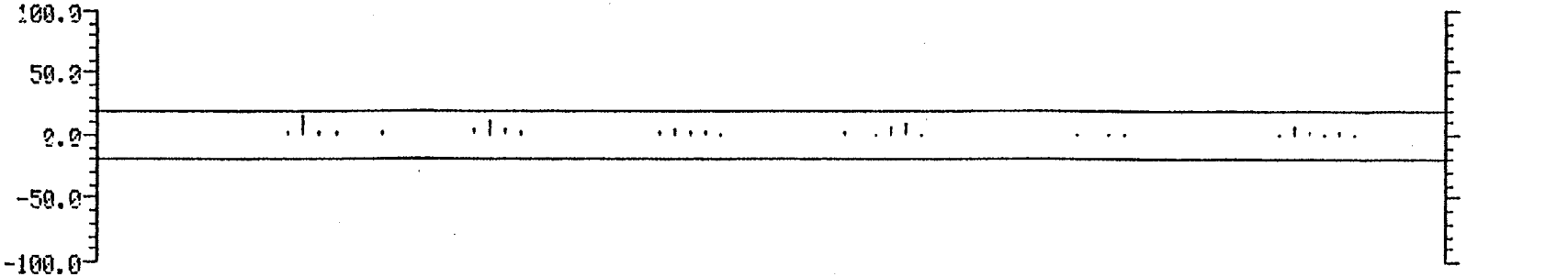
BASE M/Z: 91 RIC: 5856.



LIBRARY FILE: TP #48

BASE M/Z: 91 RIC: 2372.





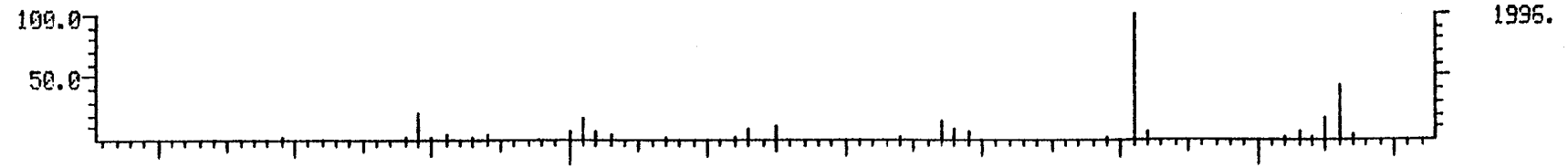
A0000073

DATA FILE: AF2086DL #2746
TARGET COMPOUND COMPARISON
COMPOUND: O-XYLENE

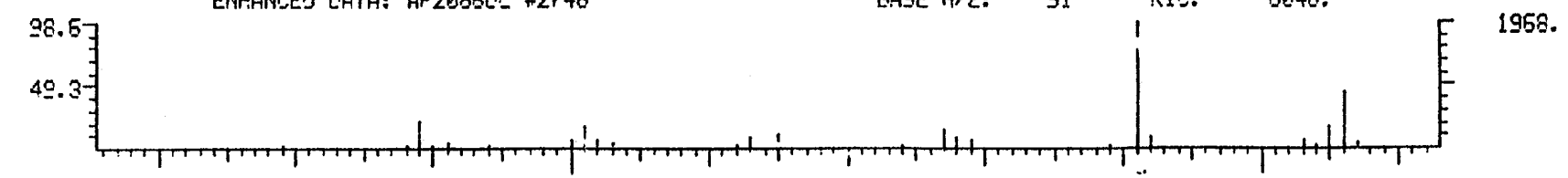
LIBRARY FILE: TP #50
CALI: AF2086DL #3

RAW DATA: AF2085DL #2745
05/09/95 23:31

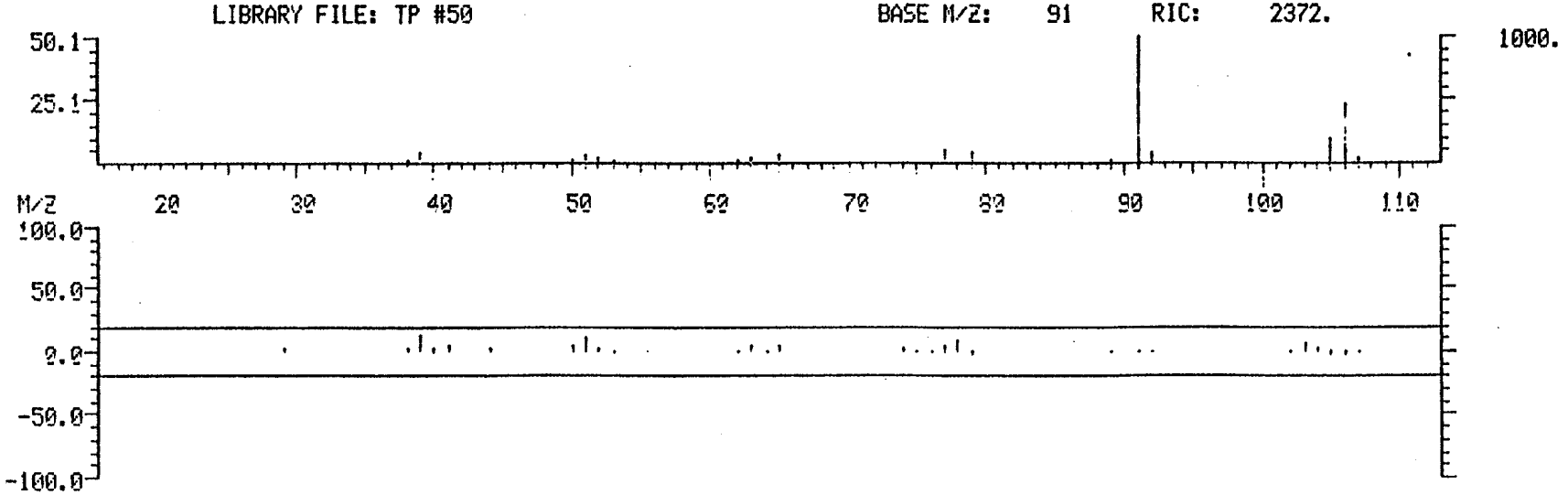
BASE M/Z: 91 RIC: 5240.



ENHANCED DATA: AF2086DL #2746 BASE M/Z: 91 RIC: 5048.



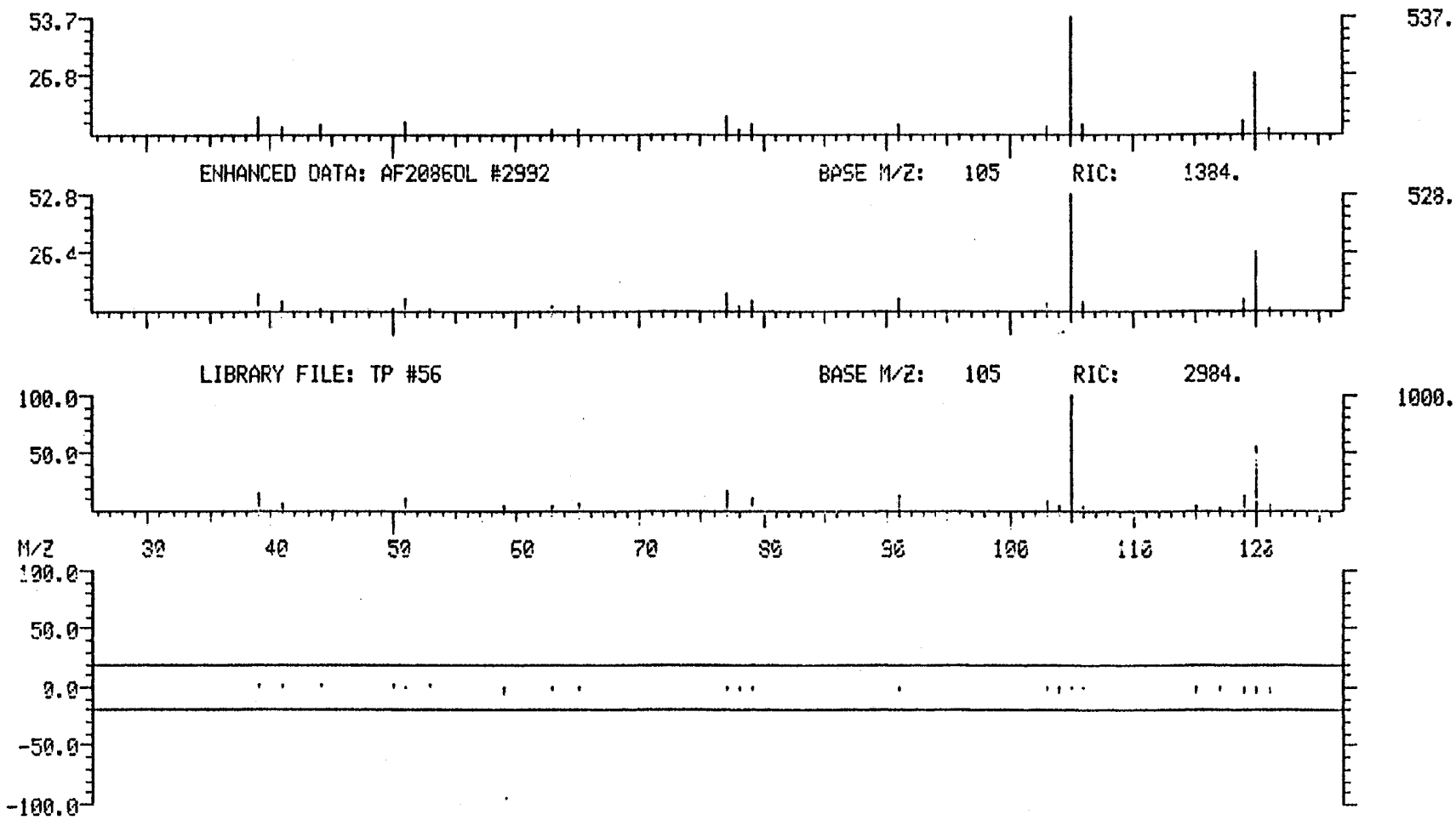
LIBRARY FILE: TP #50 BASE M/Z: 91 RIC: 2372.



A0000074

DATA FILE: AF2086DL #2992 LIBRARY FILE: TP #55
TARGET COMPOUND COMPARISON CALI: AF2086DL #3
COMPOUND: 1,3,5-TRIMETHYLBENZENE

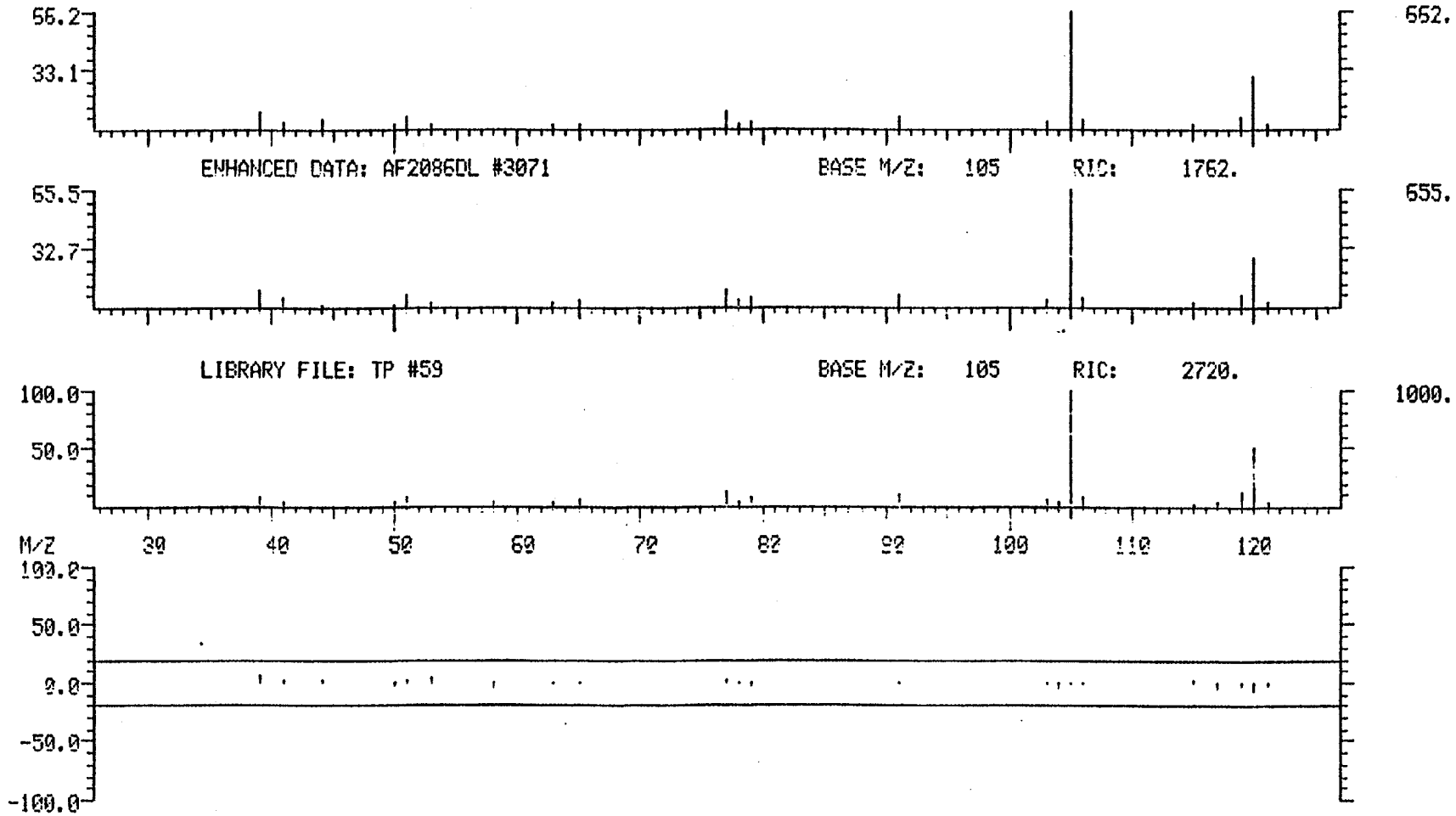
RAW DATA: AF2086DL #2992 BASE M/Z: 105 RIC: 1428.
05/09/95 23:31



A0000075

DATA FILE: AF2086DL #3071 LIBRARY FILE: TP #59
TARGET COMPOUND COMPARISON CALI: AF2086DL #3
COMPOUND: 1,2,4-TRIMETHYLBENZENE

RAW DATA: AF2086DL #3071 BASE M/Z: 105 RIC: 1820.
05/09/95 23:31



QA/QC REPORT

SAMPLE NAME: af2086d1
INJECT TIME: 21:55:35
DATE: Tue May 09 1995
METHOD: polar3.MPT
NAMELIST: dcg.nam
MANIFOLD POSITION: 13

PRESSURE BEFORE SAMPLING(PSIA) 27.9
AFTER SAMPLING(PSIA) 27.1

NG INT. STD INJECTED IS1(0) IS2(0) IS3(0) IS4(0) IS5(0)

PREHEAT MODULE 1 (Y) MODULE 2 (N) , CRYOFOCUS? (Y) , HEAT SAMPLE? (N)

CONDITIONS:

DURING CONCENTRATION	MAX TEMP	FINAL TEMP	TRAP/SEP TIME
M1 Glass Bead Cryotrap	-151	-159(-160)	277
M2 Sorbent Packed Cryotrap	-29	-29(-25)	253
Focusing Trap	-190	-200(-190)	150(150)

DESORB/TRANSFER/INJECT	PREHEAT	FINAL TEMP	TIME(secs)
M1 Glass Bead Cryotrap	-9(-10)	12(5)	253
M2 Sorbent Packed Cryotrap	92(100)	221(220)	150(150)
Focusing Trap	-200	74	300(300)

MEDIUM CONC./TRANSFERRED	VOLUME	FLOW(SCCM)	FINAL PSIA
Internal Standard	100(100)	100(100)	20.3
Sample	500(500)	125(125)	23.8
Sweep/Dry Purge	101(100)	100(100)	32.6
Transfer to Packed Col.	45(45)	10(10)	33.3
Packed Column Separation	0(0)	10(50)	33.3

SYSTEM BAKEOUT

	TEMPERATURE	TIME(min.)
M1 Glass Bead Cryotrap	164(160)	5(5)
M2 Sorbent Packed Cryotrap	222(220)	5(5)
Focusing Trap		

REGULATED ZONES	TEMPERATURE
8-PORT VALVE	149(150)
GC TRANSFER LINE	113(110)
MANIFOLD TRANSFER LINE	110(110)
16-POSITION SELECT VALVE	100(100)
SAMPLE CONTAINER	AMBIENT

Client: OHM
Workorder: 3512

TO-14 Volatile Organics

Client Sample ID: SYSTEM TOTAL

Lab Sample ID: AF2087DL

Analysis Date: 05/10/95

Dilution Factor: 3072

CAS #	Compound	Result ppb(V/V)	Detection Limit
75-71-8	Dichlorodifluoromethane	ND	610
76-14-2	1,2-Dichlorotetrafluoroethane	ND	610
74-87-3	Chloromethane	ND	610
75-01-4	Vinyl Chloride	ND	610
74-83-9	Bromomethane	ND	610
75-00-3	Chloroethane	ND	610
75-69-4	Trichlorofluoromethane	ND	610
75-35-4	1,1-Dichloroethene	ND	610
76-13-1	1,1,2-Trichlorotrifluoroethane	ND	920
75-09-2	Methylene Chloride	ND	920
75-34-3	1,1-Dichloroethane	ND	610
156-59-2	cis-1,2-Dichloroethene	ND	610
67-66-3	Chloroform	ND	610
71-55-6	1,1,1-Trichloroethane	ND	610
56-23-5	Carbon Tetrachloride	ND	610
71-43-2	Benzene	ND	610
107-06-2	1,2-Dichloroethane	ND	610
79-01-6	Trichloroethene	ND	610
78-87-5	1,2-Dichloropropane	ND	610
10061-01-5	cis-1,3-Dichloropropene	ND	610
108-88-3	Toluene	ND	610
10061-02-6	trans-1,3-Dichloropropene	ND	610
79-00-5	1,1,2-Trichloroethane	ND	610
127-18-4	Tetrachloroethene	80000	610
106-93-4	1,2-Dibromoethane	ND	610
108-90-7	Chlorobenzene	ND	610
100-41-4	Ethylbenzene	ND	610
136777-61-2	m/p-Xylene	5500	610
95-47-6	o-Xylene	4700	610
100-42-5	Styrene	ND	610
79-34-5	1,1,2,2-Tetrachloroethane	ND	610
108-67-8	1,3,5-Trimethylbenzene	820	610
95-63-6	1,2,4-Trimethylbenzene	950	610
541-73-1	1,3-Dichlorobenzene	ND	610

Client: OHM
Workorder: 3512

TO-14 Volatile Organics

Client Sample ID: SYSTEM TOTAL

Lab Sample ID: AF2087DL

Analysis Date: 05/10/95

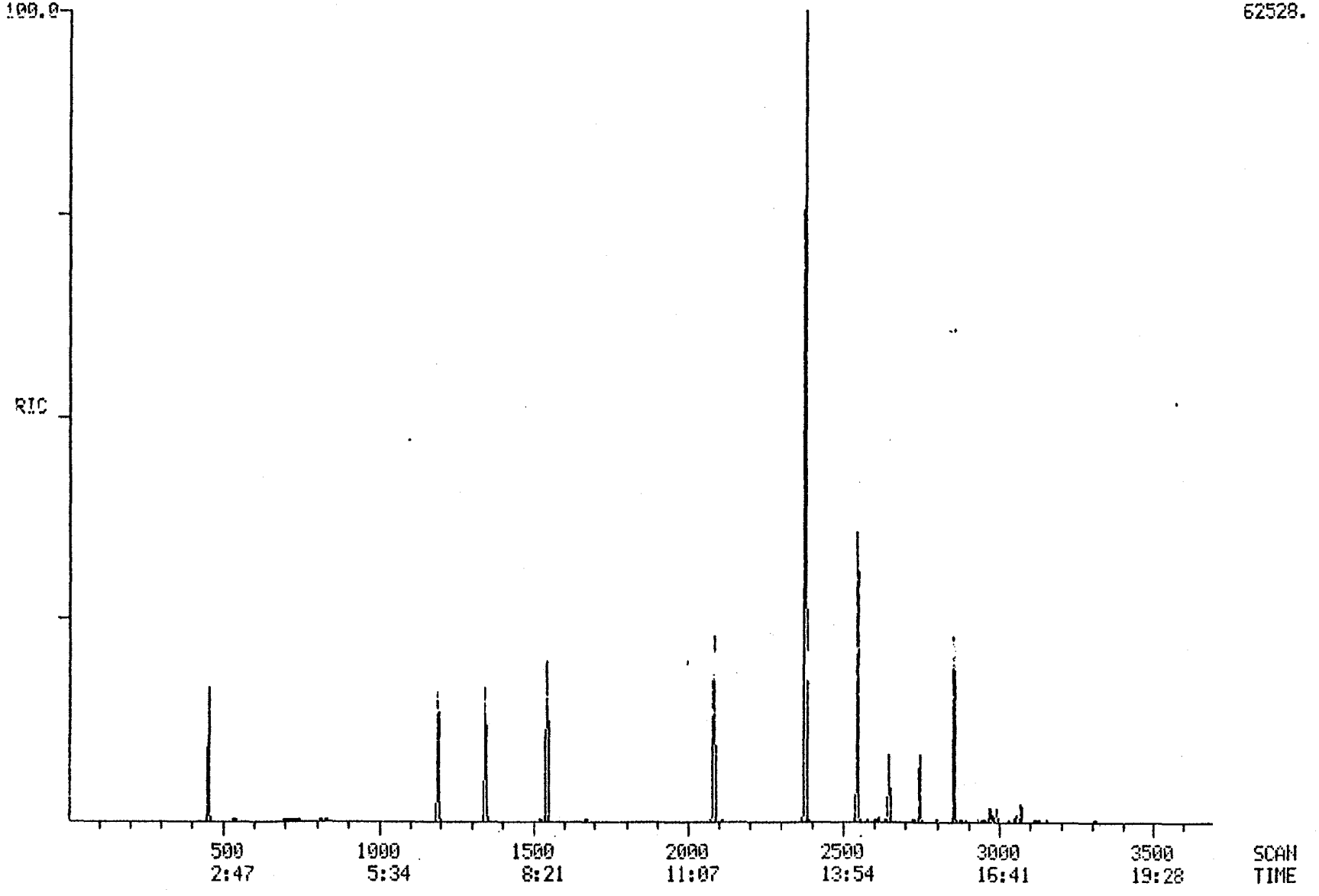
Dilution Factor: 3072

CAS #	Compound	Result ppb(V/V)	Detection Limit
106-46-7	1,4-Dichlorobenzene	ND	610
95-50-1	1,2-Dichlorobenzene	ND	610
100-44-7	Benzyl Chloride	ND	610
120-82-1	1,2,4-Trichlorobenzene	ND	610
87-68-3	Hexachlorobutadiene	ND	610

Surrogate Compound	% Recovery
D4-1,2-Dichloroethane	100
D8-Toluene	108
Bromofluorobenzene	102

A0000079

RIC DATA: AF2087DL #1 SCANS 1 TO 3685
05/10/95 0:00:00 CALI: AF2087DL #3
SAMPLE: % WQ3512 424335 SYSTEM TOTAL 500ML
CONDS.: GC DESC=MB SCAN=DN DB-5 60M 45CM/SEC INST M METH TO-14
RANGE: G 1.3685 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3



Quantitation Report File: AF2087DL

Data: AF2087DL.T1
05/10/95 0:00:00
Sample: M WO3512 #04335 SYSTEM TOTAL 500ML
Conds.: GC DESC=MB SCAN=DN DB-5 60M 45CM/SEC INST M METH TO-14
Formula: POS14 Instrument: FINN Weight: 0.000
Submitted by: OHM Analyst: DCG/079 Acct. No.:

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name
1	BROMOCHLOROMETHANE
2	1,4-DIFLUOROBENZENE
3	D5-CHLOROBENZENE
4	D4-1,2-DICHLOROETHANE
5	D8-TOLUENE
6	BROMOFLUOROBENZENE
7	TETRACHLOROETHENE
8	M-XYLENE (FOR P-)
9	O-XYLENE
10	1,3,5-TRIMETHYLBENZENE
11	1,2,4-TRIMETHYLBENZENE

VK 5/10/95

Scan	Time	Area(Hght)	Amount		Name
1193	6:38	6501.	8.000	PPBV	BROMOCHLOROMETHANE
1542	8:35	33699.	8.000	PPBV	1,4-DIFLUOROBENZENE
2544	14:09	33097.	8.000	PPBV	D5-CHLOROBENZENE
1344	7:28	8911.	8.028	PPBV	D4-1,2-DICHLOROETHANE
2085	11:36	30870.	8.604	PPBV	D8-TOLUENE
2855	15:53	13641.	4.098	PPBV	BROMOFLUOROBENZENE
2378	13:14	34214.	26.027	PPBV	TETRACHLOROETHENE
2648	14:44	10127.	1.793	PPBV	M-XYLENE (FOR P-)
2746	15:16	8336.	1.519	PPBV	O-XYLENE
2993	16:39	1927.	0.268	PPBV	1,3,5-TRIMETHYLBENZENE
3071	17:05	2259.	0.308	PPBV	1,2,4-TRIMETHYLBENZENE

DCG 5/10/95

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(A)	Ratio
1	6:40	0.99	1.000	1.00	8.00	8.00	1.000	1.000	1.00
2	8:37	1.00	1.000	1.00	8.00	8.00	1.000	1.000	1.00
3	14:10	1.00	1.000	1.00	8.00	8.00	1.000	1.000	1.00
4	7:31	0.99	0.873	1.00	8.03	8.00	0.264	0.263	1.00
5	11:37	1.00	0.821	1.00	8.60	8.00	0.933	0.867	1.08
6	15:54	1.00	1.122	1.00	4.10	4.00	0.824	0.805	1.02
7	13:14	1.00	0.934	1.00	26.03	10.00	0.827	0.318	2.60
8	14:44	1.00	1.040	1.00	1.79	10.00	0.245	1.366	0.18
9	15:17	1.00	1.079	1.00	1.52	10.00	0.201	1.326	0.15
10	16:39	1.00	1.176	1.00	0.27	10.00	0.047	1.740	0.03
11	17:05	1.00	1.207	1.00	0.31	10.00	0.055	1.770	0.03

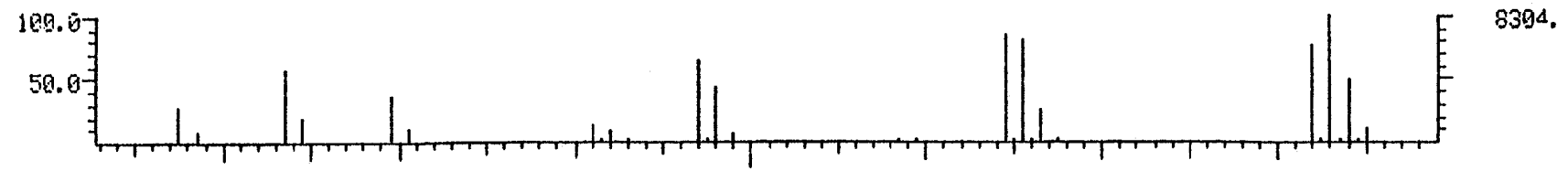
A0000081

DATA FILE: AF2087DL #2378
TARGET COMPOUND COMPARISON
COMPOUND: TETRACHLOROETHENE

LIBRARY FILE: TP #43
CALI: AF2087DL #3

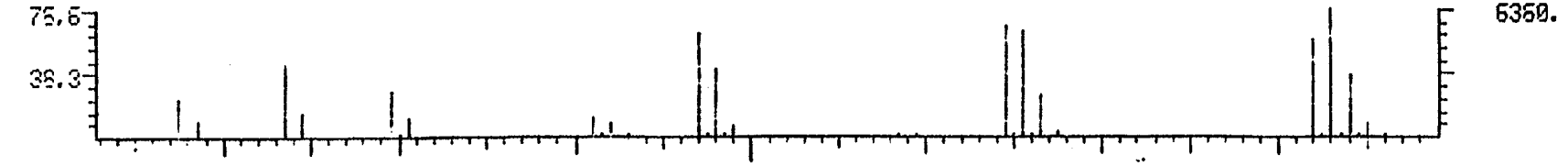
RAW DATA: AF2087DL #2378
05/10/95 0:00

BASE M/Z: 166 RIC: 62464.



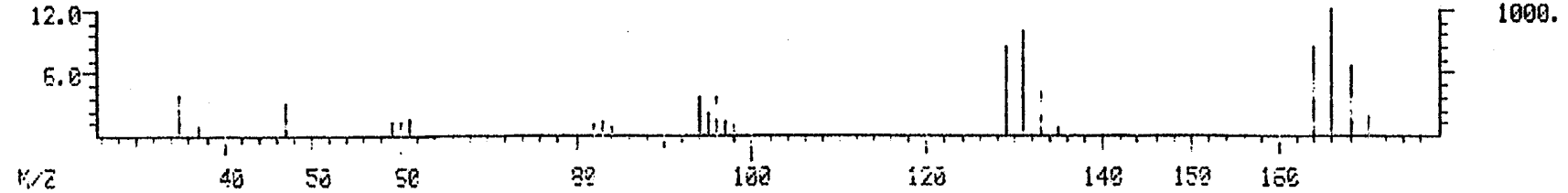
ENHANCED DATA: AF2087DL #2378

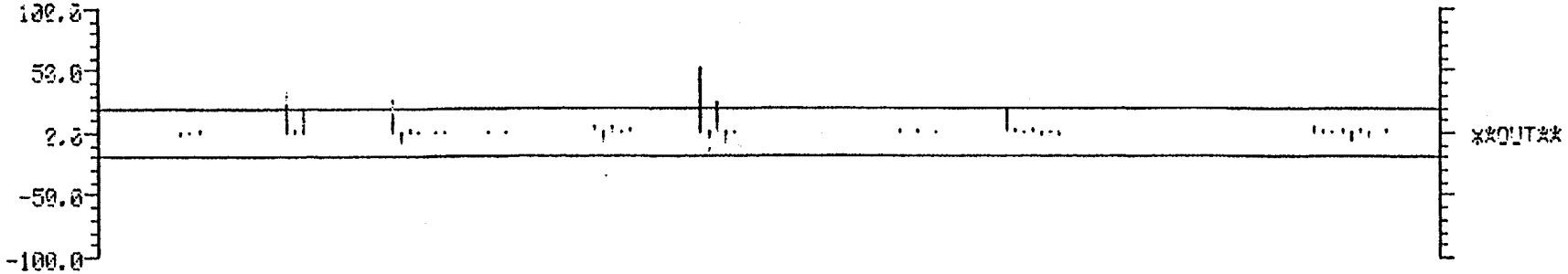
BASE M/Z: 166 RIC: 51543.



LIBRARY FILE: TP #43

BASE M/Z: 166 RIC: 6608.





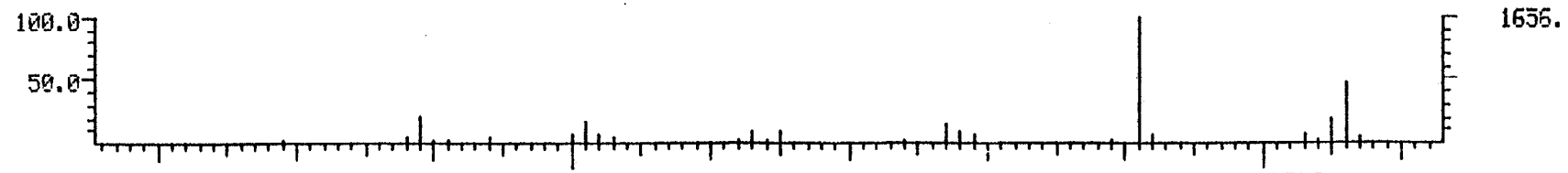
A0000082

DATA FILE: AF2087DL #2548
TARGET COMPOUND COMPARISON
COMPOUND: M-XYLENE (FOR P-)

LIBRARY FILE: TP #48
CALI: AF2087DL #3

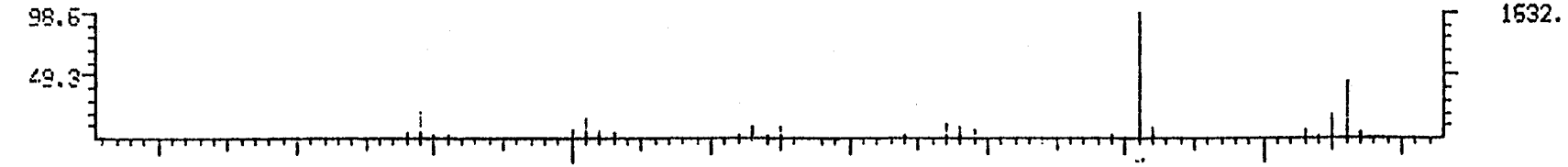
RAW DATA: AF2087DL #2548
05/10/95 0:00

BASE M/Z: 91 RIC: 5184.



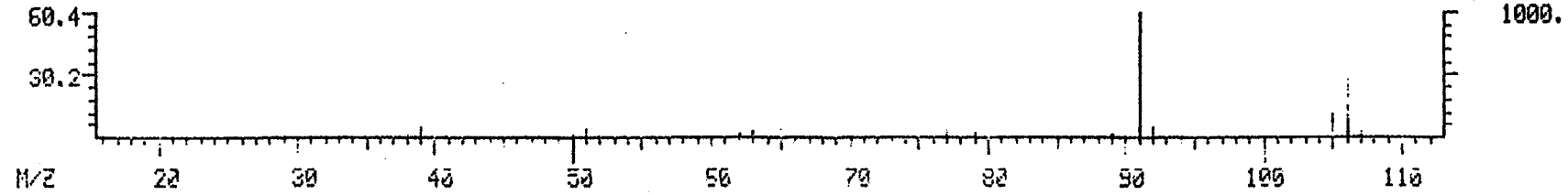
ENHANCED DATA: AF2087DL #2548

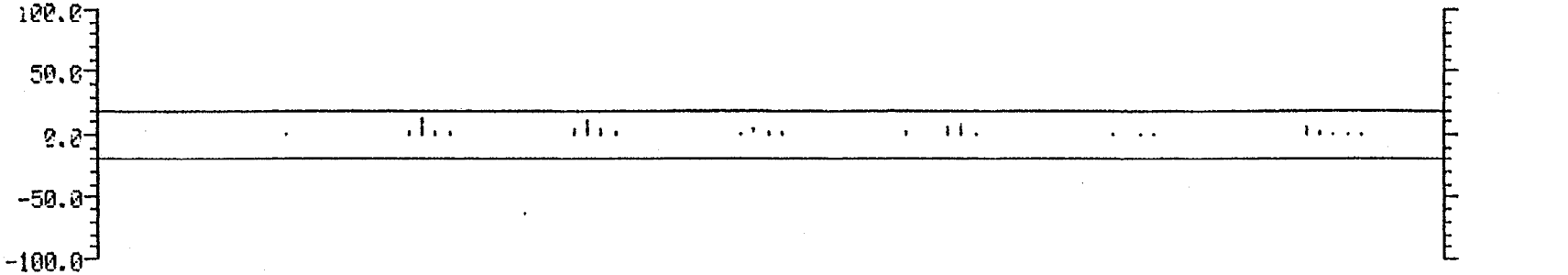
BASE M/Z: 91 RIC: 5056.



LIBRARY FILE: TP #48

BASE M/Z: 91 RIC: 2372.





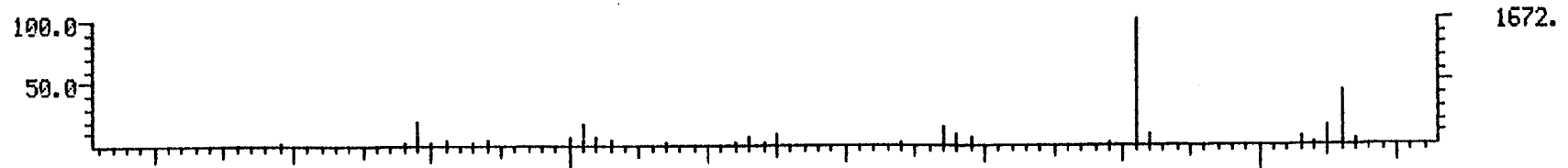
A0000083

DATA FILE: AF2087DL #2746
TARGET COMPOUND COMPARISON
COMPOUND: O-XYLENE

LIBRARY FILE: TP #50
CALI: AF2087DL #3

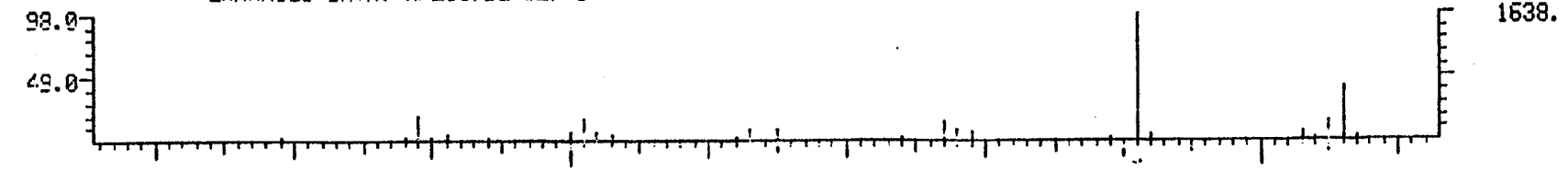
RAW DATA: AF2087DL #2746
05/10/95 0:00

BASE M/Z: 91 RIC: 5135.



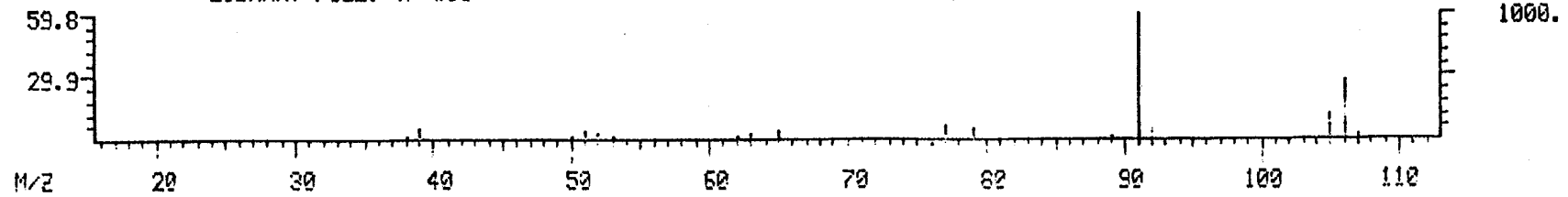
ENHANCED DATA: AF2087DL #2746

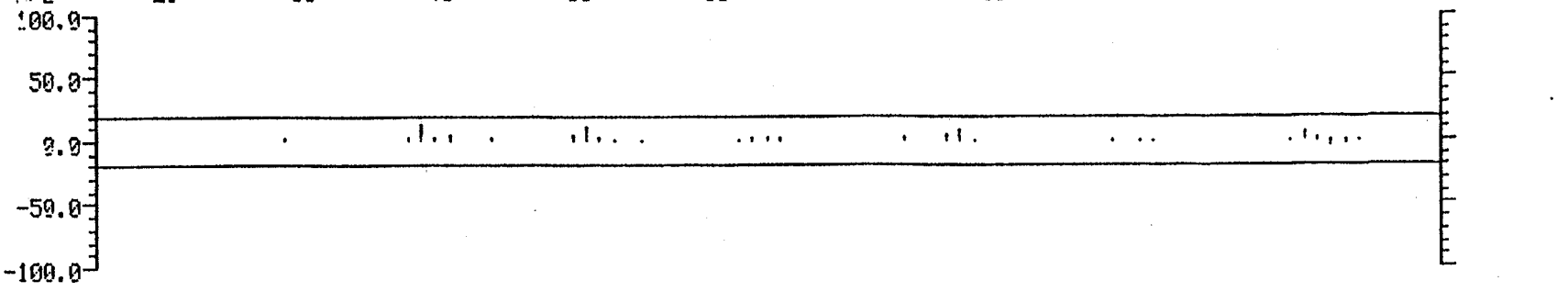
BASE M/Z: 91 RIC: 4944.



LIBRARY FILE: TP #50

BASE M/Z: 91 RIC: 2372.

