ANNUAL MANAGEMENT REPORT

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM

SECOND SEMESTER 2005/FIRST SEMESTER 2006
(JULY 2005 THROUGH JUNE 2006)

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FIGURE 16.2B SITE M-232-236 EPA METHOD 602 COLORIMETRY AND PLUME IN EXCESS OF 2L – SECOND QUARTER 2006 **(Data not available at time of report preparation)**
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17.0 SITE PP-3326

EXECUTIVE SUMMARY

18.0 SITE PP-3330

EXECUTIVE SUMMARY

19.0 SITE PP-3332

EXECUTIVE SUMMARY

20.0 SITE PP-3350

EXECUTIVE SUMMARY

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22.0 SITE TT-2477-78

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23.0 SITE TT-3548

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INTRODUCTION

The purpose of this *Annual Management Report* is to present the results of recent monitoring events performed at underground storage tank (UST) sites located at Marine Corps Air Station New River (MCAS New River) and Marine Corps Base Camp Lejeune (MCB Camp Lejeune). Monitoring and reporting is being performed in accordance with the *MCB Camp Lejeune UST Management Program.* A listing of sites for which sampling results are included in this *Annual Management Report* is presented in Table I and locations of these sites are shown on Figure I.

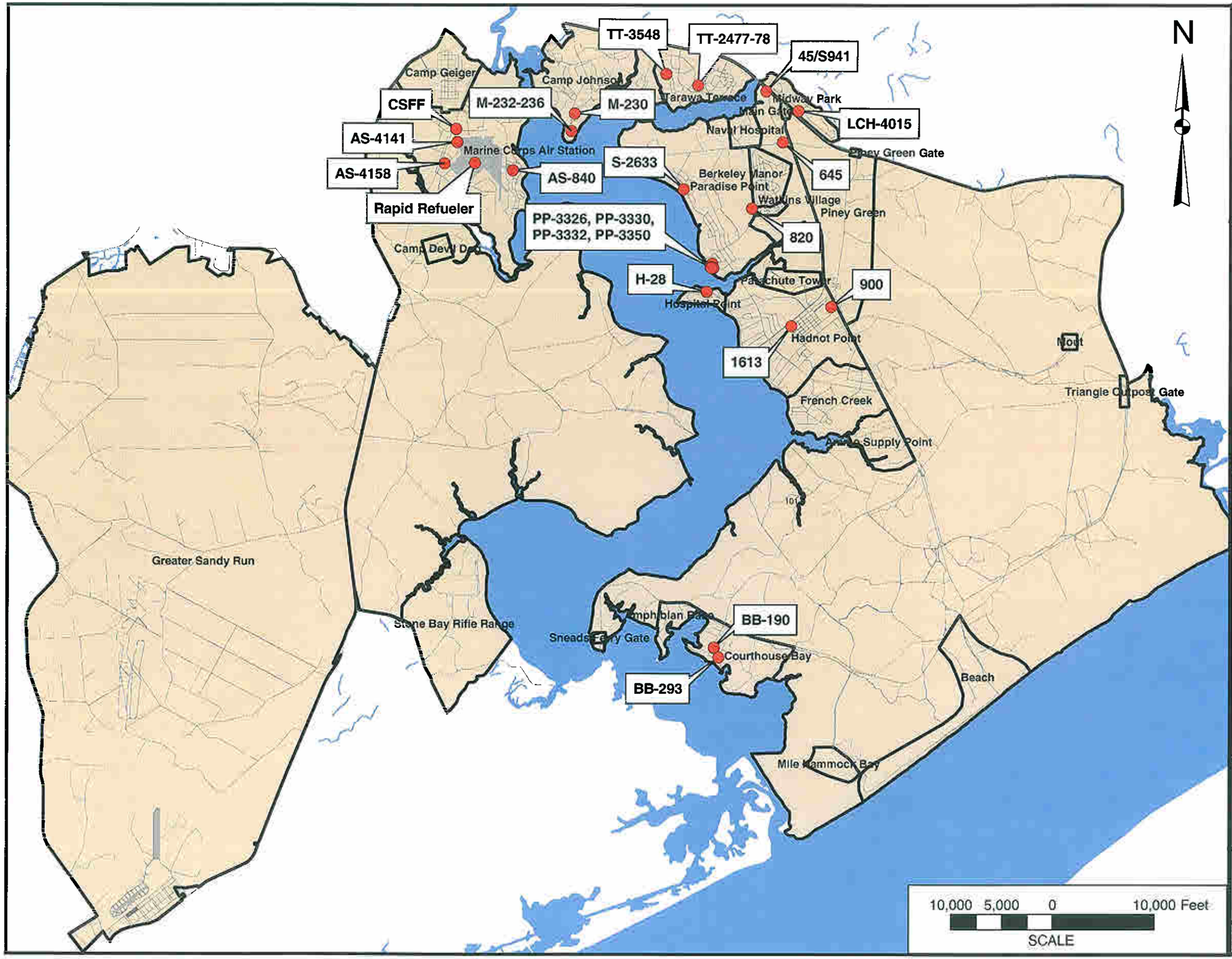
This *Annual Management Report* is designed such that all data and information pertaining to any individual site is contained entirely within one section of the report and each section is devoted entirely to one site. Therefore, each section serves as a stand-alone monitoring report for the respective site. Each section begins with an *Executive Summary* which provides information about location, monitoring, groundwater hydraulics, free product plumes, dissolved-phase plumes, potential receptors, and remediation at the site. Each *Executive Summary* is supported by several site-specific tables and figures.

TABLE I

INDEX OF SITES FOR THIS REPORT

SITE NAME	NCDENR INCIDENT NO.	SITE LOCATION	REPORT SECTION NO.
AS-4141	3218	MCAS New River	1.0
AS-4158	10804	MCAS New River	2.0
AS-840	Not Applicable	MCAS New River	3.0
Campbell Street Fuel Farm/AS-4151	23297	MCAS New River	4.0
Rapid Refueler	5668	MCAS New River	5.0
1613	20660	MCB Camp Lejeune	6.0
45	22890	MCB Camp Lejeune	7.0
645	87556	MCB Camp Lejeune	8.0
820	23135	MCB Camp Lejeune	9.0
900	32126	MCB Camp Lejeune	10.0
BB-190	22793	MCB Camp Lejeune	11.0
BB-293	32049	MCB Camp Lejeune	12.0
H-28	23333	MCB Camp Lejeune	13.0
LCH-4015	85352	MCB Camp Lejeune	14.0
M-230	12677	MCB Camp Lejeune	15.0
M-232-236	9593	MCB Camp Lejeune	16.0
PP-3326	24009	MCB Camp Lejeune	17.0
PP-3330	24010	MCB Camp Lejeune	18.0
PP-3332	24011	MCB Camp Lejeune	19.0
PP-3350	24015	MCB Camp Lejeune	20.0
S-2633	20385	MCB Camp Lejeune	21.0
TT-2477-78	7176	MCB Camp Lejeune	22.0
TT-3548	23694	MCB Camp Lejeune	23.0

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM



LEGEND

- UST Sites
- Base Areas
- Airfield Pavement
- Roads
- Surface Water

NOTES

1. Data layers provided by MCB Camp Lejeune GIS Department.

CATLIN ENGINEERS and SCIENTISTS

MCAS NEW RIVER/MCB CAMP LEJEUNE
SITE LOCTIONS MAP
CAMP LEJEUNE, NORTH CAROLINA

FIGURE I

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

SECTION 1.0

OF THE

ANNUAL MANAGEMENT REPORT
MCB CAMP LEJEUNE UST MANAGEMENT PROGRAM

MONITORING EVENT:

SECOND SEMESTER 2005/FIRST SEMESTER 2006
(JULY 2005 THROUGH JUNE 2006)

SITE-SPECIFIC MONITORING REPORT
FOR

SITE AS-4141

NCDENR INCIDENT NO. 3218



1.0 EXECUTIVE SUMMARY
SITE AS-4141

1.1 Site Information

1.1.1 Site Location: MCAS New River
1.1.2 Incident Number(s): 3218
1.1.3 UTM Coordinates (WGS84) (Meters): 275544.52 Easting, 3844298.53 Northing
1.1.4 Risk Classification: Intermediate
1.1.5 Land Use Classification: Industrial/Commercial
1.1.6 Source Type(s): JP-5

1.2 Monitoring Event Information

1.2.1 Sampling Performed By: Shaw
1.2.2 Date(s) of This Monitoring Event: Gauging on 11/30/2005 and sampling on 12/22/05
1.2.3 Date(s) of Previous Monitoring Event: March 2005
1.2.4 Reason(s) for This Monitoring Event: Track free-product thickness, attenuation and dissolved-phase plume migration.
1.2.5 Site Monitoring Status at Time of This Event: Wells AS4141RW01 and AS4141OBG03R are gauged weekly and 11 wells are gauged monthly. Six wells are sampled semi-annually and annual report is submitted.

1.3 Groundwater Hydraulics

1.3.1 Hydraulic Conductivity: 7.4 gpd/ft^2
1.3.2 Effective Porosity: 0.40
1.3.3 Hydraulic Gradient: 0.02
1.3.4 Average Linear Groundwater Flow Velocity: 18 ft/yr
1.3.5 Groundwater Flow Direction: Easterly
1.3.6 Range of Measured Water Table Elevations: 13.61 (USTAS4141-MW14) to 17.80 (USTAS4141-OBG06) (see Table 1.1A)
1.3.7 Significant Changes from Previously Reported Data: Not Applicable. The data collected during this monitoring period is the first under the Camp Lejeune UST Management Program developed by CATLIN.

Free Product Plume

1.3.8 Free Product Present?: Yes.
1.3.9 Free Product Thickness Measured: See Tables 1.1A.
1.3.10 Plume Size and Location: See Figures 1.1A and 1.1B.
1.3.11 Free Product Removed from Site This Period: Yes. 3.75 gallons during four AFVR events and an undetermined amount during periodic skimming utilizing a pneumatic pump.
1.3.12 Significant Changes from Previously Reported Data: Not Applicable. This is the first Management Report prepared by CATLIN.

1.4 Dissolved-Phase Plume

1.4.1 Plume Concentrations: See Tables 1.2A through 1.4B

1.4.2 Plume Size and Location: Inconclusive data, see Figures 1.2A, 1.3A, and 1.4A

1.4.3 Significant Changes from Previously Reported Data: Not Applicable. This is the first Management Report prepared by CATLIN. Groundwater sample analytical results compared to the 2L GWQS are discussed as follows:

EPA Method 8260B

No EPA Method 8260B compounds were detected above the corresponding 2L GWQS. The USTAS4141-MW02 groundwater sample revealed minor Acetone concentrations and the USTAS4141-MW15 groundwater sample revealed minor Ethylbenzene concentrations. No other concentrations were detected above the laboratory reporting limit.

EPA Method 8270

2-Methylnaphthalene was detected in the USTAS4141-MW15 groundwater sample above the corresponding 2L GWQS. 1-Methylnaphthalene was revealed in the USTAS4141-MW15 and USTAS4141-RW2 respective groundwater samples. There is no established 1-Methylnaphthalene 2L GWQS. Naphthalene was also detected in the USTAS4141-MW15 and USTAS4141-RW2 groundwater samples but below the 2L GWQS. No other EPA Method 8270 compound concentrations were detected above the laboratory reporting limit.

EPA Method 6010B

Lead was detected above the 2L GWQS in the USTAS4141-MW02 and USTAS4141-MW15 groundwater samples. Minor lead concentrations below the 2L GWQS were revealed in the USTAS4141-MW014, USTAS4141-OBG06, and USTAS4141-RW2 groundwater samples.

1.5 Potential Receptors

1.5.1 Contaminated Water Supply Well(s)?: None

1.5.2 Potable Water Supply Well Within 1,000 Feet of Source Area?: No

1.5.3 Any Water Supply Well Within 250 Feet of Source Area?: No

1.5.4 Surface Water Body Within 500 Feet?: No

1.5.5 Past Evidence of Vapors?: No

1.5.6 Significant Changes from Previously Reported Data?: Not Applicable. This is the first Management Report prepared by CATLIN.

1.6 Remediation

1.6.1 Status: Inactive
1.6.2 Type: Pump and treat and AFVR.
1.6.3 Progress: Pump and treat system shut down in July 2000. Last AFVR event conducted in April 2006. A dual-phase extraction system was recently recommended in an RAO and RCAPA Report dated June 12, 2006.
1.6.4 Construction Contractor: Specialized Marine and O'Brien & Gere Engineers
1.6.5 Operating Contractor: None currently

1.7 Observations and Comments

The recommendations from the RAO and RCAPA included: free phase product plume and soil contamination delineation; complete soil cleanup plan if necessary; install deep monitoring wells; implement new groundwater monitoring schedule; prepare annual groundwater monitoring reports; further evaluate remedial approaches pending additional assessment findings.

Monitoring data for the second quarter 2006 is not included in this report as the data was not available at the time of report preparation.

TABLE 1.1A
SITE AS-4141
FIELD MEASUREMENTS - FOURTH QUARTER 2005

Date Measured 11/30/2005

Well No.	Type	TOC	Stick up	DTW	Product Thickness	DTW BGS	GW Elevation
USTAS4141-MW14	T-III	19.23		5.62	0.00		13.61
USTAS4141-MW15	T-II	18.21		1.27	0.00		16.94
USTAS4141-OBG03R	T-II	20.35		8.15	1.78		12.20
USTAS4141-OBG06	T-II	21.63		3.83	0.00		17.80
USTAS4141-RW01	RW			4.99	0.10		

Notes:
1. TII = Type II monitoring well
   TIII = Type III monitoring well
   RW = Recovery well
2. TOC = Top of well casing elevation.
3. STICK UP = Height of well casing above land surface in feet.
4. DTW = Depth to water (in feet) from top of well casing.
5. Product thickness is measured in feet.
6. DTW BGS = Depth to water below ground surface in feet.
7. GW Elevation = Ground water elevation (not adjusted for free product)
8. A zero ("0.00") in the product thickness column indicates no measureable thickness.
9. Top of casing elevations are measured in feet relative to Mean Sea Level (NAD83).
10. Stick up values were not available for wells with no values in the STICK UP and DTW BGS columns.

TABLE 1.2A

SITE AS-4141

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 8260B

Contaminant of Concern →			
Well ID	**Date**	**Acetone**	**Ethylbenzene**
2L GWQS		700	550
GCL		700000	550000
USTAS4141-MW02	12/22/2005	9.50	BQL
USTAS4141-MW14	12/22/2005	BQL	BQL
USTAS4141-MW15	12/22/2005	BQL	1.60
USTAS4141-OBG06	12/22/2005	BQL	BQL
USTAS4141-RW2	12/22/2005	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 1.2B

SITE AS-4141

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 8260B

Contaminant of Concern →			
Well ID	**Date**	**Acetone**	**Ethylbenzene**
2L GWQS		700	550
GCL		700000	550000
USTAS4141-MW02	12/22/2005	9.50	BQL
USTAS4141-MW14	12/22/2005	BQL	BQL
USTAS4141-MW15	12/22/2005	BQL	1.60
USTAS4141-OBG06	12/22/2005	BQL	BQL
USTAS4141-RW2	12/22/2005	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 1.3A

SITE AS-4141

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 8270C

Contaminant of Concern →		1-Methylnaphthalene	2-Methylnaphthalene	Naphthalene
Well ID	Date			
2L GWQS		0	14	21
GCL		0	12500	15500
USTAS4141-MW02	12/22/2005	BQL	BQL	BQL
USTAS4141-MW14	12/22/2005	BQL	BQL	BQL
USTAS4141-MW15	12/22/2005	**38.90**	**36.20**	18.10
USTAS4141-OBG06	12/22/2005	BQL	BQL	BQL
USTAS4141-RW2	12/22/2005	**4.60**	BQL	5.60

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 1.3B

SITE AS-4141

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 8270C

Contaminant of Concern →		1-Methylnaphthalene	2-Methylnaphthalene	Naphthalene
Well ID	**Date**			
2L GWQS		0	14	21
GCL		0	12500	15500
USTAS4141-MW02	12/22/2005	BQL	BQL	BQL
USTAS4141-MW14	12/22/2005	BQL	BQL	BQL
USTAS4141-MW15	12/22/2005	38.90	36.20	18.10
USTAS4141-OBG06	12/22/2005	BQL	BQL	BQL
USTAS4141-RW2	12/22/2005	4.60	BQL	5.60

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 1.4A

SITE AS-4141

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 6010B

Contaminant of Concern →		
Well ID	**Date**	**Lead**
	2L GWQS	15
	GCL	15000
USTAS4141-MW02	12/22/2005	**105.00**
USTAS4141-MW14	12/22/2005	5.80
USTAS4141-MW15	12/22/2005	**19.90**
USTAS4141-OBG06	12/22/2005	14.30
USTAS4141-RW2	12/22/2005	2.30

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 1.4B

SITE AS-4141

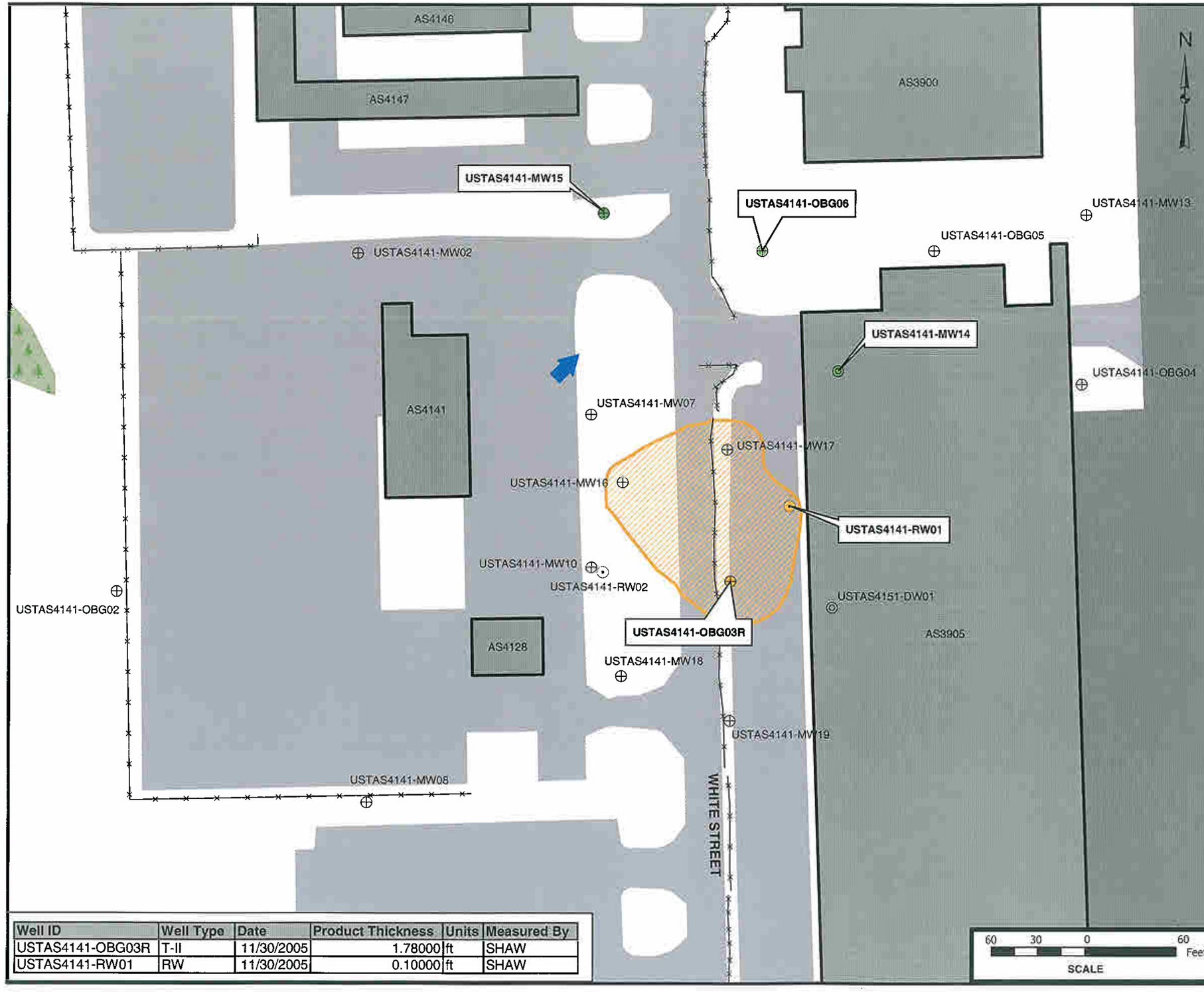
HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 6010B