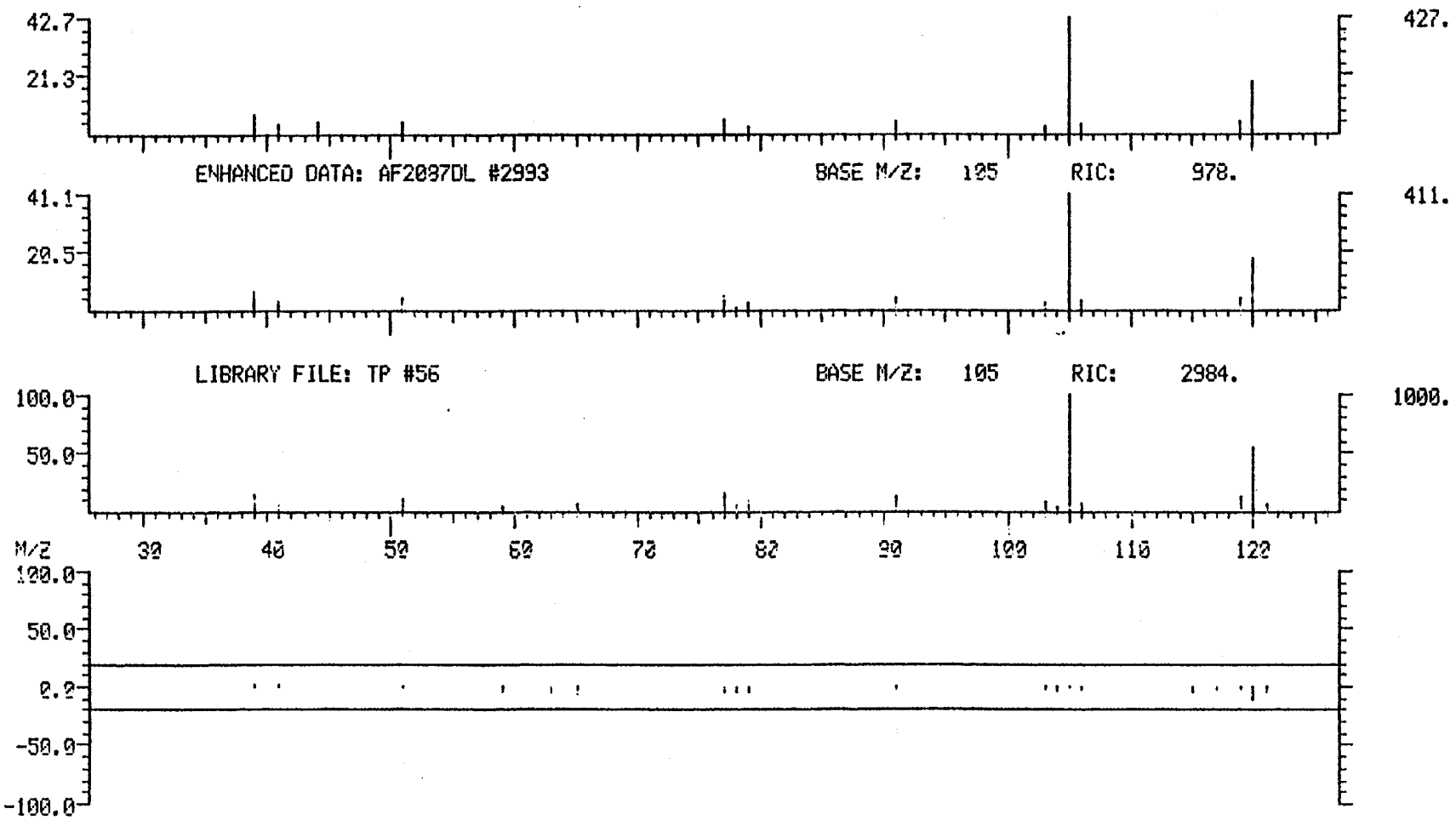




A0000084

DATA FILE: AF2087DL #2993 LIBRARY FILE: TP #55
TARGET COMPOUND COMPARISON CALI: AF2087DL #3
COMPOUND: 1,3,5-TRIMETHYLBENZENE

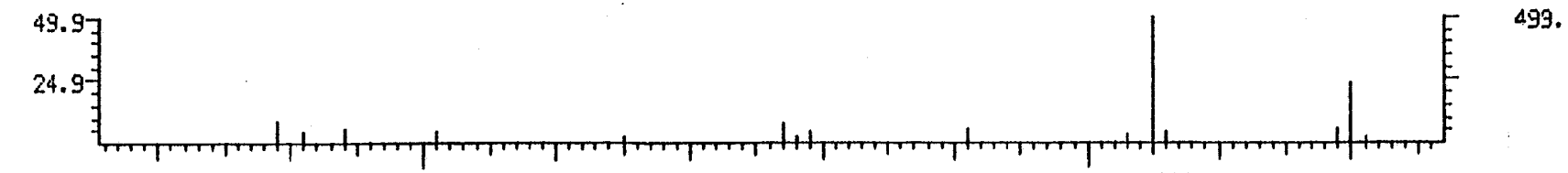
RAW DATA: AF2087DL #2993 BASE M/Z: 105 RIC: 1056.
05/10/95 0:00



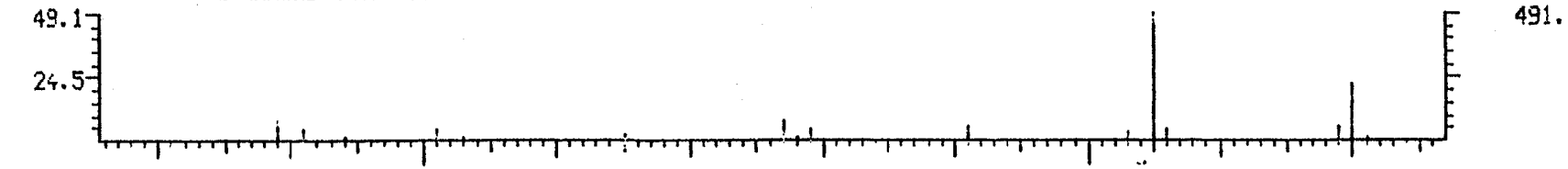
A0000085

DATA FILE: AF2087DL #3071 LIBRARY FILE: TP #59
TARGET COMPOUND COMPARISON CALI: AF2087DL #3
COMPOUND: 1,2,4-TRIMETHYLBENZENE

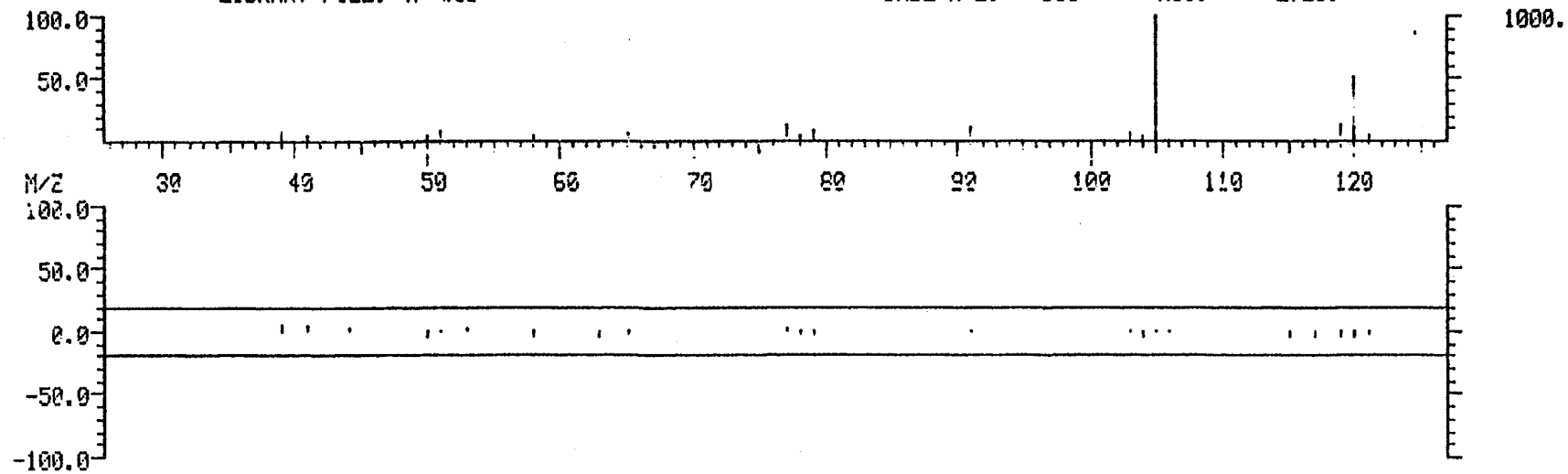
RAW DATA: AF2087DL #3071 BASE M/Z: 105 RIC: 1308.
05/10/95 0:00



ENHANCED DATA: AF2087DL #3071 BASE M/Z: 105 RIC: 1236.



LIBRARY FILE: TP #59 BASE M/Z: 105 RIC: 2720.



QA/QC REPORT

SAMPLE NAME: af2087d1
INJECT TIME: 22:24:45
DATE: Tue May 09 1995
METHOD: polar3.MPT
NAMELIST: dcg.nam
MANIFOLD POSITION: 14

PRESSURE BEFORE SAMPLING(PSIA) 28.4
AFTER SAMPLING(PSIA) 26.8

NG INT. STD INJECTED IS1(0) IS2(0) IS3(0) IS4(0) IS5(0)

PREHEAT MODULE 1 (Y) MODULE 2 (N) , CRYOFOCUS? (Y) , HEAT SAMPLE? (N)

CONDITIONS:

DURING CONCENTRATION	MAX TEMP	FINAL TEMP	TRAP/SEP TIME
M1 Glass Bead Cryotrap	-151	-160(-160)	277
M2 Sorbent Packed Cryotrap	-29	-29(-25)	253
Focusing Trap	-200	-200(-190)	150(150)

DESORB/TRANSFER/INJECT	PREHEAT	FINAL TEMP	TIME(secs)
M1 Glass Bead Cryotrap	-6(-10)	10(5)	253
M2 Sorbent Packed Cryotrap	92(100)	221(220)	150(150)
Focusing Trap	-200	77	300(300)

MEDIUM CONC./TRANSFERRED	VOLUME	FLOW(SCCM)	FINAL PSIA
Internal Standard	100(100)	100(100)	20.3
Sample	501(500)	125(125)	24.1
Sweep/Dry Purge	100(100)	99(100)	32.7
Transfer to Packed Col.	45(45)	10(10)	33.3
Packed Column Separation	0(0)	10(50)	33.3

SYSTEM BAKEOUT

	TEMPERATURE	TIME(min.)
M1 Glass Bead Cryotrap	163(160)	5(5)
M2 Sorbent Packed Cryotrap	222(220)	5(5)
Focusing Trap		

REGULATED ZONES	TEMPERATURE
8-PORT VALVE	148(150)
GC TRANSFER LINE	109(110)
MANIFOLD TRANSFER LINE	111(110)
16-POSITION SELECT VALVE	100(100)
SAMPLE CONTAINER	AMBIENT

Client: OHM
Workorder: 3512

TO-14 Volatile Organics

Client Sample ID: DISCHARGE STAKE

Lab Sample ID: AF2088DL

Analysis Date: 05/10/95

Dilution Factor: 3946

CAS #	Compound	Result ppb(V/V)	Detection Limit
75-71-8	Dichlorodifluoromethane	ND	790
76-14-2	1,2-Dichlorotetrafluoroethane	ND	790
74-87-3	Chloromethane	ND	790
75-01-4	Vinyl Chloride	ND	790
74-83-9	Bromomethane	ND	790
75-00-3	Chloroethane	ND	790
75-69-4	Trichlorofluoromethane	ND	790
75-35-4	1,1-Dichloroethene	ND	790
76-13-1	1,1,2-Trichlorotrifluoroethane	ND	1200
75-09-2	Methylene Chloride	ND	1200
75-34-3	1,1-Dichloroethane	ND	790
156-59-2	cis-1,2-Dichloroethene	ND	790
67-66-3	Chloroform	ND	790
71-55-6	1,1,1-Trichloroethane	ND	790
56-23-5	Carbon Tetrachloride	ND	790
71-43-2	Benzene	ND	790
107-06-2	1,2-Dichloroethane	ND	790
79-01-6	Trichloroethene	ND	790
78-87-5	1,2-Dichloropropane	ND	790
10061-01-5	cis-1,3-Dichloropropene	ND	790
108-88-3	Toluene	ND	790
10061-02-6	trans-1,3-Dichloropropene	ND	790
79-00-5	1,1,2-Trichloroethane	ND	790
127-18-4	Tetrachloroethene	10000	790
106-93-4	1,2-Dibromoethane	ND	790
108-90-7	Chlorobenzene	ND	790
100-41-4	Ethylbenzene	ND	790
136777-61-2	m/p-Xylene	ND	790
95-47-6	o-Xylene	ND	790
100-42-5	Styrene	ND	790
79-34-5	1,1,2,2-Tetrachloroethane	ND	790
108-67-8	1,3,5-Trimethylbenzene	ND	790
95-63-6	1,2,4-Trimethylbenzene	ND	790
541-73-1	1,3-Dichlorobenzene	ND	790

Client: OHM
Workorder: 3512

TO-14 Volatile Organics

Client Sample ID: DISCHARGE STAKE

Lab Sample ID: AF2088DL

Analysis Date: 05/10/95

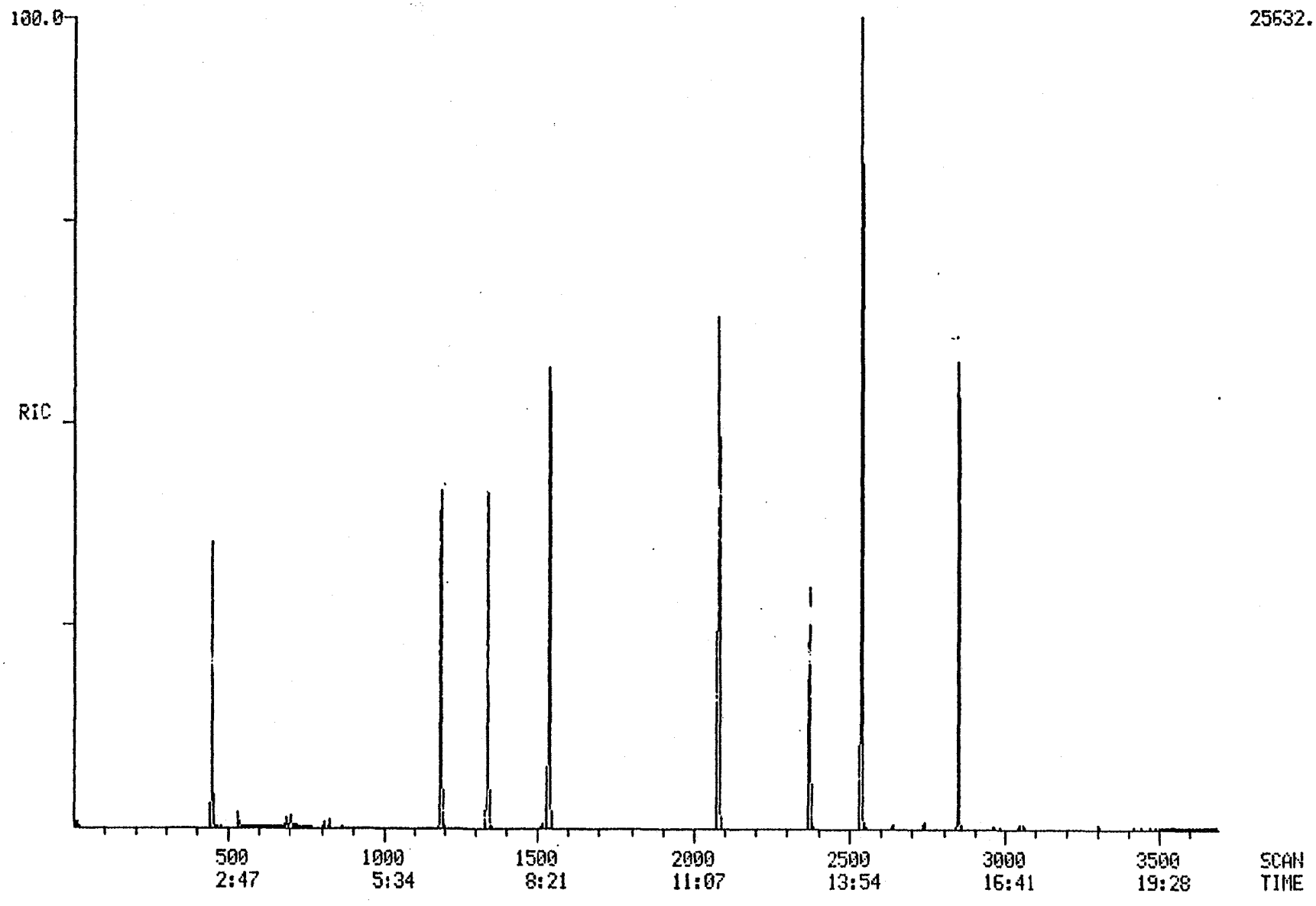
Dilution Factor: 3946

CAS #	Compound	Result ppb(V/V)	Detection Limit
106-46-7	1,4-Dichlorobenzene	ND	790
95-50-1	1,2-Dichlorobenzene	ND	790
100-44-7	Benzyl Chloride	ND	790
120-82-1	1,2,4-Trichlorobenzene	ND	790
87-68-3	Hexachlorobutadiene	ND	790

Surrogate Compound	% Recovery
D4-1,2-Dichloroethane	101
D8-Toluene	106
Bromofluorobenzene	96

A0000089

RIC DATA: AF2068DL #1 SCANS 1 TO 3586
05/10/95 1:01:00 CALI: AF2088DL #3
SAMPLE: M WO3512 #93053 DISCHARGE STAKE 500ML
CONDS.: GC DESC=MB SCAN=DN DB-5 60M 45CM/SEC INST M METH TO-14
RANGE: G 1,3686 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3



Quantitation Report File: AF2088DL

Data: AF2088DL.TI
05/10/95 1:01:00
Sample: M WO3512 #93053 DISCHARGE STAKE 500ML
Conds.: GC DESC=MB SCAN=DN DB-5 60M 45CM/SEC INST M METH TO-14
Formula: POS1S Instrument: FINN Weight: 0.000
Submitted by: OHM Analyst: DCG/079 Acct. No.:

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name
1	BROMOCHLOROMETHANE
2	1,4-DIFLUOROBENZENE
3	D5-CHLOROBENZENE
4	D4-1,2-DICHLOROETHANE
5	D8-TOLUENE
6	BROMOFLUOROBENZENE
7	TETRACHLOROETHENE

VK 5/10/95

Scan	Time	Area(Hgh#)	Amount		Name
1189	6:37	6705.	8.000	PPBV	BROMOCHLOROMETHANE
1539	8:34	34849.	8.000	PPBV	1,4-DIFLUOROBENZENE
2538	14:07	36931.	8.000	PPBV	D5-CHLOROBENZENE
1341	7:27	9245.	8.054	PPBV	D4-1,2-DICHLOROETHANE
2081	11:34	34028.	8.500	PPBV	D8-TOLUENE
2849	15:51	14294.	3.848	PPBV	BROMOFLUOROBENZENE
2371	13:11	3855.	2.628	PPBV	TETRACHLOROETHENE

DCG 5-10-95

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(A)	Ratio
1	6:40	0.99	1.000	1.00	8.00	8.00	1.000	1.000	1.00
2	8:37	0.99	1.000	1.00	8.00	8.00	1.000	1.000	1.00
3	14:10	1.00	1.000	1.00	8.00	8.00	1.000	1.000	1.00
4	7:31	0.99	0.873	1.00	8.05	8.00	0.265	0.263	1.01
5	11:37	1.00	0.821	1.00	8.50	8.00	0.921	0.867	1.06
6	15:54	1.00	1.122	1.00	3.85	4.00	0.774	0.805	0.96
7	13:14	1.00	0.934	1.00	2.63	10.00	0.084	0.318	0.26

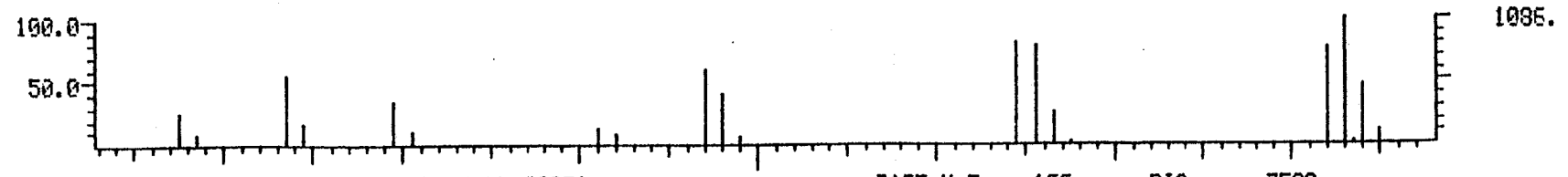
A0000091

DATA FILE: AF2088DL #2371
TARGET COMPOUND COMPARISON
COMPOUND: TETRACHLOROETHENE

LIBRARY FILE: TP #43
CALI: AF2088DL #3

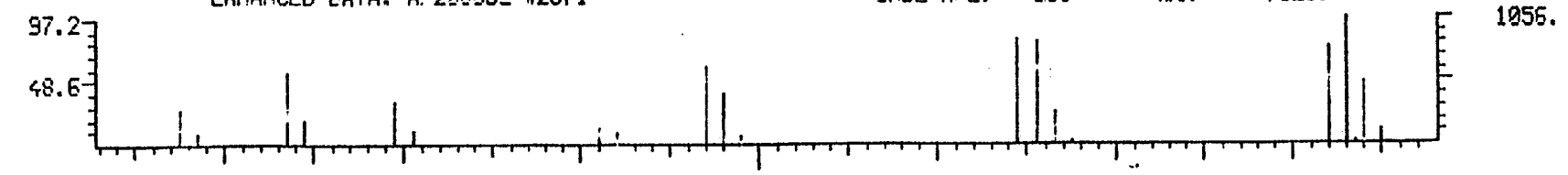
RAW DATA: AF2088DL #2371
05/10/95 1:01

BASE M/Z: 166 RIC: 7608.



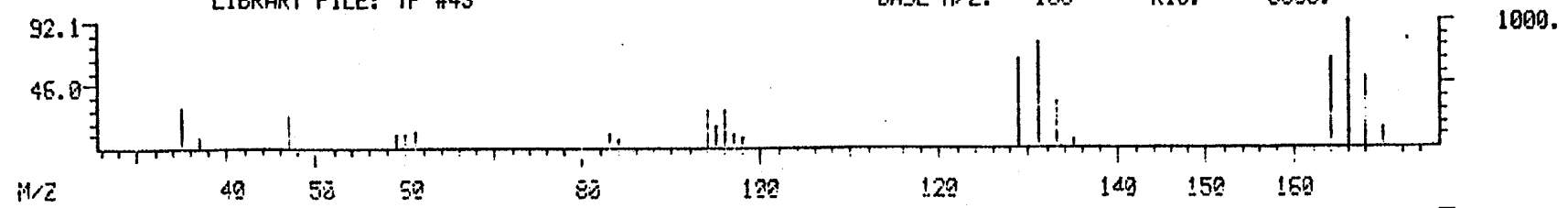
ENHANCED DATA: AF2088DL #2371

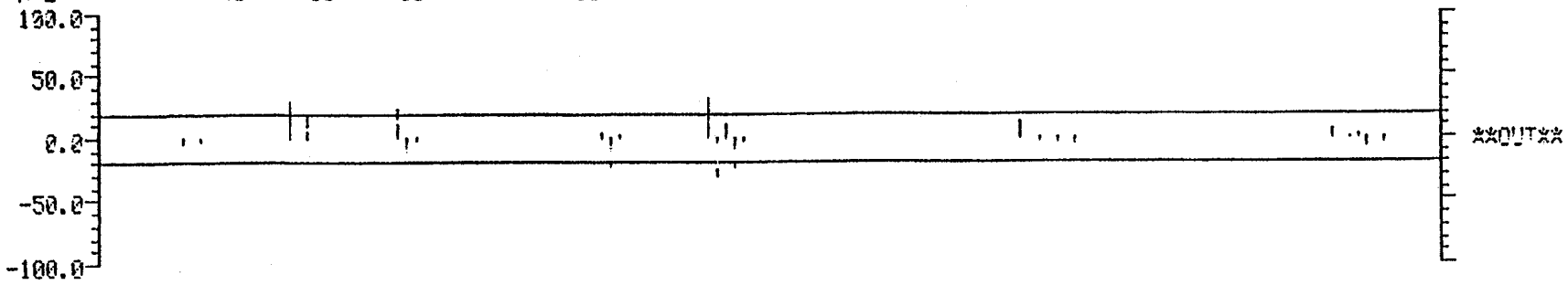
BASE M/Z: 166 RIC: 7528.



LIBRARY FILE: TP #43

BASE M/Z: 166 RIC: 6608.





QA/QC REPORT

SAMPLE NAME: af2088d1
INJECT TIME: 23:32:35
DATE: Tue May 09 1995
METHOD: polar3.MPT
NAMELIST: dcg.nam
MANIFOLD POSITION: 15

PRESSURE BEFORE SAMPLING(PSIA) 25.8
AFTER SAMPLING(PSIA) 24.4

NG INT. STD INJECTED IS1(0) IS2(0) IS3(0) IS4(0) IS5(0)

PREHEAT MODULE 1 (Y) MODULE 2 (N) , CRYOFOCUS? (Y) , HEAT SAMPLE? (N)

CONDITIONS:

DURING CONCENTRATION	MAX TEMP	FINAL TEMP	TRAP/SEP TIME
M1 Glass Bead Cryotrap	-153	-161(-160)	277
M2 Sorbent Packed Cryotrap	-28	-29(-25)	253
Focusing Trap	-200	-200(-190)	150(150)

DESORB/TRANSFER/INJECT	PREHEAT	FINAL TEMP	TIME(secs)
M1 Glass Bead Cryotrap	-5(-10)	6(5)	253
M2 Sorbent Packed Cryotrap	51(100)	225(220)	150(150)
Focusing Trap	-200	74	300(300)

MEDIUM CONC./TRANSFERRED	VOLUME	FLOW(SCCM)	FINAL PSIA
Internal Standard	100(100)	101(100)	20.0
Sample	500(500)	124(125)	20.8
Sweep/Dry Purge	100(100)	100(100)	32.5
Transfer to Packed Col.	45(45)	10(10)	33.4
Packed Column Separation	0(0)	10(50)	33.4

SYSTEM BAKEOUT

	TEMPERATURE	TIME(min.)
M1 Glass Bead Cryotrap	164(160)	5(5)
M2 Sorbent Packed Cryotrap	225(220)	5(5)
Focusing Trap		

REGULATED ZONES	TEMPERATURE
8-PORT VALVE	148(150)
GC TRANSFER LINE	109(110)
MANIFOLD TRANSFER LINE	112(110)
16-POSITION SELECT VALVE	98(100)
SAMPLE CONTAINER	AMBIENT

GCMS VOLATILES DATA, continued
STANDARDS DATA

6A
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Quanterra Knoxville Contract: OHM CAMP LEJEUNE

Lab Code: ITSTU Case No.: SDG No.: 3512

Instrument ID: M Calibration Date(s): 05/08/95 05/08/95

Calibration Times: 20:57 23:22

LAB FILE ID: RF001=LW0508M RF005=ML0508M
RF010=MD0508M RF025=MH0508M RF050=HI0508M

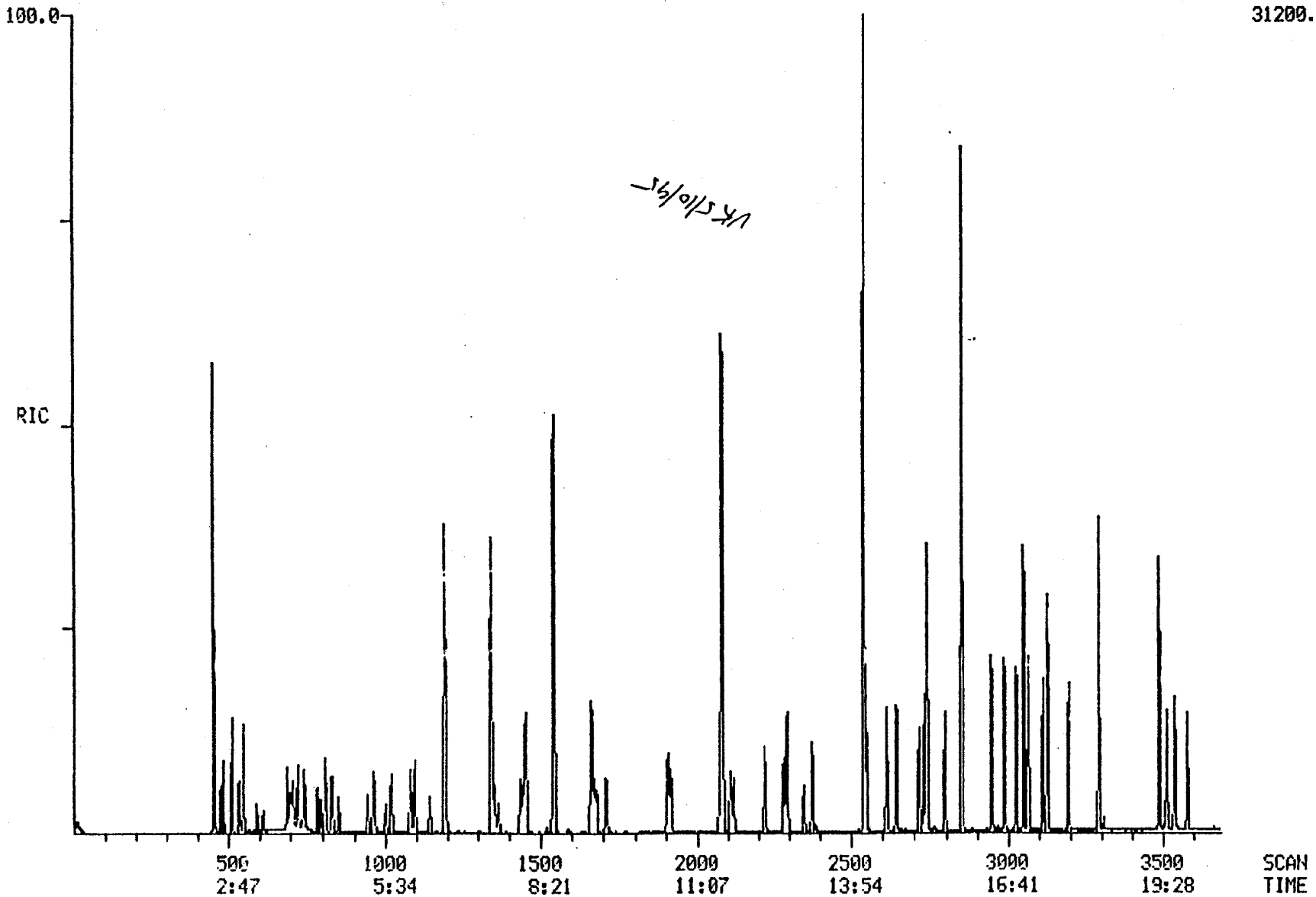
COMPOUND	RF001	RF005	RF010	RF025	RF050	$\overline{RRF}$	% RSD
Dichlorodifluoromethane	4.448	4.176	4.668	3.991	3.439	4.144	11.4
1,2-Dichlorotetrafluoroetha	2.384	2.214	2.450	2.074	1.696	2.164	13.9
Chloromethane	0.673	0.659	0.747	0.671	0.579	0.666	9.0
Vinyl Chloride	1.905	1.820	2.028	1.801	1.626	1.836	8.0
Bromomethane	1.447	1.519	1.679	1.387	1.209	1.448	11.9
Chloroethane	0.830	0.883	0.986	0.854	0.783	0.867	8.7
Trichlorofluoromethane	3.415	3.334	3.752	3.147	2.720	3.274	11.6
1,1-Dichloroethene	1.392	1.364	1.537	1.388	1.281	1.392	6.6
1,1,2-Trichlorotrifluoroeth	3.684	3.122	3.399	2.882	2.503	3.118	14.6
Methylene Chloride	1.630	1.333	1.466	1.304	1.203	1.387	11.9
1,1-Dichloroethane	3.911	3.605	4.106	3.602	3.378	3.720	7.7
cis-1,2-Dichloroethene	1.600	1.545	1.760	1.600	1.529	1.607	5.7
Chloroform	4.209	3.804	4.305	3.792	3.456	3.913	8.8
1,1,1-Trichloroethane	4.119	3.844	4.377	3.834	3.480	3.931	8.6
Carbon Tetrachloride	0.899	0.811	0.905	0.709	0.580	0.781	17.6
Benzene	0.973	0.895	1.007	0.846	0.729	0.890	12.4
1,2-Dichloroethane	0.627	0.605	0.681	0.580	0.524	0.603	9.6
Trichloroethene	0.435	0.393	0.455	0.387	0.337	0.401	11.4
1,2-Dichloropropane	0.491	0.446	0.510	0.429	0.367	0.449	12.5
cis-1,3-Dichloropropene	0.837	0.777	0.888	0.758	0.678	0.788	10.1
Toluene	0.958	0.894	0.938	0.826	0.780	0.879	8.5
trans-1,3-Dichloropropene	0.547	0.554	0.606	0.541	0.529	0.555	5.4
1,1,2-Trichloroethane	0.388	0.368	0.392	0.346	0.322	0.363	8.1
Tetrachloroethene	0.281	0.265	0.293	0.246	0.221	0.261	10.9
1,2-Dibromoethane	0.757	0.713	0.773	0.661	0.596	0.700	10.4
Chlorobenzene	0.953	0.872	0.950	0.817	0.713	0.861	11.7
Ethylbenzene	1.639	1.449	1.607	1.351	1.129	1.435	14.5
m/p-Xylene	1.315	1.167	1.295	1.088	0.912	1.155	14.3
o-Xylene	1.373	1.170	1.247	0.982	0.784	1.111	20.8
Styrene	0.895	0.785	0.873	0.747	0.645	0.789	12.8
1,1,2,2-Tetrachloroethane	1.149	0.981	1.120	0.969	0.800	1.004	13.9
1,3,5-Trimethylbenzene	1.700	1.447	1.664	1.348	1.032	1.438	18.8
1,2,4-Trimethylbenzene	1.767	1.500	1.701	1.373	1.043	1.477	19.6
1,3-Dichlorobenzene	1.081	0.899	1.072	0.857	0.686	0.919	17.9
1,4-Dichlorobenzene	1.094	0.881	1.012	0.769	0.605	0.872	22.3
1,2-Dichlorobenzene	1.051	0.861	1.032	0.843	0.672	0.892	17.4
Benzyl Chloride	1.562	1.404	1.641	1.306	0.945	1.372	19.8
1,2,4-Trichlorobenzene	0.181	0.165	0.236	0.219	0.168	0.194	16.5
Hexachlorobutadiene	0.318	0.305	0.398	0.363	0.287	0.334	13.6
D4-1,2-Dichloroethane	0.249	0.252	0.261	0.258	0.252	0.254	1.9
D8-Toluene	0.871	0.871	0.837	0.824	0.834	0.847	2.6
Bromofluorobenzene	0.846	0.783	0.798	0.739	0.627	0.759	10.9

A0000094

RIC
05/08/95 20:57:00
SAMPLE: M CX-575 LOW 100ML
CONDS.: GC DESC=MB SCAN=DN DB-5 60M 45CM/SEC INST M METH TO-14
RANGE: G 1,3685 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: LW0508M #1
CALI: LW0508M #3

SCANS 1 TO 3685



Quantitation Report File: LW0508M

Data: LW0508M.TI
05/08/95 20:57:00
Sample: M CX-576 LOW 100ML
Conds.: GC DESC=MB SCAN=DN DB-5 60M 45CM/SEC INST M METH TO-14
Formula: POS2 Instrument: FINN Weight: 0.000
Submitted by: CURVE Analyst: DCG/079 Acct. No.:

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name
1	BROMOCHLOROMETHANE
2	1,4-DIFLUOROBENZENE
3	D5-CHLOROBENZENE
4	D4-1,2-DICHLOROETHANE
5	D8-TOLUENE
6	BROMOFLUOROBENZENE
7	DICHLORODIFLUOROMETHANE
8	CHLORODIFLUOROMETHANE
9	1,2-DICHLORO-1,1,2,2-TETRAFLUOROETHANE
10	CHLOROMETHANE
11	VINYL CHLORIDE
12	N-BUTANE
13	1,3-BUTADIENE
14	BROMOMETHANE
15	CHLOROETHANE
16	TRICHLOROFLUOROMETHANE
17	PENTANE
18	1,1-DICHLOROETHENE
19	1,1,2-TRICHLOROTRIFLUOROETHANE
20	CARBON DISULFIDE
21	3-CHLOROPROPENE
22	METHYLENE CHLORIDE
23	TRANS-1,2-DICHLOROETHENE
24	HEXANE
25	1,1-DICHLOROETHANE
26	CIS-1,2-DICHLOROETHENE
27	CHLOROFORM
28	1,1,1-TRICHLOROETHANE
29	CYCLOHEXANE
30	CARBON TETRACHLORIDE
31	BENZENE
32	1,2-DICHLOROETHANE
33	HEPTANE
34	TRICHLOROETHENE
35	1,2-DICHLOROPROPANE
36	DIBROMOMETHANE
37	BROMODICHLOROMETHANE
38	CIS-1,3-DICHLOROPROPENE
39	TOLUENE
40	OCTANE
41	TRANS-1,3-DICHLOROPROPENE
42	1,1,2-TRICHLOROETHANE
43	TETRACHLOROETHENE
44	DIBROMOCHLOROMETHANE
45	1,2-DIBROMOETHANE
46	CHLOROBENZENE
47	ETHYLBENZENE

No	Name
48	M-XYLENE (FOR P-)
49	NONANE
50	O-XYLENE

Scan	Time	Area(Hght)	Amount		Name
1191	6:37	7840.	8.000	PPBV	BROMOCHLOROMETHANE
1540	8:34	40467.	8.000	PPBV	1,4-DIFLUOROBENZENE
2541	14:08	48113.	8.000	PPBV	D5-CHLOROBENZENE
1343	7:28	10088.	8.000	PPBV	D4-1,2-DICHLOROETHANE
2083	11:35	41887.	8.000	PPBV	D8-TOLUENE
2853	15:52	20352.	4.000	PPBV	BROMOFLUOROBENZENE
484	2:42	4359.	1.000	PPBV	DICHLORODIFLUOROMETHANE
475	2:39	3871.	1.000	PPBV	CHLORODIFLUOROMETHANE
511	2:51	2336.	1.000	PPBV	1,2-DICHLORO-1,1,2,2-TETRAFL
510	2:50	660.	1.000	PPBV	CHLOROMETHANE
534	2:58	1867.	1.000	PPBV	VINYL CHLORIDE
548	3:03	4158.	1.000	PPBV	N-BUTANE
547	3:03	1428.	1.000	PPBV	1,3-BUTADIENE
590	3:17	1418.	1.000	PPBV	BROMOMETHANE
610	3:24	813.	1.000	PPBV	CHLOROETHANE
690	3:50	3347.	1.000	PPBV	TRICHLOROFLUOROMETHANE
722	4:01	471.	1.000	PPBV	PENTANE
785	4:22	1364.	1.000	PPBV	1,1-DICHLOROETHENE
812	4:31	3610.	1.000	PPBV	1,1,2-TRICHLOROTRIFLUOROETHA
854	4:45	4582.	1.000	PPBV	CARBON DISULFIDE
834	4:38	2536.	1.000	PPBV	3-CHLOROPROPENE
830	4:37	1597.	1.000	PPBV	METHYLENE CHLORIDE
945	5:15	1348.	1.000	PPBV	TRANS-1,2-DICHLOROETHENE
1096	6:06	1736.	1.000	PPBV	HEXANE
1003	5:35	3833.	1.000	PPBV	1,1-DICHLOROETHANE
1144	6:22	1568.	1.000	PPBV	CIS-1,2-DICHLOROETHENE
1196	6:39	4125.	1.000	PPBV	CHLOROFORM
1354	7:32	4037.	1.000	PPBV	1,1,1-TRICHLOROETHANE
1454	8:05	2719.	1.000	PPBV	CYCLOHEXANE
1454	8:05	4550.	1.000	PPBV	CARBON TETRACHLORIDE
1448	8:03	4924.	1.000	PPBV	BENZENE
1366	7:36	3173.	1.000	PPBV	1,2-DICHLOROETHANE
1662	9:15	5927.	1.000	PPBV	HEPTANE
1670	9:17	2200.	1.000	PPBV	TRICHLOROETHENE
1661	9:14	2486.	1.000	PPBV	1,2-DICHLOROPROPANE
1679	9:20	2401.	1.000	PPBV	DIBROMOMETHANE
1709	9:30	4827.	1.000	PPBV	BROMODICHLOROMETHANE
1918	10:40	4233.	1.000	PPBV	CIS-1,3-DICHLOROPROPENE
2110	11:44	5763.	1.000	PPBV	TOLUENE
2293	12:45	2095.	1.000	PPBV	OCTANE
2075	11:32	3292.	1.000	PPBV	TRANS-1,3-DICHLOROPROPENE
2120	11:47	2335.	1.000	PPBV	1,1,2-TRICHLOROETHANE
2374	13:12	1690.	1.000	PPBV	TETRACHLOROETHENE
2283	12:42	5326.	1.000	PPBV	DIBROMOCHLOROMETHANE
2348	13:04	4553.	1.000	PPBV	1,2-DIBROMOETHANE
2551	14:11	5732.	1.000	PPBV	CHLOROBENZENE
2613	14:32	9857.	1.000	PPBV	ETHYLBENZENE
2644	14:42	7906.	1.000	PPBV	M-XYLENE (FOR P-)
2741	15:15	7129.	1.000	PPBV	NONANE
2743	15:15	8257.	1.000	PPBV	O-XYLENE

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(A)	Ratio
1	6:40	0.99	1.000	1.00	8.00	8.00	1.000	1.000	1.00
2	8:36	1.00	1.000	1.00	8.00	8.00	1.000	1.000	1.00
3	14:09	1.00	1.000	1.00	8.00	8.00	1.000	1.000	1.00
4	7:30	1.00	0.873	1.00	8.00	8.00	0.249	0.249	1.00
5	11:37	1.00	0.820	1.00	8.00	8.00	0.871	0.871	1.00
6	15:53	1.00	1.122	1.00	4.00	4.00	0.846	0.846	1.00
7	2:43	0.99	0.407	1.00	1.00	1.00	4.448	4.448	1.00
8	2:40	0.99	0.399	1.00	1.00	1.00	3.950	3.950	1.00
9	2:52	0.99	0.429	1.00	1.00	1.00	2.384	2.384	1.00
10	2:51	1.00	0.427	1.00	1.00	1.00	0.673	0.673	1.00
11	2:59	0.99	0.448	1.00	1.00	1.00	1.905	1.905	1.00
12	3:04	0.99	0.460	1.00	1.00	1.00	4.243	4.243	1.00
13	3:04	0.99	0.459	1.00	1.00	1.00	1.457	1.457	1.00
14	3:18	0.99	0.495	1.00	1.00	1.00	1.447	1.447	1.00
15	3:25	0.99	0.513	1.00	1.00	1.00	0.830	0.830	1.00
16	3:52	0.99	0.579	1.00	1.00	1.00	3.415	3.415	1.00
17	4:03	0.99	0.607	1.00	1.00	1.00	0.481	0.481	1.00
18	4:23	0.99	0.659	1.00	1.00	1.00	1.392	1.392	1.00
19	4:33	0.99	0.683	1.00	1.00	1.00	3.684	3.684	1.00
20	4:46	1.00	0.716	1.00	1.00	1.00	4.675	4.675	1.00
21	4:40	0.99	0.701	1.00	1.00	1.00	2.588	2.588	1.00
22	4:39	0.99	0.698	1.00	1.00	1.00	1.630	1.630	1.00
23	5:17	0.99	0.794	1.00	1.00	1.00	1.376	1.376	1.00
24	6:07	1.00	0.919	1.00	1.00	1.00	1.771	1.771	1.00
25	5:37	0.99	0.843	1.00	1.00	1.00	3.911	3.911	1.00
26	6:24	0.99	0.961	1.00	1.00	1.00	1.600	1.600	1.00
27	6:41	1.00	1.003	1.00	1.00	1.00	4.209	4.209	1.00
28	7:33	1.00	1.134	1.00	1.00	1.00	4.119	4.119	1.00
29	8:07	1.00	0.944	1.00	1.00	1.00	0.538	0.538	1.00
30	8:07	1.00	0.944	1.00	1.00	1.00	0.899	0.899	1.00
31	8:05	1.00	0.940	1.00	1.00	1.00	0.973	0.973	1.00
32	7:38	1.00	0.887	1.00	1.00	1.00	0.627	0.627	1.00
33	9:16	1.00	1.078	1.00	1.00	1.00	1.172	1.172	1.00
34	9:19	1.00	1.083	1.00	1.00	1.00	0.435	0.435	1.00
35	9:16	1.00	1.078	1.00	1.00	1.00	0.491	0.491	1.00
36	9:22	1.00	1.089	1.00	1.00	1.00	0.475	0.475	1.00
37	9:32	1.00	1.109	1.00	1.00	1.00	0.954	0.954	1.00
38	10:42	1.00	1.244	1.00	1.00	1.00	0.837	0.837	1.00
39	11:45	1.00	0.831	1.00	1.00	1.00	0.958	0.958	1.00
40	12:47	1.00	0.903	1.00	1.00	1.00	0.348	0.348	1.00
41	11:34	1.00	0.817	1.00	1.00	1.00	0.547	0.547	1.00
42	11:49	1.00	0.835	1.00	1.00	1.00	0.388	0.388	1.00
43	13:14	1.00	0.934	1.00	1.00	1.00	0.281	0.281	1.00
44	12:44	1.00	0.899	1.00	1.00	1.00	0.886	0.886	1.00
45	13:05	1.00	0.924	1.00	1.00	1.00	0.757	0.757	1.00
46	14:13	1.00	1.004	1.00	1.00	1.00	0.953	0.953	1.00
47	14:33	1.00	1.028	1.00	1.00	1.00	1.639	1.639	1.00
48	14:44	1.00	1.040	1.00	1.00	1.00	1.315	1.315	1.00
49	15:16	1.00	1.078	1.00	1.00	1.00	1.185	1.185	1.00
50	15:17	1.00	1.079	1.00	1.00	1.00	1.373	1.373	1.00

Quantitation Report File: LW0508M

Data: LW0508M.TI
05/08/95 20:57:00
Sample: M CX-576 LOW 100ML
Conds.: GC DESC=MB SCAN=DN DB-5 60M 45CM/SEC INST M METH TO-14
Formula: POS2 Instrument: FINN Weight: 0.000
Submitted by: CURVE Analyst: DCG/079 Acct. No.:

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name
51	STYRENE
52	BROMOFORM
53	CUMENE
54	1,1,2,2-TETRACHLOROETHANE
55	N-PROPYLBENZENE
56	1,3,5-TRIMETHYLBENZENE
57	DECANE
58	ALPHA-METHYLSTYRENE
59	1,2,4-TRIMETHYLBENZENE
60	1,3-DICHLOROBENZENE
61	1,4-DICHLOROBENZENE
62	BENZYL CHLORIDE
63	1,2-DICHLOROBENZENE
64	UNDECANE
65	DODECANE
66	BENZENE, 1,2,4-TRICHLORO
67	HEXACHLOROBUTADIENE
68	NAPHTHALENE
69	METHANOL
70	ETHYL ETHER
71	ACETONE
72	ACRYLONITRILE
73	VINYL ACETATE
74	2-BUTANONE
75	1-BUTANOL
76	4-METHYL-2-PENTANONE
77	2-HEXANONE
78	METHYL-T-BUTYL ETHER
79	ACROLEIN
80	ACETONITRILE (DOT)

Scan	Time	Area(Hght)	Amount	Name
2731	15:11	5383.	1.000 PPBV	STYRENE
2717	15:07	5422.	1.000 PPBV	BROMOFORM
2853	15:52	11983.	1.000 PPBV	CUMENE
2798	15:34	6909.	1.000 PPBV	1,1,2,2-TETRACHLOROETHANE
2949	16:24	14746.	1.000 PPBV	N-PROPYLBENZENE
2990	16:38	10222.	1.000 PPBV	1,3,5-TRIMETHYLBENZENE
3054	16:59	9739.	1.000 PPBV	DECANE
3030	16:51	5284.	1.000 PPBV	ALPHA-METHYLSTYRENE
3069	17:04	10630.	1.000 PPBV	1,2,4-TRIMETHYLBENZENE
3114	17:19	6501.	1.000 PPBV	1,3-DICHLOROBENZENE
3130	17:24	6580	1.000 PPBV	1,4-DICHLOROBENZENE
3127	17:23	9393.	1.000 PPBV	BENZYL CHLORIDE
3195	17:46	6320.	1.000 PPBV	1,2-DICHLOROBENZENE

Scan	Time	Area(Hght)	Amount	Name
3292	18:19	10131.	1.000 PPBV	UNDECANE
3486	19:23	8961.	1.000 PPBV	DODECANE
3514	19:33	1088.	1.000 PPBV	BENZENE, 1,2,4-TRICHLORO
3579	19:54	1081.	0.565 PPBV	HEXACHLOROBUTADIENE
3538	19:41	11489.	1.109 PPBV	NAPHTHALENE
533	2:58	3609.	3.779 PPBV	METHANOL
742	4:08	3632.	1.473 PPBV	ETHYL ETHER
705	3:55	1455.	2.081 PPBV	ACETONE
797	4:26	3101.	2.324 PPBV	ACRYLONITRILE
1020	5:40	11428.	1.656 PPBV	VINYL ACETATE
1081	6:01	1217.	1.708 PPBV	2-BUTANONE
1439	8:00	3232.	1.671 PPBV	1-BUTANOL
1909	10:37	9899.	1.219 PPBV	4-METHYL-2-PENTANONE
2222	12:21	3795.	1.239 PPBV	2-HEXANONE
965	5:22	5975.	1.285 PPBV	METHYL-T-BUTYL ETHER
689	3:50	1210.	2.295 PPBV	ACROLEIN
698	3:53	4379.	2.928 PPBV	ACETONITRILE (DOT)

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(A)	Ratio
51	15:13	1.00	1.075	1.00	1.00	1.00	0.895	0.895	1.00
52	15:08	1.00	1.069	1.00	1.00	1.00	0.902	0.902	1.00
53	15:53	1.00	1.122	1.00	1.00	1.00	1.992	1.992	1.00
54	15:35	1.00	1.101	1.00	1.00	1.00	1.149	1.149	1.00
55	16:25	1.00	1.160	1.00	1.00	1.00	2.452	2.452	1.00
56	16:39	1.00	1.176	1.00	1.00	1.00	1.700	1.700	1.00
57	17:00	1.00	1.201	1.00	1.00	1.00	1.619	1.619	1.00
58	16:52	1.00	1.192	1.00	1.00	1.00	0.879	0.879	1.00
59	17:05	1.00	1.207	1.00	1.00	1.00	1.767	1.767	1.00
60	17:20	1.00	1.225	1.00	1.00	1.00	1.081	1.081	1.00
61	17:25	1.00	1.231	1.00	1.00	1.00	1.094	1.094	1.00
62	17:25	1.00	1.230	1.00	1.00	1.00	1.562	1.562	1.00
63	17:47	1.00	1.257	1.00	1.00	1.00	1.051	1.051	1.00
64	18:20	1.00	1.295	1.00	1.00	1.00	1.685	1.685	1.00
65	19:25	1.00	1.371	1.00	1.00	1.00	1.490	1.490	1.00
66	19:34	1.00	1.382	1.00	1.00	1.00	0.181	0.181	1.00
67	19:55	1.00	1.407	1.00	0.56	0.56	0.318	0.318	1.00
68	19:42	1.00	1.392	1.00	1.11	1.11	1.722	1.722	1.00
69	3:00	0.99	0.450	0.99	3.78	3.78	0.975	0.975	1.00
70	4:10	0.99	0.624	1.00	1.47	1.47	2.516	2.516	1.00
71	3:58	0.99	0.594	1.00	2.08	2.08	0.714	0.714	1.00
72	4:28	0.99	0.671	1.00	2.32	2.32	1.362	1.362	1.00
73	5:43	0.99	0.857	1.00	1.66	1.66	7.044	7.044	1.00
74	6:03	0.99	0.908	1.00	1.71	1.71	0.727	0.727	1.00
75	8:03	1.00	0.935	1.00	1.67	1.67	0.382	0.382	1.00
76	10:39	1.00	1.239	1.00	1.22	1.22	1.606	1.606	1.00
77	12:23	1.00	0.875	1.00	1.24	1.24	0.509	0.509	1.00
78	5:24	0.99	0.811	1.00	1.29	1.29	4.744	4.744	1.00
79	3:52	0.99	0.579	1.00	2.30	2.30	0.538	0.538	1.00
80	3:55	0.99	0.588	1.00	2.93	2.93	1.526	1.526	1.00

QA/QC REPORT

SAMPLE NAME: lw0508m
INJECT TIME: 19:24:41
DATE: Mon May 08 1995
METHOD: polar3.MPT
NAMELIST: dcg.nam
MANIFOLD POSITION: 2

PRESSURE BEFORE SAMPLING(PSIA) 23.7
AFTER SAMPLING(PSIA) 26.6

UK 5/10/95

NG INT. STD INJECTED IS1(0) IS2(0) IS3(0) IS4(0) IS5(0)

PREHEAT MODULE 1 (Y) MODULE 2 (N) , CRYOFOCUS? (Y) , HEAT SAMPLE? (N)

CONDITIONS:

DURING CONCENTRATION	MAX TEMP	FINAL TEMP	TRAP/SEP TIME
M1 Glass Bead Cryotrap	-149	-172(-160)	277
M2 Sorbent Packed Cryotrap	-28	-30(-25)	60
Focusing Trap	-199	-200(-190)	150(150)

DESORB/TRANSFER/INJECT	PREHEAT	FINAL TEMP	TIME(secs)
M1 Glass Bead Cryotrap	-6(-10)	20(5)	60
M2 Sorbent Packed Cryotrap	121(100)	226(220)	150(150)
Focusing Trap	-200	77	300(300)

MEDIUM CONC./TRANSFERRED	VOLUME	FLOW(SCCM)	FINAL PSIA
Internal Standard	100(100)	100(100)	24.8
Sample	101(100)	124(125)	24.2
Sweep/Dry Purge	101(100)	100(100)	31.7
Transfer to Packed Col.	45(45)	10(10)	33.4
Packed Column Separation	0(0)	10(50)	33.4

SYSTEM BAKEOUT

	TEMPERATURE	TIME(min.)
M1 Glass Bead Cryotrap	164(160)	5(5)
M2 Sorbent Packed Cryotrap	224(220)	5(5)
Focusing Trap		

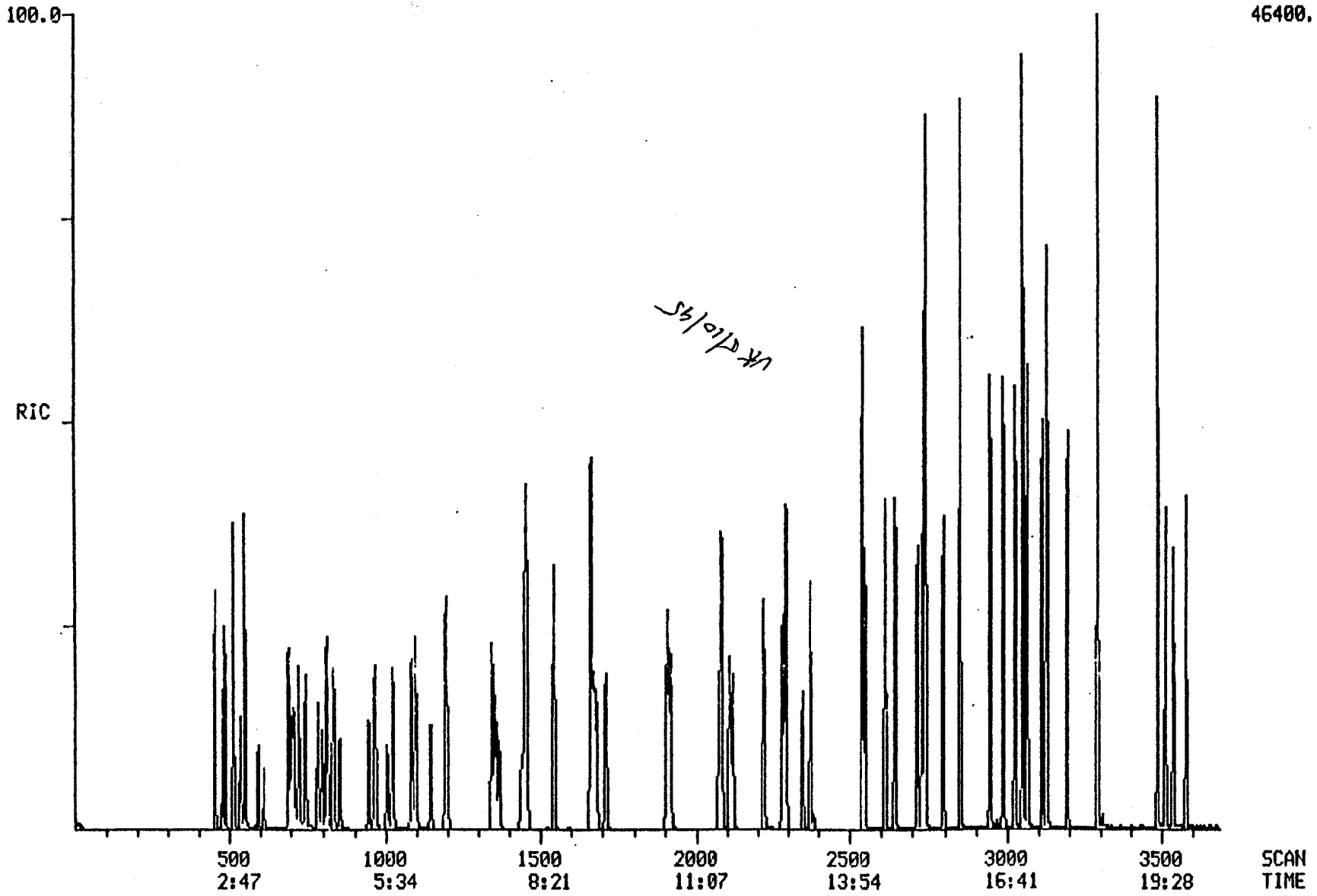
REGULATED ZONES	TEMPERATURE
8-PORT VALVE	149(150)
GC TRANSFER LINE	111(110)
MANIFOLD TRANSFER LINE	110(110)
16-POSITION SELECT VALVE	99(100)
SAMPLE CONTAINER	AMBIENT

A0000101

RIC
05/08/95 21:54:00
SAMPLE: M CX-576 LOW 500ML
CONDS.: GC DESC=MB SCAN=DN DB-5 60M 45CM/SEC INST M METH TO-14
RANGE: G 1,3686 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: ML0508M #1
CALI: ML0508M #3

SCANS 1 TO 3686



Quantitation Report File: ML0508M

Data: ML0508M.TI
05/08/95 21:54:00
Sample: M CX-576 LOW 500ML
Conds.: GC DESC=MB SCAN=DN DB-5 60M 45CM/SEC INST M METH TO-14
Formula: POS2 Instrument: FINN Weight: 0.000
Submitted by: CURVE Analyst: DCG/079 Acct. No.:

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name
1	BROMOCHLOROMETHANE
2	1,4-DIFLUOROBENZENE
3	D5-CHLOROBENZENE
4	D4-1,2-DICHLOROETHANE
5	D8-TOLUENE
6	BROMOFLUOROBENZENE
7	DICHLORODIFLUOROMETHANE
8	CHLORODIFLUOROMETHANE
9	1,2-DICHLORO-1,1,2,2-TETRAFLUOROETHANE
10	CHLOROMETHANE
11	VINYL CHLORIDE
12	N-BUTANE
13	1,3-BUTADIENE
14	BROMOMETHANE
15	CHLOROETHANE
16	TRICHLOROFLUOROMETHANE
17	PENTANE
18	1,1-DICHLOROETHENE
19	1,1,2-TRICHLOROTRIFLUOROETHANE
20	CARBON DISULFIDE
21	3-CHLOROPROPENE
22	METHYLENE CHLORIDE
23	TRANS-1,2-DICHLOROETHENE
24	HEXANE
25	1,1-DICHLOROETHANE
26	CIS-1,2-DICHLOROETHENE
27	CHLOROFORM
28	1,1,1-TRICHLOROETHANE
29	CYCLOHEXANE
30	CARBON TETRACHLORIDE
31	BENZENE
32	1,2-DICHLOROETHANE
33	HEPTANE
34	TRICHLOROETHENE
35	1,2-DICHLOROPROPANE
36	DIBROMOMETHANE
37	BROMODICHLOROMETHANE
38	CIS-1,3-DICHLOROPROPENE
39	TOLUENE
40	OCTANE
41	TRANS-1,3-DICHLOROPROPENE
42	1,1,2-TRICHLOROETHANE
43	TETRACHLOROETHENE
44	DIBROMOCHLOROMETHANE
45	1,2-DIBROMOETHANE
46	CHLOROBENZENE
47	ETHYLBENZENE

No	Name
48	M-XYLENE (FOR P-)
49	NONANE
50	O-XYLENE

Scan	Time	Area(Hght)	Amount		Name
1194	6:38	7532.	8.000	PPBV	BROMOCHLOROMETHANE
1542	8:35	38448.	8.000	PPBV	1,4-DIFLUOROBENZENE
2541	14:08	43456.	8.000	PPBV	D5-CHLOROBENZENE
1345	7:29	9704.	8.000	PPBV	D4-1,2-DICHLOROETHANE
2083	11:35	37866.	8.000	PPBV	D8-TOLUENE
2852	15:52	17007.	4.000	PPBV	BROMOFLUOROBENZENE
486	2:42	19657.	5.000	PPBV	DICHLORODIFLUOROMETHANE
477	2:39	17553.	5.000	PPBV	CHLORODIFLUOROMETHANE
513	2:51	10422.	5.000	PPBV	1,2-DICHLORO-1,1,2,2-TETRAFL
511	2:51	3101.	5.000	PPBV	CHLOROMETHANE
535	2:59	8568.	5.000	PPBV	VINYL CHLORIDE
549	3:03	18687.	5.000	PPBV	N-BUTANE
548	3:03	6988.	5.000	PPBV	1,3-BUTADIENE
592	3:18	7153.	5.000	PPBV	BROMOMETHANE
612	3:24	4156.	5.000	PPBV	CHLOROETHANE
692	3:51	15694.	5.000	PPBV	TRICHLOROFLUOROMETHANE
724	4:02	2051.	5.000	PPBV	PENTANE
787	4:23	6420.	5.000	PPBV	1,1-DICHLOROETHENE
815	4:32	14699.	5.000	PPBV	1,1,2-TRICHLOROTRIFLUOROETHA
856	4:46	19765.	5.000	PPBV	CARBON DISULFIDE
837	4:39	11588.	5.000	PPBV	3-CHLOROPROPENE
833	4:38	6277.	5.000	PPBV	METHYLENE CHLORIDE
948	5:16	6475.	5.000	PPBV	TRANS-1,2-DICHLOROETHENE
1098	6:06	7519.	5.000	PPBV	HEXANE
1007	5:36	16972.	5.000	PPBV	1,1-DICHLOROETHANE
1148	6:23	7275.	5.000	PPBV	CIS-1,2-DICHLOROETHENE
1199	6:40	17909.	5.000	PPBV	CHLOROFORM
1356	7:32	18096.	5.000	PPBV	1,1,1-TRICHLOROETHANE
1456	8:06	11773.	5.000	PPBV	CYCLOHEXANE
1456	8:06	19491.	5.000	PPBV	CARBON TETRACHLORIDE
1451	8:04	21498.	5.000	PPBV	BENZENE
1368	7:37	14541.	5.000	PPBV	1,2-DICHLOROETHANE
1663	9:15	24954.	5.000	PPBV	HEPTANE
1672	9:18	9446.	5.000	PPBV	TRICHLOROETHENE
1663	9:15	10729.	5.000	PPBV	1,2-DICHLOROPROPANE
1680	9:21	10425.	5.000	PPBV	DIBROMOMETHANE
1710	9:31	21011.	5.000	PPBV	BROMODICHLOROMETHANE
1919	10:40	18676.	5.000	PPBV	CIS-1,3-DICHLOROPROPENE
2109	11:44	24289.	5.000	PPBV	TOLUENE
2293	12:45	8819.	5.000	PPBV	OCTANE
2075	11:32	15040.	5.000	PPBV	TRANS-1,3-DICHLOROPROPENE
2120	11:47	10001.	5.000	PPBV	1,1,2-TRICHLOROETHANE
2373	13:12	7210.	5.000	PPBV	TETRACHLOROETHENE
2283	12:42	22763.	5.000	PPBV	DIBROMOCHLOROMETHANE
2348	13:04	19372.	5.000	PPBV	1,2-DIBROMOETHANE
2550	14:11	23678.	5.000	PPBV	CHLOROBENZENE
2613	14:32	39366.	5.000	PPBV	ETHYLBENZENE
2644	14:42	31708.	5.000	PPBV	M-XYLENE (FOR P-)
2740	15:14	27544.	5.000	PPBV	NONANE
2743	15:15	31788.	5.000	PPBV	O-XYLENE

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(A)	Ratio
1	6:40	1.00	1.000	1.00	8.00	8.00	1.000	1.000	1.00
2	8:36	1.00	1.000	1.00	8.00	8.00	1.000	1.000	1.00
3	14:09	1.00	1.000	1.00	8.00	8.00	1.000	1.000	1.00
4	7:30	1.00	0.873	1.00	8.00	8.00	0.252	0.252	1.00
5	11:37	1.00	0.820	1.00	8.00	8.00	0.871	0.871	1.00
6	15:53	1.00	1.122	1.00	4.00	4.00	0.783	0.783	1.00
7	2:43	1.00	0.407	1.00	5.00	5.00	4.176	4.176	1.00
8	2:40	1.00	0.399	1.00	5.00	5.00	3.729	3.729	1.00
9	2:52	1.00	0.429	1.00	5.00	5.00	2.214	2.214	1.00
10	2:51	1.00	0.427	1.00	5.00	5.00	0.659	0.659	1.00
11	2:59	1.00	0.448	1.00	5.00	5.00	1.820	1.820	1.00
12	3:04	1.00	0.460	1.00	5.00	5.00	3.970	3.970	1.00
13	3:04	1.00	0.459	1.00	5.00	5.00	1.484	1.484	1.00
14	3:18	1.00	0.495	1.00	5.00	5.00	1.519	1.519	1.00
15	3:25	1.00	0.513	1.00	5.00	5.00	0.883	0.883	1.00
16	3:52	1.00	0.579	1.00	5.00	5.00	3.334	3.334	1.00
17	4:03	1.00	0.607	1.00	5.00	5.00	0.436	0.436	1.00
18	4:23	1.00	0.659	1.00	5.00	5.00	1.364	1.364	1.00
19	4:33	1.00	0.683	1.00	5.00	5.00	3.122	3.122	1.00
20	4:46	1.00	0.716	1.00	5.00	5.00	4.199	4.199	1.00
21	4:40	1.00	0.701	1.00	5.00	5.00	2.462	2.462	1.00
22	4:39	1.00	0.698	1.00	5.00	5.00	1.333	1.333	1.00
23	5:17	1.00	0.794	1.00	5.00	5.00	1.375	1.375	1.00
24	6:07	1.00	0.919	1.00	5.00	5.00	1.597	1.597	1.00
25	5:37	1.00	0.843	1.00	5.00	5.00	3.605	3.605	1.00
26	6:24	1.00	0.961	1.00	5.00	5.00	1.545	1.545	1.00
27	6:41	1.00	1.003	1.00	5.00	5.00	3.804	3.804	1.00
28	7:33	1.00	1.134	1.00	5.00	5.00	3.844	3.844	1.00
29	8:07	1.00	0.944	1.00	5.00	5.00	0.490	0.490	1.00
30	8:07	1.00	0.944	1.00	5.00	5.00	0.811	0.811	1.00
31	8:05	1.00	0.940	1.00	5.00	5.00	0.895	0.895	1.00
32	7:38	1.00	0.887	1.00	5.00	5.00	0.605	0.605	1.00
33	9:16	1.00	1.078	1.00	5.00	5.00	1.038	1.038	1.00
34	9:19	1.00	1.083	1.00	5.00	5.00	0.393	0.393	1.00
35	9:16	1.00	1.078	1.00	5.00	5.00	0.446	0.446	1.00
36	9:22	1.00	1.089	1.00	5.00	5.00	0.434	0.434	1.00
37	9:32	1.00	1.109	1.00	5.00	5.00	0.874	0.874	1.00
38	10:42	1.00	1.244	1.00	5.00	5.00	0.777	0.777	1.00
39	11:45	1.00	0.831	1.00	5.00	5.00	0.894	0.894	1.00
40	12:47	1.00	0.903	1.00	5.00	5.00	0.325	0.325	1.00
41	11:34	1.00	0.817	1.00	5.00	5.00	0.554	0.554	1.00
42	11:49	1.00	0.835	1.00	5.00	5.00	0.368	0.368	1.00
43	13:14	1.00	0.934	1.00	5.00	5.00	0.265	0.265	1.00
44	12:44	1.00	0.899	1.00	5.00	5.00	0.838	0.838	1.00
45	13:05	1.00	0.924	1.00	5.00	5.00	0.713	0.713	1.00
46	14:13	1.00	1.004	1.00	5.00	5.00	0.872	0.872	1.00
47	14:33	1.00	1.028	1.00	5.00	5.00	1.449	1.449	1.00
48	14:44	1.00	1.040	1.00	5.00	5.00	1.167	1.167	1.00
49	15:16	1.00	1.078	1.00	5.00	5.00	1.014	1.014	1.00
50	15:17	1.00	1.079	1.00	5.00	5.00	1.170	1.170	1.00

Quantitation Report File: ML0508M

Data: ML0508M.TI
05/08/95 21:54:00
Sample: M CX-576 LOW 500ML
Conds.: GC DESC=MB SCAN=DN DB-5 60M 45CM/SEC INST M METH TO-14
Formula: POS2 Instrument: FINN Weight: 0.000
Submitted by: CURVE Analyst: DCG/079 Acct. No.:

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name
51	STYRENE
52	BROMOFORM
53	CUMENE
54	1,1,2,2-TETRACHLOROETHANE
55	N-PROPYLBENZENE
56	1,3,5-TRIMETHYLBENZENE
57	DECANE
58	ALPHA-METHYLSTYRENE
59	1,2,4-TRIMETHYLBENZENE
60	1,3-DICHLOROBENZENE
61	1,4-DICHLOROBENZENE
62	BENZYL CHLORIDE
63	1,2-DICHLOROBENZENE
64	UNDECANE
65	DODECANE
66	BENZENE, 1,2,4-TRICHLORO
67	HEXACHLOROBUTADIENE
68	NAPHTHALENE
69	METHANOL
70	ETHYL ETHER
71	ACETONE
72	ACRYLONITRILE
73	VINYL ACETATE
74	2-BUTANONE
75	1-BUTANOL
76	4-METHYL-2-PENTANONE
77	2-HEXANONE
78	METHYL-T-BUTYL ETHER
79	ACROLEIN
80	ACETONITRILE (DOT)

Scan	Time	Area(Hght)	Amount	Name
2730	15:11	21318.	5.000 PPBV	STYRENE
2716	15:06	22554.	5.000 PPBV	BROMOFORM
2852	15:52	44837.	5.000 PPBV	CUMENE
2798	15:34	26655.	5.000 PPBV	1,1,2,2-TETRACHLOROETHANE
2948	16:24	56993.	5.000 PPBV	N-PROPYLBENZENE
2990	16:38	39288.	5.000 PPBV	1,3,5-TRIMETHYLBENZENE
3053	16:59	38025.	5.000 PPBV	DECANE
3029	16:51	19936.	5.000 PPBV	ALPHA-METHYLSTYRENE
3068	17:04	40739.	5.000 PPBV	1,2,4-TRIMETHYLBENZENE
3113	17:19	24428.	5.000 PPBV	1,3-DICHLOROBENZENE
3129	17:24	23917.	5.000 PPBV	1,4-DICHLOROBENZENE
3127	17:23	38120.	5.000 PPBV	BENZYL CHLORIDE
3195	17:46	23388.	5.000 PPBV	1,2-DICHLOROBENZENE

Scan	Time	Area(Hght)	Amount	Name
3291	18:18	40399.	5.000 PPBV	UNDECANE
3486	19:23	34868.	5.000 PPBV	DODECANE
3513	19:32	4481.	5.000 PPBV	BENZENE, 1,2,4-TRICHLORO
3578	19:54	4677.	2.825 PPBV	HEXACHLOROBUTADIENE
3538	19:41	35258.	5.548 PPBV	NAPHTHALENE
536	2:59	7884.	18.894 PPBV	METHANOL
745	4:09	16917.	7.366 PPBV	ETHYL ETHER
708	3:56	6908.	10.403 PPBV	ACETONE
800	4:27	14253.	11.619 PPBV	ACRYLONITRILE
1023	5:41	50811.	8.278 PPBV	VINYL ACETATE
1084	6:02	5597.	8.542 PPBV	2-BUTANONE
1441	8:01	7979.	8.357 PPBV	1-BUTANOL
1910	10:37	41006.	6.093 PPBV	4-METHYL-2-PENTANONE
2221	12:21	15899.	6.196 PPBV	2-HEXANONE
968	5:23	26347.	6.426 PPBV	METHYL-T-BUTYL ETHER
692	3:51	5874.	11.475 PPBV	ACROLEIN
701	3:54	19685.	14.640 PPBV	ACETONITRILE (DOT)

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(A)	Ratio
51	15:13	1.00	1.075	1.00	5.00	5.00	0.785	0.785	1.00
52	15:08	1.00	1.069	1.00	5.00	5.00	0.830	0.830	1.00
53	15:53	1.00	1.122	1.00	5.00	5.00	1.651	1.651	1.00
54	15:35	1.00	1.101	1.00	5.00	5.00	0.981	0.981	1.00
55	16:25	1.00	1.160	1.00	5.00	5.00	2.098	2.098	1.00
56	16:39	1.00	1.176	1.00	5.00	5.00	1.447	1.447	1.00
57	17:00	1.00	1.201	1.00	5.00	5.00	1.400	1.400	1.00
58	16:52	1.00	1.192	1.00	5.00	5.00	0.734	0.734	1.00
59	17:05	1.00	1.207	1.00	5.00	5.00	1.500	1.500	1.00
60	17:20	1.00	1.225	1.00	5.00	5.00	0.899	0.899	1.00
61	17:25	1.00	1.231	1.00	5.00	5.00	0.881	0.881	1.00
62	17:25	1.00	1.230	1.00	5.00	5.00	1.404	1.404	1.00
63	17:47	1.00	1.257	1.00	5.00	5.00	0.861	0.861	1.00
64	18:20	1.00	1.295	1.00	5.00	5.00	1.487	1.487	1.00
65	19:25	1.00	1.371	1.00	5.00	5.00	1.284	1.284	1.00
66	19:34	1.00	1.382	1.00	5.00	5.00	0.165	0.165	1.00
67	19:55	1.00	1.407	1.00	2.82	2.82	0.305	0.305	1.00
68	19:42	1.00	1.392	1.00	5.55	5.55	1.170	1.170	1.00
69	3:00	0.99	0.450	1.00	18.89	18.89	0.443	0.443	1.00
70	4:10	1.00	0.624	1.00	7.37	7.37	2.439	2.439	1.00
71	3:58	0.99	0.594	1.00	10.40	10.40	0.705	0.705	1.00
72	4:28	1.00	0.671	1.00	11.62	11.62	1.303	1.303	1.00
73	5:43	1.00	0.857	1.00	8.28	8.28	6.520	6.520	1.00
74	6:03	1.00	0.908	1.00	8.54	8.54	0.696	0.696	1.00
75	8:03	1.00	0.935	1.00	8.36	8.36	0.199	0.199	1.00
76	10:39	1.00	1.239	1.00	6.09	6.09	1.400	1.400	1.00
77	12:23	1.00	0.875	1.00	6.20	6.20	0.472	0.472	1.00
78	5:24	1.00	0.811	1.00	6.43	6.43	4.355	4.355	1.00
79	3:52	1.00	0.579	1.00	11.48	11.48	0.544	0.544	1.00
80	3:55	1.00	0.588	1.00	14.64	14.64	1.428	1.428	1.00

QA/QC REPORT

SAMPLE NAME: ml0508m
INJECT TIME: 20:22:37
DATE: Mon May 08 1995
METHOD: polar3.MPT
NAMELIST: dcg.nam
MANIFOLD POSITION: 2

PRESSURE BEFORE SAMPLING(PSIA) 26.0
AFTER SAMPLING(PSIA) 25.1

NG INT. STD INJECTED IS1(0) IS2(0) IS3(0) IS4(0) IS5(0)

PREHEAT MODULE 1 (Y) MODULE 2 (N) , CRYOFOCUS? (Y) , HEAT SAMPLE? (N)

CONDITIONS:

DURING CONCENTRATION	MAX TEMP	FINAL TEMP	TRAP/SEP TIME
M1 Glass Bead Cryotrap	-156	-159(-160)	277
M2 Sorbent Packed Cryotrap	-28	-30(-25)	253
Focusing Trap	-195	-200(-190)	150(150)

DESORB/TRANSFER/INJECT	PREHEAT	FINAL TEMP	TIME(secs)
M1 Glass Bead Cryotrap	-6(-10)	9(5)	253
M2 Sorbent Packed Cryotrap	95(100)	222(220)	150(150)
Focusing Trap	-200	77	300(300)

MEDIUM CONC./TRANSFERRED	VOLUME	FLOW(SCCM)	FINAL PSIA
Internal Standard	100(100)	99(100)	24.9
Sample	501(500)	125(125)	20.8
Sweep/Dry Purge	100(100)	99(100)	32.6
Transfer to Packed Col.	45(45)	10(10)	33.4
Packed Column Separation	0(0)	10(50)	33.4

SYSTEM BAKEOUT

	TEMPERATURE:	TIME(min.)
M1 Glass Bead Cryotrap	166(160)	5(5)
M2 Sorbent Packed Cryotrap	220(220)	5(5)
Focusing Trap		

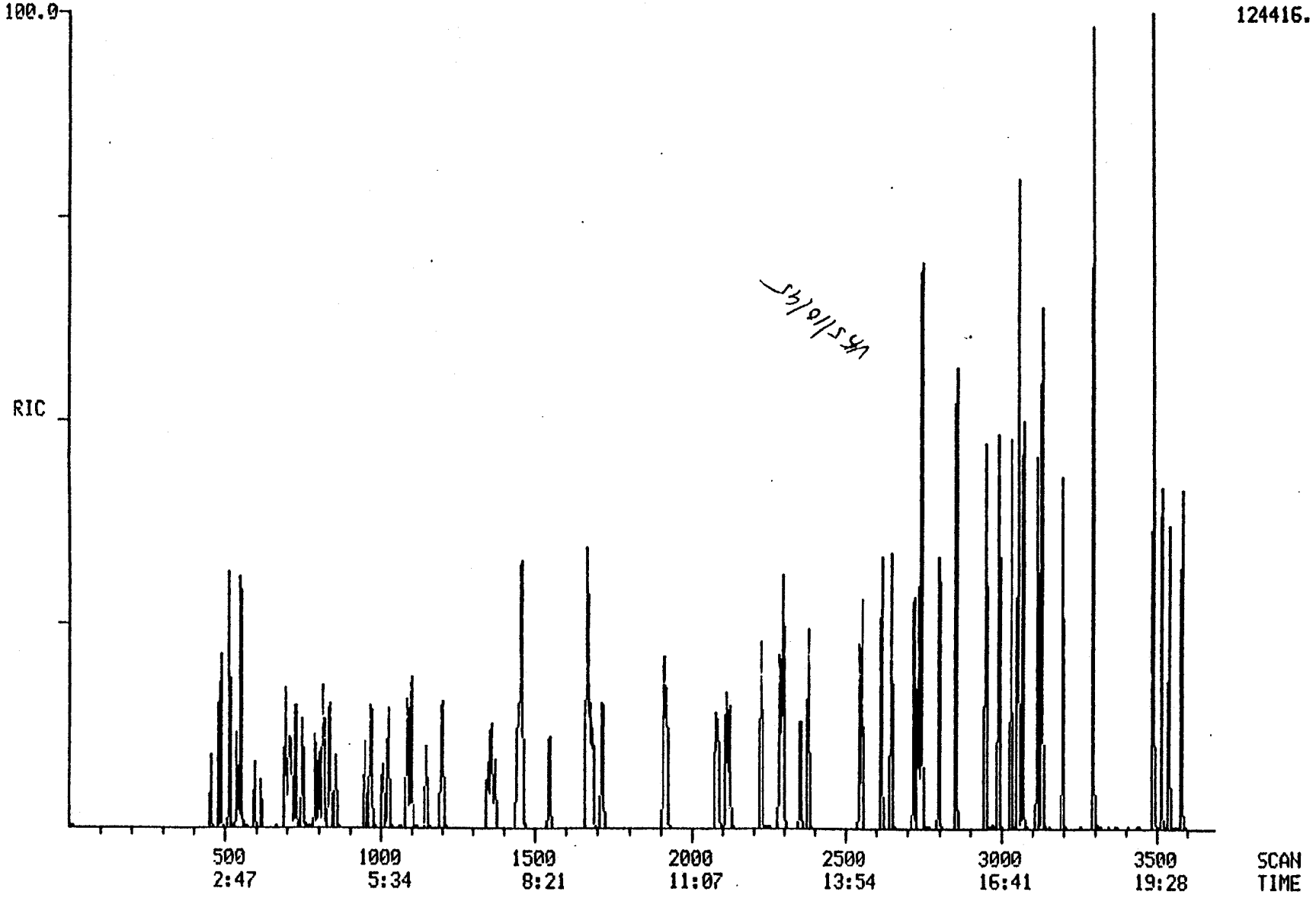
REGULATED ZONES	TEMPERATURE
8-PORT VALVE	149(150)
GC TRANSFER LINE	109(110)
MANIFOLD TRANSFER LINE	111(110)
16-POSITION SELECT VALVE	102(100)
SAMPLE CONTAINER	AMBIENT

A0000108

RIC
05/08/95 22:24:00
SAMPLE: M CX-576 100ML
CONDS.: GC DESC=MB SCAN=ON DB-5 60M 45CM/SEC INST M METH TO-14
RANGE: G 1,3685 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: MD0508M #1
CALI: MD0508M #3

SCANS 1 TO 3686



Quantitation Report File: MD0508M

Data: MD0508M.TI
05/08/95 22:24:00
Sample: M CX-576 100ML
Conds.: GC DESC=MB SCAN=DN DB-5 60M 45CM/SEC INST M METH TO-14
Formula: POS1 Instrument: FINN Weight: 0.000
Submitted by: CURVE Analyst: DCG/079 Acct. No.:

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name
1	BROMOCHLOROMETHANE
2	1,4-DIFLUOROBENZENE
3	D5-CHLOROBENZENE
4	D4-1,2-DICHLOROETHANE
5	D8-TOLUENE
6	BROMOFLUOROBENZENE
7	DICHLORODIFLUOROMETHANE
8	CHLORODIFLUOROMETHANE
9	1,2-DICHLORO-1,1,2,2-TETRAFLUOROETHANE
10	CHLOROMETHANE
11	VINYL CHLORIDE
12	N-BUTANE
13	1,3-BUTADIENE
14	BROMOMETHANE
15	CHLOROETHANE
16	TRICHLOROFLUOROMETHANE
17	PENTANE
18	1,1-DICHLOROETHENE
19	1,1,2-TRICHLOROTRIFLUOROETHANE
20	CARBON DISULFIDE
21	3-CHLOROPROPENE
22	METHYLENE CHLORIDE
23	TRANS-1,2-DICHLOROETHENE
24	HEXANE
25	1,1-DICHLOROETHANE
26	CIS-1,2-DICHLOROETHENE
27	CHLOROFORM
28	1,1,1-TRICHLOROETHANE
29	CYCLOHEXANE
30	CARBON TETRACHLORIDE
31	BENZENE
32	1,2-DICHLOROETHANE
33	HEPTANE
34	TRICHLOROETHENE
35	1,2-DICHLOROPROPANE
36	DIBROMOMETHANE
37	BROMODICHLOROMETHANE
38	CIS-1,3-DICHLOROPROPENE
39	TOLUENE
40	OCTANE
41	TRANS-1,3-DICHLOROPROPENE
42	1,1,2-TRICHLOROETHANE
43	TETRACHLOROETHENE
44	DIBROMOCHLOROMETHANE
45	1,2-DIBROMOETHANE
46	CHLOROBENZENE
47	ETHYLBENZENE