Contaminant of Concern →		
Well ID	**Date**	**Lead**
	2L GWQS	15
	GCL	15000
USTAS4141-MW02	12/22/2005	**105.00**
USTAS4141-MW14	12/22/2005	5.80
USTAS4141-MW15	12/22/2005	**19.90**
USTAS4141-OBG06	12/22/2005	14.30
USTAS4141-RW2	12/22/2005	2.30

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM



LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Free Product
- Free Product Detected
- No Measurable Product
- Free Product Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. **Free product plume is based on data from November 2005 and data gathered for a Remedial Action Optimization Report that is currently being prepared by CATLIN.**

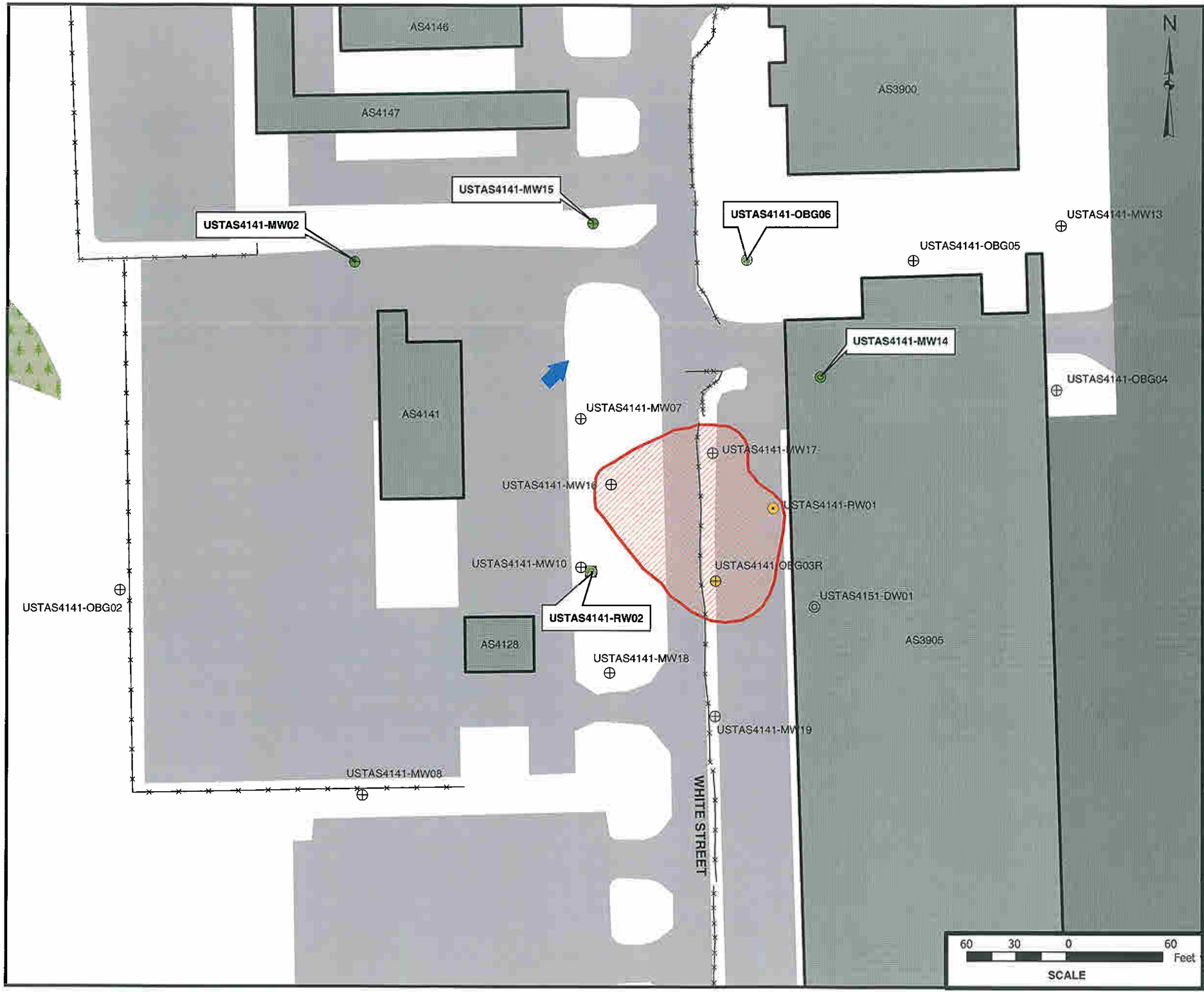
Well ID	Well Type	Date	Product Thickness	Units	Measured By
USTAS4141-OBG03R	T-II	11/30/2005	1.78000	ft	SHAW
USTAS4141-RW01	RW	11/30/2005	0.10000	ft	SHAW

CATLIN ENGINEERS and SCIENTISTS

SITE AS-4141
FREE PRODUCT PLUME MAP
FOURTH QUARTER 2005

FIGURE **1.1A**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM



MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM

LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Analytical Results
- 2L Non-compliant
- 2L compliant
- EPA 8260B Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. No EPA Method 8260B compounds were detected above 2L Standards for any wells sampled during this monitoring event.
2. Contaminant plume geometry based on the presence of free product.

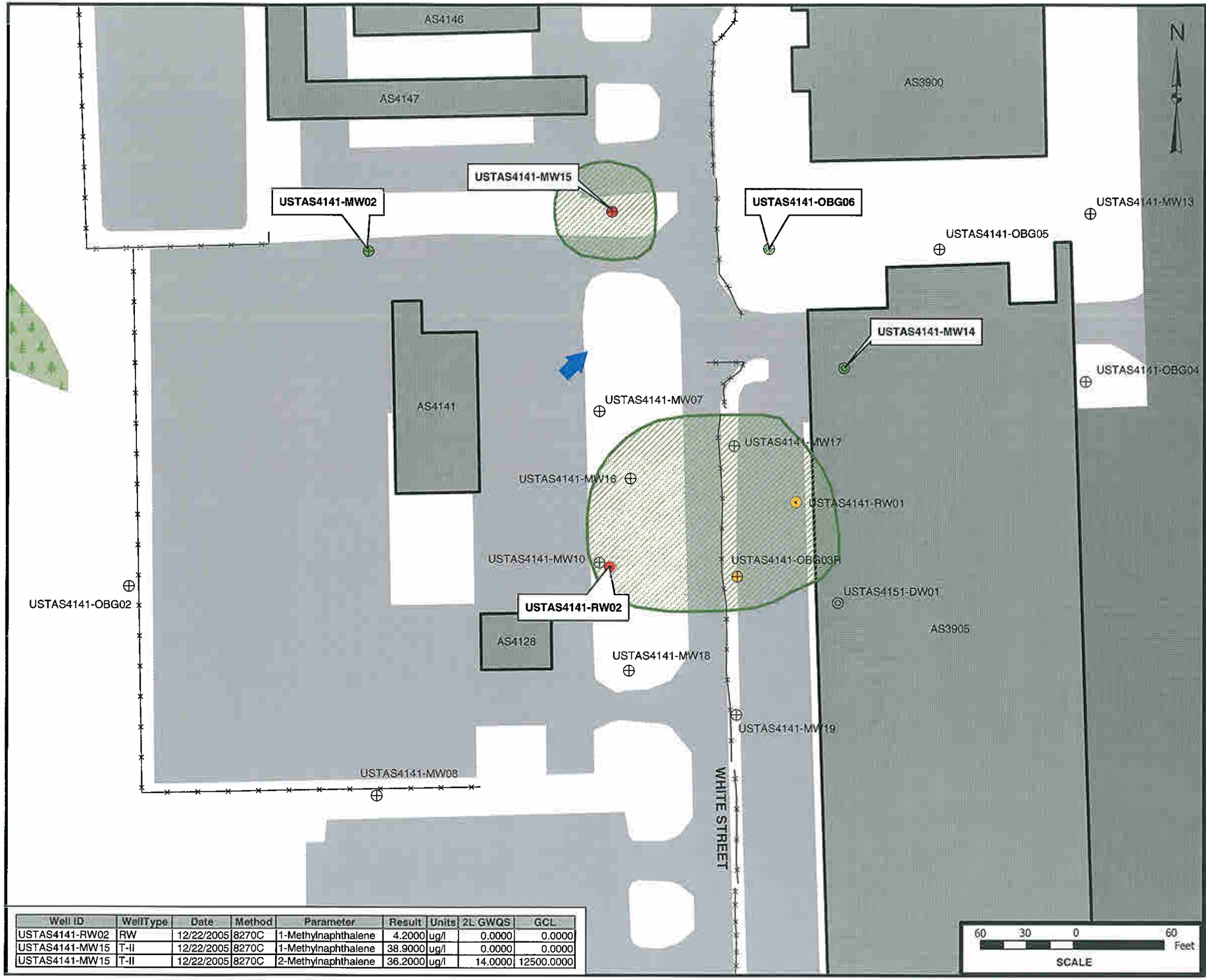
CATLIN ENGINEERS and SCIENTISTS

SITE AS-4141
EPA METHOD 8260B COLORIMETRY AND PLUME IN EXCESS OF 2L FOURTH QUARTER 2005

FIGURE **1.2A**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM



LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Analytical Results
- 2L Non-compliant
- 2L Compliant
- EPA 8270C Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. 2L Standard refers to North Carolina Groundwater Quality Standard 15A NCAC 2L.0202.
2. GCL refers to Gross Contaminant Level as defined in Table 7 of "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Ground Water", Volume II, dated January 2, 1998.
3. A 2L Standard of "0.00" implies a standard has not yet been established. According to NCAC T15:02L, any compound found above laboratory detection limits is considered noncompliant unless otherwise specified by the NCDENR.
4. EPA Method 8270C plume geometry based partially on the presence of free product.