No	Name
48	M-XYLENE (FOR P-)
49	NONANE
50	O-XYLENE

Scan	Time	Area(Hght)	Amount		Name
1198	6:40	7070.	8.000	PPBV	BROMOCHLOROMETHANE
1546	8:36	35390.	8.000	PPBV	1,4-DIFLUOROBENZENE
2545	14:09	43509.	8.000	PPBV	D5-CHLOROBENZENE
1349	7:30	9251.	8.000	PPBV	D4-1,2-DICHLOROETHANE
2088	11:37	36434.	8.000	PPBV	D8-TOLUENE
2856	15:53	17356.	4.000	PPBV	BROMOFLUOROBENZENE
487	2:43	41251.	10.000	PPBV	DICHLORODIFLUOROMETHANE
478	2:40	37738.	10.000	PPBV	CHLORODIFLUOROMETHANE
514	2:52	21648.	10.000	PPBV	1,2-DICHLORO-1,1,2,2-TETRAFL
512	2:51	6606.	10.000	PPBV	CHLOROMETHANE
537	2:59	17920.	10.000	PPBV	VINYL CHLORIDE
551	3:04	37645.	10.000	PPBV	N-BUTANE
550	3:04	14524.	10.000	PPBV	1,3-BUTADIENE
593	3:18	14836.	10.000	PPBV	BROMOMETHANE
614	3:25	8713.	10.000	PPBV	CHLOROETHANE
694	3:52	33154.	10.000	PPBV	TRICHLOROFLUOROMETHANE
727	4:03	4219.	10.000	PPBV	PENTANE
789	4:23	13585.	10.000	PPBV	1,1-DICHLOROETHENE
818	4:33	30040.	10.000	PPBV	1,1,2-TRICHLOROTRIFLUOROETHA
858	4:46	41042.	10.000	PPBV	CARBON DISULFIDE
840	4:40	23925.	10.000	PPBV	3-CHLOROPROPENE
836	4:39	12957.	10.000	PPBV	METHYLENE CHLORIDE
951	5:17	13931.	10.000	PPBV	TRANS-1,2-DICHLOROETHENE
1101	6:07	15732.	10.000	PPBV	HEXANE
1010	5:37	36290.	10.000	PPBV	1,1-DICHLOROETHANE
1151	6:24	15558.	10.000	PPBV	CIS-1,2-DICHLOROETHENE
1202	6:41	38048.	10.000	PPBV	CHLOROFORM
1359	7:33	38680.	10.000	PPBV	1,1,1-TRICHLOROETHANE
1459	8:07	24321.	10.000	PPBV	CYCLOHEXANE
1459	8:07	40057.	10.000	PPBV	CARBON TETRACHLORIDE
1454	8:05	44563.	10.000	PPBV	BENZENE
1372	7:38	30136.	10.000	PPBV	1,2-DICHLOROETHANE
1666	9:16	51669.	10.000	PPBV	HEPTANE
1675	9:19	20113.	10.000	PPBV	TRICHLOROETHENE
1667	9:16	22569.	10.000	PPBV	1,2-DICHLOROPROPANE
1684	9:22	22325.	10.000	PPBV	DIBROMOMETHANE
1714	9:32	44488.	10.000	PPBV	BROMODICHLOROMETHANE
1923	10:42	39287.	10.000	PPBV	CIS-1,3-DICHLOROPROPENE
2114	11:45	51013.	10.000	PPBV	TOLUENE
2298	12:47	19018.	10.000	PPBV	OCTANE
2080	11:34	32942.	10.000	PPBV	TRANS-1,3-DICHLOROPROPENE
2125	11:49	21320.	10.000	PPBV	1,1,2-TRICHLOROETHANE
2378	13:14	15951.	10.000	PPBV	TETRACHLOROETHENE
2288	12:44	49771.	10.000	PPBV	DIBROMOCHLOROMETHANE
2352	13:05	42042.	10.000	PPBV	1,2-DIBROMOETHANE
2555	14:13	51673.	10.000	PPBV	CHLOROBENZENE
2617	14:33	87421.	10.000	PPBV	ETHYLBENZENE
2648	14:44	70447.	10.000	PPBV	M-XYLENE (FOR P-)
2744	15:16	60003.	10.000	PPBV	NONANE
2747	15:17	67822.	10.000	PPBV	O-XYLENE

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(A)	Ratio
1	6:40	1.00	1.000	1.00	8.00	8.00	1.000	1.000	1.00
2	8:36	1.00	1.000	1.00	8.00	8.00	1.000	1.000	1.00
3	14:09	1.00	1.000	1.00	8.00	8.00	1.000	1.000	1.00
4	7:30	1.00	0.873	1.00	8.00	8.00	0.261	0.261	1.00
5	11:37	1.00	0.820	1.00	8.00	8.00	0.837	0.837	1.00
6	15:53	1.00	1.122	1.00	4.00	4.00	0.798	0.798	1.00
7	2:43	1.00	0.407	1.00	10.00	10.00	4.668	4.668	1.00
8	2:40	1.00	0.399	1.00	10.00	10.00	4.270	4.270	1.00
9	2:52	1.00	0.429	1.00	10.00	10.00	2.450	2.450	1.00
10	2:51	1.00	0.427	1.00	10.00	10.00	0.747	0.747	1.00
11	2:59	1.00	0.448	1.00	10.00	10.00	2.028	2.028	1.00
12	3:04	1.00	0.460	1.00	10.00	10.00	4.260	4.260	1.00
13	3:04	1.00	0.459	1.00	10.00	10.00	1.643	1.643	1.00
14	3:18	1.00	0.495	1.00	10.00	10.00	1.679	1.679	1.00
15	3:25	1.00	0.513	1.00	10.00	10.00	0.986	0.986	1.00
16	3:52	1.00	0.579	1.00	10.00	10.00	3.752	3.752	1.00
17	4:03	1.00	0.607	1.00	10.00	10.00	0.477	0.477	1.00
18	4:23	1.00	0.659	1.00	10.00	10.00	1.537	1.537	1.00
19	4:33	1.00	0.683	1.00	10.00	10.00	3.399	3.399	1.00
20	4:46	1.00	0.716	1.00	10.00	10.00	4.644	4.644	1.00
21	4:40	1.00	0.701	1.00	10.00	10.00	2.707	2.707	1.00
22	4:39	1.00	0.698	1.00	10.00	10.00	1.466	1.466	1.00
23	5:17	1.00	0.794	1.00	10.00	10.00	1.576	1.576	1.00
24	6:07	1.00	0.919	1.00	10.00	10.00	1.780	1.780	1.00
25	5:37	1.00	0.843	1.00	10.00	10.00	4.106	4.106	1.00
26	6:24	1.00	0.961	1.00	10.00	10.00	1.760	1.760	1.00
27	6:41	1.00	1.003	1.00	10.00	10.00	4.305	4.305	1.00
28	7:33	1.00	1.134	1.00	10.00	10.00	4.377	4.377	1.00
29	8:07	1.00	0.944	1.00	10.00	10.00	0.550	0.550	1.00
30	8:07	1.00	0.944	1.00	10.00	10.00	0.905	0.905	1.00
31	8:05	1.00	0.940	1.00	10.00	10.00	1.007	1.007	1.00
32	7:38	1.00	0.887	1.00	10.00	10.00	0.681	0.681	1.00
33	9:16	1.00	1.078	1.00	10.00	10.00	1.168	1.168	1.00
34	9:19	1.00	1.083	1.00	10.00	10.00	0.455	0.455	1.00
35	9:16	1.00	1.078	1.00	10.00	10.00	0.510	0.510	1.00
36	9:22	1.00	1.089	1.00	10.00	10.00	0.505	0.505	1.00
37	9:32	1.00	1.109	1.00	10.00	10.00	1.006	1.006	1.00
38	10:42	1.00	1.244	1.00	10.00	10.00	0.888	0.888	1.00
39	11:45	1.00	0.831	1.00	10.00	10.00	0.938	0.938	1.00
40	12:47	1.00	0.903	1.00	10.00	10.00	0.350	0.350	1.00
41	11:34	1.00	0.817	1.00	10.00	10.00	0.606	0.606	1.00
42	11:49	1.00	0.835	1.00	10.00	10.00	0.392	0.392	1.00
43	13:14	1.00	0.934	1.00	10.00	10.00	0.293	0.293	1.00
44	12:44	1.00	0.899	1.00	10.00	10.00	0.915	0.915	1.00
45	13:05	1.00	0.924	1.00	10.00	10.00	0.773	0.773	1.00
46	14:13	1.00	1.004	1.00	10.00	10.00	0.950	0.950	1.00
47	14:33	1.00	1.028	1.00	10.00	10.00	1.607	1.607	1.00
48	14:44	1.00	1.040	1.00	10.00	10.00	1.295	1.295	1.00
49	15:16	1.00	1.078	1.00	10.00	10.00	1.103	1.103	1.00
50	15:17	1.00	1.079	1.00	10.00	10.00	1.247	1.247	1.00

Quantitation Report File: MD0508M

Data: MD0508M.TI
05/08/95 22:24:00
Sample: M CX-576 100ML
Conds.: GC DESC=MB SCAN=DN DB-5 60M 45CM/SEC INST M METH TO-14
Formula: POS1 Instrument: FINN Weight: 0.000
Submitted by: CURVE Analyst: DCG/079 Acct. No.:

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name
51	STYRENE
52	BROMOFORM
53	CUMENE
54	1,1,2,2-TETRACHLOROETHANE
55	N-PROPYLBENZENE
56	1,3,5-TRIMETHYLBENZENE
57	DECANE
58	ALPHA-METHYLSTYRENE
59	1,2,4-TRIMETHYLBENZENE
60	1,3-DICHLOROBENZENE
61	1,4-DICHLOROBENZENE
62	BENZYL CHLORIDE
63	1,2-DICHLOROBENZENE
64	UNDECANE
65	DODECANE
66	BENZENE, 1,2,4-TRICHLORO
67	HEXACHLOROBUTADIENE
68	NAPHTHALENE
69	METHANOL
70	ETHYL ETHER
71	ACETONE
72	ACRYLONITRILE
73	VINYL ACETATE
74	2-BUTANONE
75	1-BUTANOL
76	4-METHYL-2-PENTANONE
77	2-HEXANONE
78	METHYL-T-BUTYL ETHER
79	ACROLEIN
80	ACETONITRILE (DOT)

Scan	Time	Area(Hght)	Amount	Name
2735	15:13	47484.	10.000 PPBV	STYRENE
2720	15:08	50425.	10.000 PPBV	BROMOFORM
2856	15:53	100705.	10.000 PPBV	CUMENE
2802	15:35	60915.	10.000 PPBV	1,1,2,2-TETRACHLOROETHANE
2953	16:25	129635.	10.000 PPBV	N-PROPYLBENZENE
2994	16:39	90501.	10.000 PPBV	1,3,5-TRIMETHYLBENZENE
3057	17:00	86155.	10.000 PPBV	DECANE
3033	16:52	47385.	10.000 PPBV	ALPHA-METHYLSTYRENE
3072	17:05	92511.	10.000 PPBV	1,2,4-TRIMETHYLBENZENE
3117	17:20	58279.	10.000 PPBV	1,3-DICHLOROBENZENE
3133	17:25	55026.	10.000 PPBV	1,4-DICHLOROBENZENE
3131	17:25	89225.	10.000 PPBV	BENZYL CHLORIDE
3198	17:47	56109.	10.000 PPBV	1,2-DICHLOROBENZENE

Scan	Time	Area(Hght)	Amount	Name
3296	18:20	103748.	10.000 PPBV	UNDECANE
3490	19:25	100878.	10.000 PPBV	DODECANE
3517	19:34	12831.	10.000 PPBV	BENZENE, 1,2,4-TRICHLORO
3582	19:55	12227.	5.649 PPBV	HEXACHLOROBUTADIENE
3542	19:42	97824.	11.095 PPBV	NAPHTHALENE
539	3:00	30580.	37.787 PPBV	METHANOL
748	4:10	34380.	14.732 PPBV	ETHYL ETHER
712	3:58	14557.	20.806 PPBV	ACETONE
804	4:28	30116.	23.238 PPBV	ACRYLONITRILE
1027	5:43	105966.	16.556 PPBV	VINYL ACETATE
1088	6:03	12357.	17.084 PPBV	2-BUTANONE
1446	8:03	29326.	16.714 PPBV	1-BUTANOL
1915	10:39	87834.	12.185 PPBV	4-METHYL-2-PENTANONE
2227	12:23	35157.	12.391 PPBV	2-HEXANONE
971	5:24	53345.	12.851 PPBV	METHYL-T-BUTYL ETHER
694	3:52	12909.	22.950 PPBV	ACROLEIN
704	3:55	43908.	29.280 PPBV	ACETONITRILE (DOT)

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(A)	Ratio
51	15:13	1.00	1.075	1.00	10.00	10.00	0.873	0.873	1.00
52	15:08	1.00	1.069	1.00	10.00	10.00	0.927	0.927	1.00
53	15:53	1.00	1.122	1.00	10.00	10.00	1.852	1.852	1.00
54	15:35	1.00	1.101	1.00	10.00	10.00	1.120	1.120	1.00
55	16:25	1.00	1.160	1.00	10.00	10.00	2.384	2.384	1.00
56	16:39	1.00	1.176	1.00	10.00	10.00	1.664	1.664	1.00
57	17:00	1.00	1.201	1.00	10.00	10.00	1.584	1.584	1.00
58	16:52	1.00	1.192	1.00	10.00	10.00	0.871	0.871	1.00
59	17:05	1.00	1.207	1.00	10.00	10.00	1.701	1.701	1.00
60	17:20	1.00	1.225	1.00	10.00	10.00	1.072	1.072	1.00
61	17:25	1.00	1.231	1.00	10.00	10.00	1.012	1.012	1.00
62	17:25	1.00	1.230	1.00	10.00	10.00	1.641	1.641	1.00
63	17:47	1.00	1.257	1.00	10.00	10.00	1.032	1.032	1.00
64	18:20	1.00	1.295	1.00	10.00	10.00	1.908	1.908	1.00
65	19:25	1.00	1.371	1.00	10.00	10.00	1.855	1.855	1.00
66	19:34	1.00	1.382	1.00	10.00	10.00	0.236	0.236	1.00
67	19:55	1.00	1.407	1.00	5.65	5.65	0.398	0.398	1.00
68	19:42	1.00	1.392	1.00	11.10	11.10	1.621	1.621	1.00
69	3:00	1.00	0.450	1.00	37.79	37.79	0.916	0.916	1.00
70	4:10	1.00	0.624	1.00	14.73	14.73	2.641	2.641	1.00
71	3:58	1.00	0.594	1.00	20.81	20.81	0.792	0.792	1.00
72	4:28	1.00	0.671	1.00	23.24	23.24	1.466	1.466	1.00
73	5:43	1.00	0.857	1.00	16.56	16.56	7.243	7.243	1.00
74	6:03	1.00	0.908	1.00	17.08	17.08	0.818	0.818	1.00
75	8:03	1.00	0.935	1.00	16.71	16.71	0.397	0.397	1.00
76	10:39	1.00	1.239	1.00	12.19	12.19	1.629	1.629	1.00
77	12:23	1.00	0.875	1.00	12.39	12.39	0.522	0.522	1.00
78	5:24	1.00	0.811	1.00	12.85	12.85	4.697	4.697	1.00
79	3:52	1.00	0.579	1.00	22.95	22.95	0.636	0.636	1.00
80	3:55	1.00	0.588	1.00	29.28	29.28	1.697	1.697	1.00

QA/QC REPORT

SAMPLE NAME: md0508m
INJECT TIME: 20:51:19
DATE: Mon May 08 1995
METHOD: polar3.MPT
NAMELIST: dcg.nam
MANIFOLD POSITION: 1

PRESSURE BEFORE SAMPLING(PSIA) 26.5
AFTER SAMPLING(PSIA) 26.1

NG INT. STD INJECTED IS1(0) IS2(0) IS3(0) IS4(0) IS5(0)

PREHEAT MODULE 1 (Y) MODULE 2 (N) , CRYOFOCUS? (Y) , HEAT SAMPLE? (N)

CONDITIONS:

DURING CONCENTRATION	MAX TEMP	FINAL TEMP	TRAP/SEP TIME
M1 Glass Bead Cryotrap	-156	-161(-160)	277
M2 Sorbent Packed Cryotrap	-28	-30(-25)	60
Focusing Trap	-196	-200(-190)	150(150)

DESORB/TRANSFER/INJECT	PREHEAT	FINAL TEMP	TIME(secs)
M1 Glass Bead Cryotrap	-4(-10)	10(5)	60
M2 Sorbent Packed Cryotrap	114(100)	221(220)	150(150)
Focusing Trap	-200	75	300(300)

MEDIUM CONC./TRANSFERRED	VOLUME	FLOW(SCCM)	FINAL PSIA
Internal Standard	100(100)	100(100)	24.7
Sample	101(100)	125(125)	23.5
Sweep/Dry Purge	100(100)	100(100)	32.7
Transfer to Packed Col.	45(45)	10(10)	33.4
Packed Column Separation	0(0)	10(50)	33.4

SYSTEM BAKEOUT

	TEMPERATURE	TIME(min.)
M1 Glass Bead Cryotrap	164(160)	5(5)
M2 Sorbent Packed Cryotrap	221(220)	5(5)
Focusing Trap		

REGULATED ZONES	TEMPERATURE
8-PORT VALVE	149(150)
GC TRANSFER LINE	110(110)
MANIFOLD TRANSFER LINE	110(110)
16-POSITION SELECT VALVE	100(100)
SAMPLE CONTAINER	AMBIENT

Quantitation Report File: MH0508M

Data: MH0508M.TI
05/08/95 22:52:00
Sample: M CX-576 250ML
Conds.: GC DESC=MB SCAN=DN DB-5 60M 45CM/SEC INST M METH TO-14
Formula: POS1 Instrument: FINN Weight: 0.000
Submitted by: CURVE Analyst: DCG/079 Acct. No.:

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name
1	BROMOCHLOROMETHANE
2	1,4-DIFLUOROBENZENE
3	D5-CHLOROBENZENE
4	D4-1,2-DICHLOROETHANE
5	D8-TOLUENE
6	BROMOFLUOROBENZENE
7	DICHLORODIFLUOROMETHANE
8	CHLORODIFLUOROMETHANE
9	1,2-DICHLORO-1,1,2,2-TETRAFLUOROETHANE
10	CHLOROMETHANE
11	VINYL CHLORIDE
12	N-BUTANE
13	1,3-BUTADIENE
14	BROMOMETHANE
15	CHLOROETHANE
16	TRICHLOROFLUOROMETHANE
17	PENTANE
18	1,1-DICHLOROETHENE
19	1,1,2-TRICHLOROTRIFLUOROETHANE
20	CARBON DISULFIDE
21	3-CHLOROPROPENE
22	METHYLENE CHLORIDE
23	TRANS-1,2-DICHLOROETHENE
24	HEXANE
25	1,1-DICHLOROETHANE
26	CIS-1,2-DICHLOROETHENE
27	CHLOROFORM
28	1,1,1-TRICHLOROETHANE
29	CYCLOHEXANE
30	CARBON TETRACHLORIDE
31	BENZENE
32	1,2-DICHLOROETHANE
33	HEPTANE
34	TRICHLOROETHENE
35	1,2-DICHLOROPROPANE
36	DIBROMOMETHANE
37	BROMODICHLOROMETHANE
38	CIS-1,3-DICHLOROPROPENE
39	TOLUENE
40	OCTANE
41	TRANS-1,3-DICHLOROPROPENE
42	1,1,2-TRICHLOROETHANE
43	TETRACHLOROETHENE
44	DIBROMOCHLOROMETHANE
45	1,2-DIBROMOETHANE
46	CHLOROBENZENE
47	ETHYLBENZENE

No	Name
48	M-XYLENE (FOR P-)
49	NONANE
50	O-XYLENE

Scan	Time	Area(Hght)	Amount		Name
1195	6:39	6907.	8.000	PPBV	BROMOCHLOROMETHANE
1543	8:35	36103.	8.000	PPBV	1,4-DIFLUOROBENZENE
2543	14:09	43283.	8.000	PPBV	D5-CHLOROBENZENE
1346	7:29	9326.	8.000	PPBV	D4-1,2-DICHLOROETHANE
2085	11:36	35681.	8.000	PPBV	D8-TOLUENE
2853	15:52	15990.	4.000	PPBV	BROMOFLUOROBENZENE
483	2:41	86143.	25.000	PPBV	DICHLORODIFLUOROMETHANE
474	2:38	81890.	25.000	PPBV	CHLORODIFLUOROMETHANE
510	2:50	44760.	25.000	PPBV	1,2-DICHLORO-1,1,2,2-TETRAFL
508	2:50	14482.	25.000	PPBV	CHLOROMETHANE
533	2:58	38876.	25.000	PPBV	VINYL CHLORIDE
547	3:03	74255.	25.000	PPBV	N-BUTANE
546	3:02	29892.	25.000	PPBV	1,3-BUTADIENE
590	3:17	29945.	25.000	PPBV	BROMOMETHANE
610	3:24	18436.	25.001	PPBV	CHLOROETHANE
690	3:50	67920.	25.000	PPBV	TRICHLOROFLUOROMETHANE
723	4:01	10173.	25.000	PPBV	PENTANE
786	4:22	29952.	25.000	PPBV	1,1-DICHLOROETHENE
815	4:32	62196.	25.000	PPBV	1,1,2-TRICHLOROTRIFLUOROETHA
855	4:45	90279.	25.000	PPBV	CARBON DISULFIDE
837	4:39	47968.	25.000	PPBV	3-CHLOROPROPENE
833	4:38	28149.	25.000	PPBV	METHYLENE CHLORIDE
948	5:16	31731.	25.000	PPBV	TRANS-1,2-DICHLOROETHENE
1098	6:06	35258.	25.000	PPBV	HEXANE
1007	5:36	77746.	25.000	PPBV	1,1-DICHLOROETHANE
1148	6:23	34543.	25.000	PPBV	CIS-1,2-DICHLOROETHENE
1200	6:40	81843.	25.000	PPBV	CHLOROFORM
1357	7:33	82746.	25.000	PPBV	1,1,1-TRICHLOROETHANE
1456	8:06	52240.	25.000	PPBV	CYCLOHEXANE
1457	8:06	79937.	25.000	PPBV	CARBON TETRACHLORIDE
1452	8:05	95472.	25.000	PPBV	BENZENE
1370	7:37	65445.	25.000	PPBV	1,2-DICHLOROETHANE
1664	9:15	106471.	25.001	PPBV	HEPTANE
1673	9:18	43620.	25.000	PPBV	TRICHLOROETHENE
1664	9:15	48345.	25.000	PPBV	1,2-DICHLOROPROPANE
1682	9:21	47316.	25.000	PPBV	DIBROMOMETHANE
1712	9:31	95779.	25.001	PPBV	BROMODICHLOROMETHANE
1921	10:41	85557.	25.000	PPBV	CIS-1,3-DICHLOROPROPENE
2112	11:45	111682.	25.000	PPBV	TOLUENE
2295	12:46	40941.	25.000	PPBV	OCTANE
2078	11:33	73202.	25.000	PPBV	TRANS-1,3-DICHLOROPROPENE
2123	11:48	46774.	25.000	PPBV	1,1,2-TRICHLOROETHANE
2376	13:13	33288.	25.000	PPBV	TETRACHLOROETHENE
2286	12:43	100009.	25.001	PPBV	DIBROMOCHLOROMETHANE
2350	13:04	89386.	25.000	PPBV	1,2-DIBROMOETHANE
2552	14:12	110561.	25.001	PPBV	CHLOROBENZENE
2615	14:33	182718.	25.000	PPBV	ETHYLBENZENE
2646	14:43	147159.	25.000	PPBV	M-XYLENE (FOR P-)
2742	15:15	113721.	25.000	PPBV	NONANE
2745	15:16	132786.	25.000	PPBV	O-XYLENE

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(A)	Ratio
1	6:40	1.00	1.000	1.00	8.00	8.00	1.000	1.000	1.00
2	8:36	1.00	1.000	1.00	8.00	8.00	1.000	1.000	1.00
3	14:09	1.00	1.000	1.00	8.00	8.00	1.000	1.000	1.00
4	7:30	1.00	0.873	1.00	8.00	8.00	0.258	0.258	1.00
5	11:37	1.00	0.820	1.00	8.00	8.00	0.824	0.824	1.00
6	15:53	1.00	1.122	1.00	4.00	4.00	0.739	0.739	1.00
7	2:43	0.99	0.407	0.99	25.00	25.00	3.991	3.991	1.00
8	2:40	0.99	0.399	0.99	25.00	25.00	3.794	3.794	1.00
9	2:52	0.99	0.429	0.99	25.00	25.00	2.074	2.074	1.00
10	2:51	0.99	0 427	0.99	25.00	25.00	0.671	0.671	1.00
11	2:59	0.99	C. 448	1.00	25.00	25.00	1.801	1.801	1.00
12	3:04	0.99	0.460	1.00	25.00	25.00	3.440	3.440	1.00
13	3:04	0.99	0.459	1.00	25.00	25.00	1.385	1.385	1.00
14	3:18	0.99	0.495	1.00	25.00	25.00	1.387	1.387	1.00
15	3:25	0.99	0.513	1.00	25.00	25.00	0.854	0.854	1.00
16	3:52	0.99	0.579	1.00	25.00	25.00	3.147	3.147	1.00
17	4:03	0.99	0.607	1.00	25.00	25.00	0.471	0.471	1.00
18	4:23	1.00	0.659	1.00	25.00	25.00	1.388	1.388	1.00
19	4:33	1.00	0.683	1.00	25.00	25.00	2.882	2.882	1.00
20	4:46	1.00	0.716	1.00	25.00	25.00	4.183	4.183	1.00
21	4:40	1.00	0.701	1.00	25.00	25.00	2.222	2.222	1.00
22	4:39	1.00	0.698	1.00	25.00	25.00	1.304	1.304	1.00
23	5:17	1.00	0.794	1.00	25.00	25.00	1.470	1.470	1.00
24	6:07	1.00	0.919	1.00	25.00	25.00	1.633	1.633	1.00
25	5:37	1.00	0.843	1.00	25.00	25.00	3.602	3.602	1.00
26	6:24	1.00	0.961	1.00	25.00	25.00	1.600	1.600	1.00
27	6:41	1.00	1.003	1.00	25.00	25.00	3.792	3.792	1.00
28	7:33	1.00	1.134	1.00	25.00	25.00	3.834	3.834	1.00
29	8:07	1.00	0.944	1.00	25.00	25.00	0.463	0.463	1.00
30	8:07	1.00	0.944	1.00	25.00	25.00	0.709	0.709	1.00
31	8:05	1.00	0.940	1.00	25.00	25.00	0.846	0.846	1.00
32	7:38	1.00	0.887	1.00	25.00	25.00	0.580	0.580	1.00
33	9:16	1.00	1.078	1.00	25.00	25.00	0.944	0.944	1.00
34	9:19	1.00	1.083	1.00	25.00	25.00	0.387	0.387	1.00
35	9:16	1.00	1.078	1.00	25.00	25.00	0.429	0.429	1.00
36	9:22	1.00	1.089	1.00	25.00	25.00	0.419	0.419	1.00
37	9:32	1.00	1.109	1.00	25.00	25.00	0.849	0.849	1.00
38	10:42	1.00	1.244	1.00	25.00	25.00	0.758	0.758	1.00
39	11:45	1.00	0.831	1.00	25.00	25.00	0.826	0.826	1.00
40	12:47	1.00	0.903	1.00	25.00	25.00	0.303	0.303	1.00
41	11:34	1.00	0.817	1.00	25.00	25.00	0.541	0.541	1.00
42	11:49	1.00	0.835	1.00	25.00	25.00	0.346	0.346	1.00
43	13:14	1.00	0.934	1.00	25.00	25.00	0.246	0.246	1.00
44	12:44	1.00	0.899	1.00	25.00	25.00	0.739	0.739	1.00
45	13:05	1.00	0.924	1.00	25.00	25.00	0.661	0.661	1.00
46	14:13	1.00	1.004	1.00	25.00	25.00	0.817	0.817	1.00
47	14:33	1.00	1.028	1.00	25.00	25.00	1.351	1.351	1.00
48	14:44	1.00	1.040	1.00	25.00	25.00	1.088	1.088	1.00
49	15:16	1.00	1.078	1.00	25.00	25.00	0.841	0.841	1.00
50	15:17	1.00	1.079	1.00	25.00	25.00	0.982	0.982	1.00

Quantitation Report File: MH0508M

Data: MH0508M.TI
05/08/95 22:52:00
Sample: M CX-576 250ML
Conds.: GC DESC=MB SCAN=DN DB-5 60M 45CM/SEC INST M METH TO-14
Formula: POS1 Instrument: FINN Weight: 0.000
Submitted by: CURVE Analyst: DCG/079 Acct. No.:

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name
51	STYRENE
52	BROMOFORM
53	CUMENE
54	1,1,2,2-TETRACHLOROETHANE
55	N-PROPYLBENZENE
56	1,3,5-TRIMETHYLBENZENE
57	DECANE
58	ALPHA-METHYLSTYRENE
59	1,2,4-TRIMETHYLBENZENE
60	1,3-DICHLOROBENZENE
61	1,4-DICHLOROBENZENE
62	BENZYL CHLORIDE
63	1,2-DICHLOROBENZENE
64	UNDECANE
65	DODECANE
66	BENZENE, 1,2,4-TRICHLORO
67	HEXACHLOROBUTADIENE
68	NAPHTHALENE
69	METHANOL
70	ETHYL ETHER
71	ACETONE
72	ACRYLONITRILE
73	VINYL ACETATE
74	2-BUTANONE
75	1-BUTANOL
76	4-METHYL-2-PENTANONE
77	2-HEXANONE
78	METHYL-T-BUTYL ETHER
79	ACROLEIN
80	ACETONITRILE (DOT)

Scan	Time	Area(Hght)	Amount	Name
2732	15:12	101029.	25.001 PPBV	STYRENE
2718	15:07	100369.	25.001 PPBV	BROMOFORM
2854	15:52	199569.	25.000 PPBV	CUMENE
2799	15:34	131041.	25.001 PPBV	1,1,2,2-TETRACHLOROETHANE
2950	16:24	263206.	25.000 PPBV	N-PROPYLBENZENE
2991	16:38	182370.	25.000 PPBV	1,3,5-TRIMETHYLBENZENE
3055	16:59	168939.	25.000 PPBV	DECANE
3031	16:51	96292.	25.001 PPBV	ALPHA-METHYLSTYRENE
3070	17:04	185726.	25.000 PPBV	1,2,4-TRIMETHYLBENZENE
3114	17:19	115887.	25.000 PPBV	1,3-DICHLOROBENZENE
3131	17:25	104075.	25.000 PPBV	1,4-DICHLOROBENZENE
3128	17:24	176651.	25.000 PPBV	BENZYL CHLORIDE
3196	17:47	113967.	25.001 PPBV	1,2-DICHLOROBENZENE

Scan	Time	Area(Hght)	Amount	Name
3293	18:19	197155.	25.000 PPBV	UNDECANE
3488	19:24	193444.	25.000 PPBV	DODECANE
3516	19:33	29682.	25.000 PPBV	BENZENE, 1,2,4-TRICHLORO
3580	19:55	27722.	14.123 PPBV	HEXACHLOROBUTADIENE
3540	19:41	199546.	27.737 PPBV	NAPHTHALENE
536	2:59	60637.	94.468 PPBV	METHANOL
744	4:08	93657.	36.830 PPBV	ETHYL ETHER
709	3:57	31864.	52.015 PPBV	ACETONE
802	4:28	68495.	58.095 PPBV	ACRYLONITRILE
1024	5:42	228901.	41.389 PPBV	VINYL ACETATE
1086	6:02	28143.	42.710 PPBV	2-BUTANONE
1444	8:02	52467.	41.784 PPBV	1-BUTANOL
1913	10:38	190430.	30.463 PPBV	4-METHYL-2-PENTANONE
2225	12:22	77846.	30.978 PPBV	2-HEXANONE
968	5:23	116507.	32.127 PPBV	METHYL-T-BUTYL ETHER
691	3:51	28066.	57.375 PPBV	ACROLEIN
703	3:55	96094.	73.200 PPBV	ACETONITRILE (DOT)

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(A)	Ratio
51	15:13	1.00	1.075	1.00	25.00	25.00	0.747	0.747	1.00
52	15:08	1.00	1.069	1.00	25.00	25.00	0.742	0.742	1.00
53	15:53	1.00	1.122	1.00	25.00	25.00	1.475	1.475	1.00
54	15:35	1.00	1.101	1.00	25.00	25.00	0.969	0.969	1.00
55	16:25	1.00	1.160	1.00	25.00	25.00	1.946	1.946	1.00
56	16:39	1.00	1.176	1.00	25.00	25.00	1.348	1.348	1.00
57	17:00	1.00	1.201	1.00	25.00	25.00	1.249	1.249	1.00
58	16:52	1.00	1.192	1.00	25.00	25.00	0.712	0.712	1.00
59	17:05	1.00	1.207	1.00	25.00	25.00	1.373	1.373	1.00
60	17:20	1.00	1.225	1.00	25.00	25.00	0.857	0.857	1.00
61	17:25	1.00	1.231	1.00	25.00	25.00	0.769	0.769	1.00
62	17:25	1.00	1.230	1.00	25.00	25.00	1.306	1.306	1.00
63	17:47	1.00	1.257	1.00	25.00	25.00	0.843	0.843	1.00
64	18:20	1.00	1.295	1.00	25.00	25.00	1.458	1.458	1.00
65	19:25	1.00	1.371	1.00	25.00	25.00	1.430	1.430	1.00
66	19:34	1.00	1.382	1.00	25.00	25.00	0.219	0.219	1.00
67	19:55	1.00	1.407	1.00	14.12	14.12	0.363	0.363	1.00
68	19:42	1.00	1.392	1.00	27.74	27.74	1.330	1.330	1.00
69	3:00	0.99	0.450	1.00	94.47	94.47	0.743	0.743	1.00
70	4:10	0.99	0.624	1.00	36.83	36.83	2.945	2.945	1.00
71	3:58	1.00	0.594	1.00	52.02	52.02	0.710	0.710	1.00
72	4:28	1.00	0.671	1.00	58.10	58.10	1.366	1.366	1.00
73	5:43	1.00	0.857	1.00	41.39	41.39	6.406	6.406	1.00
74	6:03	1.00	0.908	1.00	42.71	42.71	0.763	0.763	1.00
75	8:03	1.00	0.935	1.00	41.78	41.78	0.278	0.278	1.00
76	10:39	1.00	1.239	1.00	30.46	30.46	1.385	1.385	1.00
77	12:23	1.00	0.875	1.00	30.98	30.98	0.464	0.464	1.00
78	5:24	1.00	0.811	1.00	32.13	32.13	4.200	4.200	1.00
79	3:52	1.00	0.579	1.00	57.38	57.38	0.567	0.567	1.00
80	3:55	1.00	0.588	1.00	73.20	73.20	1.520	1.520	1.00

QA/QC REPORT

SAMPLE NAME: mh0508m
INJECT TIME: 21:20:11
DATE: Mon May 08 1995
METHOD: polar3.MPT
NAMELIST: dcg.nam
MANIFOLD POSITION: 1

PRESSURE BEFORE SAMPLING(PSIA) 26.1
AFTER SAMPLING(PSIA) 25.7

NG INT. STD INJECTED IS1(0) IS2(0) IS3(0) IS4(0) IS5(0)

PREHEAT MODULE 1 (Y) MODULE 2 (N) , CRYOFOCUS? (Y) , HEAT SAMPLE? (N)

CONDITIONS:

DURING CONCENTRATION	MAX TEMP	FINAL TEMP	TRAP/SEP TIME
M1 Glass Bead Cryotrap	-150	-162(-160)	277
M2 Sorbent Packed Cryotrap	-28	-29(-25)	132
Focusing Trap	-198	-200(-190)	150(150)

DESORB/TRANSFER/INJECT	PREHEAT	FINAL TEMP	TIME(secs)
M1 Glass Bead Cryotrap	-9(-10)	9(5)	132
M2 Sorbent Packed Cryotrap	108(100)	221(220)	150(150)
Focusing Trap	-200	74	300(300)

MEDIUM CONC./TRANSFERRED	VOLUME	FLOW(SCCM)	FINAL PSIA
Internal Standard	100(100)	100(100)	24.5
Sample	251(250)	124(125)	23.1
Sweep/Dry Purge	101(100)	100(100)	32.7
Transfer to Packed Col.	45(45)	10(10)	33.4
Packed Column Separation	0(0)	10(50)	33.4

SYSTEM BAKEOUT

	TEMPERATURE	TIME(min.)
M1 Glass Bead Cryotrap	159(160)	5(5)
M2 Sorbent Packed Cryotrap	218(220)	5(5)
Focusing Trap		

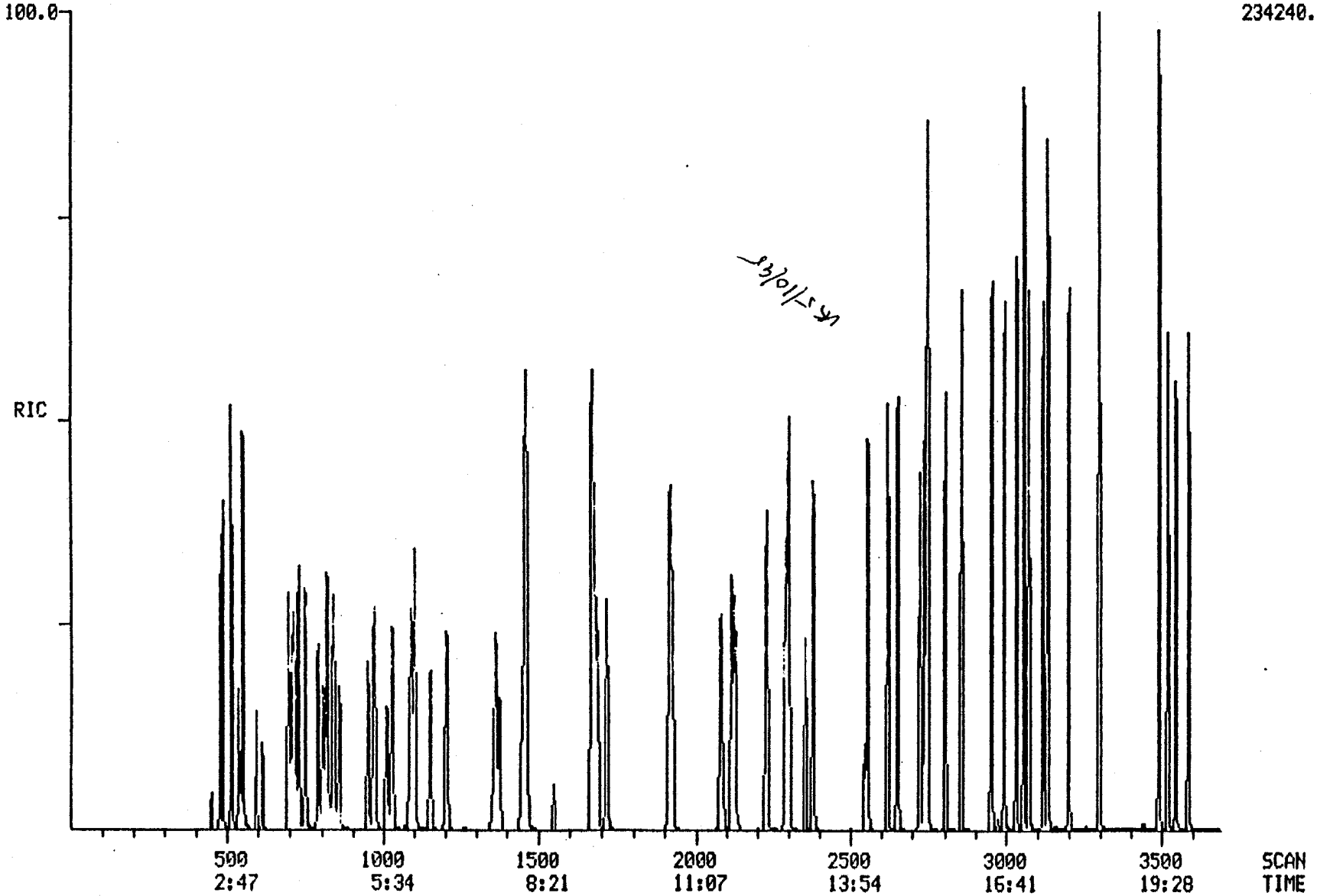
REGULATED ZONES	TEMPERATURE
8-PORT VALVE	150(150)
GC TRANSFER LINE	111(110)
MANIFOLD TRANSFER LINE	110(110)
16-POSITION SELECT VALVE	98(100)
SAMPLE CONTAINER	AMBIENT

A0000122

RIC
05/08/95 23:22:00
SAMPLE: M CX-576 500ML
CONDS.: GC DESC=MB SCAN=DN DB-5 60M 45CM/SEC INST M METH TO-14
RANGE: G 1,3686 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: HI0508M #1
CALI: HI0508M #3

SCANS 1 TO 3686



Quantitation Report File: HI0508M

Data: HI0508M.TI
05/08/95 23:22:00
Sample: M CX-576 500ML
Conds.: GC DESC=MB SCAN=DN DB-5 60M 45CM/SEC INST M METH TO-14
Formula: POS1 Instrument: FINN Weight: 0.000
Submitted by: CURVE Analyst: DCG/079 Acct. No.:

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name
1	BROMOCHLOROMETHANE
2	1,4-DIFLUOROBENZENE
3	D5-CHLOROBENZENE
4	D4-1,2-DICHLOROETHANE
5	D8-TOLUENE
6	BROMOFLUOROBENZENE
7	DICHLORODIFLUOROMETHANE
8	CHLORODIFLUOROMETHANE
9	1,2-DICHLORO-1,1,2,2-TETRAFLUOROETHANE
10	CHLOROMETHANE
11	VINYL CHLORIDE
12	N-BUTANE
13	1,3-BUTADIENE
14	BROMOMETHANE
15	CHLOROETHANE
16	TRICHLOROFLUOROMETHANE
17	PENTANE
18	1,1-DICHLOROETHENE
19	1,1,2-TRICHLOROTRIFLUOROETHANE
20	CARBON DISULFIDE
21	3-CHLOROPROPENE
22	METHYLENE CHLORIDE
23	TRANS-1,2-DICHLOROETHENE
24	HEXANE
25	1,1-DICHLOROETHANE
26	CIS-1,2-DICHLOROETHENE
27	CHLOROFORM
28	1,1,1-TRICHLOROETHANE
29	CYCLOHEXANE
30	CARBON TETRACHLORIDE
31	BENZENE
32	1,2-DICHLOROETHANE
33	HEPTANE
34	TRICHLOROETHENE
35	1,2-DICHLOROPROPANE
36	DIBROMOMETHANE
37	BROMODICHLOROMETHANE
38	CIS-1,3-DICHLOROPROPENE
39	TOLUENE
40	OCTANE
41	TRANS-1,3-DICHLOROPROPENE
42	1,1,2-TRICHLOROETHANE
43	TETRACHLOROETHENE
44	DIBROMOCHLOROMETHANE
45	1,2-DIBROMOETHANE
46	CHLOROBENZENE
47	ETHYLBENZENE

No	Name
48	M-XYLENE (FOR P-)
49	NONANE
50	O-XYLENE

Scan	Time	Area(Hght)	Amount		Name
1200	6:40	6953.	8.000	PPBV	BROMOCHLOROMETHANE
1549	8:37	37053.	8.000	PPBV	1,4-DIFLUOROBENZENE
2547	14:10	41800.	8.000	PPBV	D5-CHLOROBENZENE
1352	7:31	9345.	8.000	PPBV	D4-1,2-DICHLOROETHANE
2091	11:38	34842.	8.000	PPBV	D8-TOLUENE
2958	15:54	13099.	4.000	PPBV	BROMOFLUOROBENZENE
487	2:43	149452.	50.000	PPBV	DICHLORODIFLUOROMETHANE
478	2:40	151329.	50.000	PPBV	CHLORODIFLUOROMETHANE
514	2:52	73717.	50.000	PPBV	1,2-DICHLORO-1,1,2,2-TETRAFL
512	2:51	25173.	50.000	PPBV	CHLOROMETHANE
537	2:59	70679.	50.000	PPBV	VINYL CHLORIDE
551	3:04	122677.	50.000	PPBV	N-BUTANE
550	3:04	51010.	50.000	PPBV	1,3-BUTADIENE
594	3:18	52546.	50.000	PPBV	BROMOMETHANE
614	3:25	34007.	50.001	PPBV	CHLOROETHANE
695	3:52	118219.	50.000	PPBV	TRICHLOROFLUOROMETHANE
728	4:03	18947.	50.000	PPBV	PENTANE
791	4:24	55674.	50.000	PPBV	1,1-DICHLOROETHENE
819	4:33	108776.	50.000	PPBV	1,1,2-TRICHLOROTRIFLUOROETHA
859	4:47	167343.	50.000	PPBV	CARBON DISULFIDE
842	4:41	86021.	50.000	PPBV	3-CHLOROPROPENE
838	4:40	52298.	50.001	PPBV	METHYLENE CHLORIDE
953	5:18	60190.	50.000	PPBV	TRANS-1,2-DICHLOROETHENE
1103	6:08	63320.	50.000	PPBV	HEXANE
1012	5:38	146774.	50.000	PPBV	1,1-DICHLOROETHANE
1154	6:25	66458.	50.000	PPBV	CIS-1,2-DICHLOROETHENE
1205	6:42	150174.	50.000	PPBV	CHLOROFORM
1362	7:34	151242.	50.000	PPBV	1,1,1-TRICHLOROETHANE
1462	8:08	89714.	50.000	PPBV	CYCLOHEXANE
1462	8:08	134284.	50.000	PPBV	CARBON TETRACHLORIDE
1457	8:06	168781.	50.001	PPBV	BENZENE
1375	7:39	121321.	50.000	PPBV	1,2-DICHLOROETHANE
1669	9:17	181328.	50.001	PPBV	HEPTANE
1679	9:20	77956.	50.000	PPBV	TRICHLOROETHENE
1671	9:18	85069.	50.000	PPBV	1,2-DICHLOROPROPANE
1687	9:23	85358.	50.000	PPBV	DIBROMOMETHANE
1718	9:33	170095.	50.001	PPBV	BROMODICHLOROMETHANE
1927	10:43	157024.	50.001	PPBV	CIS-1,3-DICHLOROPROPENE
2118	11:47	203889.	50.001	PPBV	TOLUENE
2301	12:48	72698.	50.000	PPBV	OCTANE
2084	11:35	138116.	50.000	PPBV	TRANS-1,3-DICHLOROPROPENE
2129	11:50	84209.	50.000	PPBV	1,1,2-TRICHLOROETHANE
2381	13:15	57634.	50.000	PPBV	TETRACHLOROETHENE
2291	12:45	167997.	50.001	PPBV	DIBROMOCHLOROMETHANE
2356	13:06	155743.	50.001	PPBV	1,2-DIBROMOETHANE
2557	14:13	186329.	50.002	PPBV	CHLOROBENZENE
2620	14:34	294848.	50.000	PPBV	ETHYLBENZENE
2651	14:45	238318.	50.000	PPBV	M-XYLENE (FOR P-)
2746	15:16	169677.	50.001	PPBV	NONANE
2750	15:18	204806.	50.001	PPBV	O-XYLENE

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(A)	Ratio
1	6:40	1.00	1.000	1.00	8.00	8.00	1.000	1.000	1.00
2	8:36	1.00	1.000	1.00	8.00	8.00	1.000	1.000	1.00
3	14:09	1.00	1.000	1.00	8.00	8.00	1.000	1.000	1.00
4	7:30	1.00	0.873	1.00	8.00	8.00	0.252	0.252	1.00
5	11:37	1.00	0.820	1.00	8.00	8.00	0.834	0.834	1.00
6	15:53	1.00	1.122	1.00	4.00	4.00	0.627	0.627	1.00
7	2:43	1.00	0.407	1.00	50.00	50.00	3.439	3.439	1.00
8	2:40	1.00	0.399	1.00	50.00	50.00	3.482	3.482	1.00
9	2:52	1.00	0.429	1.00	50.00	50.00	1.696	1.696	1.00
10	2:51	1.00	0.427	1.00	50.00	50.00	0.579	0.579	1.00
11	2:59	1.00	0.448	1.00	50.00	50.00	1.626	1.626	1.00
12	3:04	1.00	0.460	1.00	50.00	50.00	2.823	2.823	1.00
13	3:04	1.00	0.459	1.00	50.00	50.00	1.174	1.174	1.00
14	3:18	1.00	0.495	1.00	50.00	50.00	1.209	1.209	1.00
15	3:25	1.00	0.513	1.00	50.00	50.00	0.783	0.783	1.00
16	3:52	1.00	0.579	1.00	50.00	50.00	2.720	2.720	1.00
17	4:03	1.00	0.607	1.00	50.00	50.00	0.436	0.436	1.00
18	4:23	1.00	0.659	1.00	50.00	50.00	1.281	1.281	1.00
19	4:33	1.00	0.683	1.00	50.00	50.00	2.503	2.503	1.00
20	4:46	1.00	0.716	1.00	50.00	50.00	3.851	3.851	1.00
21	4:40	1.00	0.701	1.00	50.00	50.00	1.979	1.979	1.00
22	4:39	1.00	0.698	1.00	50.00	50.00	1.203	1.203	1.00
23	5:17	1.00	0.794	1.00	50.00	50.00	1.385	1.385	1.00
24	6:07	1.00	0.919	1.00	50.00	50.00	1.457	1.457	1.00
25	5:37	1.00	0.843	1.00	50.00	50.00	3.378	3.378	1.00
26	6:24	1.00	0.961	1.00	50.00	50.00	1.529	1.529	1.00
27	6:41	1.00	1.003	1.00	50.00	50.00	3.456	3.456	1.00
28	7:33	1.00	1.134	1.00	50.00	50.00	3.480	3.480	1.00
29	8:07	1.00	0.944	1.00	50.00	50.00	0.387	0.387	1.00
30	8:07	1.00	0.944	1.00	50.00	50.00	0.580	0.580	1.00
31	8:05	1.00	0.940	1.00	50.00	50.00	0.729	0.729	1.00
32	7:38	1.00	0.887	1.00	50.00	50.00	0.524	0.524	1.00
33	9:16	1.00	1.078	1.00	50.00	50.00	0.783	0.783	1.00
34	9:19	1.00	1.083	1.00	50.00	50.00	0.337	0.337	1.00
35	9:16	1.00	1.078	1.00	50.00	50.00	0.367	0.367	1.00
36	9:22	1.00	1.089	1.00	50.00	50.00	0.369	0.369	1.00
37	9:32	1.00	1.109	1.00	50.00	50.00	0.734	0.734	1.00
38	10:42	1.00	1.244	1.00	50.00	50.00	0.678	0.678	1.00
39	11:45	1.00	0.831	1.00	50.00	50.00	0.780	0.780	1.00
40	12:47	1.00	0.903	1.00	50.00	50.00	0.278	0.278	1.00
41	11:34	1.00	0.817	1.00	50.00	50.00	0.529	0.529	1.00
42	11:49	1.00	0.835	1.00	50.00	50.00	0.322	0.322	1.00
43	13:14	1.00	0.934	1.00	50.00	50.00	0.221	0.221	1.00
44	12:44	1.00	0.899	1.00	50.00	50.00	0.643	0.643	1.00
45	13:05	1.00	0.924	1.00	50.00	50.00	0.596	0.596	1.00
46	14:13	1.00	1.004	1.00	50.00	50.00	0.713	0.713	1.00
47	14:33	1.00	1.028	1.00	50.00	50.00	1.129	1.129	1.00
48	14:44	1.00	1.040	1.00	50.00	50.00	0.912	0.912	1.00
49	15:16	1.00	1.078	1.00	50.00	50.00	0.649	0.649	1.00
50	15:17	1.00	1.079	1.00	50.00	50.00	0.784	0.784	1.00

Quantitation Report File: HI0508M

Data: HI0508M.TI
05/08/95 23:22:00
Sample: M CX-576 500ML
Conds.: GC DESC=MB SCAN=DN DB-5 60M 45CM/SEC INST M METH TO-14
Formula: POS1 Instrument: FINN Weight: 0.000
Submitted by: CURVE Analyst: DCG/079 Acct. No.:

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name
51	STYRENE
52	BROMOFORM
53	CUMENE
54	1,1,2,2-TETRACHLOROETHANE
55	N-PROPYLBENZENE
56	1,3,5-TRIMETHYLBENZENE
57	DECANE
58	ALPHA-METHYLSTYRENE
59	1,2,4-TRIMETHYLBENZENE
60	1,3-DICHLOROBENZENE
61	1,4-DICHLOROBENZENE
62	BENZYL CHLORIDE
63	1,2-DICHLOROBENZENE
64	UNDECANE
65	DODECANE
66	BENZENE, 1,2,4-TRICHLORO
67	HEXACHLOROBUTADIENE
68	NAPHTHALENE
69	METHANOL
70	ETHYL ETHER
71	ACETONE
72	ACRYLONITRILE
73	VINYL ACETATE
74	2-BUTANONE
75	1-BUTANOL
76	4-METHYL-2-PENTANONE
77	2-HEXANONE
78	METHYL-T-BUTYL ETHER
79	ACROLEIN
80	ACETONITRILE (DOT)

Scan	Time	Area(Hght)	Amount	Name
2737	15:13	168493.	50.001 PPBV	STYRENE
2723	15:09	158692.	50.001 PPBV	BROMOFORM
2859	15:54	300018.	50.000 PPBV	CUMENE
2804	15:36	209103.	50.002 PPBV	1,1,2,2-TETRACHLOROETHANE
2955	16:26	386564.	50.000 PPBV	N-PROPYLBENZENE
2996	16:40	269703.	50.000 PPBV	1,3,5-TRIMETHYLBENZENE
3060	17:01	242811.	50.001 PPBV	DECANE
3036	16:53	143770.	50.001 PPBV	ALPHA-METHYLSTYRENE
3075	17:06	272420.	50.000 PPBV	1,2,4-TRIMETHYLBENZENE
3119	17:21	179271.	50.001 PPBV	1,3-DICHLOROBENZENE
3137	17:27	158027.	50.001 PPBV	1,4-DICHLOROBENZENE
3133	17:25	246868.	50.000 PPBV	BENZYL CHLORIDE
3201	17:48	175594.	50.001 PPBV	1,2-DICHLOROBENZENE

Scan	Time	Area(Hght)	Amount		Name
3298	18:21	265130.	50.000	PPBV	UNDECANE
3493	19:26	248787.	50.000	PPBV	DODECANE
3520	19:35	43780.	50.000	PPBV	BENZENE, 1,2,4-TRICHLORO
3585	19:56	42290.	28.245	PPBV	HEXACHLOROBUTADIENE
3545	19:43	264976.	55.475	PPBV	NAPHTHALENE
540	3:00	72832.	188.936	PPBV	METHANOL
749	4:10	168533.	73.661	PPBV	ETHYL ETHER
715	3:59	65744.	104.031	PPBV	ACETONE
808	4:30	131578.	116.190	PPBV	ACRYLONITRILE
1030	5:44	416216.	82.778	PPBV	VINYL ACETATE
1092	6:04	53421.	85.420	PPBV	2-BUTANONE
1450	8:04	66917.	83.568	PPBV	1-BUTANOL
1919	10:40	328253.	60.926	PPBV	4-METHYL-2-PENTANONE
2231	12:24	141080.	61.955	PPBV	2-HEXANONE
973	5:25	214534.	64.255	PPBV	METHYL-T-BUTYL ETHER
697	3:53	52072.	114.751	PPBV	ACROLEIN
709	3:57	184103.	146.401	PPBV	ACETONITRILE (DOT)

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(A)	Ratio
51	15:13	1.00	1.075	1.00	50.00	50.00	0.645	0.645	1.00
52	15:08	1.00	1.069	1.00	50.00	50.00	0.607	0.607	1.00
53	15:53	1.00	1.122	1.00	50.00	50.00	1.148	1.148	1.00
54	15:35	1.00	1.101	1.00	50.00	50.00	0.800	0.800	1.00
55	16:25	1.00	1.160	1.00	50.00	50.00	1.480	1.480	1.00
56	16:39	1.00	1.176	1.00	50.00	50.00	1.032	1.032	1.00
57	17:00	1.00	1.201	1.00	50.00	50.00	0.929	0.929	1.00
58	16:52	1.00	1.192	1.00	50.00	50.00	0.550	0.550	1.00
59	17:05	1.00	1.207	1.00	50.00	50.00	1.043	1.043	1.00
60	17:20	1.00	1.225	1.00	50.00	50.00	0.686	0.686	1.00
61	17:25	1.00	1.231	1.00	50.00	50.00	0.605	0.605	1.00
62	17:25	1.00	1.230	1.00	50.00	50.00	0.945	0.945	1.00
63	17:47	1.00	1.257	1.00	50.00	50.00	0.672	0.672	1.00
64	18:20	1.00	1.295	1.00	50.00	50.00	1.015	1.015	1.00
65	19:25	1.00	1.371	1.00	50.00	50.00	0.952	0.952	1.00
66	19:34	1.00	1.382	1.00	50.00	50.00	0.168	0.168	1.00
67	19:55	1.00	1.407	1.00	28.25	28.25	0.287	0.287	1.00
68	19:42	1.00	1.392	1.00	55.48	55.48	0.914	0.914	1.00
69	3:00	1.00	0.450	1.00	188.94	188.94	0.444	0.444	1.00
70	4:10	1.00	0.624	1.00	73.66	73.66	2.632	2.632	1.00
71	3:58	1.00	0.594	1.00	104.03	104.03	0.727	0.727	1.00
72	4:28	1.00	0.671	1.00	116.19	116.19	1.303	1.303	1.00
73	5:43	1.00	0.857	1.00	82.78	82.78	5.785	5.785	1.00
74	6:03	1.00	0.908	1.00	85.42	85.42	0.720	0.720	1.00
75	8:03	1.00	0.935	1.00	83.57	83.57	0.173	0.173	1.00
76	10:39	1.00	1.239	1.00	60.93	60.93	1.163	1.163	1.00
77	12:23	1.00	0.875	1.00	61.96	61.96	0.436	0.436	1.00
78	5:24	1.00	0.811	1.00	64.26	64.26	3.842	3.842	1.00
79	3:52	1.00	0.579	1.00	114.75	114.75	0.522	0.522	1.00
80	3:55	1.01	0.588	1.01	146.40	146.40	1.447	1.447	1.00

QA/QC REPORT

SAMPLE NAME: hi0508m
INJECT TIME: 21:49:15
DATE: Mon May 08 1995
METHOD: polar3.MPT
NAMELIST: dcg.nam
MANIFOLD POSITION: 1

PRESSURE BEFORE SAMPLING(PSIA) 26.5
AFTER SAMPLING(PSIA) 20.9

NG INT. STD INJECTED IS1(0) IS2(0) IS3(0) IS4(0) IS5(0)

PREHEAT MODULE 1 (Y) MODULE 2 (N) , CRYOFOCUS? (Y) , HEAT SAMPLE? (N)

CONDITIONS:

DURING CONCENTRATION	MAX TEMP	FINAL TEMP	TRAP/SEP TIME
M1 Glass Bead Cryotrap	-151	-163(-160)	277
M2 Sorbent Packed Cryotrap	-28	-29(-25)	253
Focusing Trap	-200	-200(-190)	150(150)

DESORB/TRANSFER/INJECT	PREHEAT	FINAL TEMP	TIME(secs)
M1 Glass Bead Cryotrap	-4(-10)	7(5)	253
M2 Sorbent Packed Cryotrap	93(100)	219(220)	150(150)
Focusing Trap	-200	74	300(300)

MEDIUM CONC./TRANSFERRED	VOLUME	FLOW(SCCM)	FINAL PSIA
Internal Standard	100(100)	99(100)	24.4
Sample	501(500)	126(125)	22.2
Sweep/Dry Purge	100(100)	101(100)	32.6
Transfer to Packed Col.	45(45)	10(10)	33.5
Packed Column Separation	0(0)	10(50)	33.5

SYSTEM BAKEOUT

	TEMPERATURE	TIME(min.)
M1 Glass Bead Cryotrap	160(160)	5(5)
M2 Sorbent Packed Cryotrap	221(220)	5(5)
Focusing Trap		

REGULATED ZONES	TEMPERATURE
8-PORT VALVE	149(150)
GC TRANSFER LINE	111(110)
MANIFOLD TRANSFER LINE	108(110)
16-POSITION SELECT VALVE	102(100)
SAMPLE CONTAINER	AMBIENT

7A
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Quanterra Knoxville Contract: OHM CAMP LEJEUNE

Lab Code: ITSTU Case No.: SAS No.: SDG No.: 3512

Instrument ID: M Calibration Date: 05/09/95 Time: 15:56

Lab File ID: MD0509M Init. Calib. Date(s): 05/08/95 05/08/95

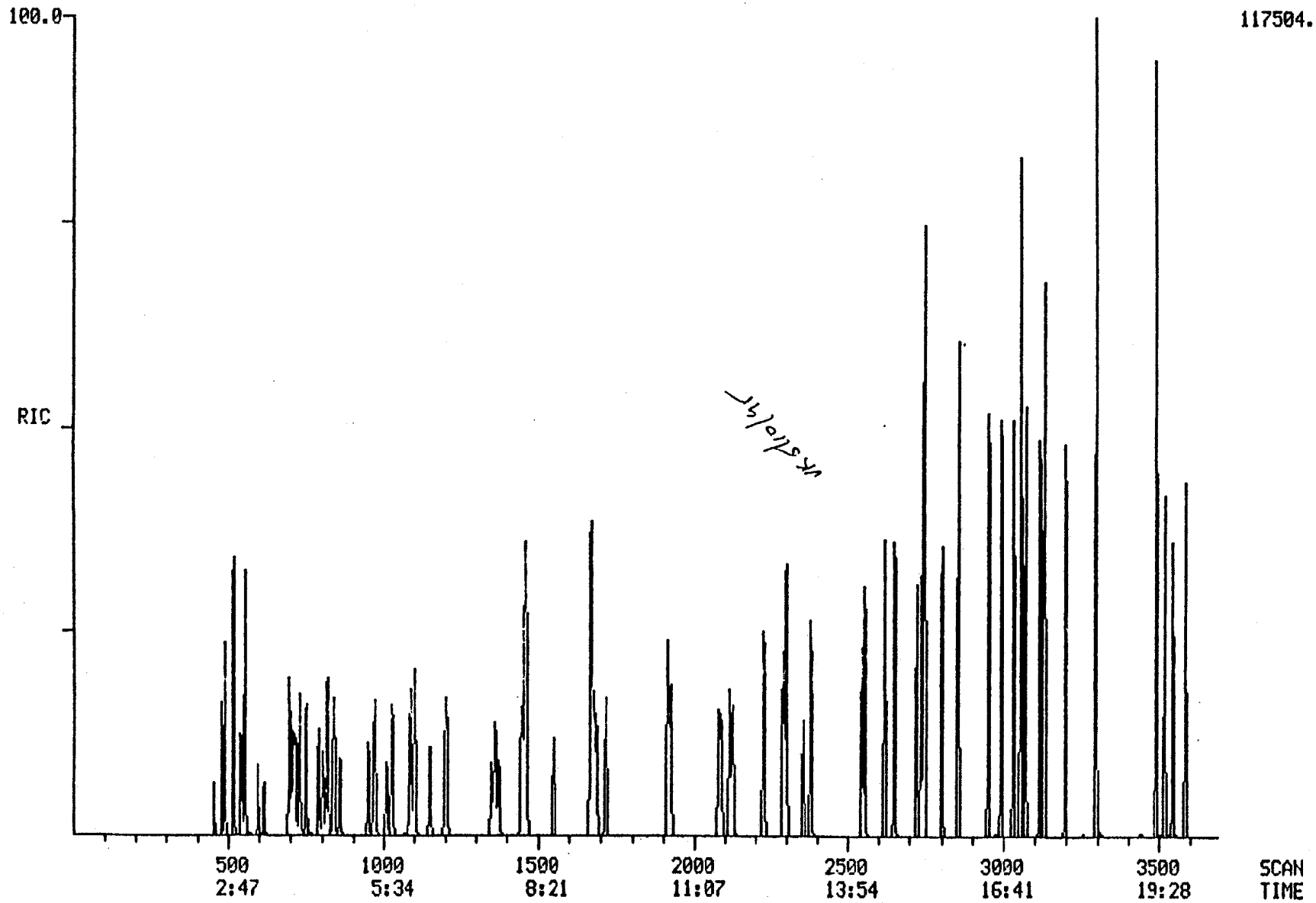
COMPOUND	$\overline{RRF}$	RRF10	%D
Dichlorodifluoromethane	4.144	5.032	21.4
1,2-Dichlorotetrafluoroetha	2.164	2.550	17.9
Chloromethane	0.666	0.778	16.9
Vinyl Chloride	1.836	2.118	15.4
Bromomethane	1.448	1.730	19.5
Chloroethane	0.867	1.042	20.2
Trichlorofluoromethane	3.274	4.107	25.5
1,1-Dichloroethene	1.392	1.619	16.3
1,1,2-Trichlorotrifluoroeth	3.118	3.639	16.7
Methylene Chloride	1.387	1.537	10.8
1,1-Dichloroethane	3.720	4.242	14.0
cis-1,2-Dichloroethene	1.607	1.823	13.5
Chloroform	3.913	4.580	17.0
1,1,1-Trichloroethane	3.931	4.595	16.9
Carbon Tetrachloride	0.781	0.925	18.5
Benzene	0.890	1.006	13.0
1,2-Dichloroethane	0.603	0.699	15.8
Trichloroethene	0.401	0.448	11.6
1,2-Dichloropropane	0.449	0.510	13.7
cis-1,3-Dichloropropene	0.788	0.899	14.1
Toluene	0.879	0.993	12.9
trans-1,3-Dichloropropene	0.555	0.642	15.6
1,1,2-Trichloroethane	0.363	0.410	12.9
Tetrachloroethene	0.261	0.318	21.7
1,2-Dibromoethane	0.700	0.806	15.1
Chlorobenzene	0.861	0.978	13.6
Ethylbenzene	1.435	1.685	17.4
m/p-Xylene	1.155	1.366	18.2
o-Xylene	1.111	1.326	19.3
Styrene	0.789	0.900	14.1
1,1,2,2-Tetrachloroethane	1.004	1.173	16.9
1,3,5-Trimethylbenzene	1.438	1.740	21.0
1,2,4-Trimethylbenzene	1.477	1.770	19.9
1,3-Dichlorobenzene	0.919	1.086	18.2
1,4-Dichlorobenzene	0.872	1.015	16.4
1,2-Dichlorobenzene	0.892	1.050	17.7
Benzyl Chloride	1.372	1.702	24.1
1,2,4-Trichlorobenzene	0.194	0.232	19.7
Hexachlorobutadiene	0.334	0.411	23.0
D4-1,2-Dichloroethane	0.254	0.263	3.4
D8-Toluene	0.847	0.867	2.3
Bromofluorobenzene	0.759	0.805	6.1

A0000130

RIC
05/09/95 15:56:00
SAMPLE: M CX-575 100ML
CONDS.: GC DESC=MB SCAN=DN DB-5 60M 45CM/SEC INST M METH TO-14
RANGE: G 1,3686 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: MD0509M #1
CALI: MD0509M #3

SCANS 1 TO 3686



Quantitation Report File: MD0509M

Data: MD0509M.TI
05/09/95 15:56:00
Sample: M CX-576 100ML
Conds.: GC DESC=MB SCAN=DN DB-5 60M 45CM/SEC INST M METH TO-14
Formula: POS1 Instrument: FINN Weight: 0.000
Submitted by: CCC Analyst: DCG/079 Acct. No.:

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name
1	BROMOCHLOROMETHANE
2	1,4-DIFLUOROBENZENE
3	D5-CHLOROBENZENE
4	D4-1,2-DICHLOROETHANE
5	D8-TOLUENE
6	BROMOFLUOROBENZENE
7	DICHLORODIFLUOROMETHANE
8	CHLORODIFLUOROMETHANE
9	1,2-DICHLORO-1,1,2,2-TETRAFLUOROETHANE
10	CHLOROMETHANE
11	VINYL CHLORIDE
12	N-BUTANE
13	1,3-BUTADIENE
14	BROMOMETHANE
15	CHLOROETHANE
16	TRICHLOROFLUOROMETHANE
17	PENTANE
18	1,1-DICHLOROETHENE
19	1,1,2-TRICHLOROTRIFLUOROETHANE
20	CARBON DISULFIDE
21	3-CHLOROPROPENE
22	METHYLENE CHLORIDE
23	TRANS-1,2-DICHLOROETHENE
24	HEXANE
25	1,1-DICHLOROETHANE
26	CIS-1,2-DICHLOROETHENE
27	CHLOROFORM
28	1,1,1-TRICHLOROETHANE
29	CYCLOHEXANE
30	CARBON TETRACHLORIDE
31	BENZENE
32	1,2-DICHLOROETHANE
33	HEPTANE
34	TRICHLOROETHENE
35	1,2-DICHLOROPROPANE
36	DIBROMOMETHANE
37	BROMODICHLOROMETHANE
38	CIS-1,3-DICHLOROPROPENE
39	TOLUENE
40	OCTANE
41	TRANS-1,3-DICHLOROPROPENE
42	1,1,2-TRICHLOROETHANE
43	TETRACHLOROETHENE
44	DIBROMOCHLOROMETHANE
45	1,2-DIBROMOETHANE
46	CHLOROBENZENE
47	ETHYLBENZENE

No	Name
48	M-XYLENE (FOR P-)
49	NONANE
50	O-XYLENE

Scan	Time	Area(Hght)	Amount	Name
1200	6:40	6938.	8.000 PPBV	BROMOCHLOROMETHANE
1548	8:37	35970.	8.000 PPBV	1,4-DIFLUOROBENZENE
2547	14:10	41522.	8.000 PPBV	D5-CHLOROBENZENE
1351	7:31	9478.	8.000 PPBV	D4-1,2-DICHLOROETHANE
2090	11:37	36008.	8.000 PPBV	D8-TOLUENE
2858	15:54	16705.	4.000 PPBV	BROMOFLUOROBENZENE
489	2:43	43639.	10.000 PPBV	DICHLORODIFLUOROMETHANE
480	2:40	39661.	10.000 PPBV	CHLORODIFLUOROMETHANE
516	2:52	22115.	10.000 PPBV	1,2-DICHLORO-1,1,2,2-TETRAFL
514	2:52	6751.	10.000 PPBV	CHLOROMETHANE
539	3:00	18372.	10.000 PPBV	VINYL CHLORIDE
553	3:05	38605.	10.000 PPBV	N-BUTANE
552	3:04	14506.	10.000 PPBV	1,3-BUTADIENE
595	3:19	15004.	10.000 PPBV	BROMOMETHANE
616	3:26	9039.	10.000 PPBV	CHLOROETHANE
696	3:52	35621.	10.000 PPBV	TRICHLOROFLUOROMETHANE
729	4:03	4515.	10.000 PPBV	PENTANE
792	4:24	14037.	10.000 PPBV	1,1-DICHLOROETHENE
820	4:34	31560.	10.000 PPBV	1,1,2-TRICHLOROTRIFLUOROETHA
860	4:47	42570.	10.000 PPBV	CARBON DISULFIDE
842	4:41	24762.	10.000 PPBV	3-CHLOROPROPENE
838	4:40	13327.	10.000 PPBV	METHYLENE CHLORIDE
953	5:18	14261.	10.000 PPBV	TRANS-1,2-DICHLOROETHENE
1104	6:08	16393.	10.000 PPBV	HEXANE
1012	5:38	36791.	10.000 PPBV	1,1-DICHLOROETHANE
1153	6:25	15813.	10.000 PPBV	CIS-1,2-DICHLOROETHENE
1205	6:42	39722.	10.000 PPBV	CHLOROFORM
1362	7:34	39849.	10.000 PPBV	1,1,1-TRICHLOROETHANE
1461	8:08	25506.	10.000 PPBV	CYCLOHEXANE
1462	8:08	41587.	10.000 PPBV	CARBON TETRACHLORIDE
1457	8:06	45249.	10.000 PPBV	BENZENE
1374	7:39	31449.	10.000 PPBV	1,2-DICHLOROETHANE
1669	9:17	53843.	10.000 PPBV	HEPTANE
1678	9:20	20138.	10.000 PPBV	TRICHLOROETHENE
1669	9:17	22925.	10.000 PPBV	1,2-DICHLOROPROPANE
1687	9:23	22424.	10.000 PPBV	DIBROMOMETHANE
1717	9:33	45971.	10.000 PPBV	BROMODICHLOROMETHANE
1926	10:43	40407.	10.000 PPBV	CIS-1,3-DICHLOROPROPENE
2117	11:46	51558.	10.000 PPBV	TOLUENE
2300	12:48	18770.	10.000 PPBV	OCTANE
2082	11:35	33305.	10.000 PPBV	TRANS-1,3-DICHLOROPROPENE
2127	11:50	21262.	10.000 PPBV	1,1,2-TRICHLOROETHANE
2380	13:14	16492.	10.000 PPBV	TETRACHLOROETHENE
2290	12:44	49184.	10.000 PPBV	DIBROMOCHLOROMETHANE
2355	13:06	41826.	10.000 PPBV	1,2-DIBROMOETHANE
2557	14:13	50786.	10.000 PPBV	CHLOROBENZENE
2619	14:34	87481.	10.000 PPBV	ETHYLBENZENE
2650	14:44	70874.	10.000 PPBV	M-XYLENE (FOR P-)
2746	15:16	59923.	10.000 PPBV	NONANE
2748	15:17	68841.	10.000 PPBV	O-XYLENE

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(A)	Ratio
1	6:40	1.00	1.000	1.00	8.00	8.00	1.000	1.000	1.00
2	8:37	1.00	1.000	1.00	8.00	8.00	1.000	1.000	1.00
3	14:10	1.00	1.000	1.00	8.00	8.00	1.000	1.000	1.00
4	7:31	1.00	0.873	1.00	8.00	8.00	0.263	0.263	1.00
5	11:37	1.00	0.821	1.00	8.00	8.00	0.867	0.867	1.00
6	15:54	1.00	1.122	1.00	4.00	4.00	0.805	0.805	1.00
7	2:43	1.00	0.408	1.00	10.00	10.00	5.032	5.032	1.00
8	2:40	1.00	0.400	1.00	10.00	10.00	4.573	4.573	1.00
9	2:52	1.00	0.430	1.00	10.00	10.00	2.550	2.550	1.00
10	2:52	1.00	0.428	1.00	10.00	10.00	0.778	0.778	1.00
11	3:00	1.00	0.449	1.00	10.00	10.00	2.118	2.118	1.00
12	3:05	1.00	0.461	1.00	10.00	10.00	4.451	4.451	1.00
13	3:04	1.00	0.460	1.00	10.00	10.00	1.673	1.673	1.00
14	3:19	1.00	0.496	1.00	10.00	10.00	1.730	1.730	1.00
15	3:26	1.00	0.513	1.00	10.00	10.00	1.042	1.042	1.00
16	3:52	1.00	0.580	1.00	10.00	10.00	4.107	4.107	1.00
17	4:03	1.00	0.608	1.00	10.00	10.00	0.521	0.521	1.00
18	4:24	1.00	0.660	1.00	10.00	10.00	1.619	1.619	1.00
19	4:34	1.00	0.683	1.00	10.00	10.00	3.639	3.639	1.00
20	4:47	1.00	0.717	1.00	10.00	10.00	4.909	4.909	1.00
21	4:41	1.00	0.702	1.00	10.00	10.00	2.855	2.855	1.00
22	4:40	1.00	0.698	1.00	10.00	10.00	1.537	1.537	1.00
23	5:18	1.00	0.794	1.00	10.00	10.00	1.644	1.644	1.00
24	6:08	1.00	0.920	1.00	10.00	10.00	1.890	1.890	1.00
25	5:38	1.00	0.843	1.00	10.00	10.00	4.242	4.242	1.00
26	6:25	1.00	0.961	1.00	10.00	10.00	1.823	1.823	1.00
27	6:42	1.00	1.004	1.00	10.00	10.00	4.580	4.580	1.00
28	7:34	1.00	1.135	1.00	10.00	10.00	4.595	4.595	1.00
29	8:08	1.00	0.944	1.00	10.00	10.00	0.567	0.567	1.00
30	8:08	1.00	0.944	1.00	10.00	10.00	0.925	0.925	1.00
31	8:06	1.00	0.941	1.00	10.00	10.00	1.006	1.006	1.00
32	7:39	1.00	0.888	1.00	10.00	10.00	0.699	0.699	1.00
33	9:17	1.00	1.078	1.00	10.00	10.00	1.197	1.197	1.00
34	9:20	1.00	1.084	1.00	10.00	10.00	0.448	0.448	1.00
35	9:17	1.00	1.078	1.00	10.00	10.00	0.510	0.510	1.00
36	9:23	1.00	1.090	1.00	10.00	10.00	0.499	0.499	1.00
37	9:33	1.00	1.109	1.00	10.00	10.00	1.022	1.022	1.00
38	10:43	1.00	1.244	1.00	10.00	10.00	0.899	0.899	1.00
39	11:46	1.00	0.831	1.00	10.00	10.00	0.993	0.993	1.00
40	12:48	1.00	0.903	1.00	10.00	10.00	0.362	0.362	1.00
41	11:35	1.00	0.817	1.00	10.00	10.00	0.642	0.642	1.00
42	11:50	1.00	0.835	1.00	10.00	10.00	0.410	0.410	1.00
43	13:14	1.00	0.934	1.00	10.00	10.00	0.318	0.318	1.00
44	12:44	1.00	0.899	1.00	10.00	10.00	0.948	0.948	1.00
45	13:06	1.00	0.925	1.00	10.00	10.00	0.806	0.806	1.00
46	14:13	1.00	1.004	1.00	10.00	10.00	0.978	0.978	1.00
47	14:34	1.00	1.028	1.00	10.00	10.00	1.685	1.685	1.00
48	14:44	1.00	1.040	1.00	10.00	10.00	1.366	1.366	1.00
49	15:16	1.00	1.078	1.00	10.00	10.00	1.155	1.155	1.00
50	15:17	1.00	1.079	1.00	10.00	10.00	1.326	1.326	1.00

Quantitation Report File: MD0509M

Data: MD0509M.TI
05/09/95 15:56:00
Sample: M CX-576 100ML
Conds.: GC DESC=MB SCAN=DN DB-5 60M 45CM/SEC INST M METH TO-14
Formula: POS1 Instrument: FINN Weight: 0.000
Submitted by: CCC Analyst: DCG/079 Acct. No.:

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name
51	STYRENE
52	BROMOFORM
53	CUMENE
54	1,1,2,2-TETRACHLOROETHANE
55	N-PROPYLBENZENE
56	1,3,5-TRIMETHYLBENZENE
57	DECANE
58	ALPHA-METHYLSTYRENE
59	1,2,4-TRIMETHYLBENZENE
60	1,3-DICHLOROBENZENE
61	1,4-DICHLOROBENZENE
62	BENZYL CHLORIDE
63	1,2-DICHLOROBENZENE
64	UNDECANE
65	DODECANE
66	BENZENE, 1,2,4-TRICHLORO
67	HEXACHLOROBUTADIENE
68	NAPHTHALENE
69	METHANOL
70	ETHYL ETHER
71	ACETONE
72	ACRYLONITRILE
73	VINYL ACETATE
74	2-BUTANONE
75	1-BUTANOL
76	4-METHYL-2-PENTANONE
77	2-HEXANONE
78	METHYL-T-BUTYL ETHER
79	ACROLEIN
80	ACETONITRILE (DOT)

Scan	Time	Area(Hght)	Amount	Name
2736	15:13	46701.	10.000 PPBV	STYRENE
2722	15:08	48896.	10.000 PPBV	BROMOFORM
2858	15:54	99805.	10.000 PPBV	CUMENE
2803	15:35	60885.	10.000 PPBV	1,1,2,2-TETRACHLOROETHANE
2954	16:26	128549.	10.000 PPBV	N-PROPYLBENZENE
2995	16:39	90328.	10.000 PPBV	1,3,5-TRIMETHYLBENZENE
3058	17:00	84772.	10.000 PPBV	DECANE
3035	16:53	45845.	10.000 PPBV	ALPHA-METHYLSTYRENE
3073	17:05	91880.	10.000 PPBV	1,2,4-TRIMETHYLBENZENE
3118	17:20	56386.	10.000 PPBV	1,3-DICHLOROBENZENE
3134	17:26	52704.	10.000 PPBV	1,4-DICHLOROBENZENE
3132	17:25	88316.	10.000 PPBV	BENZYL CHLORIDE
3200	17:48	54506.	10.000 PPBV	1,2-DICHLOROBENZENE

Scan	Time	Area(Hght)	Amount	Name
3297	18:20	98668.	10.000 PPBV	UNDECANE
3491	19:25	90820.	10.000 PPBV	DODECANE
3519	19:34	12026.	10.000 PPBV	BENZENE, 1,2,4-TRICHLORO
3584	19:56	12050.	5.649 PPBV	HEXACHLOROBUTADIENE
3544	19:43	87153.	11.095 PPBV	NAPHTHALENE
541	3:01	33619.	37.787 PPBV	METHANOL
749	4:10	39450.	14.732 PPBV	ETHYL ETHER
714	3:58	15884.	20.806 PPBV	ACETONE
806	4:29	31666.	23.238 PPBV	ACRYLONITRILE
1029	5:43	110890.	16.556 PPBV	VINYL ACETATE
1090	6:04	12595.	17.084 PPBV	2-BUTANONE
1448	8:03	29647.	16.714 PPBV	1-BUTANOL
1917	10:40	91312.	12.185 PPBV	4-METHYL-2-PENTANONE
2228	12:23	35276.	12.391 PPBV	2-HEXANONE
974	5:25	56504.	12.851 PPBV	METHYL-T-BUTYL ETHER
696	3:52	13347.	22.950 PPBV	ACROLEIN
707	3:56	48696.	29.280 PPBV	ACETONITRILE (DOT)

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(A)	Ratio
51	15:13	1.00	1.074	1.00	10.00	10.00	0.900	0.900	1.00
52	15:08	1.00	1.069	1.00	10.00	10.00	0.942	0.942	1.00
53	15:54	1.00	1.122	1.00	10.00	10.00	1.923	1.923	1.00
54	15:35	1.00	1.101	1.00	10.00	10.00	1.173	1.173	1.00
55	16:26	1.00	1.160	1.00	10.00	10.00	2.477	2.477	1.00
56	16:39	1.00	1.176	1.00	10.00	10.00	1.740	1.740	1.00
57	17:00	1.00	1.201	1.00	10.00	10.00	1.633	1.633	1.00
58	16:53	1.00	1.192	1.00	10.00	10.00	0.883	0.883	1.00
59	17:05	1.00	1.207	1.00	10.00	10.00	1.770	1.770	1.00
60	17:20	1.00	1.224	1.00	10.00	10.00	1.086	1.086	1.00
61	17:26	1.00	1.230	1.00	10.00	10.00	1.015	1.015	1.00
62	17:25	1.00	1.230	1.00	10.00	10.00	1.702	1.702	1.00
63	17:48	1.00	1.256	1.00	10.00	10.00	1.050	1.050	1.00
64	18:20	1.00	1.294	1.00	10.00	10.00	1.901	1.901	1.00
65	19:25	1.00	1.371	1.00	10.00	10.00	1.750	1.750	1.00
66	19:34	1.00	1.382	1.00	10.00	10.00	0.232	0.232	1.00
67	19:56	1.00	1.407	1.00	5.65	5.65	0.411	0.411	1.00
68	19:43	1.00	1.391	1.00	11.10	11.10	1.513	1.513	1.00
69	3:01	1.00	0.451	1.00	37.79	37.79	1.026	1.026	1.00
70	4:10	1.00	0.624	1.00	14.73	14.73	3.088	3.088	1.00
71	3:58	1.00	0.595	1.00	20.81	20.81	0.880	0.880	1.00
72	4:29	1.00	0.672	1.00	23.24	23.24	1.571	1.571	1.00
73	5:43	1.00	0.858	1.00	16.56	16.56	7.723	7.723	1.00
74	6:04	1.00	0.908	1.00	17.08	17.08	0.850	0.850	1.00
75	8:03	1.00	0.935	1.00	16.71	16.71	0.395	0.395	1.00
76	10:40	1.00	1.238	1.00	12.19	12.19	1.667	1.667	1.00
77	12:23	1.00	0.875	1.00	12.39	12.39	0.549	0.549	1.00
78	5:25	1.00	0.812	1.00	12.85	12.85	5.070	5.070	1.00
79	3:52	1.00	0.580	1.00	22.95	22.95	0.671	0.671	1.00
80	3:56	1.00	0.589	1.00	29.28	29.28	1.918	1.918	1.00

QA/QC REPORT

SAMPLE NAME: md0509m
INJECT TIME: 14:19:22
DATE: Tue May 09 1995
METHOD: polar3.MPT
NAMELIST: dcg.nam
MANIFOLD POSITION: 1

PRESSURE BEFORE SAMPLING(PSIA) 25.0
AFTER SAMPLING(PSIA) 24.8

NG INT. STD INJECTED IS1(0) IS2(0) IS3(0) IS4(0) IS5(0)

PREHEAT MODULE 1 (Y) MODULE 2 (N) . CRYOFOCUS? (Y) . HEAT SAMPLE? (N)

CONDITIONS:

DURING CONCENTRATION	MAX TEMP	FINAL TEMP	TRAP/SEP TIME
M1 Glass Bead Cryotrap	-155	-166(-160)	277
M2 Sorbent Packed Cryotrap	-28	-30(-25)	60
Focusing Trap	-197	-200(-190)	150(150)

DESORB/TRANSFER/INJECT	PREHEAT	FINAL TEMP	TIME(secs)
M1 Glass Bead Cryotrap	-4(-10)	14(5)	60
M2 Sorbent Packed Cryotrap	117(100)	224(220)	150(150)
Focusing Trap	-200	74	300(300)