Well ID	WellType	Date	Method	Parameter	Result	Units	2L GWQS	GCL
USTAS4141-RW02	RW	12/22/2005	8270C	1-Methylnaphthalene	4.2000	ug/l	0.0000	0.0000
USTAS4141-MW15	T-II	12/22/2005	8270C	1-Methylnaphthalene	38.9000	ug/l	0.0000	0.0000
USTAS4141-MW15	T-II	12/22/2005	8270C	2-Methylnaphthalene	36.2000	ug/l	14.0000	12500.0000

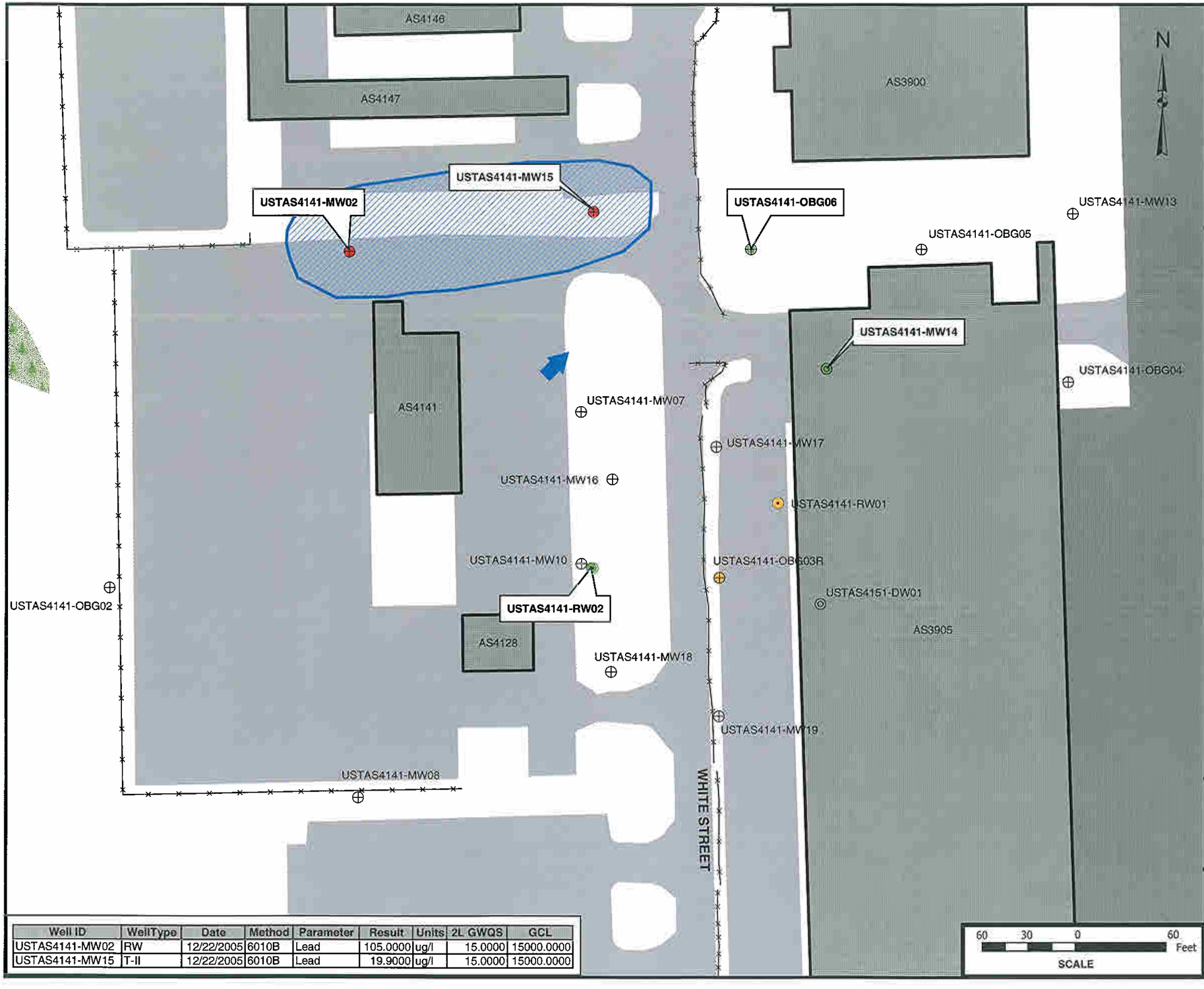
CATLIN ENGINEERS and SCIENTISTS

SITE AS-4141
EPA METHOD 8270C COLORIMETRY AND PLUME IN EXCESS OF 2L
FOURTH QUARTER 2005

FIGURE **1.3A**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM



LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Analytical Results
- 2L Non-compliant
- 2L Compliant
- EPA 6010B Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. 2L Standard refers to North Carolina Groundwater Quality Standard 15A NCAC 2L.0202.
2. GCL refers to Gross Contaminant Level as defined in Table 7 of "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Ground Water", Volume II, dated January 2, 1998.
3. A 2L Standard of "0.00" implies a standard has not yet been established. According to NCAC T15:02L, any compound found above laboratory detection limits is considered noncompliant unless otherwise specified by the NCDENR.

Well ID	WellType	Date	Method	Parameter	Result	Units	2L GWQS	GCL
USTAS4141-MW02	RW	12/22/2005	6010B	Lead	105.0000	ug/l	15.0000	15000.0000
USTAS4141-MW15	T-II	12/22/2005	6010B	Lead	19.9000	ug/l	15.0000	15000.0000

60 30 0 60 Feet
SCALE

CATLIN ENGINEERS and SCIENTISTS

SITE AS-4141
EPA METHOD 6010B COLORIMETRY AND PLUME IN EXCESS OF 2L
FOURTH QUARTER 2005

FIGURE **1.4A**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

SECTION 2.0

OF THE

ANNUAL MANAGEMENT REPORT
MCB CAMP LEJEUNE UST MANAGEMENT PROGRAM

MONITORING EVENT:

SECOND SEMESTER 2005/FIRST SEMESTER 2006
(JULY 2005 THROUGH JUNE 2006)

SITE-SPECIFIC MONITORING REPORT
FOR

SITE AS-4158

NCDENR INCIDENT NO. 10804



2.0 EXECUTIVE SUMMARY
SITE AS-4158

2.1 Site Information

2.1.1 Site Location: MCB Camp Lejeune (MCAS New River)
2.1.2 Incident Number(s): 10804
2.1.3 UTM Coordinates (WGS84, Meters): 274871.75 Easting, 3843672.85 Northing
2.1.4 Risk Classification: High
2.1.5 Land Use Classification: Industrial/Commercial
2.1.6 Source Type(s): Former (removed in 1992) gasoline and diesel USTs including: one (1) 3,000-gallon gasoline and two (2) 3,000-gallon diesel USTs. An underground fuel transfer line leak was discovered in January 2002.

2.2 Monitoring Event Information

2.2.1 Sampling Performed By: EEI
2.2.2 Date(s) of This Monitoring Event: July 2005
2.2.3 Date(s) of Previous Monitoring Event: April 2004 through August 2005
2.2.4 Reason(s) for This Monitoring Event: Track attenuation and migration of dissolved-phase plume
2.2.5 Site Monitoring Status at Time of This Event: Remediation system shut-down in January 2006. 10 wells gauged monthly and sampled annually.

2.3 Groundwater Hydraulics

2.3.1 Hydraulic Conductivity: 11.7 ft/day
2.3.2 Effective Porosity: 0.20
2.3.3 Hydraulic Gradient: Well pair MW-9/MW-8 = 0.086, Well pair MW-9/MW-10 = 0.12
2.3.4 Average Linear Groundwater Flow Velocity: 5 ft/day
2.3.5 Groundwater Flow Direction: From the east into the site.
2.3.6 Range of Measured Water Table Elevations: See Table 2.1
2.3.7 Significant Changes from Previously Reported Data: Not Applicable. The data collected during this monitoring period is the first under the Camp Lejeune UST Management Program developed by CATLIN.

2.4 Free Product Plume

2.4.1 Free Product Present?: No
2.4.2 Free Product Thickness Measured: None, see Table 2.1
2.4.3 Plume Size and Location: None, see Figure 2.1
2.4.4 Free Product Removed from Site This Period: None
2.4.5 Significant Changes from Previously Reported Data: Not Applicable. This is the first Management Report prepared by CATLIN.

2.5 Dissolved-Phase Plume

2.5.1 Plume Concentrations: See Tables 2.2A, 2.2B, 2.3A and 2.3B
2.5.2 Plume Size and Location: See Figures 2.2 and 2.3
2.5.3 Significant Changes from Previously Reported Data: Not Applicable. This is the first Management Report prepared by CATLIN. Groundwater sample analytical results compared to the 2L GWQS are discussed as follows:

EPA METHOD 602

No EPA Method 602 compounds were detected above the corresponding 2L GWQS. Minor concentrations of Benzene, MTBE, Toluene, and/or total Xylenes were revealed in wells USTAS4158-MW09, USTAS4158-MW11, USTAS4158-MW13, USTAS4158-MW15, USTAS4158-MW17, and USTAS4158-MW18.

EPA METHOD 610

No EPA Method 610 compounds were detected above the corresponding 2L GWQS or laboratory reporting limit.

2.6 Potential Receptors

2.6.1 Contaminated Water Supply Well(s)?: None
2.6.2 Potable Water Supply Well Within 1,000 Feet of Source Area?: Yes, the water supply well PSWAS4150 in not in use and is not expected to be in use in the near future.
2.6.3 Any Water Supply Well Within 250 Feet of Source Area?: No
2.6.4 Surface Water Body Within 500 Feet?: No
2.6.5 Past Evidence of Vapors?: No
2.6.6 Significant Changes from Previously Reported Data?: Not Applicable. This is the first Management Report prepared by CATLIN.

2.7 Remediation

2.7.1 Status: Shutdown in January 2006
2.7.2 Type: Air-sparge, SVE, passive free-product recovery skimmer, and hand bailing
2.7.3 Progress: On-going
2.7.4 Construction Contractor: JA Jones
2.7.5 Operating Contractor: None currently

2.8 Observations and Comments

Free product has not been measured at the site since January 2005. Recent groundwater sample analytical results did not reveal any EPA Method 602 or 610 compounds above the corresponding 2L GWQS.