MEDIUM CONC./TRANSFERRED	VOLUME	FLOW(SCCM)	FINAL PSIA
Internal Standard	100(100)	101(100)	22.0
Sample	101(100)	126(125)	22.1
Sweep/Dry Purge	100(100)	100(100)	32.7
Transfer to Packed Col.	45(45)	10(10)	33.3
Packed Column Separation	0(0)	10(50)	33.3

SYSTEM BAKEOUT

	TEMPERATURE	TIME(min.)
M1 Glass Bead Cryotrap	169(160)	5(5)
M2 Sorbent Packed Cryotrap	223(220)	5(5)
Focusing Trap		

REGULATED ZONES	TEMPERATURE
8-PORT VALVE	149(150)
GC TRANSFER LINE	108(110)
MANIFOLD TRANSFER LINE	104(110)
16-POSITION SELECT VALVE	102(100)
SAMPLE CONTAINER	AMBIENT

GCMS VOLATILES DATA continued
RAW QC DATA

BROMOFLUOROBENZENE

Tuning Report
05/08/95 20:33:00 + 15:52
Instrument: FINN
#2850 to #2854 summed - #2840
Case Number:

Data: BF0508M #2852
Cali: CA050895 # 3
Analyst: DCG/079
Laboratory:

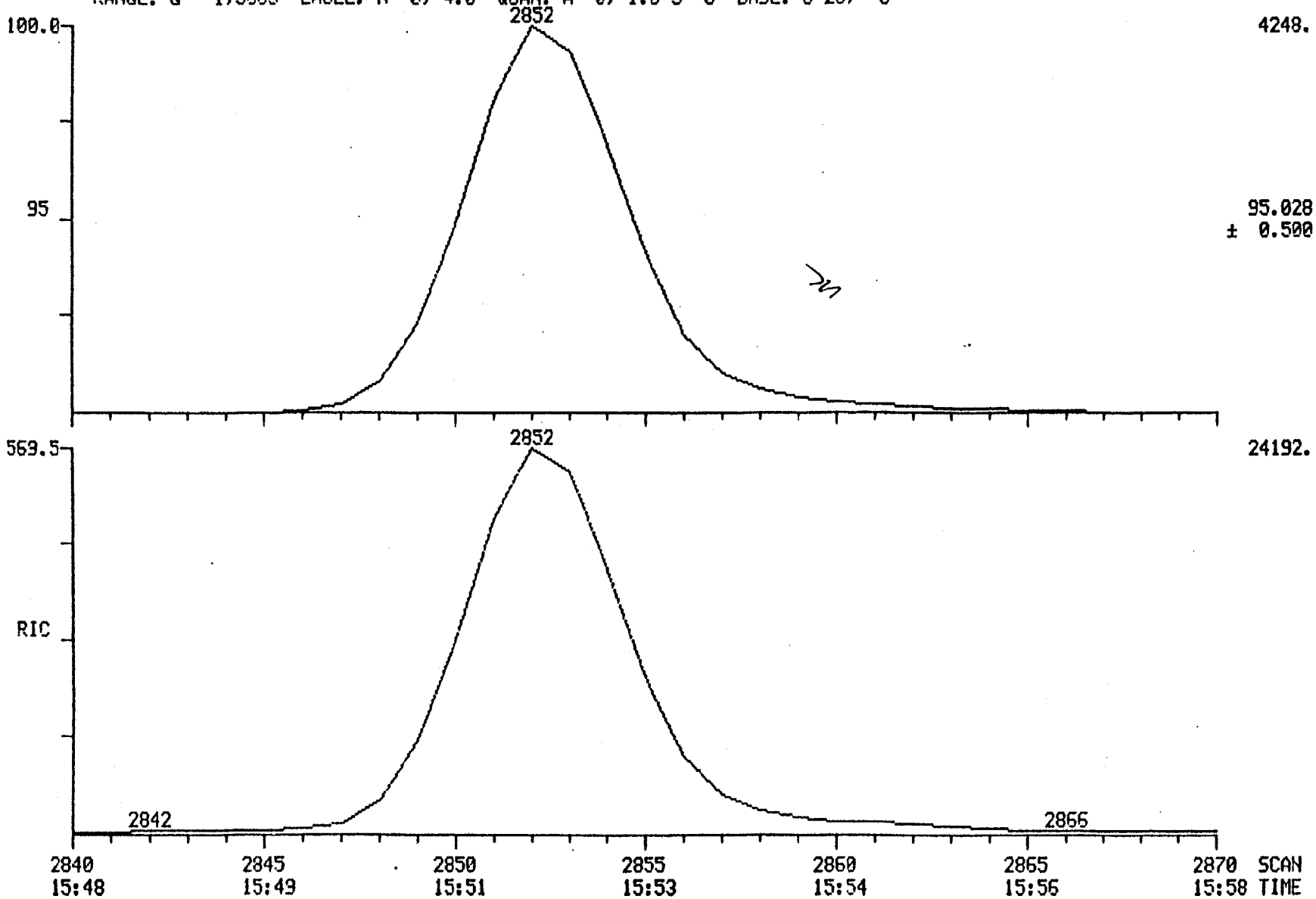
Base m/z: 95
RIC: 94208.
Acct. No.:
Contract:

m/z	Intensity	% RA	Ion Abundance Criteria Min %	Max %	Mass	Actual	Status
50	5048.	30.3	15.0	40.0	93	30.3	PASS
75	8304.	49.9	30.0	60.0	95	49.9	PASS
95	16640.	100.0	100.0	---	---	100.0	PASS
96	1164.	7.0	5.0	9.0	95	7.0	PASS
173	0.	0.0	---	2.0	174	0.0	PASS
174	12224.	73.5	50.0	---	95	73.5	PASS
175	863.	5.2	5.0	9.0	174	7.1	PASS
176	12160.	73.1	95.0	101.0	174	99.5	PASS
177	807.	4.8	5.0	9.0	176	6.6	PASS

VK 5/10/95

A0000138

RIC+MASS CHROMATOGRAM DATA: BF0508M #1 SCANS 2840 TO 2870
05/08/95 20:33:00 CALI: CA050895 #3
SAMPLE: M TUNE CHECK 500ML
CONDS.: GC DESC=MB SCAN=DN DB-5 60M 45CM/SEC INST M METH TO-14
RANGE: G 1,3685 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

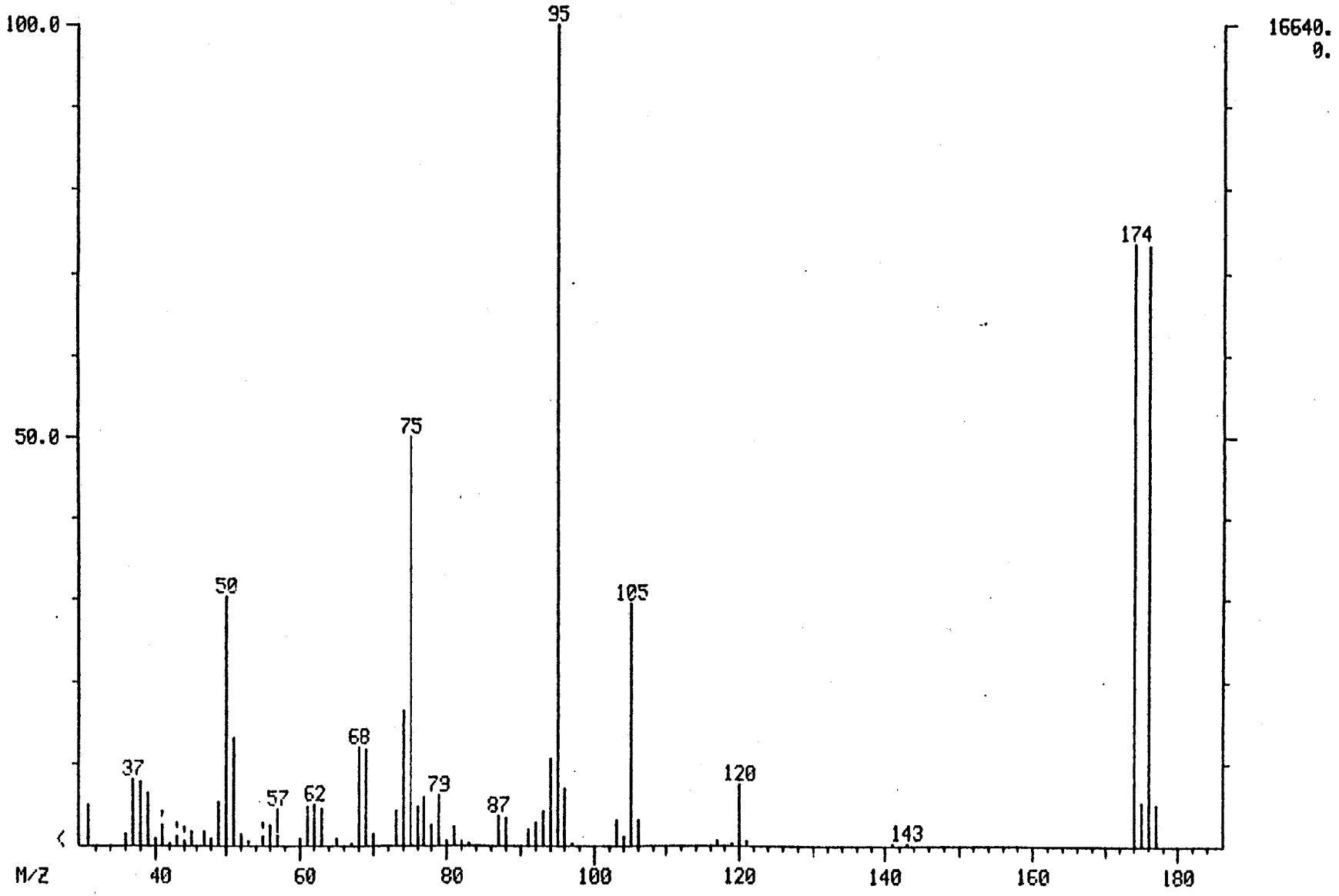


A0000139

MASS SPECTRUM
05/08/95 20:33:00 + 15:52
SAMPLE: M TUNE CHECK 500ML
CONDS.: GC DESC=MB SCAN=ON DB-5 60M 45CM/SEC INST M METH TO-14
TEMP: 162 DEG. C
#2850 TO #2854 SUMMED - #2840

DATA: BF0508M #2852
CALI: CA050895 #3

BASE M/Z: 95
RIC: 94208.



Mass List Data: BF0508M #2852 Base m/z: 95
05/08/95 20:33:00 + 15:52 Cali: CA050895 # 3 RIC: 94208.
Sample: M TUNE CHECK 500ML
Conds.: GC DESC=MB SCAN=DN DB-5 60M 45CM/SEC INST M METH TO-14
#2850 to #2854 summed - #2840

29 0.00 0. Minima Min Inten: 0.
177 Maxima # 0

Mass		% RA	Inten.	Maxima Mass	% RA	Inten.
29?	S	0.34	56.	96	7.00	1164.
31?		4.90	815.	97	0.25	41.
36?		1.33	222.	103	2.91	485.
37?		8.14	1354.	104	1.17	194.
38?		7.61	1266.	105	29.42	4896.
39?		6.38	1062.	106	2.99	497.
40?		0.82	136.	117	0.59	98.
41?	S	2.37	395.	119	0.32	53.
42?		0.41	68.	120	7.52	1252.
43?	S	0.99	164.	121	0.51	85.
44?	S	0.62	103.	141	0.25	42.
45?		1.59	265.	143	0.29	48.
47?		1.75	291.	174	73.46	12224.
48?		0.70	117.	175	5.19	863.
49?		5.36	892.	176	73.08	12160.
50?		30.34	5048.	177	4.85	807.
51?		13.10	2180.			
52?		1.48	247.			
53?		0.59	98.			
55?	S	1.10	183.			
56?		2.48	412.			
57?		4.30	715.			
60?		0.76	126.			
61?		4.81	800.			
62?		5.01	834.			
63?		4.47	743.			
64?		0.12	20.			
65?		0.78	129.			
67?		0.26	44.			
68?		11.78	1960.			
69		11.69	1946.			
70		1.41	234.			
73		4.10	682.			
74		16.39	2728.			
75		49.90	8304.			
76		4.64	772.			
77		5.70	949.			
78		2.46	409.			
79		6.00	999.			
80		0.69	114.			
81		2.09	348.			
82		0.42	70.			
83		0.24	40.			
87		3.59	597.			
88		3.36	559.			
91		2.05	341.			
92		2.63	438.			
93		4.02	669.			
94		10.56	1758.			
95		100.00	16640.			

QA/QC REPORT

SAMPLE NAME: bf0508m
INJECT TIME: 18:56:04
DATE: Mon May 08 1995
METHOD: polar3.MPT
NAMELIST: dcg.nam
MANIFOLD POSITION: 4

PRESSURE BEFORE SAMPLING(PSIA) 18.6
AFTER SAMPLING(PSIA) 17.8

NG INT. STD INJECTED IS1(0) IS2(0) IS3(0) IS4(0) IS5(0)

PREHEAT MODULE 1 (Y) MODULE 2 (N) , CRYOFOCUS? (Y) , HEAT SAMPLE? (N)

CONDITIONS:

DURING CONCENTRATION	MAX TEMP	FINAL TEMP	TRAP/SEP TIME
M1 Glass Bead Cryotrap	-153	-166(-160)	277
M2 Sorbent Packed Cryotrap	-28	-30(-25)	253
Focusing Trap	-168	-198(-190)	150(150)

DESORB/TRANSFER/INJECT	PREHEAT	FINAL TEMP	TIME(secs)
M1 Glass Bead Cryotrap	-5(-10)	21(5)	253
M2 Sorbent Packed Cryotrap	24(100)	224(220)	150(150)
Focusing Trap	-198	74	300(300)

MEDIUM CONC./TRANSFERRED	VOLUME	FLOW(SCCM)	FINAL PSIA
Internal Standard	100(100)	101(100)	25.4
Sample	501(500)	124(125)	12.5
Sweep/Dry Purge	100(100)	99(100)	32.7
Transfer to Packed Col.	45(45)	10(10)	33.5
Packed Column Separation	0(0)	10(50)	33.5

SYSTEM BAKEOUT

	TEMPERATURE	TIME(min.)
M1 Glass Bead Cryotrap	166(160)	5(5)
M2 Sorbent Packed Cryotrap	221(220)	5(5)
Focusing Trap		

REGULATED ZONES	TEMPERATURE
8-PORT VALVE	151(150)
GC TRANSFER LINE	109(110)
MANIFOLD TRANSFER LINE	109(110)
16-POSITION SELECT VALVE	100(100)
SAMPLE CONTAINER	AMBIENT

BROMOFLUOROBENZENE

Tuning Report
05/09/95 15:13:00 + 15:53
Instrument: FINN
#2855 to #2859 summed - #2845
Case Number:

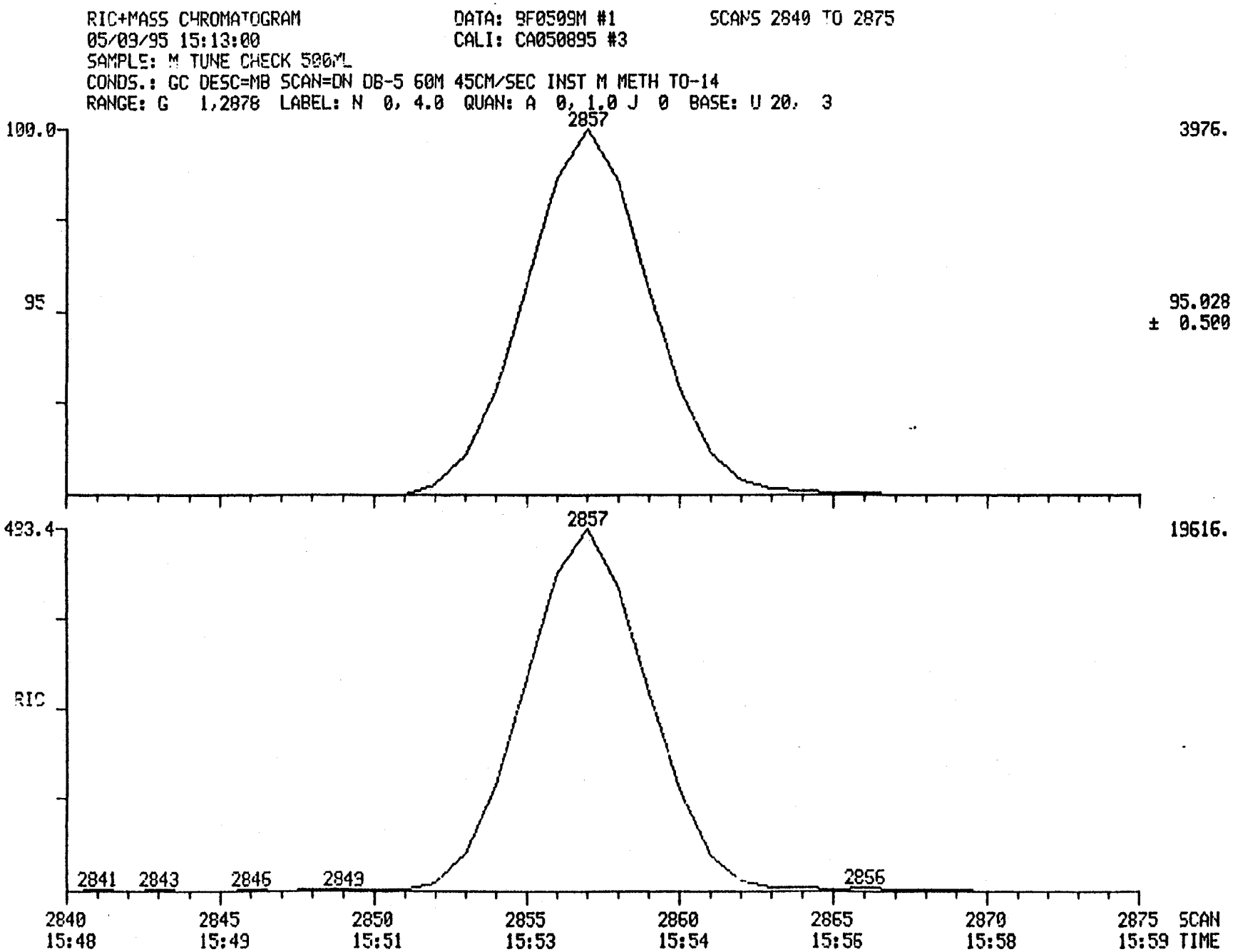
Data: BF0509M #2857
Cali: CA050895 # 3
Analyst: DCG/079
Laboratory:

Base m/z: 95
RIC: 75264.
Acct. No.:
Contract:

m/z	Intensity	% RA	Ion Abundance Criteria Min %	Max %	Mass	Actual	Status
50	4824.	31.4	15.0	40.0	95	31.4	PASS
75	8192.	53.4	30.0	60.0	95	53.4	PASS
95	15344.	100.0	100.0	---	---	100.0	PASS
96	1038.	6.8	5.0	9.0	95	6.8	PASS
173	0.	0.0	---	2.0	174	0.0	PASS
174	10768.	70.2	50.0	---	95	70.2	PASS
175	757.	4.9	5.0	9.0	174	7.0	PASS
176	10576.	68.9	95.0	101.0	174	98.2	PASS
177	678.	4.4	5.0	9.0	176	6.4	PASS

VK 5/10/95

A0000143

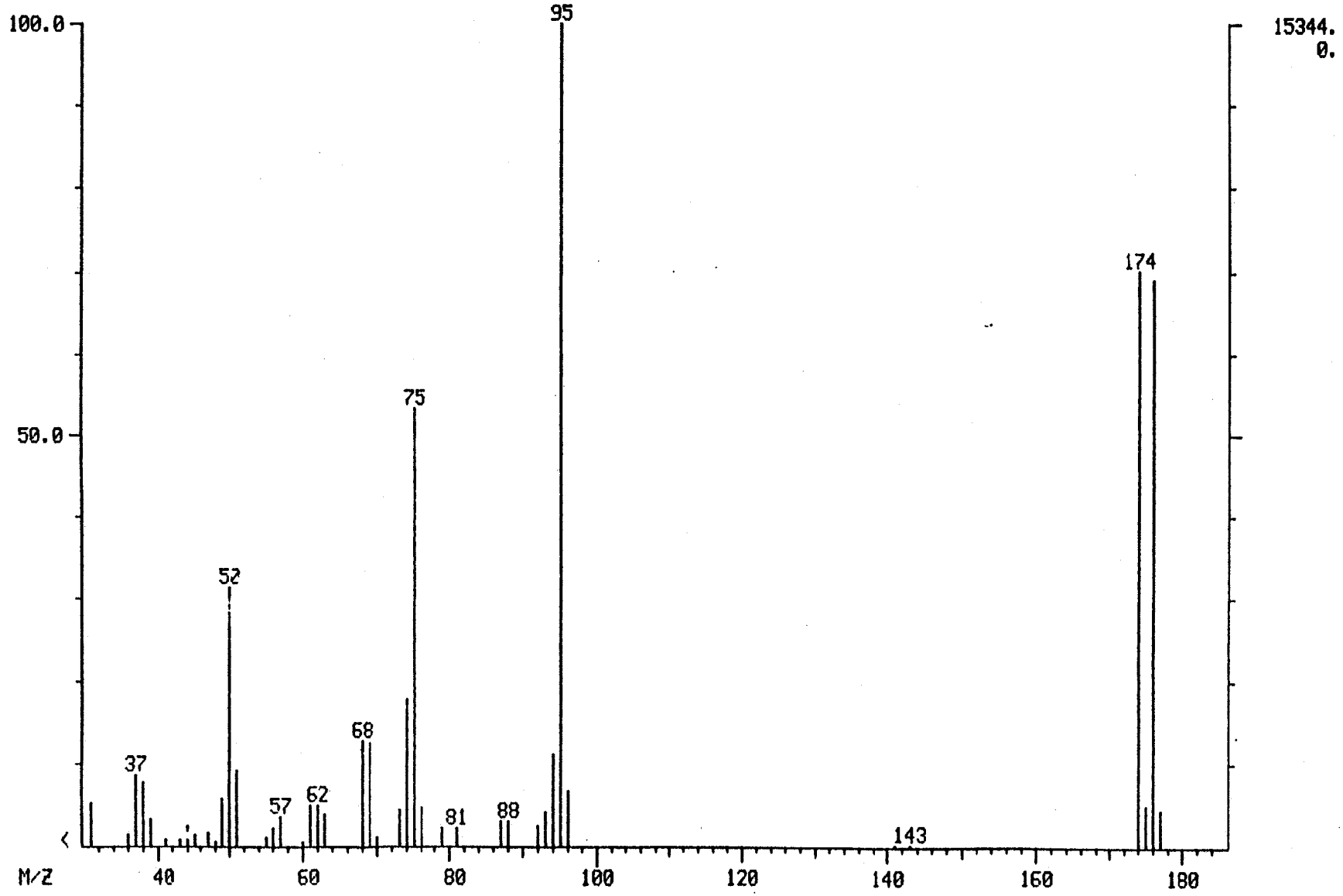

RIC+MASS CHROMATOGRAM
05/09/95 15:13:00
SAMPLE: M TUNE CHECK 500ML
CONDS.: GC DESC=MB SCAN=DN DB-5 60M 45CM/SEC INST M METH TO-14
RANGE: G 1,2878 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3
DATA: BF0509M #1
CALI: CA050895 #3
SCANS 2840 TO 2875
100.0
95
2857
3976.
95.028
± 0.500
493.4
RIC
2857
19616.
2841
2843
2846
2849
2856
2840
15:48
2845
15:49
2850
15:51
2855
15:53
2860
15:54
2865
15:56
2870
15:58
2875
15:59
SCAN
TIME

A0000144

MASS SPECTRUM
05/09/95 15:13:00 + 15:53
SAMPLE: M TUNE CHECK 500ML
CONDS.: GC DESC=MB SCAN=DN DB-5 60M 45CM/SEC INST M METH TO-14
TEMP: 162 DEG. C
#2855 TO #2859 SUMMED - #2845

DATA: BF0509M #2857
CALI: CA050895 #3

BASE M/Z: 95
RIC: 75264.



Mass List
05/09/95 15:13:00 + 15:53
Sample: M TUNE CHECK 500ML
Conds.: GC DESC=MB SCAN=DN DB-5 60M 45CM/SEC INST M METH TO-14
#2855 to #2859 summed - #2845

Data: BF0509M #2857
Cali: CA050895 # 3

Base m/z: 95
RIC: 75264.

29 0.00 0. Minima Min Inten: 0.
177 Maxima # 0

Mass		% RA	Inten.
29?		0.57	87.
31?		5.34	819.
36?		1.46	224.
37?		8.54	1310.
38?		7.72	1184.
39?		3.42	525.
41?		0.72	110.
43?		0.86	132.
44?	S	0.81	124.
45?		1.41	216.
47?		1.54	237.
48?		0.51	79.
49?		5.83	894.
50?		31.44	4824.
51?		9.16	1406.
55?		0.98	151.
56?		2.17	333.
57?		3.68	564.
60?		0.55	85.
61?		5.07	778.
62?		5.08	779.
63?		3.75	576.
68?		12.70	1948.
69		12.30	1888.
70		1.07	164.
73		4.42	678.
74		17.67	2712.
75		53.39	8192.
76		4.74	728.
79		2.13	327.
80		0.14	21.
81		2.15	330.
87		2.93	449.
88		2.95	452.
92		2.52	387.
93		4.07	624.
94		11.11	1704.
95		100.00	15344.
96		6.76	1038.
141		0.15	23.
143		0.28	43.
174		70.18	10768.
175		4.93	757.
176		68.93	10576.
177		4.42	678.

QA/QC REPORT

SAMPLE NAME: bf0509m
INJECT TIME: 13:52:02
DATE: Tue May 09 1995
METHOD: polar3.MPT
NAMELIST: dcg.nam
MANIFOLD POSITION: 4

PRESSURE BEFORE SAMPLING(PSIA) 32.0
AFTER SAMPLING(PSIA) 31.3

NG INT. STD INJECTED IS1(0) IS2(0) IS3(0) IS4(0) IS5(0)

PREHEAT MODULE 1 (Y) MODULE 2 (N) , CRYOFOCUS? (Y) , HEAT SAMPLE? (N)

CONDITIONS:

DURING CONCENTRATION	MAX TEMP	FINAL TEMP	TRAP/SEP TIME
M1 Glass Bead Cryotrap	-152	-163(-160)	277
M2 Sorbent Packed Cryotrap	-29	-30(-25)	252
Focusing Trap	-200	-200(-190)	150(150)

DESORB/TRANSFER/INJECT	PREHEAT	FINAL TEMP	TIME(secs)
M1 Glass Bead Cryotrap	-7(-10)	16(5)	252
M2 Sorbent Packed Cryotrap	23(100)	225(220)	150(150)
Focusing Trap	-200	75	300(300)

MEDIUM CONC./TRANSFERRED	VOLUME	FLOW(SCCM)	FINAL PSIA
Internal Standard	100(100)	101(100)	22.2
Sample	501(500)	126(125)	27.8
Sweep/Dry Purge	100(100)	99(100)	32.4
Transfer to Packed Col.	45(45)	10(10)	33.5
Packed Column Separation	0(0)	10(50)	33.5

SYSTEM BAKEOUT

	TEMPERATURE	TIME(min.)
M1 Glass Bead Cryotrap	167(160)	5(5)
M2 Sorbent Packed Cryotrap	225(220)	5(5)
Focusing Trap		

REGULATED ZONES	TEMPERATURE
8-PORT VALVE	147(150)
GC TRANSFER LINE	112(110)
MANIFOLD TRANSFER LINE	103(110)
16-POSITION SELECT VALVE	97(100)
SAMPLE CONTAINER	AMBIENT

GCMS VOLATILES DATA, continued
BLANK DATA

Client: OHM
Workorder: 3512

TO-14 Volatile Organics

Client Sample ID: SYSTEM BLANK

Lab Sample ID: ABLKS2

Analysis Date: 05/09/95

Dilution Factor: 1

CAS #	Compound	Result ppb(V/V)	Detection Limit
75-71-8	Dichlorodifluoromethane	ND	0.20
76-14-2	1,2-Dichlorotetrafluoroethane	ND	0.20
74-87-3	Chloromethane	ND	0.20
75-01-4	Vinyl Chloride	ND	0.20
74-83-9	Bromomethane	ND	0.20
75-00-3	Chloroethane	ND	0.20
75-69-4	Trichlorofluoromethane	ND	0.20
75-35-4	1,1-Dichloroethene	ND	0.20
76-13-1	1,1,2-Trichlorotrifluoroethane	ND	0.30
75-09-2	Methylene Chloride	ND	0.30
75-34-3	1,1-Dichloroethane	ND	0.20
156-59-2	cis-1,2-Dichloroethene	ND	0.20
67-66-3	Chloroform	ND	0.20
71-55-6	1,1,1-Trichloroethane	ND	0.20
56-23-5	Carbon Tetrachloride	ND	0.20
71-43-2	Benzene	ND	0.20
107-06-2	1,2-Dichloroethane	ND	0.20
79-01-6	Trichloroethene	ND	0.20
78-87-5	1,2-Dichloropropane	ND	0.20
10061-01-5	cis-1,3-Dichloropropene	ND	0.20
108-88-3	Toluene	ND	0.20
10061-02-6	trans-1,3-Dichloropropene	ND	0.20
79-00-5	1,1,2-Trichloroethane	ND	0.20
127-18-4	Tetrachloroethene	ND	0.20
106-93-4	1,2-Dibromoethane	ND	0.20
108-90-7	Chlorobenzene	ND	0.20
100-41-4	Ethylbenzene	ND	0.20
136777-61-2	m/p-Xylene	ND	0.20
95-47-6	o-Xylene	ND	0.20
100-42-5	Styrene	ND	0.20
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.20
108-67-8	1,3,5-Trimethylbenzene	ND	0.20
95-63-6	1,2,4-Trimethylbenzene	ND	0.20
541-73-1	1,3-Dichlorobenzene	ND	0.20

Client: OHM
Workorder: 3512

TO-14 Volatile Organics

Client Sample ID: SYSTEM BLANK

Lab Sample ID: ABLKS2

Analysis Date: 05/09/95

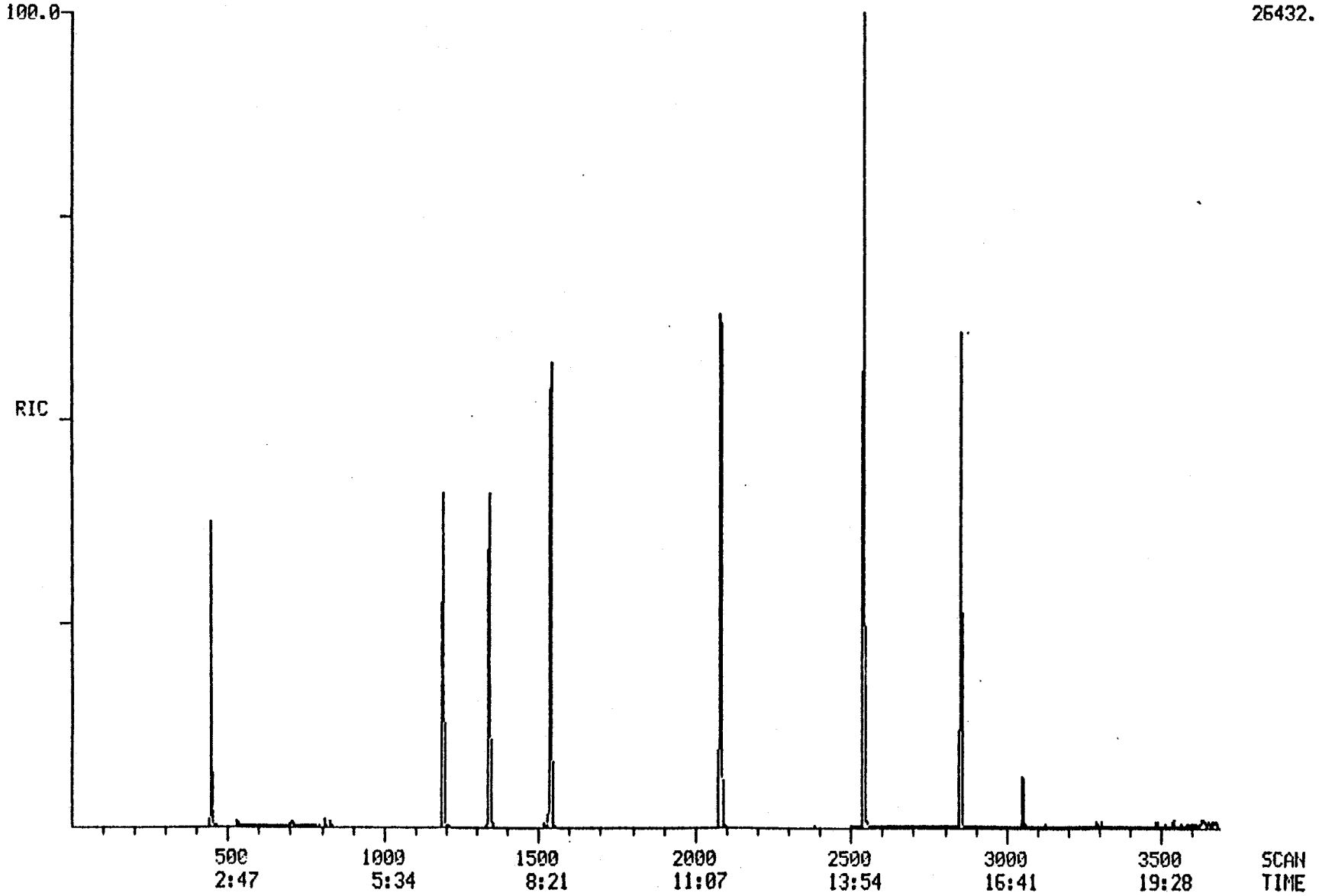
Dilution Factor: 1

CAS #	Compound	Result ppb(V/V)	Detection Limit
106-46-7	1,4-Dichlorobenzene	ND	0.20
95-50-1	1,2-Dichlorobenzene	ND	0.20
100-44-7	Benzyl Chloride	ND	0.20
120-82-1	1,2,4-Trichlorobenzene	ND	0.20
87-68-3	Hexachlorobutadiene	ND	0.20

Surrogate Compound	% Recovery
D4-1,2-Dichloroethane	98
D8-Toluene	110
Bromofluorobenzene	103

A0000149

RIC DATA: ABLKS2 #1 SCANS 1 TO 3685
05/09/95 16:53:00 CALI: ABLKS2 #3
SAMPLE: M SYSTEM BLANK 500ML
CONDS.: GC DESC=MB SCAN=ON DB-5 60M 45CM/SEC INST M METH TO-14
RANGE: G 1,3686 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3



Quantitation Report File: ABLKS2

Data: ABLKS2.TI
05/09/95 16:53:00
Sample: M SYSTEM BLANK 500ML
Conds.: GC DESC=MB SCAN=DN DB-5 60M 45CM/SEC INST M METH TO-14
Formula: POS4 Instrument: FINN Weight: 0.000
Submitted by: Analyst: DCG/079 Acct. No.:

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name
1	BROMOCHLOROMETHANE
2	1,4-DIFLUOROBENZENE
3	D5-CHLOROBENZENE
4	D4-1,2-DICHLOROETHANE
5	D8-TOLUENE
6	BROMOFLUOROBENZENE

Scan	Time	Area(Hght)	Amount	Name
1190	6:37	7145.	8.000 PPBV	BROMOCHLOROMETHANE
1540	8:34	36213.	8.000 PPBV	1,4-DIFLUOROBENZENE
2542	14:08	38039.	8.000 PPBV	D5-CHLOROBENZENE
1342	7:28	9391.	7.873 PPBV	D4-1,2-DICHLOROETHANE
2083	11:35	36333.	8.811 PPBV	D8-TOLUENE
2853	15:52	15744.	4.115 PPBV	BROMOFLUOROBENZENE

DCG 5-10-95

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(A)	Ratio
1	6:40	0.99	1.000	1.00	8.00	8.00	1.000	1.000	1.00
2	8:37	0.99	1.000	1.00	8.00	8.00	1.000	1.000	1.00
3	14:10	1.00	1.000	1.00	8.00	8.00	1.000	1.000	1.00
4	7:31	0.99	0.873	1.00	7.87	8.00	0.259	0.263	0.98
5	11:37	1.00	0.821	1.00	8.81	8.00	0.955	0.867	1.10
6	15:54	1.00	1.122	1.00	4.12	4.00	0.828	0.805	1.03

QA/QC REPORT

SAMPLE NAME: ablks2
INJECT TIME: 15:17:17
DATE: Tue May 09 1995
METHOD: polar3.MPT
NAMELIST: dcg.nam
MANIFOLD POSITION: 4

PRESSURE BEFORE SAMPLING(PSIA) 30.5
AFTER SAMPLING(PSIA) 29.9

NG INT. STD INJECTED IS1(0) IS2(0) IS3(0) IS4(0) IS5(0)

PREHEAT MODULE 1 (Y) MODULE 2 (N) . CRYOFOCUS? (Y) . HEAT SAMPLE? (N)

CONDITIONS:

DURING CONCENTRATION	MAX TEMP	FINAL TEMP	TRAP/SEP TIME
M1 Glass Bead Cryotrap	-152	-162(-160)	278
M2 Sorbent Packed Cryotrap	-29	-30(-25)	252
Focusing Trap	-198	-200(-190)	150(150)

DESORB/TRANSFER/INJECT	PREHEAT	FINAL TEMP	TIME(secs)
M1 Glass Bead Cryotrap	-6(-10)	14(5)	252
M2 Sorbent Packed Cryotrap	95(100)	223(220)	150(150)
Focusing Trap	-200	79	300(300)

MEDIUM CONC./TRANSFERRED	VOLUME	FLOW(SCCM)	FINAL PSIA
Internal Standard	100(100)	101(100)	21.9
Sample	501(500)	110(125)	26.4
Sweep/Dry Purge	100(100)	99(100)	32.4
Transfer to Packed Col.	45(45)	10(10)	33.3
Packed Column Separation	0(0)	10(50)	33.3

SYSTEM BAKEOUT

	TEMPERATURE	TIME(min.)
M1 Glass Bead Cryotrap	166(160)	5(5)
M2 Sorbent Packed Cryotrap	218(220)	5(5)
Focusing Trap		

REGULATED ZONES	TEMPERATURE
8-PORT VALVE	150(150)
GC TRANSFER LINE	111(110)
MANIFOLD TRANSFER LINE	107(110)
16-POSITION SELECT VALVE	101(100)
SAMPLE CONTAINER	AMBIENT

(BCVS VOLATILES DATA CONTINUED)

SAMPLE DUPLICATE

Client: OHM
Workorder: 3512

Duplicate Recovery of Volatile Organics

Client Sample ID: SVEW-1

Lab Sample ID: AF2079DL Analysis Date: 05/09/95

Duplicate Sample ID: AF2079D2 Analysis Date: 05/09/95

Dilution Factor: 6288 Units: ppb(V/V)

Compound	Sample Amount	Duplicate Amount	%RPD
Dichlorodifluoromethane	ND	ND	NA
1,2-Dichlorotetrafluoroethane	ND	ND	NA
Chloromethane	ND	ND	NA
Vinyl Chloride	ND	ND	NA
Bromomethane	ND	ND	NA
Chloroethane	ND	ND	NA
Trichlorofluoromethane	ND	ND	NA
1,1-Dichloroethene	ND	ND	NA
1,1,2-Trichlorotrifluoroethane	ND	ND	NA
Methylene Chloride	ND	ND	NA
1,1-Dichloroethane	ND	ND	NA
cis-1,2-Dichloroethene	ND	ND	NA
Chloroform	ND	ND	NA
1,1,1-Trichloroethane	ND	ND	NA
Carbon Tetrachloride	ND	ND	NA
Benzene	ND	ND	NA
1,2-Dichloroethane	ND	ND	NA
Trichloroethene	ND	ND	NA
1,2-Dichloropropane	ND	ND	NA
cis-1,3-Dichloropropene	ND	ND	NA
Toluene	ND	ND	NA
trans-1,3-Dichloropropene	ND	ND	NA
1,1,2-Trichloroethane	ND	ND	NA
Tetrachloroethene	64500	63900	1
1,2-Dibromoethane	ND	ND	NA
Chlorobenzene	ND	ND	NA
Ethylbenzene	ND	ND	NA
m/p-Xylene	ND	ND	NA
o-Xylene	ND	ND	NA
Styrene	ND	ND	NA
1,1,2,2-Tetrachloroethane	ND	ND	NA
1,3,5-Trimethylbenzene	ND	ND	NA

Instrument M

Client: OHM
Workorder: 3512

Duplicate Recovery of Volatile Organics

Client Sample ID: SVEW-1

Lab Sample ID: AF2079DL Analysis Date: 05/09/95

Duplicate Sample ID: AF2079D2 Analysis Date: 05/09/95

Dilution Factor: 6288 Units: ppb(V/V)

Compound	Sample Amount	Duplicate Amount	%RPD
1,2,4-Trimethylbenzene.....	ND	ND	NA
1,3-Dichlorobenzene.....	ND	ND	NA
1,4-Dichlorobenzene.....	ND	ND	NA
1,2-Dichlorobenzene.....	ND	ND	NA
Benzyl Chloride.....	ND	ND	NA
1,2,4-Trichlorobenzene.....	ND	ND	NA
Hexachlorobutadiene.....	ND	ND	NA

Surrogate Compound	Run % Recovery	Duplicate % Recovery
D4-1,2-Dichloroethane.....	98	98
D8-Toluene.....	110	108
Bromofluorobenzene.....	103	102

Instrument M

COMPARISON OF STANDARD TO REFERENCE

Analyst: DC 9 5-8-95 Checker: JK 5/10/95

Reference File Name: RF0505M Analysis Date: 05/05/95

Standard ID#: CX-576 Standard Made On: 5-4-95

Reference Standard ID#: CX-577 Reference Made On: 5-4-95

Dilution Factor: 5 Units: ppb (V/V)

Stock CX-576	Compound	Expected Amount	Quantitated Amount	Percent Rec
50	Dichlorodifluoromethane.....	10.00	9.673	97
50	Chlorodifluoromethane.....	10.00	9.714	97
50	1,2-Dichlorotetrafluoroethane...	10.00	9.942	99
50	Chloromethane.....	10.00	9.992	100
50	Vinyl Chloride.....	10.00	9.892	99
50	n-Butane.....	10.00	10.06	101
50	1,3-Butadiene.....	10.00	10.15	102
50	Bromomethane.....	10.00	9.966	100
50	Chloroethane.....	10.00	10.21	102
50	Trichlorofluoromethane.....	10.00	10.30	103
50	Pentane.....	10.00	10.25	103
50	1,1-Dichloroethene.....	10.00	10.07	101
50	1,1,2-Trichlorotrifluoroethane..	10.00	10.55	106
50	Carbon Disulfide.....	10.00	10.25	103
50	3-Chloropropene.....	10.00	10.45	104
50	Methylene Chloride.....	10.00	10.42	104
50	trans-1,2-Dichloroethene.....	10.00	10.34	103
50	n-Hexane.....	10.00	10.28	103
50	1,1-Dichloroethane.....	10.00	10.17	102
50	cis-1,2-Dichloroethene.....	10.00	10.40	104
50	Chloroform.....	10.00	10.11	101
50	1,1,1-Trichloroethane.....	10.00	10.10	101
50	Cyclohexane.....	10.00	10.57	106
50	Carbon Tetrachloride.....	10.00	10.16	102
50	Benzene.....	10.00	10.27	103
50	1,2-Dichloroethane.....	10.00	9.890	99
50	n-Heptane.....	10.00	10.33	103
50	Trichloroethene.....	10.00	10.49	105
50	1,2-Dichloropropane.....	10.00	10.10	101
50	Dibromomethane.....	10.00	10.31	103
50	Bromodichloromethane.....	10.00	10.28	103
50	cis-1,3-Dichloropropene.....	10.00	10.10	101
50	Toluene.....	10.00	10.16	102
50	n-Octane.....	10.00	10.50	105
50	trans-1,3-Dichloropropene.....	10.00	9.958	100
50	1,1,2-Trichloroethane.....	10.00	10.20	102
50	Tetrachloroethene.....	10.00	9.916	99
50	Dibromochloromethane.....	10.00	10.06	101
50	1,2-Dibromoethane.....	10.00	9.800	98

COMPARISON OF STANDARD TO REFERENCE

Analyst: DC9 5-8-95 Checker: VIC 5/10/95

Reference File Name: RF0505M Analysis Date: 05/05/95

Standard ID#: CX-576 Standard Made On: 5-4-95

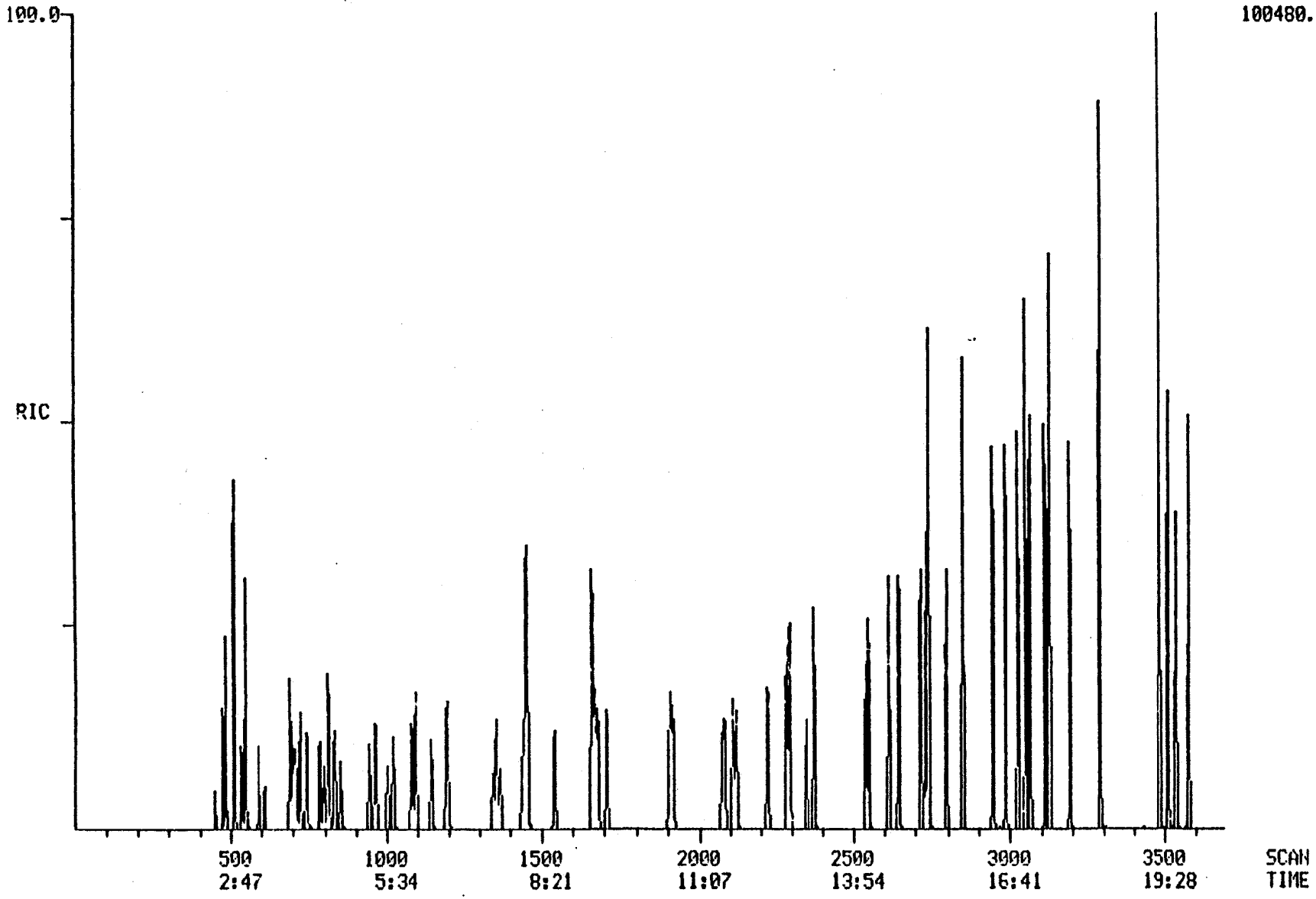
Reference Standard ID#: CX-577 Reference Made On: 5-4-95

Dilution Factor: 5 Units: ppb (V/V)

Stock CX-576	Compound	Expected Amount	Quantitated Amount	Percent Rec
50	Chlorobenzene	10.00	10.28	103
50	Ethylbenzene	10.00	10.16	102
50	m/p-Xylene	10.00	10.24	102
50	Nonane	10.00	10.04	100
50	o-Xylene	10.00	10.21	102
50	Styrene	10.00	10.09	101
50	Bromoform	10.00	10.17	102
50	Cumene	10.00	9.989	100
50	1,1,2,2-Tetrachloroethane	10.00	10.14	101
50	n-Propylbenzene	10.00	9.554	96
50	1,3,5-Trimethylbenzene	10.00	9.706	97
50	Decane	10.00	9.583	96
50	alpha-Methylstyrene	10.00	9.642	96
50	1,2,4-Trimethylbenzene	10.00	9.754	98
50	1,3-Dichlorobenzene	10.00	9.823	98
50	1,4-Dichlorobenzene	10.00	9.854	99
50	Benzyl Chloride	10.00	9.852	99
50	1,2-Dichlorobenzene	10.00	9.792	98
50	n-Undecane	10.00	9.402	94
50	n-Dodecane	10.00	9.110	91
50	1,2,4-Trichlorobenzene	10.00	10.03	100
28.245	Hexachlorobutadiene	5.649	4.973	88
55.473	Naphthalene	11.09	10.05	91
188.933	Methanol	37.79	35.27	93
73.662	Ethyl Ether	14.73	14.03	95
104.028	Acetone	20.81	19.11	92
116.191	Acrylonitrile	23.24	22.65	97
82.78	Vinyl Acetate	16.56	16.10	97
85.42	2-Butanone	17.08	16.64	97
83.569	1-Butanol	16.71	16.38	98
60.926	4-Methyl-2-Pentanone	12.19	11.64	96
61.957	2-Hexanone	12.39	12.01	97
64.255	Methyl-t-Butylether	12.85	12.61	98
114.749	Acrolein	22.95	22.98	100
146.402	Acetonitrile	29.28	28.86	99

A0000156

RIC DATA: RF0505M #1 SCANS 1 TO 3685
05/05/95 17:49:00 CALI: RF0505M #3
SAMPLE: M CX-577 100ML
CONDS.: GC DESC=MB SCAN=DN DB-5 60M 45CM/SEC INST M METH TO-14
RANGE: G 1,3586 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3



Quantitation Report File: RF0505M

Data: RF0505M.TI
05/05/95 17:49:00
Sample: M CX-577 100ML
Conds.: GC DESC=MB SCAN=DN DB-5 60M 45CM/SEC INST M METH TO-14
Formula: POS3 Instrument: FINN Weight: 0.000
Submitted by: REF Analyst: DCG/079 Acct. No.:

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name
1	BROMOCHLOROMETHANE
2	1,4-DIFLUOROBENZENE
3	D5-CHLOROBENZENE
4	D4-1,2-DICHLOROETHANE
5	D8-TOLUENE
6	BROMOFLUOROBENZENE
7	DICHLORODIFLUOROMETHANE
8	CHLORODIFLUOROMETHANE
9	1,2-DICHLORO-1,1,2,2-TETRAFLUOROETHANE
10	CHLOROMETHANE
11	VINYL CHLORIDE
12	N-BUTANE
13	1,3-BUTADIENE
14	BROMOMETHANE
15	CHLOROETHANE
16	TRICHLOROFLUOROMETHANE
17	PENTANE
18	1,1-DICHLOROETHENE
19	1,1,2-TRICHLOROTRIFLUOROETHANE
20	CARBON DISULFIDE
21	3-CHLOROPROPENE
22	METHYLENE CHLORIDE
23	TRANS-1,2-DICHLOROETHENE
24	HEXANE
25	1,1-DICHLOROETHANE
26	CIS-1,2-DICHLOROETHENE
27	CHLOROFORM
28	1,1,1-TRICHLOROETHANE
29	CYCLOHEXANE
30	CARBON TETRACHLORIDE
31	BENZENE
32	1,2-DICHLOROETHANE
33	HEPTANE
34	TRICHLOROETHENE
35	1,2-DICHLOROPROPANE
36	DIBROMOMETHANE
37	BROMODICHLOROMETHANE
38	CIS-1,3-DICHLOROPROPENE
39	TOLUENE
40	OCTANE
41	TRANS-1,3-DICHLOROPROPENE
42	1,1,2-TRICHLOROETHANE
43	TETRACHLOROETHENE
44	DIBROMOCHLOROMETHANE
45	1,2-DIBROMOETHANE
46	CHLOROBENZENE
47	ETHYLBENZENE

No	Name
48	M-XYLENE (FOR P-)
49	NONANE
50	O-XYLENE

Scan	Time	Area(Hght)	Amount		Name
1192	6:38	8365.	8.000	PPBV	BROMOCHLOROMETHANE
1540	8:34	38171.	8.000	PPBV	1,4-DIFLUOROBENZENE
2541	14:08	35771.	8.000	PPBV	D5-CHLOROBENZENE
1344	7:28	7483.	7.774	PPBV	D4-1,2-DICHLOROETHANE
2083	11:35	33958.	7.954	PPBV	D8-TOLUENE
2852	15:52	14606.	3.869	PPBV	BROMOFLUOROBENZENE
483	2:41	41843.	9.673	PPBV	DICHLORODIFLUOROMETHANE
474	2:38	30365.	9.714	PPBV	CHLORODIFLUOROMETHANE
510	2:50	29625.	9.942	PPBV	1,2-DICHLORO-1,1,2,2-TETRAFL
509	2:50	5511.	9.992	PPBV	CHLOROMETHANE
533	2:58	16388.	9.892	PPBV	VINYL CHLORIDE
547	3:03	30973.	10.064	PPBV	N-BUTANE
546	3:02	12586.	10.154	PPBV	1,3-BUTADIENE
589	3:17	15918.	9.966	PPBV	BROMOMETHANE
610	3:24	7663.	10.206	PPBV	CHLOROETHANE
689	3:50	31993.	10.299	PPBV	TRICHLOROFLUOROMETHANE
722	4:01	3538.	10.252	PPBV	PENTANE
785	4:22	12207.	10.068	PPBV	1,1-DICHLOROETHENE
813	4:31	27396.	10.552	PPBV	1,1,2-TRICHLOROTRIFLUOROETHA
853	4:45	34836.	10.254	PPBV	CARBON DISULFIDE
835	4:39	13026.	10.446	PPBV	3-CHLOROPROPENE
831	4:37	11779.	10.421	PPBV	METHYLENE CHLORIDE
946	5:16	13832.	10.337	PPBV	TRANS-1,2-DICHLOROETHENE
1096	6:06	12723.	10.275	PPBV	HEXANE
1005	5:35	28531.	10.171	PPBV	1,1-DICHLOROETHANE
1146	6:22	16425.	10.403	PPBV	CIS-1,2-DICHLOROETHENE
1197	6:39	35145.	10.109	PPBV	CHLOROFORM
1354	7:32	34557.	10.102	PPBV	1,1,1-TRICHLOROETHANE
1453	8:05	24566.	10.569	PPBV	CYCLOHEXANE
1454	8:05	38994.	10.156	PPBV	CARBON TETRACHLORIDE
1449	8:04	44116.	10.267	PPBV	BENZENE
1366	7:36	23233.	9.890	PPBV	1,2-DICHLOROETHANE
1661	9:14	33795.	10.328	PPBV	HEPTANE
1670	9:17	21819.	10.487	PPBV	TRICHLOROETHENE
1661	9:14	17824.	10.097	PPBV	1,2-DICHLOROPROPANE
1679	9:20	19434.	10.312	PPBV	DIBROMOMETHANE
1709	9:30	35988.	10.278	PPBV	BROMODICHLOROMETHANE
1918	10:40	32113.	10.103	PPBV	CIS-1,3-DICHLOROPROPENE
2110	11:44	44703.	10.163	PPBV	TOLUENE
2293	12:45	16278.	10.503	PPBV	OCTANE
2076	11:33	25162.	9.958	PPBV	TRANS-1,3-DICHLOROPROPENE
2121	11:48	18234.	10.195	PPBV	1,1,2-TRICHLOROETHANE
2374	13:12	12382.	9.916	PPBV	TETRACHLOROETHENE
2284	12:42	44527.	10.058	PPBV	DIBROMOCHLOROMETHANE
2348	13:04	34404.	9.800	PPBV	1,2-DIBROMOETHANE
2550	14:11	42724.	10.281	PPBV	CHLOROBENZENE
2613	14:32	68706.	10.157	PPBV	ETHYLBENZENE
2644	14:42	56374.	10.236	PPBV	M-XYLENE (FOR P-)
2740	15:14	39803.	10.041	PPBV	NONANE
2743	15:15	58362.	10.209	PPBV	O-XYLENE

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(A)	Ratio
1	6:38	1.00	1.000	1.00	8.00	8.00	1.000	1.000	1.00
2	8:34	1.00	1.000	1.00	8.00	8.00	1.000	1.000	1.00
3	14:08	1.00	1.000	1.00	8.00	8.00	1.000	1.000	1.00
4	7:28	1.00	0.872	1.00	7.77	8.00	0.196	0.202	0.97
5	11:35	1.00	0.820	1.00	7.95	8.00	0.949	0.955	0.99
6	15:52	1.00	1.122	1.00	3.87	4.00	0.817	0.844	0.97
7	2:42	1.00	0.406	1.00	9.67	10.00	4.002	4.137	0.97
8	2:39	1.00	0.398	1.00	9.71	10.00	2.904	2.990	0.97
9	2:50	1.00	0.427	1.00	9.94	10.00	2.833	2.850	0.99
10	2:50	1.00	0.427	1.00	9.99	10.00	0.527	0.527	1.00
11	2:58	1.00	0.447	1.00	9.89	10.00	1.567	1.584	0.99
12	3:03	1.00	0.459	1.00	10.06	10.00	2.962	2.943	1.01
13	3:02	1.00	0.458	1.00	10.15	10.00	1.204	1.185	1.02
14	3:17	1.00	0.494	1.00	9.97	10.00	1.522	1.528	1.00
15	3:24	1.00	0.511	1.00	10.21	10.00	0.733	0.718	1.02
16	3:50	1.00	0.578	1.00	10.30	10.00	3.060	2.971	1.03
17	4:01	1.00	0.605	1.00	10.25	10.00	0.338	0.330	1.03
18	4:22	1.00	0.658	1.00	10.07	10.00	1.167	1.160	1.01
19	4:31	1.00	0.681	1.00	10.55	10.00	2.620	2.483	1.06
20	4:45	1.00	0.715	1.00	10.25	10.00	3.332	3.249	1.03
21	4:39	1.00	0.700	1.00	10.45	10.00	1.246	1.193	1.04
22	4:37	1.00	0.697	1.00	10.42	10.00	1.126	1.081	1.04
23	5:16	1.00	0.793	1.00	10.34	10.00	1.323	1.280	1.03
24	6:06	1.00	0.919	1.00	10.28	10.00	1.217	1.184	1.03
25	5:35	1.00	0.842	1.00	10.17	10.00	2.729	2.683	1.02
26	6:22	1.00	0.961	1.00	10.40	10.00	1.571	1.510	1.04
27	6:39	1.00	1.003	1.00	10.11	10.00	3.361	3.325	1.01
28	7:32	1.00	1.135	1.00	10.10	10.00	3.305	3.271	1.01
29	8:05	1.00	0.944	1.00	10.57	10.00	0.515	0.487	1.06
30	8:05	1.00	0.944	1.00	10.16	10.00	0.817	0.805	1.02
31	8:04	1.00	0.941	1.00	10.27	10.00	0.925	0.901	1.03
32	7:36	1.00	0.887	1.00	9.89	10.00	0.487	0.492	0.99
33	9:14	1.00	1.079	1.00	10.33	10.00	0.708	0.686	1.03
34	9:17	1.00	1.084	1.00	10.49	10.00	0.457	0.436	1.05
35	9:14	1.00	1.079	1.00	10.10	10.00	0.374	0.370	1.01
36	9:20	1.00	1.090	1.00	10.31	10.00	0.407	0.395	1.03
37	9:30	1.00	1.110	1.00	10.28	10.00	0.754	0.734	1.03
38	10:40	1.00	1.245	1.00	10.10	10.00	0.673	0.666	1.01
39	11:44	1.00	0.830	1.00	10.16	10.00	1.000	0.984	1.02
40	12:45	1.00	0.902	1.00	10.50	10.00	0.364	0.347	1.05
41	11:33	1.00	0.817	1.00	9.96	10.00	0.563	0.565	1.00
42	11:48	1.00	0.835	1.00	10.20	10.00	0.408	0.400	1.02
43	13:12	1.00	0.934	1.00	9.92	10.00	0.277	0.279	0.99
44	12:42	1.00	0.899	1.00	10.06	10.00	0.996	0.990	1.01
45	13:04	1.00	0.924	1.00	9.80	10.00	0.769	0.785	0.98
46	14:11	1.00	1.004	1.00	10.28	10.00	0.955	0.929	1.03
47	14:32	1.00	1.028	1.00	10.16	10.00	1.537	1.513	1.02
48	14:42	1.00	1.041	1.00	10.24	10.00	1.261	1.232	1.02
49	15:14	1.00	1.078	1.00	10.04	10.00	0.890	0.887	1.00
50	15:15	1.00	1.079	1.00	10.21	10.00	1.305	1.278	1.02

Quantitation Report File: RF0505M

Data: RF0505M.TI
05/05/95 17:49:00
Sample: M CX-577 100ML
Conds.: GC DESC=MB SCAN=DN DB-5 60M 45CM/SEC INST M METH TO-14
Formula: POS3 Instrument: FINN Weight: 0.000
Submitted by: REF Analyst: DCG/079 Acct. No.:

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name
51	STYRENE
52	BROMOFORM
53	CUMENE
54	1,1,2,2-TETRACHLOROETHANE
55	N-PROPYLBENZENE
56	1,3,5-TRIMETHYLBENZENE
57	DECANE
58	ALPHA-METHYLSTYRENE
59	1,2,4-TRIMETHYLBENZENE
60	1,3-DICHLOROBENZENE
61	1,4-DICHLOROBENZENE
62	BENZYL CHLORIDE
63	1,2-DICHLOROBENZENE
64	UNDECANE
65	DODECANE
66	BENZENE, 1,2,4-TRICHLORO
67	HEXACHLOROBUTADIENE
68	NAPHTHALENE
69	METHANOL
70	ETHYL ETHER
71	ACETONE
72	ACRYLONITRILE
73	VINYL ACETATE
74	2-BUTANONE
75	1-BUTANOL
76	4-METHYL-2-PENTANONE
77	2-HEXANONE
78	METHYL-T-BUTYL ETHER
79	ACROLEIN
80	ACETONITRILE (DOT)

Scan	Time	Area(Hght)	Amount	Name
2730	15:11	37025.	10.085 PPBV	STYRENE
2716	15:06	46027.	10.165 PPBV	BROMOFORM
2853	15:52	87347.	9.989 PPBV	CUMENE
2798	15:34	45843.	10.137 PPBV	1,1,2,2-TETRACHLOROETHANE
2948	16:24	102647.	9.554 PPBV	N-PROPYLBENZENE
2990	16:38	75393.	9.706 PPBV	1,3,5-TRIMETHYLBENZENE
3052	16:58	60036.	9.583 PPBV	DECANE
3029	16:51	37231.	9.642 PPBV	ALPHA-METHYLSTYRENE
3067	17:03	78799.	9.754 PPBV	1,2,4-TRIMETHYLBENZENE
3112	17:18	49424.	9.823 PPBV	1,3-DICHLOROBENZENE
3128	17:24	50966.	9.854 PPBV	1,4-DICHLOROBENZENE
3126	17:23	75830.	9.852 PPBV	BENZYL CHLORIDE
3193	17:46	47356.	9.792 PPBV	1,2-DICHLOROBENZENE

Scan	Time	Area(Hght)	Amount	Name
3290	18:18	76425.	9.402 PPBV	UNDECANE
3485	19:23	82732.	9.110 PPBV	DODECANE
3512	19:32	12687.	10.028 PPBV	BENZENE, 1,2,4-TRICHLORO
3577	19:54	11170.	4.973 PPBV	HEXACHLOROBUTADIENE
3536	19:40	78512.	10.047 PPBV	NAPHTHALENE
535	2:59	11973.	35.269 PPBV	METHANOL
743	4:08	22004.	14.030 PPBV	ETHYL ETHER
706	3:56	11393.	19.114 PPBV	ACETONE
799	4:27	20852.	22.649 PPBV	ACRYLONITRILE
1022	5:41	65715.	16.098 PPBV	VINYL ACETATE
1083	6:01	11361.	16.636 PPBV	2-BUTANONE
1442	8:01	17372.	16.383 PPBV	1-BUTANOL
1910	10:37	52651.	11.637 PPBV	4-METHYL-2-PENTANONE
2223	12:22	23525.	12.007 PPBV	2-HEXANONE
966	5:22	44867.	12.609 PPBV	METHYL-T-BUTYL ETHER
690	3:50	10347.	22.983 PPBV	ACROLEIN
700	3:54	32299.	28.855 PPBV	ACETONITRILE (DOT)

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(A)	Ratio
51	15:11	1.00	1.075	1.00	10.09	10.00	0.828	0.821	1.01
52	15:06	1.00	1.069	1.00	10.16	10.00	1.029	1.013	1.02
53	15:52	1.00	1.122	1.00	9.99	10.00	1.953	1.956	1.00
54	15:34	1.00	1.101	1.00	10.14	10.00	1.025	1.011	1.01
55	16:24	1.00	1.161	1.00	9.55	10.00	2.296	2.403	0.96
56	16:38	1.00	1.177	1.00	9.71	10.00	1.686	1.737	0.97
57	16:59	1.00	1.202	1.00	9.58	10.00	1.343	1.401	0.96
58	16:51	1.00	1.192	1.00	9.64	10.00	0.833	0.864	0.96
59	17:04	1.00	1.208	1.00	9.75	10.00	1.762	1.807	0.98
60	17:19	1.00	1.225	1.00	9.82	10.00	1.105	1.125	0.98
61	17:24	1.00	1.231	1.00	9.85	10.00	1.140	1.157	0.99
62	17:23	1.00	1.231	1.00	9.85	10.00	1.696	1.721	0.99
63	17:46	1.00	1.257	1.00	9.79	10.00	1.059	1.082	0.98
64	18:18	1.00	1.295	1.00	9.40	10.00	1.709	1.818	0.94
65	19:23	1.00	1.372	1.00	9.11	10.00	1.850	2.031	0.91
66	19:32	1.00	1.383	1.00	10.03	10.00	0.284	0.283	1.00
67	19:54	1.00	1.408	1.00	4.97	5.65	0.442	0.502	0.88
68	19:40	1.00	1.392	1.00	10.05	11.09	1.583	1.748	0.91
69	2:58	1.00	0.448	1.00	35.27	37.79	0.303	0.325	0.93
70	4:08	1.00	0.623	1.00	14.03	14.73	1.428	1.500	0.95
71	3:56	1.00	0.593	1.00	19.11	20.81	0.524	0.570	0.92
72	4:27	1.00	0.670	1.00	22.65	23.24	0.858	0.880	0.97
73	5:41	1.00	0.857	1.00	16.10	16.56	3.796	3.904	0.97
74	6:01	1.00	0.907	1.00	16.64	17.08	0.636	0.653	0.97
75	8:01	1.00	0.935	1.00	16.38	16.71	0.218	0.222	0.98
76	10:37	1.00	1.240	1.00	11.64	12.19	0.906	0.948	0.96
77	12:22	1.00	0.875	1.00	12.01	12.39	0.425	0.438	0.97
78	5:22	1.00	0.810	1.00	12.61	12.85	3.339	3.403	0.98
79	3:50	1.00	0.578	1.00	22.98	22.95	0.431	0.431	1.00
80	3:54	1.00	0.587	1.00	28.85	29.28	1.055	1.071	0.99

QA/QC REPORT

SAMPLE NAME: rf0505m
INJECT TIME: 16:12:49
DATE: Fri May 05 1995
METHOD: polar3.MPT
NAMELIST: dcg.nam
MANIFOLD POSITION: 3

PRESSURE BEFORE SAMPLING(PSIA) 29.3
AFTER SAMPLING(PSIA) 29.1

NG INT. STD INJECTED IS1(0) IS2(0) IS3(0) IS4(0) IS5(0)

PREHEAT MODULE 1 (Y) MODULE 2 (N) , CRYOFOCUS? (Y) , HEAT SAMPLE? (N)

CONDITIONS:

DURING CONCENTRATION	MAX TEMP	FINAL TEMP	TRAP/SEP TIME
M1 Glass Bead Cryotrap	-155	-166(-160)	607
M2 Sorbent Packed Cryotrap	-28	-30(-25)	60
Focusing Trap	-200	-200(-190)	150(150)

DESORB/TRANSFER/INJECT	PREHEAT	FINAL TEMP	TIME(secs)
M1 Glass Bead Cryotrap	-6(-10)	15(5)	60
M2 Sorbent Packed Cryotrap	120(100)	220(220)	150(150)
Focusing Trap	-200	76	300(300)

MEDIUM CONC./TRANSFERRED	VOLUME	FLOW(SCCM)	FINAL PSIA
Internal Standard	100(100)	101(100)	27.0
Sample	101(100)	125(125)	27.4
Sweep/Dry Purge	101(100)	99(100)	32.9
Transfer to Packed Col.	40(40)	4(5)	34.0
Packed Column Separation	0(0)	4(50)	34.0

SYSTEM BAKEOUT

	TEMPERATURE	TIME(min.)
M1 Glass Bead Cryotrap	169(160)	4(4)
M2 Sorbent Packed Cryotrap	219(220)	4(4)
Focusing Trap		

REGULATED ZONES	TEMPERATURE
8-PORT VALVE	149(150)
GC TRANSFER LINE	110(110)
MANIFOLD TRANSFER LINE	108(110)
16-POSITION SELECT VALVE	100(100)
SAMPLE CONTAINER	AMBIENT

SAMPLE RECEIPT DOCUMENTATION

W.O. # 3512

R.L. # 3530

LAB COPY

OHM Corporation

COC NO. "0004011"

CHAIN-OF-CUSTODY RECORD

Fed Ex: 3224507856

Form 0019
Field Technical Services
Rev. 08/89

144109

O.H. MATERIALS CORP. • P.O. BOX 551 • FINDLAY, OH 45839-0551 • 419-423-3526

PROJECT NAME	PROJECT LOCATION
Camp Lejeune POIS	Camp Lejeune
PROJ. NO. 16032	**PROJECT CONTACT** Randy Smith
PROJECT TELEPHONE NO. 910-451-1809	
CLIENT'S REPRESENTATIVE Van Marshburn	**PROJECT MANAGER/SUPERVISOR** Jim Quinn / Randy Smith

ITEM NO.	SAMPLE NUMBER	DATE	TIME	COMP	GRAB	SAMPLE DESCRIPTION (INCLUDE MATRIX AND POINT OF SAMPLE)	NUMBER OF CONTAINERS	ANALYSIS DESIRED (INDICATE SEPARATE CONTAINERS) T.O. 14	REMARKS
1	SVEW-1	5/4	15:57		X	Well head Sample	1 TB	X	
2	SVEW-2	5/4	16:00		X	" "	1 TB	X	
3	SVEW-3	5/4	16:06		X	" "	1 TB	X	
4	SVEW-4	5/4	16:09		X	" "	1 TB	X	
5	SVEW-5	5/4	16:11		X	" "	1 TB	X	
6	SVEW-6	5/4	16:13		X	" "	1 TB	X	
7	SVEW-7	5/4	16:16		X	" "	1 TB	X	
8	SVEW-8	5/4	16:20		X	" "	1 TB	X	Recd at 12°C without custody Seals BSA 5/5/95
9	System Total	5/4	16:22		X	Total of Influent Air (System Total)	1 TB	X	
10	Discharge Stake	5/4	16:24		X	Discharge Stake	TTB	X	

TRANSFER NUMBER	ITEM NUMBER	TRANSFERS RELINQUISHED BY	TRANSFERS ACCEPTED BY	DATE	TIME
1	1 ~ 10	Randy Smith	Fed-Ex	5/4/95	18:00
2			Ben Anderson	5/5/95	08:30
3					
4					

REMARKS

5 day TAT
Please Fax data AS SOON AS YOU have data to 910-451-1809
If you have any problem please call me A.S.A.P

SAMPLER'S SIGNATURE Sharon R. Strawn #4720

page 18004442407 9811496 FAX results ASAP

B0000001

Quanterra Incorporated
5815 Middlebrook Pike
Knoxville, Tennessee 37921

615 588-6401 Telephone
615 584-4315 Fax

May 12, 1995

MISSY ART/FAX TO RANDY SMITH AT SITE
OHM REMEDIATION SERVICES CORP.
OHM REMEDIATION SERVICES CORP
5335 TRIANGLE PARKWAY, SUITE 450
NORCROSS, GA 30092

Re: OHM CAMP LEJEUNE
P.O. #1003607

Dear MISSY ART/FAX TO RANDY SMITH AT SITE:

This confirms the receipt of samples for analysis on May 12, 1995 at our QUANTERRA-KNOXVILLE laboratory. These samples were received in good condition unless otherwise noted on an attached Condition Upon Receipt variance form. The samples were logged into our tracking system as Work Order #3576. Please review the attached outline for samples received and test assignments for any discrepancies. If you discover any problems please call me at (615) 588-6401.

We appreciate the opportunity to support your analytical requirements. Your report will be sent to you at the above address on or before May 17, 1995 unless advised otherwise.

Again, if you have any questions or comments on our performance, please feel free to call me at (615) 588-6401.

Sincerely,

KENNETH MUELLER
Project Manager
QUANTERRA-KNOXVILLE

May 12, 1995

Client: OHM REMEDIATION SERVICES CORP.

Project: OHM CAMP LEJEUNE

Client ID: CAMP LEJEUNE /

LIMS Work Order #: 3576

Client Sample ID	Lab ID	QC	Test Description
5/11 SVEW-1	AF3328		TO-14 (VOA) CANISTER ANALYSIS BY GC/MS NEESA LEVEL C DATA PKG, GCMS TESTS
5/11 SVEW-2	AF3329		TO-14 (VOA) CANISTER ANALYSIS BY GC/MS NEESA LEVEL C DATA PKG, GCMS TESTS
5/11 SVEW-3	AF3330		TO-14 (VOA) CANISTER ANALYSIS BY GC/MS NEESA LEVEL C DATA PKG, GCMS TESTS
5/11 SVEW-4	AF3331		TO-14 (VOA) CANISTER ANALYSIS BY GC/MS NEESA LEVEL C DATA PKG, GCMS TESTS
5/11 SVEW-5	AF3333		TO-14 (VOA) CANISTER ANALYSIS BY GC/MS NEESA LEVEL C DATA PKG, GCMS TESTS
5/11 SVEW-6	AF3335		TO-14 (VOA) CANISTER ANALYSIS BY GC/MS NEESA LEVEL C DATA PKG, GCMS TESTS
5/11 SVEW-7	AF3336		TO-14 (VOA) CANISTER ANALYSIS BY GC/MS NEESA LEVEL C DATA PKG, GCMS TESTS
5/11 SVEW-8	AF3337		TO-14 (VOA) CANISTER ANALYSIS BY GC/MS NEESA LEVEL C DATA PKG, GCMS TESTS
5/11 SYSTEM TOTAL	AF3339		TO-14 (VOA) CANISTER ANALYSIS BY GC/MS NEESA LEVEL C DATA PKG, GCMS TESTS
5/11 DISCHARGE STACK	AF3341		TO-14 (VOA) CANISTER ANALYSIS BY GC/MS NEESA LEVEL C DATA PKG, GCMS TESTS

W.O.# 3576 R.L.# 3590

Fed Ex 772 4507 871

OHM Corporation

COC NO. *0004076*

CHAIN-OF-CUSTODY RECORD

LA PY

Form 0019
Field Technical Services
Rev. 08/89

144130

O.H. MATERIALS CORP. • P.O. BOX 551 • FINDLAY, OH 45839-0551 • 419-423-3526

PROJECT NAME: Camp Lejeune DO15	PROJECT LOCATION: Camp Lejeune	
PROJ. NO.: 16032	PROJECT CONTACT: Randy Smith	PROJECT TELEPHONE NO.: 910-451-1809
CLIENT'S REPRESENTATIVE: Van Marshburn	PROJECT MANAGER/SUPERVISOR: Jim Dunn / Randy Smith	

ITEM NO.	SAMPLE NUMBER	DATE	TIME	COMP	GRAB	SAMPLE DESCRIPTION (INCLUDE MATRIX AND POINT OF SAMPLE)	NUMBER OF CONTAINERS	ANALYSIS DESIRED (INDICATE SEPARATE CONTAINERS) T.O.14	REMARKS
1	5/11 SVEW-1	5/11	1121		X	Well head Sample	1 TB	X	
2	5/11 SVEW-2	5/11	1125		X	"	1 TB	X	
3	5/11 SVEW-3	5/11	1129		X	"	1 TB	X	
4	5/11 SVEW-4	5/11	1131		X	"	1 TB	X	
5	5/11 SVEW-5	5/11	1134		X	"	1 TB	X	
6	5/11 SVEW-6	5/11	1136		X	"	1 TB	X	
7	5/11 SVEW-7	5/11	1139		X	"	1 TB	X	
8	5/11 SVEW-8	5/11	1142		X	"	1 TB	X	Rec'd at 10°C without
9	5/11 System Total	5/11	1144		X	Total of Influent Air (System Total)	1 TB	X	custody seals.
10	5/11 Discharge stack	5/11	1148		X	Discharge Stack	1 TB	X	BEA 5/12/95

TRANSFER NUMBER	ITEM NUMBER	TRANSFERS RELINQUISHED BY	TRANSFERS ACCEPTED BY	DATE	TIME
1	1–10	Aaron R. Aram	FED-EX	5/11	1700
2			Ben Anderson	5/12	0835
3					
4					

REMARKS

5 day TAT

Please Fax data As soon as you have data to 910-451-1809. If you have any problems please call Randy A.S.A.P.

SAMPLER'S SIGNATURE: Aaron R. Aram #4720

Quanterra Environmental Services

Quanterra Incorporated
5815 Middlebrook Pike
Knoxville, Tennessee 37921

615 588-6401 Telephone
615 584-4315 Fax

OHM Remediation Services Corporation
5335 Triangle Parkway, Suite 450
Norcross, GA 30092
Attn: Missy Art

May 24, 1995

Job Number: 3576

This is the Certificate of Analysis for the following samples:

Client Project ID:	Camp Lejeune D.O. 15 / 16032
Date Received by Lab:	May 12, 1995
Number of Samples:	Ten (10)
Sample Type:	Air

I. Introduction

On May 12, 1995, ten (10) air samples arrived at Quanterra Environmental Services, Knoxville, Tennessee, from OHM Remediation Services, Corporation, Norcross, Georgia. The samples were collected on May 11, 1995, and were labeled as follows:

Client Sample ID	Lab Sample ID	Client Sample ID	Lab Sample ID
5/11 SVEW-1	AF3328	5/11 SVEW-6	AF3335
5/11 SVEW-2	AF3329	5/11 SVEW-7	AF3336
5/11 SVEW-3	AF3330	5/11 SVEW-8	AF3337
5/11 SVEW-4	AF3331	5/11 System Total	AF3339
5/11 SVEW-5	AF3333	5/11 Discharge Stack	AF3341

II. Analytical Results/Methodology

The analytical results for this report are presented by analytical test. The data will include sample identification information, the analytical results, and the appropriate detection limits.

Reviewed and Approved:

Kenneth Mueller
Project Manager

Quanterra Environmental Services

II. Analytical Results/Methodology (Continued)

The samples were analyzed for volatile organic compounds by gas chromatography/mass spectroscopy (GC/MS) based on EPA method TO-14.

III. Quality Control

Routine laboratory level I QC was followed.

Cross Reference Table for Work Order #: 3579

Client Sample ID	Description	Lab ID	QC	Test Description
A-RRB07-15(11295)	AIR/SUMMA CANISTER #11295	AF3370		TO-14 (VOA) CANISTER ANALYSIS BY GC/MS
				FLOW CONTROLLER PREP & RENTAL,<30DAYS
				TO-14 CANISTER CLEAN&RENT.< 30 DAYS
				REPORT DELIVERABLE-STANDARD COA
				REPORT DELIVERABLE-EDT (ELECTRONIC)
A-RRB03-15(92065)	AIR/SUMMA CANISTER #92065	AF3371		TO-14 (VOA) CANISTER ANALYSIS BY GC/MS
				FLOW CONTROLLER PREP & RENTAL,<30DAYS
				TO-14 CANISTER CLEAN&RENT.< 30 DAYS
				REPORT DELIVERABLE-EDT (ELECTRONIC)
A-RR003-15(93187)	AIR/SUMMA CANISTER #93187	AF3372		TO-14 (VOA) CANISTER ANALYSIS BY GC/MS
				FLOW CONTROLLER PREP & RENTAL,<30DAYS
				TO-14 CANISTER CLEAN&RENT.< 30 DAYS
				REPORT DELIVERABLE-EDT (ELECTRONIC)

W.O.# 3576 R.L.# 3590

Fed Ex 322 4507 871

OHM Corporation

COC NO. *0004076*

CHAIN-OF-CUSTODY RECORD

LAB COPY

Form 0019
Field Technical Services
Rev. 08/89

144130

O.H. MATERIALS CORP. • P.O. BOX 551 • FINDLAY, OH 45839-0551 • 419-423-3526

PROJECT NAME	PROJECT LOCATION
Camp Lejeune DO15	Camp Lejeune

PROJ. NO.	PROJECT CONTACT	PROJECT TELEPHONE NO.
16032	Randy Smith	910-451-1809

CLIENT'S REPRESENTATIVE	PROJECT MANAGER/SUPERVISOR
Van Marshburn	Jim Dunn / Randy Smith

ITEM NO.	SAMPLE NUMBER	DATE	TIME	COMP	GRAB	SAMPLE DESCRIPTION (INCLUDE MATRIX AND POINT OF SAMPLE)	NUMBER OF CONTAINERS	ANALYSIS DESIRED (INDICATE SEPARATE CONTAINERS) T.O.14	REMARKS
1	5/11 SVEW-1	5/11	1121		X	Well head Sample	1 TB	X	
2	5/11 SVEW-2	5/11	1125		X	"	1 TB	X	
3	5/11 SVEW-3	5/11	1129		X	"	1 TB	X	
4	5/11 SVEW-4	5/11	1131		X	"	1 TB	X	
5	5/11 SVEW-5	5/11	1134		X	"	1 TB	X	
6	5/11 SVEW-6	5/11	1136		X	"	1 TB	X	
7	5/11 SVEW-7	5/11	1139		X	"	1 TB	X	
8	5/11 SVEW-8	5/11	1142		X	"	1 TB	X	Rec'd at 10°C without
9	5/11 System Total	5/11	1144		X	Total of Influent Air (System Total)	1 TB	X	custody seals.
10	5/11 Discharge Stack	5/11	1148		X	Discharge Stack	1 TB	X	BEA 5/12/95

TRANSFER NUMBER	ITEM NUMBER	TRANSFERS RELINQUISHED BY	TRANSFERS ACCEPTED BY	DATE	TIME
1	1–10	Aaron R. Aram	FED-EX	5/11	1700
2			Ben Anderson	5/12	0835
3					
4					

REMARKS

5 day TAT

Please Fax data As soon as you have data to 910-451-1809. If you have any problems please call Randy A.S.A.P.