TABLE 2.1
SITE AS-4158
FIELD MEASUREMENTS - THIRD QUARTER 2005

Date Measured: 7/26/2005

Well No.	Type	TOC	Stick up	DTW	Product Thickness	DTW BGS	GW Elevation
USTAS4158-MW01	T-II				0.00		
USTAS4158-MW03	T-II	21.49	-0.69	10.72	0.00	11.41	10.77
USTAS4158-MW04	T-II	21.56	-0.72	6.85	0.00	7.57	14.71
USTAS4158-MW05	T-II	21.75	-0.56	7.82	0.00	8.38	13.93
USTAS4158-MW06	T-II	22.57	-0.30	14.47	0.00	14.77	8.10
USTAS4158-MW07	T-II	21.88	-0.56	8.25	0.00	8.81	13.63
USTAS4158-MW08	T-II	22.67	-0.46	15.40	0.00	15.86	7.27
USTAS4158-MW09	T-II	22.80	-0.43	8.73	0.00	9.16	14.07
USTAS4158-MW10	T-II	22.93	-0.30	17.74	0.00	18.04	5.19
USTAS4158-MW11	T-II	23.52	-0.36	10.39	0.00	10.75	13.13
USTAS4158-MW13	T-II	23.75	-0.33	11.03	0.00	11.36	12.72
USTAS4158-MW14	T-II	23.16	-0.46	17.16	0.00	17.62	6.00
USTAS4158-MW15	T-II	23.65	-0.37	9.76	0.00	10.13	13.89
USTAS4158-MW16	T-III	21.88	-0.36	8.65	0.00	9.01	13.23
USTAS4158-MW17	T-III	22.77	-0.36	10.03	0.00	10.39	12.74
USTAS4158-MW18	T-III	23.56	-0.42	10.64	0.00	11.06	12.92

Notes:
1. TII = Type II monitoring well
   TIII = Type III monitoring well
   RW = Recovery well
2. TOC = Top of well casing elevation.
3. STICK UP = Height of well casing above land surface in feet.
4. DTW = Depth to water (in feet) from top of well casing.
5. Product thickness is measured in feet.
6. DTW BGS = Depth to water below ground surface in feet.
7. GW Elevation = Ground water elevation (not adjusted for free product)
8. A zero ("0.00") in the product thickness column indicates no measureable thickness.
9. Top of casing elevations are measured in feet relative to Mean Sea Level (NAD83).
10. Stick up values were not available for wells with no values in the STICK UP and DTW BGS columns.

TABLE 2.2A

SITE AS-4158

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 602

Contaminant of Concern →					
Well ID	Date	Benzene	Methyl Tert Butyl Ether	Toluene	Xylenes (total)
2L GWQS		1	200	1000	530
GCL		5000	200000	257500	87500
USTAS4158-MW01	7/27/2005	BQL	BQL	BQL	BQL
USTAS4158-MW03	7/27/2005	BQL	BQL	BQL	BQL
USTAS4158-MW04	7/27/2005	BQL	BQL	BQL	BQL
USTAS4158-MW05	7/27/2005	BQL	BQL	BQL	BQL
USTAS4158-MW07	7/27/2005	BQL	BQL	BQL	BQL
USTAS4158-MW08	7/27/2005	BQL	BQL	BQL	BQL
USTAS4158-MW09	7/28/2005	0.67	BQL	2.50	11.00
USTAS4158-MW10	7/27/2005	BQL	BQL	BQL	BQL
USTAS4158-MW11	7/27/2005	0.97	29.90	BQL	BQL
USTAS4158-MW13	7/27/2005	BQL	47.40	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 2.2A

SITE AS-4158

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 602

Contaminant of Concern →		Benzene	Methyl Tert Butyl Ether	Toluene	Xylenes (total)
Well ID	Date				
2L GWQS		1	200	1000	530
GCL		5000	200000	257500	87500
USTAS4158-MW14	7/27/2005	BQL	BQL	BQL	BQL
USTAS4158-MW15	7/28/2005	BQL	BQL	1.00	1.60
USTAS4158-MW17	7/28/2005	BQL	29.40	BQL	BQL
USTAS4158-MW18	7/28/2005	BQL	BQL	0.52	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 2.2B

SITE AS-4158

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 602

Contaminant of Concern →		Benzene	Methyl Tert Butyl Ether	Toluene	Xylenes (total)
Well ID	Date				
2L GWQS		1	200	1000	530
GCL		5000	200000	257500	87500
USTAS4158-MW01	7/27/2005	BQL	BQL	BQL	BQL
USTAS4158-MW03	7/27/2005	BQL	BQL	BQL	BQL
USTAS4158-MW04	7/27/2005	BQL	BQL	BQL	BQL
USTAS4158-MW05	7/27/2005	BQL	BQL	BQL	BQL
USTAS4158-MW07	7/27/2005	BQL	BQL	BQL	BQL
USTAS4158-MW08	7/27/2005	BQL	BQL	BQL	BQL
USTAS4158-MW09	7/28/2005	0.67	BQL	2.50	11.00
USTAS4158-MW10	7/27/2005	BQL	BQL	BQL	BQL
USTAS4158-MW11	7/27/2005	0.97	29.90	BQL	BQL
USTAS4158-MW13	7/27/2005	BQL	47.40	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 2.2B

SITE AS-4158

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 602

Contaminant of Concern →		Benzene	Methyl Tert Butyl Ether	Toluene	Xylenes (total)
Well ID	Date				
2L GWQS		1	200	1000	530
GCL		5000	200000	257500	87500
USTAS4158-MW14	7/27/2005	BQL	BQL	BQL	BQL
USTAS4158-MW15	7/28/2005	BQL	BQL	1.00	1.60
USTAS4158-MW17	7/28/2005	BQL	29.40	BQL	BQL
USTAS4158-MW18	7/28/2005	BQL	BQL	0.52	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 2.3A

SITE AS-4158

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 610

Contaminant of Concern →		
Well ID	**Date**	
2L GWQS		
GCL		
USTAS4158-MW01	7/27/2005	
USTAS4158-MW03	7/27/2005	
USTAS4158-MW04	7/27/2005	
USTAS4158-MW05	7/27/2005	
USTAS4158-MW07	7/27/2005	
USTAS4158-MW08	7/27/2005	
USTAS4158-MW09	7/28/2005	
USTAS4158-MW10	7/27/2005	
USTAS4158-MW11	7/27/2005	
USTAS4158-MW13	7/27/2005	

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 2.3A

SITE AS-4158

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 610

Contaminant of Concern →		
Well ID	**Date**	
2L GWQS		
GCL		
USTAS4158-MW14	7/27/2005	
USTAS4158-MW15	7/28/2005	
USTAS4158-MW17	7/28/2005	
USTAS4158-MW18	7/28/2005	

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 2.3B

SITE AS-4158

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 610

Contaminant of Concern →		
Well ID	**Date**	
2L GWQS		
GCL		
USTAS4158-MW01	7/27/2005	
USTAS4158-MW03	7/27/2005	
USTAS4158-MW04	7/27/2005	
USTAS4158-MW05	7/27/2005	
USTAS4158-MW07	7/27/2005	
USTAS4158-MW08	7/27/2005	
USTAS4158-MW09	7/28/2005	
USTAS4158-MW10	7/27/2005	
USTAS4158-MW11	7/27/2005	
USTAS4158-MW13	7/27/2005	

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 2.3B

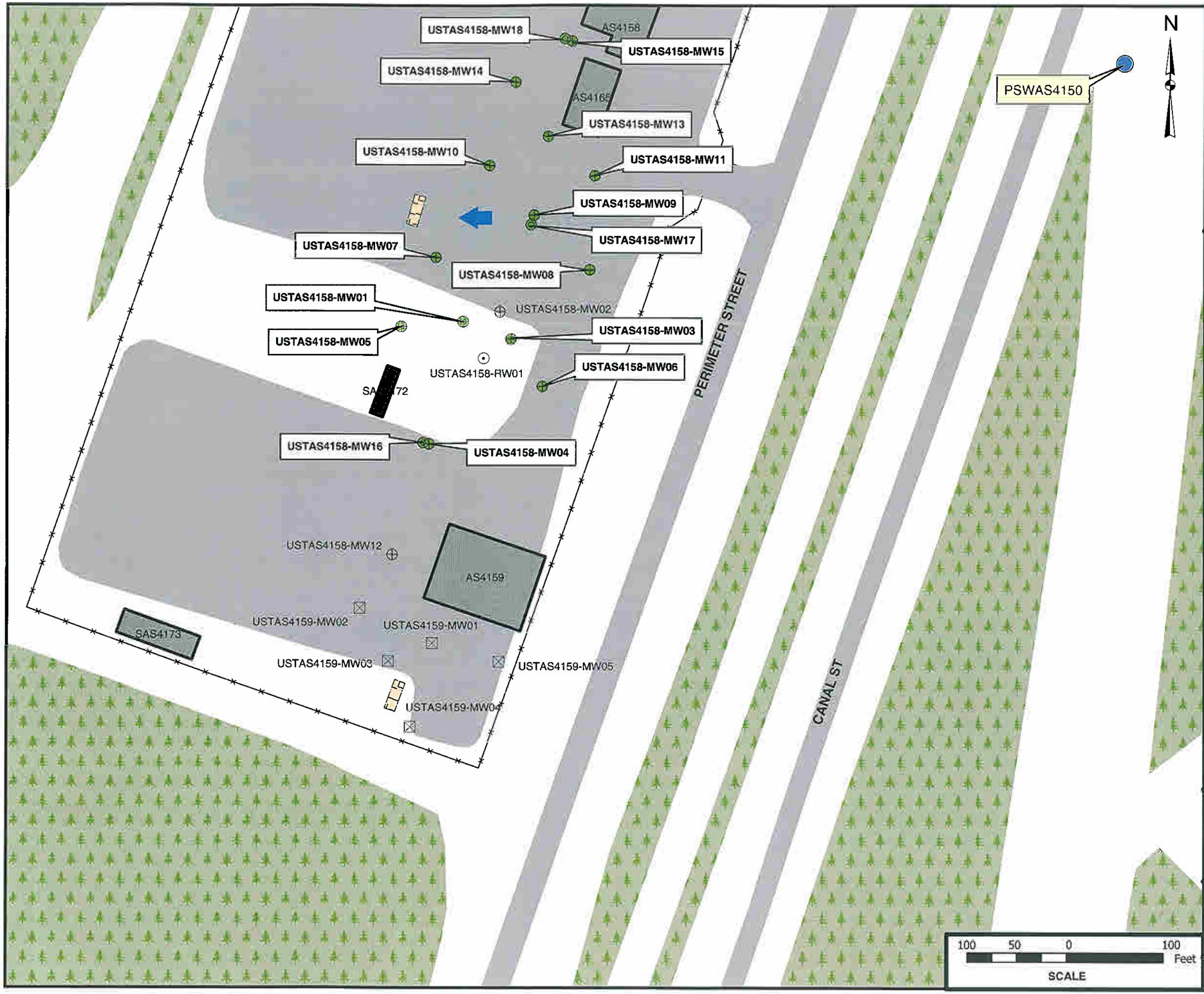
SITE AS-4158

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 610

Contaminant of Concern →		
Well ID	Date	
2L GWQS		
GCL		
USTAS4158-MW14	7/27/2005	
USTAS4158-MW15	7/28/2005	
USTAS4158-MW17	7/28/2005	
USTAS4158-MW18	7/28/2005	

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL



MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM

LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Free Product
- Free Product Detected
- No Measurable Product
- Free Product Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

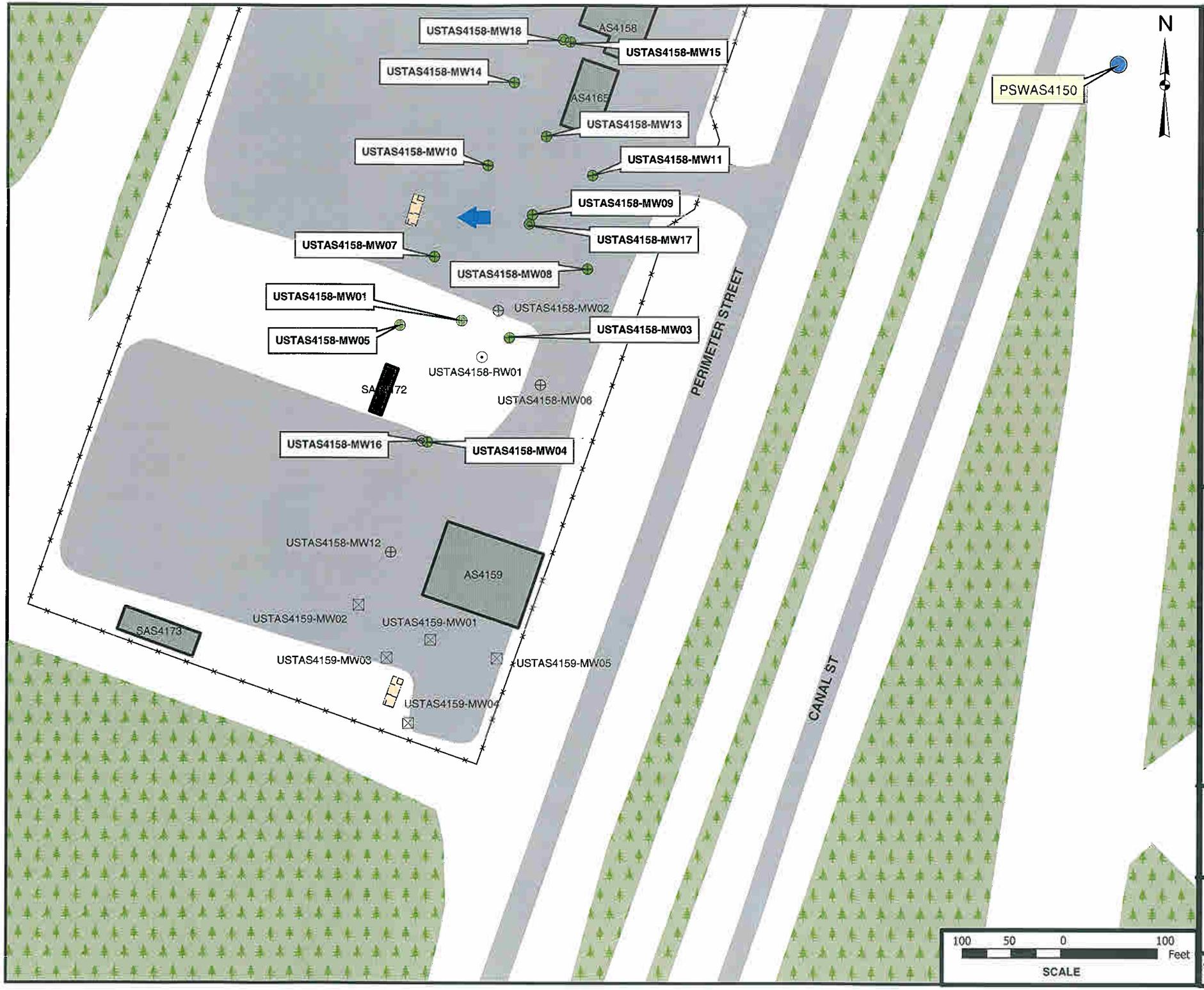
1. Free product was not detected at this site in any of the wells gauged during this monitoring event.

CATLIN ENGINEERS and SCIENTISTS

SITE AS-4158
FREE PRODUCT PLUME MAP
THIRD QUARTER 2005

FIGURE 2.1

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM



MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM

LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Analytical Results
- 2L Non-Compliant
- 2L Compliant
- EPA 602 Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

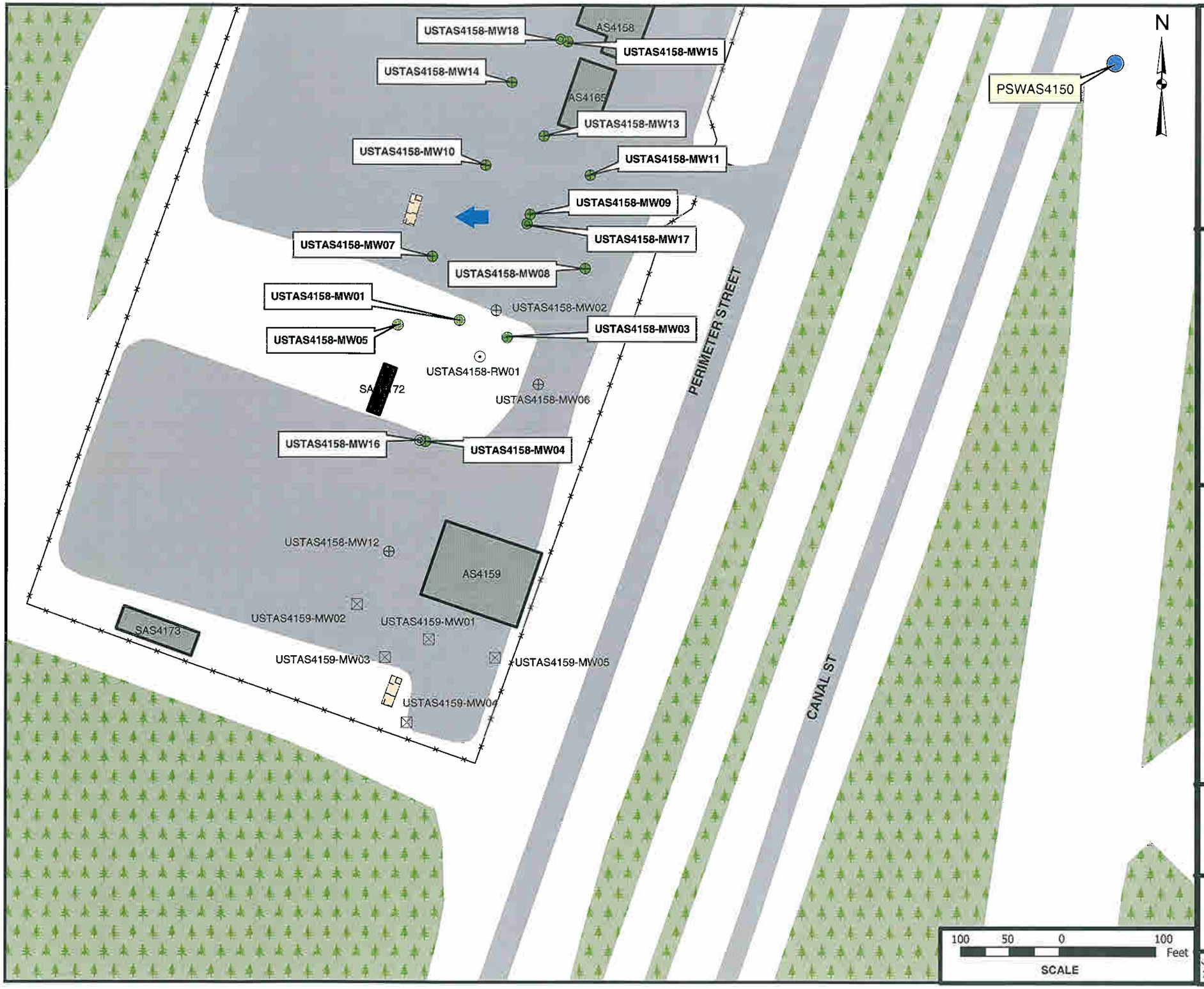
1. No EPA Method 602 compounds were detected above 2L Standards for any wells sampled during this monitoring event.

CATLIN ENGINEERS and SCIENTISTS

SITE AS-4158
EPA METHOD 602 COLORIMETRY
AND PLUME IN EXCESS OF 2L
THIRD QUARTER 2005

FIGURE 2.2

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM



MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM

LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Analytical Results
- 2L Non-Compliant
- 2L Compliant
- EPA 610 Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. No EPA Method 610 compounds were detected above 2L Standards for any wells sampled during this monitoring event.

CATLIN ENGINEERS and SCIENTISTS

SITE AS-4158
EPA METHOD 610 COLORIMETRY
AND PLUME IN EXCESS OF 2L
THIRD QUARTER 2005

FIGURE 2.3

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

SECTION 3.0

OF THE

ANNUAL MANAGEMENT REPORT
MCB CAMP LEJEUNE UST MANAGEMENT PROGRAM

MONITORING EVENT:

SECOND SEMESTER 2005/FIRST SEMESTER 2006
(JULY 2005 THROUGH JUNE 2006)

SITE-SPECIFIC MONITORING REPORT
FOR

SITE AS-840

NCDENR INCIDENT NO. Not Applicable



3.0 EXECUTIVE SUMMARY
SITE AS-840

3.1 Site Information

3.1.1 Site Location: MCAS New River
3.1.2 Incident Number(s): Pending
3.1.3 UTM Coordinates (WGS84) (Meters): 277203.64 Easting, 3843453.45 Northing
3.1.4 Risk Classification: Not Applicable
3.1.5 Land Use Classification: Not Applicable
3.1.6 Source Type(s): Gasoline, Diesel Fuel

3.2 Monitoring Event Information

3.2.1 Sampling Performed By: CATLIN
3.2.2 Date(s) of This Monitoring Event: None
3.2.3 Date(s) of Previous Monitoring Event: 10/06/03 and 10/23/03
3.2.4 Reason(s) for This Monitoring Event: Not Applicable. Groundwater sampling for possible site closure after soil excavation and ORC groundwater remediation is conducted.
3.2.5 Site Monitoring Status at Time of This Event: Two sampling events of eight monitoring wells.