SAMPLER'S SIGNATURE Aaron R. Aram #4720

VOLATILE ORGANICS

Client: OHM
Workorder: 3576

TO-14 Volatile Organics

Client Sample ID: 5/11 SVEW-1

Lab Sample ID: AF3328

Analysis Date: 05/17/95

Dilution Factor: 2111

CAS #	Compound	Result ppb(V/V)	Detection Limit
75-71-8	Dichlorodifluoromethane	ND	420
76-14-2	1,2-Dichlorotetrafluoroethane	ND	420
74-87-3	Chloromethane	ND	420
75-01-4	Vinyl Chloride	ND	420
74-83-9	Bromomethane	ND	420
75-00-3	Chloroethane	ND	420
75-69-4	Trichlorofluoromethane	ND	420
75-35-4	1,1-Dichloroethene	ND	420
76-13-1	1,1,2-Trichlorotrifluoroethane	ND	630
75-09-2	Methylene Chloride	ND	630
75-34-3	1,1-Dichloroethane	ND	420
156-59-2	cis-1,2-Dichloroethene	ND	420
67-66-3	Chloroform	ND	420
71-55-6	1,1,1-Trichloroethane	ND	420
56-23-5	Carbon Tetrachloride	ND	420
71-43-2	Benzene	ND	420
107-06-2	1,2-Dichloroethane	ND	420
79-01-6	Trichloroethene	560	420
78-87-5	1,2-Dichloropropane	ND	420
10061-01-5	cis-1,3-Dichloropropene	ND	420
108-88-3	Toluene	ND	420
10061-02-6	trans-1,3-Dichloropropene	ND	420
79-00-5	1,1,2-Trichloroethane	ND	420
127-18-4	Tetrachloroethene	86000	420
106-93-4	1,2-Dibromoethane	ND	420
108-90-7	Chlorobenzene	ND	420
100-41-4	Ethylbenzene	ND	420
136777-61-2	m/p-Xylene	800	420
95-47-6	o-Xylene	790	420
100-42-5	Styrene	ND	420
79-34-5	1,1,2,2-Tetrachloroethane	ND	420
108-67-8	1,3,5-Trimethylbenzene	ND	420
95-63-6	1,2,4-Trimethylbenzene	ND	420
541-73-1	1,3-Dichlorobenzene	ND	420

Client: OHM
Workorder: 3576

TO-14 Volatile Organics

Client Sample ID: 5/11 SVEW-1

Lab Sample ID: AF3328

Analysis Date: 05/17/95

Dilution Factor: 2111

CAS #	Compound	Result ppb(V/V)	Detection Limit
106-46-7	1,4-Dichlorobenzene	ND	420
95-50-1	1,2-Dichlorobenzene	ND	420
100-44-7	Benzyl Chloride	ND	420
120-82-1	1,2,4-Trichlorobenzene	ND	420
87-68-3	Hexachlorobutadiene	ND	420

Surrogate Compound	% Recovery
D4-1,2-Dichloroethane	96
D8-Toluene	113
Bromofluorobenzene	99

Client: OHM
Workorder: 3576

TO-14 Volatile Organics

Client Sample ID: 5/11 SVEW-2

Lab Sample ID: AF3329D3

Analysis Date: 05/18/95

Dilution Factor: 227214

CAS #	Compound	Result ppb(V/V)	Detection Limit
75-71-8	Dichlorodifluoromethane	ND	45000
76-14-2	1,2-Dichlorotetrafluoroethane	ND	45000
74-87-3	Chloromethane	ND	45000
75-01-4	Vinyl Chloride	ND	45000
74-83-9	Bromomethane	ND	45000
75-00-3	Chloroethane	ND	45000
75-69-4	Trichlorofluoromethane	ND	45000
75-35-4	1,1-Dichloroethene	ND	45000
76-13-1	1,1,2-Trichlorotrifluoroethane	ND	68000
75-09-2	Methylene Chloride	ND	68000
75-34-3	1,1-Dichloroethane	ND	45000
156-59-2	cis-1,2-Dichloroethene	ND	45000
67-66-3	Chloroform	ND	45000
71-55-6	1,1,1-Trichloroethane	ND	45000
56-23-5	Carbon Tetrachloride	ND	45000
71-43-2	Benzene	ND	45000
107-06-2	1,2-Dichloroethane	ND	45000
79-01-6	Trichloroethene	ND	45000
78-87-5	1,2-Dichloropropane	ND	45000
10061-01-5	cis-1,3-Dichloropropene	ND	45000
108-88-3	Toluene	ND	45000
10061-02-6	trans-1,3-Dichloropropene	ND	45000
79-00-5	1,1,2-Trichloroethane	ND	45000
127-18-4	Tetrachloroethene	900000	45000
106-93-4	1,2-Dibromoethane	ND	45000
108-90-7	Chlorobenzene	ND	45000
100-41-4	Ethylbenzene	ND	45000
136777-61-2	m/p-Xylene	64000	45000
95-47-6	o-Xylene	54000	45000
100-42-5	Styrene	ND	45000
79-34-5	1,1,2,2-Tetrachloroethane	ND	45000
108-67-8	1,3,5-Trimethylbenzene	ND	45000
95-63-6	1,2,4-Trimethylbenzene	ND	45000
541-73-1	1,3-Dichlorobenzene	ND	45000

Client: OHM
Workorder: 3576

TO-14 Volatile Organics

Client Sample ID: 5/11 SVEW-2

Lab Sample ID: AF3329D3

Analysis Date: 05/18/95

Dilution Factor: 227214

CAS #	Compound	Result ppb(V/V)	Detection Limit
106-46-7	1,4-Dichlorobenzene	ND	45000
95-50-1	1,2-Dichlorobenzene	ND	45000
100-44-7	Benzyl Chloride	ND	45000
120-82-1	1,2,4-Trichlorobenzene	ND	45000
87-68-3	Hexachlorobutadiene	ND	45000

Surrogate Compound	% Recovery
D4-1,2-Dichloroethane	98
D8-Toluene	106
Bromofluorobenzene	98

Client: OHM
Workorder: 3576

TO-14 Volatile Organics

Client Sample ID: 5/11 SVEW-3

Lab Sample ID: AF3330

Analysis Date: 05/18/95

Dilution Factor: 2071

CAS #	Compound	Result ppb(V/V)	Detection Limit
75-71-8	Dichlorodifluoromethane	ND	410
76-14-2	1,2-Dichlorotetrafluoroethane	ND	410
74-87-3	Chloromethane	ND	410
75-01-4	Vinyl Chloride	ND	410
74-83-9	Bromomethane	ND	410
75-00-3	Chloroethane	ND	410
75-69-4	Trichlorofluoromethane	ND	410
75-35-4	1,1-Dichloroethene	ND	410
76-13-1	1,1,2-Trichlorotrifluoroethane	ND	620
75-09-2	Methylene Chloride	ND	620
75-34-3	1,1-Dichloroethane	ND	410
156-59-2	cis-1,2-Dichloroethene	ND	410
67-66-3	Chloroform	ND	410
71-55-6	1,1,1-Trichloroethane	ND	410
56-23-5	Carbon Tetrachloride	ND	410
71-43-2	Benzene	ND	410
107-06-2	1,2-Dichloroethane	ND	410
79-01-6	Trichloroethene	ND	410
78-87-5	1,2-Dichloropropane	ND	410
10061-01-5	cis-1,3-Dichloropropene	ND	410
108-88-3	Toluene	ND	410
10061-02-6	trans-1,3-Dichloropropene	ND	410
79-00-5	1,1,2-Trichloroethane	ND	410
127-18-4	Tetrachloroethene	19000	410
106-93-4	1,2-Dibromoethane	ND	410
108-90-7	Chlorobenzene	ND	410
100-41-4	Ethylbenzene	ND	410
136777-61-2	m/p-Xylene	2600	410
95-47-6	o-Xylene	2500	410
100-42-5	Styrene	ND	410
79-34-5	1,1,2,2-Tetrachloroethane	ND	410
108-67-8	1,3,5-Trimethylbenzene	980	410
95-63-6	1,2,4-Trimethylbenzene	1600	410
541-73-1	1,3-Dichlorobenzene	ND	410

Client: OHM
Workorder: 3576

TO-14 Volatile Organics

Client Sample ID: 5/11 SVEW-3

Lab Sample ID: AF3330

Analysis Date: 05/18/95

Dilution Factor: 2071

CAS #	Compound	Result ppb(V/V)	Detection Limit
106-46-7	1,4-Dichlorobenzene	ND	410
95-50-1	1,2-Dichlorobenzene	ND	410
100-44-7	Benzyl Chloride	ND	410
120-82-1	1,2,4-Trichlorobenzene	ND	410
87-68-3	Hexachlorobutadiene	ND	410

Surrogate Compound	% Recovery
D4-1,2-Dichloroethane	99
D8-Toluene	108
Bromofluorobenzene	102

Client: OHM
Workorder: 3576

TO-14 Volatile Organics

Client Sample ID: 5/11 SVEW-4

Lab Sample ID: AF3331

Analysis Date: 05/18/95

Dilution Factor: 2056

CAS #	Compound	Result ppb(V/V)	Detection Limit
75-71-8	Dichlorodifluoromethane	ND	410
76-14-2	1,2-Dichlorotetrafluoroethane	ND	410
74-87-3	Chloromethane	ND	410
75-01-4	Vinyl Chloride	ND	410
74-83-9	Bromomethane	ND	410
75-00-3	Chloroethane	ND	410
75-69-4	Trichlorofluoromethane	ND	410
75-35-4	1,1-Dichloroethene	ND	410
76-13-1	1,1,2-Trichlorotrifluoroethane	ND	620
75-09-2	Methylene Chloride	ND	620
75-34-3	1,1-Dichloroethane	ND	410
156-59-2	cis-1,2-Dichloroethene	ND	410
67-66-3	Chloroform	ND	410
71-55-6	1,1,1-Trichloroethane	ND	410
56-23-5	Carbon Tetrachloride	ND	410
71-43-2	Benzene	ND	410
107-06-2	1,2-Dichloroethane	ND	410
79-01-6	Trichloroethene	ND	410
78-87-5	1,2-Dichloropropane	ND	410
10061-01-5	cis-1,3-Dichloropropene	ND	410
108-88-3	Toluene	ND	410
10061-02-6	trans-1,3-Dichloropropene	ND	410
79-00-5	1,1,2-Trichloroethane	ND	410
127-18-4	Tetrachloroethene	21000	410
106-93-4	1,2-Dibromoethane	ND	410
108-90-7	Chlorobenzene	ND	410
100-41-4	Ethylbenzene	ND	410
136777-61-2	m/p-Xylene	1300	410
95-47-6	o-Xylene	1200	410
100-42-5	Styrene	ND	410
79-34-5	1,1,2,2-Tetrachloroethane	ND	410
108-67-8	1,3,5-Trimethylbenzene	500	410
95-63-6	1,2,4-Trimethylbenzene	850	410
541-73-1	1,3-Dichlorobenzene	ND	410

Client: OHM
Workorder: 3576

TO-14 Volatile Organics

Client Sample ID: 5/11 SVEW-4

Lab Sample ID: AF3331

Analysis Date: 05/18/95

Dilution Factor: 2056

CAS #	Compound	Result ppb(V/V)	Detection Limit
106-46-7	1,4-Dichlorobenzene	ND	410
95-50-1	1,2-Dichlorobenzene	ND	410
100-44-7	Benzyl Chloride	ND	410
120-82-1	1,2,4-Trichlorobenzene	ND	410
87-68-3	Hexachlorobutadiene	ND	410

Surrogate Compound	% Recovery
D4-1,2-Dichloroethane	100
D8-Toluene	107
Bromofluorobenzene	100

Client: OHM
Workorder: 3576

TO-14 Volatile Organics

Client Sample ID: 5/11 SVEW-5

Lab Sample ID: AF3333

Analysis Date: 05/18/95

Dilution Factor: 3621

CAS #	Compound	Result ppb(V/V)	Detection Limit
75-71-8	Dichlorodifluoromethane	ND	720
76-14-2	1,2-Dichlorotetrafluoroethane	ND	720
74-87-3	Chloromethane	ND	720
75-01-4	Vinyl Chloride	ND	720
74-83-9	Bromomethane	ND	720
75-00-3	Chloroethane	ND	720
75-69-4	Trichlorofluoromethane	ND	720
75-35-4	1,1-Dichloroethene	ND	720
76-13-1	1,1,2-Trichlorotrifluoroethane	ND	1100
75-09-2	Methylene Chloride	ND	1100
75-34-3	1,1-Dichloroethane	ND	720
156-59-2	cis-1,2-Dichloroethene	ND	720
67-66-3	Chloroform	ND	720
71-55-6	1,1,1-Trichloroethane	ND	720
56-23-5	Carbon Tetrachloride	ND	720
71-43-2	Benzene	ND	720
107-06-2	1,2-Dichloroethane	ND	720
79-01-6	Trichloroethene	ND	720
78-87-5	1,2-Dichloropropane	ND	720
10061-01-5	cis-1,3-Dichloropropene	ND	720
108-88-3	Toluene	ND	720
10061-02-6	trans-1,3-Dichloropropene	ND	720
79-00-5	1,1,2-Trichloroethane	ND	720
127-18-4	Tetrachloroethene	49000	720
106-93-4	1,2-Dibromoethane	ND	720
108-90-7	Chlorobenzene	ND	720
100-41-4	Ethylbenzene	ND	720
136777-61-2	m/p-Xylene	5500	720
95-47-6	o-Xylene	4600	720
100-42-5	Styrene	ND	720
79-34-5	1,1,2,2-Tetrachloroethane	ND	720
108-67-8	1,3,5-Trimethylbenzene	810	720
95-63-6	1,2,4-Trimethylbenzene	970	720
541-73-1	1,3-Dichlorobenzene	ND	720

Client: OHM
Workorder: 3576

TO-14 Volatile Organics

Client Sample ID: 5/11 SVEW-5

Lab Sample ID: AF3333

Analysis Date: 05/18/95

Dilution Factor: 3621

CAS #	Compound	Result ppb(V/V)	Detection Limit
106-46-7	1,4-Dichlorobenzene	ND	720
95-50-1	1,2-Dichlorobenzene	ND	720
100-44-7	Benzyl Chloride	ND	720
120-82-1	1,2,4-Trichlorobenzene	ND	720
87-68-3	Hexachlorobutadiene	ND	720

Surrogate Compound	% Recovery
D4-1,2-Dichloroethane	100
D8-Toluene	109
Bromofluorobenzene	103

Client: OHM
Workorder: 3576

TO-14 Volatile Organics

Client Sample ID: 5/11 SVEW-6

Lab Sample ID: AF3335

Analysis Date: 05/18/95

Dilution Factor: 2405

CAS #	Compound	Result ppb(V/V)	Detection Limit
75-71-8	Dichlorodifluoromethane	ND	480
76-14-2	1,2-Dichlorotetrafluoroethane	ND	480
74-87-3	Chloromethane	ND	480
75-01-4	Vinyl Chloride	ND	480
74-83-9	Bromomethane	ND	480
75-00-3	Chloroethane	ND	480
75-69-4	Trichlorofluoromethane	ND	480
75-35-4	1,1-Dichloroethene	ND	480
76-13-1	1,1,2-Trichlorotrifluoroethane	ND	720
75-09-2	Methylene Chloride	ND	720
75-34-3	1,1-Dichloroethane	ND	480
156-59-2	cis-1,2-Dichloroethene	ND	480
67-66-3	Chloroform	ND	480
71-55-6	1,1,1-Trichloroethane	ND	480
56-23-5	Carbon Tetrachloride	ND	480
71-43-2	Benzene	ND	480
107-06-2	1,2-Dichloroethane	ND	480
79-01-6	Trichloroethene	ND	480
78-87-5	1,2-Dichloropropane	ND	480
10061-01-5	cis-1,3-Dichloropropene	ND	480
108-88-3	Toluene	ND	480
10061-02-6	trans-1,3-Dichloropropene	ND	480
79-00-5	1,1,2-Trichloroethane	ND	480
127-18-4	Tetrachloroethene	35000	480
106-93-4	1,2-Dibromoethane	ND	480
108-90-7	Chlorobenzene	ND	480
100-41-4	Ethylbenzene	ND	480
136777-61-2	m/p-Xylene	4300	480
95-47-6	o-Xylene	3500	480
100-42-5	Styrene	ND	480
79-34-5	1,1,2,2-Tetrachloroethane	ND	480
108-67-8	1,3,5-Trimethylbenzene	590	480
95-63-6	1,2,4-Trimethylbenzene	880	480
541-73-1	1,3-Dichlorobenzene	ND	480

Client: OHM
Workorder: 3576

TO-14 Volatile Organics

Client Sample ID: 5/11 SVEW-6

Lab Sample ID: AF3335

Analysis Date: 05/18/95

Dilution Factor: 2405

CAS #	Compound	Result ppb(V/V)	Detection Limit
106-46-7	1,4-Dichlorobenzene	ND	480
95-50-1	1,2-Dichlorobenzene	ND	480
100-44-7	Benzyl Chloride	ND	480
120-82-1	1,2,4-Trichlorobenzene	ND	480
87-68-3	Hexachlorobutadiene	ND	480

Surrogate Compound	% Recovery
D4-1,2-Dichloroethane	100
D8-Toluene	107
Bromofluorobenzene	98

Client: OHM
Workorder: 3576

TO-14 Volatile Organics

Client Sample ID: 5/11 SVEW-7

Lab Sample ID: AF3336

Analysis Date: 05/18/95

Dilution Factor: 3216

CAS #	Compound	Result ppb(V/V)	Detection Limit
75-71-8	Dichlorodifluoromethane	ND	640
76-14-2	1,2-Dichlorotetrafluoroethane	ND	640
74-87-3	Chloromethane	ND	640
75-01-4	Vinyl Chloride	ND	640
74-83-9	Bromomethane	ND	640
75-00-3	Chloroethane	ND	640
75-69-4	Trichlorofluoromethane	ND	640
75-35-4	1,1-Dichloroethene	ND	640
76-13-1	1,1,2-Trichlorotrifluoroethane	ND	960
75-09-2	Methylene Chloride	ND	960
75-34-3	1,1-Dichloroethane	ND	640
156-59-2	cis-1,2-Dichloroethene	ND	640
67-66-3	Chloroform	ND	640
71-55-6	1,1,1-Trichloroethane	ND	640
56-23-5	Carbon Tetrachloride	ND	640
71-43-2	Benzene	ND	640
107-06-2	1,2-Dichloroethane	ND	640
79-01-6	Trichloroethene	ND	640
78-87-5	1,2-Dichloropropane	ND	640
10061-01-5	cis-1,3-Dichloropropene	ND	640
108-88-3	Toluene	ND	640
10061-02-6	trans-1,3-Dichloropropene	ND	640
79-00-5	1,1,2-Trichloroethane	ND	640
127-18-4	Tetrachloroethene	6600	640
106-93-4	1,2-Dibromoethane	ND	640
108-90-7	Chlorobenzene	ND	640
100-41-4	Ethylbenzene	ND	640
136777-61-2	m/p-Xylene	ND	640
95-47-6	o-Xylene	ND	640
100-42-5	Styrene	ND	640
79-34-5	1,1,2,2-Tetrachloroethane	ND	640
108-67-8	1,3,5-Trimethylbenzene	ND	640
95-63-6	1,2,4-Trimethylbenzene	ND	640
541-73-1	1,3-Dichlorobenzene	ND	640

Client: OHM
Workorder: 3576

TO-14 Volatile Organics

Client Sample ID: 5/11 SVEW-7

Lab Sample ID: AF3336

Analysis Date: 05/18/95

Dilution Factor: 3216

CAS #	Compound	Result ppb(V/V)	Detection Limit
106-46-7	1,4-Dichlorobenzene	ND	640
95-50-1	1,2-Dichlorobenzene	ND	640
100-44-7	Benzyl Chloride	ND	640
120-82-1	1,2,4-Trichlorobenzene	ND	640
87-68-3	Hexachlorobutadiene	ND	640

Surrogate Compound	% Recovery
D4-1,2-Dichloroethane	100
D8-Toluene	104
Bromofluorobenzene	99

Client: OHM
Workorder: 3576

TO-14 Volatile Organics

Client Sample ID: 5/11 SVEW-8

Lab Sample ID: AF3337

Analysis Date: 05/18/95

Dilution Factor: 3490

CAS #	Compound	Result ppb(V/V)	Detection Limit
75-71-8	Dichlorodifluoromethane	ND	700
76-14-2	1,2-Dichlorotetrafluoroethane	ND	700
74-87-3	Chloromethane	ND	700
75-01-4	Vinyl Chloride	ND	700
74-83-9	Bromomethane	ND	700
75-00-3	Chloroethane	ND	700
75-69-4	Trichlorofluoromethane	ND	700
75-35-4	1,1-Dichloroethene	ND	700
76-13-1	1,1,2-Trichlorotrifluoroethane	ND	1000
75-09-2	Methylene Chloride	ND	1000
75-34-3	1,1-Dichloroethane	ND	700
156-59-2	cis-1,2-Dichloroethene	ND	700
67-66-3	Chloroform	ND	700
71-55-6	1,1,1-Trichloroethane	ND	700
56-23-5	Carbon Tetrachloride	ND	700
71-43-2	Benzene	ND	700
107-06-2	1,2-Dichloroethane	ND	700
79-01-6	Trichloroethene	ND	700
78-87-5	1,2-Dichloropropane	ND	700
10061-01-5	cis-1,3-Dichloropropene	ND	700
108-88-3	Toluene	ND	700
10061-02-6	trans-1,3-Dichloropropene	ND	700
79-00-5	1,1,2-Trichloroethane	ND	700
127-18-4	Tetrachloroethene	22000	700
106-93-4	1,2-Dibromoethane	ND	700
108-90-7	Chlorobenzene	ND	700
100-41-4	Ethylbenzene	ND	700
136777-61-2	m/p-Xylene	920	700
95-47-6	o-Xylene	820	700
100-42-5	Styrene	ND	700
79-34-5	1,1,2,2-Tetrachloroethane	ND	700
108-67-8	1,3,5-Trimethylbenzene	ND	700
95-63-6	1,2,4-Trimethylbenzene	ND	700
541-73-1	1,3-Dichlorobenzene	ND	700

Client: OHM
Workorder: 3576

TO-14 Volatile Organics

Client Sample ID: 5/11 SVEW-8

Lab Sample ID: AF3337

Analysis Date: 05/18/95

Dilution Factor: 3490

CAS #	Compound	Result ppb(V/V)	Detection Limit
106-46-7	1,4-Dichlorobenzene	ND	700
95-50-1	1,2-Dichlorobenzene	ND	700
100-44-7	Benzyl Chloride	ND	700
120-82-1	1,2,4-Trichlorobenzene	ND	700
87-68-3	Hexachlorobutadiene	ND	700

Surrogate Compound	% Recovery
D4-1,2-Dichloroethane	102
D8-Toluene	106
Bromofluorobenzene	99

Client: OHM
Workorder: 3576

TO-14 Volatile Organics

Client Sample ID: 5/11 SYSTEM TOTAL

Lab Sample ID: AF3339

Analysis Date: 05/18/95

Dilution Factor: 4057

CAS #	Compound	Result ppb(V/V)	Detection Limit
75-71-8	Dichlorodifluoromethane	ND	810
76-14-2	1,2-Dichlorotetrafluoroethane	ND	810
74-87-3	Chloromethane	ND	810
75-01-4	Vinyl Chloride	ND	810
74-83-9	Bromomethane	ND	810
75-00-3	Chloroethane	ND	810
75-69-4	Trichlorofluoromethane	ND	810
75-35-4	1,1-Dichloroethene	ND	810
76-13-1	1,1,2-Trichlorotrifluoroethane	ND	1200
75-09-2	Methylene Chloride	ND	1200
75-34-3	1,1-Dichloroethane	ND	810
156-59-2	cis-1,2-Dichloroethene	ND	810
67-66-3	Chloroform	ND	810
71-55-6	1,1,1-Trichloroethane	ND	810
56-23-5	Carbon Tetrachloride	ND	810
71-43-2	Benzene	ND	810
107-06-2	1,2-Dichloroethane	ND	810
79-01-6	Trichloroethene	ND	810
78-87-5	1,2-Dichloropropane	ND	810
10061-01-5	cis-1,3-Dichloropropene	ND	810
108-88-3	Toluene	ND	810
10061-02-6	trans-1,3-Dichloropropene	ND	810
79-00-5	1,1,2-Trichloroethane	ND	810
127-18-4	Tetrachloroethene	86000	810
106-93-4	1,2-Dibromoethane	ND	810
108-90-7	Chlorobenzene	ND	810
100-41-4	Ethylbenzene	ND	810
136777-61-2	m/p-Xylene	5400	810
95-47-6	o-Xylene	4500	810
100-42-5	Styrene	ND	810
79-34-5	1,1,2,2-Tetrachloroethane	ND	810
108-67-8	1,3,5-Trimethylbenzene	ND	810
95-63-6	1,2,4-Trimethylbenzene	ND	810
541-73-1	1,3-Dichlorobenzene	ND	810

Client: OHM
Workorder: 3576

TO-14 Volatile Organics

Client Sample ID: 5/11 SYSTEM TOTAL

Lab Sample ID: AF3339

Analysis Date: 05/18/95

Dilution Factor: 4057

CAS #	Compound	Result ppb(V/V)	Detection Limit
106-46-7	1,4-Dichlorobenzene	ND	810
95-50-1	1,2-Dichlorobenzene	ND	810
100-44-7	Benzyl Chloride	ND	810
120-82-1	1,2,4-Trichlorobenzene	ND	810
87-68-3	Hexachlorobutadiene	ND	810

Surrogate Compound	% Recovery
D4-1,2-Dichloroethane	103
D8-Toluene	106
Bromofluorobenzene	101

Client: OHM
Workorder: 3576

TO-14 Volatile Organics

Client Sample ID: 5/11 DISCHARGE STACK

Lab Sample ID: AF3341

Analysis Date: 05/18/95

Dilution Factor: 16234

CAS #	Compound	Result ppb(V/V)	Detection Limit
75-71-8	Dichlorodifluoromethane	ND	3200
76-14-2	1,2-Dichlorotetrafluoroethane	ND	3200
74-87-3	Chloromethane	ND	3200
75-01-4	Vinyl Chloride	ND	3200
74-83-9	Bromomethane	ND	3200
75-00-3	Chloroethane	ND	3200
75-69-4	Trichlorofluoromethane	ND	3200
75-35-4	1,1-Dichloroethene	ND	3200
76-13-1	1,1,2-Trichlorotrifluoroethane	ND	4900
75-09-2	Methylene Chloride	ND	4900
75-34-3	1,1-Dichloroethane	ND	3200
156-59-2	cis-1,2-Dichloroethene	ND	3200
67-66-3	Chloroform	ND	3200
71-55-6	1,1,1-Trichloroethane	ND	3200
56-23-5	Carbon Tetrachloride	ND	3200
71-43-2	Benzene	ND	3200
107-06-2	1,2-Dichloroethane	ND	3200
79-01-6	Trichloroethene	ND	3200
78-87-5	1,2-Dichloropropane	ND	3200
10061-01-5	cis-1,3-Dichloropropene	ND	3200
108-88-3	Toluene	ND	3200
10061-02-6	trans-1,3-Dichloropropene	ND	3200
79-00-5	1,1,2-Trichloroethane	ND	3200
127-18-4	Tetrachloroethene	11000	3200
106-93-4	1,2-Dibromoethane	ND	3200
108-90-7	Chlorobenzene	ND	3200
100-41-4	Ethylbenzene	ND	3200
136777-61-2	m/p-Xylene	ND	3200
95-47-6	o-Xylene	ND	3200
100-42-5	Styrene	ND	3200
79-34-5	1,1,2,2-Tetrachloroethane	ND	3200
108-67-8	1,3,5-Trimethylbenzene	ND	3200
95-63-6	1,2,4-Trimethylbenzene	ND	3200
541-73-1	1,3-Dichlorobenzene	ND	3200

Client: OHM
Workorder: 3576

TO-14 Volatile Organics

Client Sample ID: 5/11 DISCHARGE STACK

Lab Sample ID: AF3341

Analysis Date: 05/18/95

Dilution Factor: 16234

CAS #	Compound	Result ppb(V/V)	Detection Limit
106-46-7	1,4-Dichlorobenzene	ND	3200
95-50-1	1,2-Dichlorobenzene	ND	3200
100-44-7	Benzyl Chloride	ND	3200
120-82-1	1,2,4-Trichlorobenzene	ND	3200
87-68-3	Hexachlorobutadiene	ND	3200

Surrogate Compound	% Recovery
D4-1,2-Dichloroethane	104
D8-Toluene	102
Bromofluorobenzene	98

Client: OHM
Workorder: 3576

TO-14 Volatile Organics

Client Sample ID: SYSTEM BLANK

Lab Sample ID: ABLKT6

Analysis Date: 05/17/95

Dilution Factor: 1

CAS #	Compound	Result ppb(V/V)	Detection Limit
75-71-8	Dichlorodifluoromethane	ND	0.20
76-14-2	1,2-Dichlorotetrafluoroethane	ND	0.20
74-87-3	Chloromethane	ND	0.20
75-01-4	Vinyl Chloride	ND	0.20
74-83-9	Bromomethane	ND	0.20
75-00-3	Chloroethane	ND	0.20
75-69-4	Trichlorofluoromethane	ND	0.20
75-35-4	1,1-Dichloroethene	ND	0.20
76-13-1	1,1,2-Trichlorotrifluoroethane	ND	0.30
75-09-2	Methylene Chloride	ND	0.30
75-34-3	1,1-Dichloroethane	ND	0.20
156-59-2	cis-1,2-Dichloroethene	ND	0.20
67-66-3	Chloroform	ND	0.20
71-55-6	1,1,1-Trichloroethane	ND	0.20
56-23-5	Carbon Tetrachloride	ND	0.20
71-43-2	Benzene	ND	0.20
107-06-2	1,2-Dichloroethane	ND	0.20
79-01-6	Trichloroethene	ND	0.20
78-87-5	1,2-Dichloropropane	ND	0.20
10061-01-5	cis-1,3-Dichloropropene	ND	0.20
108-88-3	Toluene	ND	0.20
10061-02-6	trans-1,3-Dichloropropene	ND	0.20
79-00-5	1,1,2-Trichloroethane	ND	0.20
127-18-4	Tetrachloroethene	ND	0.20
106-93-4	1,2-Dibromoethane	ND	0.20
108-90-7	Chlorobenzene	ND	0.20
100-41-4	Ethylbenzene	ND	0.20
136777-61-2	m/p-Xylene	ND	0.20
95-47-6	o-Xylene	ND	0.20
100-42-5	Styrene	ND	0.20
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.20
108-67-8	1,3,5-Trimethylbenzene	ND	0.20
95-63-6	1,2,4-Trimethylbenzene	ND	0.20
541-73-1	1,3-Dichlorobenzene	ND	0.20

Client: OHM
Workorder: 3576

TO-14 Volatile Organics

Client Sample ID: SYSTEM BLANK

Lab Sample ID: ABLKT6

Analysis Date: 05/17/95

Dilution Factor: 1

CAS #	Compound	Result ppb(V/V)	Detection Limit
106-46-7	1,4-Dichlorobenzene	ND	0.20
95-50-1	1,2-Dichlorobenzene	ND	0.20
100-44-7	Benzyl Chloride	ND	0.20
120-82-1	1,2,4-Trichlorobenzene	ND	0.20
87-68-3	Hexachlorobutadiene	ND	0.20

Surrogate Compound	% Recovery
D4-1,2-Dichloroethane	98
D8-Toluene	103
Bromofluorobenzene	99

Client: OHM
Workorder: 3576

TO-14 Volatile Organics

Client Sample ID: SYSTEM BLANK

Lab Sample ID: ABLKT8

Analysis Date: 05/18/95

Dilution Factor: 1

CAS #	Compound	Result ppb(V/V)	Detection Limit
75-71-8	Dichlorodifluoromethane	ND	0.20
76-14-2	1,2-Dichlorotetrafluoroethane	ND	0.20
74-87-3	Chloromethane	ND	0.20
75-01-4	Vinyl Chloride	ND	0.20
74-83-9	Bromomethane	ND	0.20
75-00-3	Chloroethane	ND	0.20
75-69-4	Trichlorofluoromethane	ND	0.20
75-35-4	1,1-Dichloroethene	ND	0.20
76-13-1	1,1,2-Trichlorotrifluoroethane	ND	0.30
75-09-2	Methylene Chloride	ND	0.30
75-34-3	1,1-Dichloroethane	ND	0.20
156-59-2	cis-1,2-Dichloroethene	ND	0.20
67-66-3	Chloroform	ND	0.20
71-55-6	1,1,1-Trichloroethane	ND	0.20
56-23-5	Carbon Tetrachloride	ND	0.20
71-43-2	Benzene	ND	0.20
107-06-2	1,2-Dichloroethane	ND	0.20
79-01-6	Trichloroethene	ND	0.20
78-87-5	1,2-Dichloropropane	ND	0.20
10061-01-5	cis-1,3-Dichloropropene	ND	0.20
108-88-3	Toluene	ND	0.20
10061-02-6	trans-1,3-Dichloropropene	ND	0.20
79-00-5	1,1,2-Trichloroethane	ND	0.20
127-18-4	Tetrachloroethene	ND	0.20
106-93-4	1,2-Dibromoethane	ND	0.20
108-90-7	Chlorobenzene	ND	0.20
100-41-4	Ethylbenzene	ND	0.20
136777-61-2	m/p-Xylene	ND	0.20
95-47-6	o-Xylene	ND	0.20
100-42-5	Styrene	ND	0.20
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.20
108-67-8	1,3,5-Trimethylbenzene	ND	0.20
95-63-6	1,2,4-Trimethylbenzene	ND	0.20
541-73-1	1,3-Dichlorobenzene	ND	0.20

Client: OHM
Workorder: 3576

TO-14 Volatile Organics

Client Sample ID: SYSTEM BLANK

Lab Sample ID: ABLKT8

Analysis Date: 05/18/95

Dilution Factor: 1

CAS #	Compound	Result ppb(V/V)	Detection Limit
106-46-7	1,4-Dichlorobenzene	ND	0.20
95-50-1	1,2-Dichlorobenzene	ND	0.20
100-44-7	Benzyl Chloride	ND	0.20
120-82-1	1,2,4-Trichlorobenzene	ND	0.20
87-68-3	Hexachlorobutadiene	ND	0.20

Surrogate Compound	% Recovery
D4-1,2-Dichloroethane	97
D8-Toluene	103
Bromofluorobenzene	96

GCMS VOLATILES DATA
QC SUMMARY

2B
VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: Quanterra Knoxville Contract: OHM CAMP LEJEUNE

Lab Code: ITSTU Case No.: SAS No.: SDG No.:3576

Level:(low/med) LOW

	EPA SAMPLE NO.	SMC1 (TOL) #	SMC2 (BFB) #	SMC3 (DCE) #	OTHER	TOT OUT
1	SYSTEM BLAN	103	99	98		0
2	SVEW-1	113	99	96		0
3	SVEW-3	108	102	99		0
4	SVEW-4	107	100	100		0
5	SVEW-5	109	103	100		0
6	SVEW-6	107	98	100		0
7	SVEW-7	104	99	100		0
8	SVEW-8	106	99	102		0
9	SYSTEM TOTA	106	101	103		0
10	DISCHARGE S	102	98	104		0
11	SYSTEM BLAN	103	96	97		0
12	SVEW-2	106	98	98		0

	QC LIMITS
SMC1 (TOL) = D8-Toluene	(70 - 130)
SMC2 (BFB) = Bromofluorobenzene	(70 - 130)
SMC3 (DCE) = D4-1,2-Dichloroethane	(70 - 130)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

4A

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

SYSTEM BLAN

Lab Name: Quanterra Knoxville Contract: OHM CAMP LEJEUNE

Lab Code: ITSTU Case No.: SAS No.: SDG No.: 3576

Lab File ID: ABLKT6 Lab Sample ID: BLANK

Date Analyzed: 05/17/95 Time Analyzed: 19:21

Instrument ID: M

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
1	SVEW-1	AF3328	AF3328	23:35
2	SVEW-3	AF3330	AF3330	0:46
3	SVEW-4	AF3331	AF3331	1:15
4	SVEW-5	AF3333	AF3333	1:44
5	SVEW-6	AF3335	AF3335	2:13
6	SVEW-7	AF3336	AF3336	2:42
7	SVEW-8	AF3337	AF3337	3:11
8	SYSTEM TOTA	AF3339	AF3339	3:40
9	DISCHARGE S	AF3341	AF3341	4:09

COMMENTS:

4A

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

SYSTEM BLAN

Lab Name: Quanterra Knoxville Contract: OHM CAMP LEJEUNE

Lab Code: ITSTU Case No.: SAS No.: SDG No.: 3576

Lab File ID: ABLKT8 Lab Sample ID: BLANK

Date Analyzed: 05/18/95 Time Analyzed: 17:40

Instrument ID: M

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
1	SVEW-2	AF3329	AF3329D3	19:47

COMMENTS:

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Quanterra Knoxville Contract: OHM CAMP LE JEUNE

Lab Code: ITSTU Case No.: SAS No.: SDG No.: 3576

Lab File ID: BF0508M BFB Injection Date: 05/08/95

Instrument ID.: M BFB Injection Time: 20:33

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	30.3
75	30.0 - 66.0% of mass 95	49.9
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.0
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 120.0% of mass 95	73.5
175	4.0 - 9.0 % of mass 174	5.2 (7.1)1
176	93.0 - 101.0% of mass 174	73.1 (99.5)1
177	5.0 - 9.0% of mass 176	4.8 (6.6)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	VSTD50	VSTD50	LW0508M	05/08/95	20:57
2	VSTD100	VSTD100	ML0508M	05/08/95	21:54
3	VSTD250	VSTD250	MD0508M	05/08/95	22:24
4	VSTD375	VSTD375	MH0508M	05/08/95	22:52
5	VSTD500	VSTD500	HI0508M	05/08/95	23:22

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Quanterra Knoxville Contract: OHM CAMP LEJEUNE

Lab Code: ITSTU Case No.: SAS No.: SDG No.: 3576

Lab File ID: BF0517M BFB Injection Date: 05/17/95

Instrument ID.: M BFB Injection Time: 16:00

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	31.9
75	30.0 - 66.0% of mass 95	55.9
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 120.0% of mass 95	76.7
175	4.0 - 9.0 % of mass 174	5.4 (7.0)1
176	93.0 - 101.0% of mass 174	77.3 (100.7)1
177	5.0 - 9.0% of mass 176	5.0 (6.4)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	VSTD250	VSTD250	MD0517M	05/17/95	18:23
2	SYSTEM BLAN	BLANK	ABLKT6	05/17/95	19:21
3	SVEW-1	AF3328	AF3328	05/17/95	23:35
4	SVEW-3	AF3330	AF3330	05/18/95	0:46
5	SVEW-4	AF3331	AF3331	05/18/95	1:15
6	SVEW-5	AF3333	AF3333	05/18/95	1:44
7	SVEW-6	AF3335	AF3335	05/18/95	2:13
8	SVEW-7	AF3336	AF3336	05/18/95	2:42
9	SVEW-8	AF3337	AF3337	05/18/95	3:11
10	SYSTEM TOTA	AF3339	AF3339	05/18/95	3:40
11	DISCHARGE S	AF3341	AF3341	05/18/95	4:09

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Quanterra Knoxville Contract: OHM CAMP LEJEUNE

Lab Code: ITSTU Case No.: SAS No.: SDG No.: 3576

Lab File ID: BF0518M BFB Injection Date: 05/18/95

Instrument ID.: M BFB Injection Time: 17:39

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	33.4
75	30.0 - 66.0% of mass 95	57.6
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 120.0% of mass 95	75.6
175	4.0 - 9.0 % of mass 174	6.1 (6.8)1
176	93.0 - 101.0% of mass 174	88.9 (99.3)1
177	5.0 - 9.0% of mass 176	5.7 (6.4)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	VSTD250	VSTD250	MD0518M	05/18/95	16:42
2	SYSTEM BLAN	BLANK	ABLKT8	05/18/95	17:40
3	SVEW-2	AF3329	AF3329D3	05/18/95	19:47

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Quanterra Knoxville Contract: OHM CAMP LEJEUNE

Lab Code: ITSTU Case No.: SAS No.: SDG No.: 3576

Lab File ID (Standard): MD0517M Date Analyzed: 05/17/95

Instrument ID: M Time Analyzed: ~~20:33~~ 18:23 UK 5/22/95

		IS1(BCM) AREA	#	RT	#	IS2(DFB) AREA	#	RT	#	IS3(CBZ) AREA	#	RT	#
	12 HOUR STD	8452.		6:40		43636.		8:36		49852.		14:10	
	UPPER LIMIT	16904.		7:10		87272.		9: 6		99704.		14:40	
	LOWER LIMIT	4226.		6:10		21818.		8: 6		24926.		13:40	
	EPA SAMPLE NO.												
1	SYSTEM BLAN	8595.		6:37		44643.		8:34		47519.		14:07	
2	SVEW-1	9715.		6:37		48735.		8:34		46254.		14:08	
3	SVEW-3	8761.		6:38		44913.		8:35		46757.		14:09	
4	SVEW-4	8217.		6:37		42643.		8:34		44934.		14:08	
5	SVEW-5	8392.		6:38		42888.		8:35		43279.		14:09	
6	SVEW-6	8374.		6:38		42771.		8:35		43450.		14:09	
7	SVEW-7	8294.		6:37		42270.		8:34		43897.		14:08	
8	SVEW-8	7905.		6:38		41104.		8:35		43388.		14:10	
9	SYSTEM TOTA	7886.		6:38		40545.		8:35		42082.		14:09	
10	DISCHARGE S	7946.		6:39		40113.		8:36		42867.		14:10	

IS1 (BCM) = BROMOCHLOROMETHANE
IS2 (DFB) = 1,4-DIFLUOROBENZENE
IS3 (CBZ) = CHLOROBENZENE-D5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Quanterra Knoxville Contract: OHM CAMP LEJEUNE

Lab Code: ITSTU Case No.: SAS No.: SDG No.: 3576

Lab File ID (Standard): MD0518M Date Analyzed: 05/18/95

Instrument ID: M Time Analyzed: ~~20:33~~ 16:42 VK 5/22/95

		IS1(BCM) AREA	#	RT	#	IS2(DFB) AREA	#	RT	#	IS3(CBZ) AREA	#	RT	#
	12 HOUR STD	7499.		6:40		38353.		8:36		44623.		14:09	
	UPPER LIMIT	14998.		7:10		76706.		9: 6		89246.		14:39	
	LOWER LIMIT	3750.		6:10		19177.		8: 6		22312.		13:39	
	EPA SAMPLE NO.												
1	SYSTEM BLAN	7993.		6:38		40805.		8:35		43291.		14:09	
2	SVEW-2	8576.		6:39		43687.		8:36		44880.		14:09	

IS1 (BCM) = BROMOCHLOROMETHANE
IS2 (DFB) = 1,4-DIFLUOROBENZENE
IS3 (CBZ) = CHLOROBENZENE-D5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + .50 minutes of internal standard RT
RT LOWER LIMIT = - .50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.