3.3 Groundwater Hydraulics

3.3.1 Hydraulic Conductivity: 30 feet/day
3.3.2 Effective Porosity: 0.40
3.3.3 Hydraulic Gradient: 0.0047 feet/feet
3.3.4 Average Linear Groundwater Flow Velocity: 0.353 feet/day
3.3.5 Groundwater Flow Direction: Northeast, toward the New River
3.3.6 Range of Measured Water Table Elevations: 5.65 to 7.02 feet BLS
3.3.7 Significant Changes from Previously Reported Data: No previous data

3.4 Free Product Plume

3.4.1 Free Product Present?: Yes
3.4.2 Free Product Thickness Measured: In CSAA by CATLIN, gauged 10/23/03, MW-02 contained 0.48 feet of Free Product.
3.4.3 Plume Size and Location: Estimated at 30x20 feet in the vicinity of MW-02
3.4.4 Free Product Removed from Site This Period: Approximately 11.9 gallons removed during last reported AFVR on 7/23/02.

3.4.5 Significant Changes from Previously Reported Data: Not Applicable. This the first Management Report prepared by CATLIN.

3.5 Dissolved-Phase Plume

3.5.1 Plume Concentrations: See CSAA Tables 4, 5, 6A, and 6B
3.5.2 Plume Size and Location: See CSAA Figures 6 through 8
3.5.3 Significant Changes from Previously Reported Data: Not Applicable. This the first Management Report prepared by CATLIN.

3.6 Potential Receptors

3.6.1 Contaminated Water Supply Well(s)?: None
3.6.2 Potable Water Supply Well Within 1,000 Feet of Source Area?: No
3.6.3 Any Water Supply Well Within 250 Feet of Source Area?: No
3.6.4 Surface Water Body Within 500 Feet?: No
3.6.5 Past Evidence of Vapors?: No
3.6.6 Significant Changes from Previously Reported Data?: No

3.7 Remediation

3.7.1 Status: On-going
3.7.2 Type: AFVR (past), soil excavation, ORC groundwater treatment
3.7.3 Progress: On-going
3.7.4 Construction Contractor: Sovereign
3.7.5 Operating Contractor: Sovereign

3.8 Observations and Comments

Soil excavation and groundwater ORC application completed. Need to install and sample Type II well in former source area.

SECTION 4.0

OF THE

ANNUAL MANAGEMENT REPORT
MCB CAMP LEJEUNE UST MANAGEMENT PROGRAM

MONITORING EVENT:

SECOND SEMESTER 2005/FIRST SEMESTER 2006
(JULY 2005 THROUGH JUNE 2006)

SITE-SPECIFIC MONITORING REPORT
FOR

SITE CAMPBELL STREET FUEL FARM/AS-4151

NCDENR INCIDENT NO. 23297



4.0 EXECUTIVE SUMMARY
SITE CAMPBELL STREET FUEL FARM/AS-4151

4.1 Site Information

4.1.1 Site Location: MCAS New River
4.1.2 Incident Number(s): 23297
4.1.3 UTM Coordinates (WGS84) (Meters): 275539.81 Easting, 3844610.62 Northing
4.1.4 Risk Classification: Intermediate
4.1.5 Land Use Classification: Industrial/Commercial
7.1.6 Source Type(s): JP-5, AVGAS, Gasoline (Fuel Farm/143), No. 6 Fuel Oil, Waste Oil (4151)

4.2 Monitoring Event Information

4.2.1 Sampling Performed By: EEI and Sovereign
4.2.2 Date(s) of This Monitoring Event: 9/21/05, 11/18/05, 1/18/06, and 4/13/06
4.2.3 Date(s) of Previous Monitoring Event: 12/16/04 and 12/17/04
4.2.4 Reason(s) for This Monitoring Event: Gauge free product.
4.2.5 Site Monitoring Status at Time of This Event: Gauging only.

4.3 Groundwater Hydraulics

4.3.1 Hydraulic Conductivity: Fuel Farm: 0.46 feet/day; AS-4151: 0.14 feet/day
4.3.2 Effective Porosity: Fuel Farm: 0.28; AS-4151: 0.34
4.3.3 Hydraulic Gradient: Fuel Farm: 0.0075 feet/feet; AS-4151: 0.0097 feet/feet
4.3.4 Average Linear Groundwater Flow Velocity: Fuel Farm: 4.5 feet/year; AS-4151: 1.5 feet/year
4.3.5 Groundwater Flow Direction: Fuel Farm: South; AS-4151: South-Southeast
4.3.6 Range of Measured Water Table Elevations: Fuel Farm: 6-7 feet BLS: AS-4151: 3-4 feet BLS
4.3.7 Significant Changes from Previously Reported Data: Not Applicable. The data collected during this monitoring period is the first under the Camp Lejeune UST Management Program developed by CATLIN.

4.4 Free Product Plume

4.4.1 Free Product Present?: Yes. Free Product detected in USTCSFF-MW13 in April 2006.
4.4.2 Free Product Thickness Measured: See Tables 4.1A through 4.1D
4.4.3 Plume Size and Location: See Figures 4.1A through 4.1D
4.4.4 Free Product Removed from Site This Period: Unknown. Free Product was hand bailed from USTCSFF-MW13, however the quantity collected was not reported to CATLIN.
4.4.5 Significant Changes from Previously Reported Data: Not Applicable. This is the first Management Report prepared by CATLIN.

4.5 Dissolved-Phase Plume

4.5.1 Plume Concentrations: Not Applicable

4.5.2 Plume Size and Location: Not Applicable

4.5.3 Significant Changes from Previously Reported Data: Not Applicable. This is the first Management Report prepared by CATLIN. No groundwater samples were collected for laboratory analysis during this monitoring period.

4.6 Potential Receptors

4.6.1 Contaminated Water Supply Well(s)?: No

4.6.2 Potable Water Supply Well Within 1,000 Feet of Source Area?: No

4.6.3 Any Water Supply Well Within 250 Feet of Source Area?: No

4.6.4 Surface Water Body Within 500 Feet?: Yes. A retention pond is located approximately 115 feet Southeast of the Fuel Farm, and 275 feet Northeast of AS-4151.

4.6.5 Past Evidence of Vapors?: No

4.6.6 Significant Changes from Previously Reported Data?: Not Applicable. This is the first Management Report prepared by CATLIN.

4.7 Remediation

4.7.1 Status: Remediation system shutdown July 11, 2005

4.7.2 Type: Pump and Treat, AFVR when product observed ≥ 0.1 feet

4.7.3 Progress: Shutdown.

4.7.4 Construction Contractor: J. A. Jones

4.7.5 Operating Contractor: Sovereign

4.8 Observations and Comments

The free-phase product detected in monitoring well USTCSFF-MW13 is most likely from a recent surface release of petroleum and not associated with the original releases from this site. This new release should be addressed as a separate incident.

Therefore, it appears that the above-stated remediation technologies have been effective in the removal of free-phase product. Additional groundwater gauging activities are scheduled through July 2006 in order to meet the requirements established by NCDENR for achieving site closure.

In a previously reference letter by NCDENR UST Section dated June 28, 2005, the site risk classification remains intermediate risk until the absence of free-phase product is documented for one year following the deactivation of the pump and treat system. In the event that free-phase product is not identified at the conclusion of the one-year time period, the site should be reclassified as low risk. At this time a request for No Further Action with Land Use Restrictions will be prepared and submitted to the UST Section for approval.

TABLE 4.1A
SITE Campbell Street Fuel Farm/AS-4151
FIELD MEASUREMENTS - THIRD QUARTER 2005

Date Measured: 9/21/2005

Well No.	Type	TOC	Stick up	DTW	Product Thickness	DTW BGS	GW Elevation
USTAS4151-DW01A	T-III			7.39	0.00		
USTAS4151-MW03	T-II	31.86	8.53	5.70	0.00	-2.83	26.16
USTAS4151-MW04	T-II	23.33	-0.95	1.20	0.00	2.15	22.13
USTAS4151-MW05		20.05	-0.29	3.38	0.00	3.67	16.67
USTAS4151-MW06	T-II	19.13	-0.92	6.25	0.00	7.17	12.88
USTAS4151-MW07	T-III	19.82	-0.55	2.54	0.00	3.09	17.28
USTAS4151-MW08	T-II	28.64	6.49	6.13	0.00	-0.36	22.51
USTAS4151-MW09	T-II	21.06	-1.81	4.34	0.00	6.15	16.72
USTAS4151-MW11	T-II	29.10	6.99	5.42	0.00	-1.57	23.68
USTAS4151-MW13	T-II	26.28	6.43	4.72	0.00	-1.71	21.56
USTAS4151-MW13A	T-II			5.32	0.00		
USTAS4151-MW14	T-II	35.73	6.50	6.41	0.00	-0.09	29.32
USTAS4151-RW01	RW			3.64	0.00		
USTCSFF-DW02	T-III			8.03	0.00		
USTCSFF-DW06	T-III			7.25	0.00		
USTCSFF-MW03	T-II	21.48	2.94	5.55	0.00	2.61	15.93
USTCSFF-MW09	T-II	20.11	2.43	5.36	0.00	2.93	14.75
USTCSFF-MW10	T-II	20.80	2.39	4.97	0.00	2.58	15.83
USTCSFF-MW11	T-II	21.68	2.42	6.85	0.00	4.43	14.83
USTCSFF-MW12	T-II	21.09	2.39	6.36	0.00	3.97	14.73
USTCSFF-MW14	T-II	19.71	2.39	5.03	0.00	2.64	14.68
USTCSFF-MW15	T-II	21.29	2.36	6.79	0.00	4.43	14.50
USTCSFF-MW16	T-II	21.16	2.36	6.55	0.00	4.19	14.61
USTCSFF-MW21	T-II	21.39	2.33	6.58	0.00	4.25	14.81
USTCSFF-MW22	T-II	20.80	2.43	6.50	0.00	4.07	14.30
USTCSFF-MW24	T-II	21.32	2.36	6.72	0.00	4.36	14.60

Notes:
1. TII = Type II monitoring well
   TIII = Type III monitoring well
   RW = Recovery well
2. TOC = Top of well casing elevation.
3. STICK UP = Height of well casing above land surface in feet.
4. DTW = Depth to water (in feet) from top of well casing.
5. Product thickness is measured in feet.
6. DTW BGS = Depth to water below ground surface in feet.
7. GW Elevation = Ground water elevation (not adjusted for free product)
8. A zero ("0.00") in the product thickness column indicates no measureable thickness.
9. Top of casing elevations are measured in feet relative to Mean Sea Level (NAD83).
10. Stick up values were not available for wells with no values in the STICK UP and DTW BGS columns.

TABLE 4.1B
SITE Campbell Street Fuel Farm/AS-4151
FIELD MEASUREMENTS - FOURTH QUARTER 2005

Date Measured: 11/18/2005

Well No.	Type	TOC	Stick up	DTW	Product Thickness	DTW BGS	GW Elevation
USTAS4151-DW01A	T-III			7.63	0.00		
USTAS4151-MW03	T-II	31.86	8.53	6.73	0.00	-1.80	25.13
USTAS4151-MW04	T-II	23.33	-0.95	3.17	0.00	4.12	20.16
USTAS4151-MW05		20.05	-0.29	4.00	0.00	4.29	16.05
USTAS4151-MW06	T-II	19.13	-0.92	6.60	0.00	7.52	12.53
USTAS4151-MW07	T-III	19.82	-0.55	3.57	0.00	4.12	16.25
USTAS4151-MW08	T-II	28.64	6.49	6.77	0.00	0.28	21.87
USTAS4151-MW09	T-II	21.06	-1.81	4.98	0.00	6.79	16.08
USTAS4151-MW11	T-II	29.10	6.99	6.23	0.00	-0.76	22.87
USTAS4151-MW13	T-II	26.28	6.43	4.96	0.00	-1.47	21.32
USTAS4151-MW13A	T-II			5.98	0.00		
USTAS4151-MW14	T-II	35.73	6.50	7.12	0.00	0.62	28.61
USTAS4151-RW01	RW			4.33	0.00		
USTCSFF-DW02	T-III			8.25	0.00		
USTCSFF-DW06	T-III			7.48	0.00		
USTCSFF-MW03	T-II	21.48	2.94	6.82	0.00	3.88	14.66
USTCSFF-MW09	T-II	20.11	2.43	5.60	0.00	3.17	14.51
USTCSFF-MW10	T-II	20.80	2.39	5.90	0.00	3.51	14.90
USTCSFF-MW11	T-II	21.68	2.42	7.08	0.00	4.66	14.60
USTCSFF-MW12	T-II	21.09	2.39	7.00	0.00	4.61	14.09
USTCSFF-MW14	T-II	19.71	2.39	5.77	0.00	3.38	13.94
USTCSFF-MW15	T-II	21.29	2.36	7.12	0.00	4.76	14.17
USTCSFF-MW16	T-II	21.16	2.36	7.00	0.00	4.64	14.16
USTCSFF-MW21	T-II	21.39	2.33	7.06	0.00	4.73	14.33
USTCSFF-MW22	T-II	20.80	2.43	6.95	0.00	4.52	13.85
USTCSFF-MW24	T-II	21.32	2.36	7.32	0.00	4.96	14.00

Notes:
1. TII = Type II monitoring well
   TIII = Type III monitoring well
   RW = Recovery well
2. TOC = Top of well casing elevation.
3. STICK UP = Height of well casing above land surface in feet.
4. DTW = Depth to water (in feet) from top of well casing.
5. Product thickness is measured in feet.
6. DTW BGS = Depth to water below ground surface in feet.
7. GW Elevation = Ground water elevation (not adjusted for free product)
8. A zero ("0.00") in the product thickness column indicates no measureable thickness.
9. Top of casing elevations are measured in feet relative to Mean Sea Level (NAD83).
10. Stick up values were not available for wells with no values in the STICK UP and DTW BGS columns.

TABLE 4.1C
SITE Campbell Street Fuel Farm/AS-4151
FIELD MEASUREMENTS - FIRST QUARTER 2006

Date Measured: 1/18/2006

Well No.	Type	TOC	Stick up	DTW	Product Thickness	DTW BGS	GW Elevation
USTAS4151-DW01A	T-III			7.09	0.00		
USTAS4151-MW03	T-II	31.86	8.53	4.95	0.00	-3.58	26.91
USTAS4151-MW04	T-II	23.33	-0.95	2.95	0.00	3.90	20.38
USTAS4151-MW05		20.05	-0.29	4.06	0.00	4.35	15.99
USTAS4151-MW06	T-II	19.13	-0.92	6.25	0.00	7.17	12.88
USTAS4151-MW07	T-III	19.82	-0.55	2.94	0.00	3.49	16.88
USTAS4151-MW08	T-II	28.64	6.49	6.46	0.00	-0.03	22.18
USTAS4151-MW09	T-II	21.06	-1.81	4.62	0.00	6.43	16.44
USTAS4151-MW11	T-II	29.10	6.99	5.86	0.00	-1.13	23.24
USTAS4151-MW13	T-II	26.28	6.43	5.00	0.00	-1.43	21.28
USTAS4151-MW13A	T-II			5.82	0.00		
USTAS4151-MW14	T-II	35.73	6.50	5.68	0.00	-0.82	30.05
USTAS4151-RW01	RW			3.92	0.00		
USTCSFF-DW02	T-III			7.47	0.00		
USTCSFF-DW06	T-III			6.74	0.00		
USTCSFF-MW03	T-II	21.48	2.94	5.61	0.00	2.67	15.87
USTCSFF-MW09	T-II	20.11	2.43	4.81	0.00	2.38	15.30
USTCSFF-MW10	T-II	20.80	2.39	4.40	0.00	2.01	16.40
USTCSFF-MW11	T-II	21.68	2.42	6.08	0.00	3.66	15.60
USTCSFF-MW12	T-II	21.09	2.39	5.63	0.00	3.24	15.46
USTCSFF-MW14	T-II	19.71	2.39	5.12	0.00	2.73	14.59
USTCSFF-MW15	T-II	21.29	2.36	6.48	0.00	4.12	14.81
USTCSFF-MW16	T-II	21.16	2.36	6.40	0.00	4.04	14.76
USTCSFF-MW21	T-II	21.39	2.33	6.45	0.00	4.12	14.94
USTCSFF-MW22	T-II	20.80	2.43	6.53	0.00	4.10	14.27
USTCSFF-MW24	T-II	21.32	2.36	6.75	0.00	4.39	14.57
USTJP5-MW01	T-II	100.00	0.00	2.73	0.00	2.73	97.27

Notes:
1. TII = Type II monitoring well
   TIII = Type III monitoring well
   RW = Recovery well
2. TOC = Top of well casing elevation.
3. STICK UP = Height of well casing above land surface in feet.
4. DTW = Depth to water (in feet) from top of well casing.
5. Product thickness is measured in feet.
6. DTW BGS = Depth to water below ground surface in feet.
7. GW Elevation = Ground water elevation (not adjusted for free product)
8. A zero ("0.00") in the product thickness column indicates no measureable thickness.
9. Top of casing elevations are measured in feet relative to Mean Sea Level (NAD83).
10. Stick up values were not available for wells with no values in the STICK UP and DTW BGS columns.

TABLE 4.1D
SITE Campbell Street Fuel Farm/AS-4151
FIELD MEASUREMENTS - SECOND QUARTER 2006

Date Measured: 4/13/2006

Well No.	Type	TOC	Stick up	DTW	Product Thickness	DTW BGS	GW Elevation
USTAS4151-DW01	T-III			4.57	0.00		
USTAS4151-DW01A	T-III			7.86	0.00		
USTAS4151-DW02				8.29	0.00		
USTAS4151-MW01		33.40	7.88	5.68	0.00	-2.20	27.72
USTAS4151-MW02		32.61	7.15	6.08	0.00	-1.07	26.53
USTAS4151-MW03	T-II	31.86	8.53	6.06	0.00	-2.47	25.80
USTAS4151-MW04	T-II	23.33	-0.95	3.34	0.00	4.29	19.99
USTAS4151-MW05		20.05	-0.29	3.58	0.00	3.87	16.47
USTAS4151-MW07	T-III	19.82	-0.55	3.37	0.00	3.92	16.45
USTAS4151-MW08	T-II	28.64	6.49	6.55	0.00	0.06	22.09
USTAS4151-MW09	T-II	21.06	-1.81	4.63	0.00	6.44	16.43
USTAS4151-MW10	T-II	29.30	7.35	6.07	0.00	-1.28	23.23
USTAS4151-MW11	T-II	29.10	6.99	5.92	0.00	-1.07	23.18
USTAS4151-MW12		26.90	7.22	5.72	0.00	-1.50	21.18
USTAS4151-MW13	T-II	26.28	6.43	5.53	0.00	-0.90	20.75
USTAS4151-MW13A	T-II			6.04	0.00		
USTAS4151-MW14	T-II	35.73	6.50	6.35	0.00	-0.15	29.38
USTAS4151-RW01	RW			3.95	0.00		
USTCSFF-DW01	T-III			6.57	0.00		
USTCSFF-DW02	T-III			8.42	0.00		
USTCSFF-DW04	T-III			6.43	0.00		
USTCSFF-DW05	T-III			8.42	0.00		
USTCSFF-DW06	T-III			7.67	0.00		
USTCSFF-MW02A	T-II			6.47	0.00		
USTCSFF-MW03	T-II	21.48	2.94	6.60	0.00	3.66	14.88
USTCSFF-MW04	T-II	22.53	3.44	8.27	0.00	4.83	14.26
USTCSFF-MW05		23.55	2.65	8.59	0.00	5.94	14.96
USTCSFF-MW06		20.24	2.82	6.52	0.00	3.70	13.72
USTCSFF-MW07	T-II	20.80	3.12	4.65	0.00	1.53	16.15
USTCSFF-MW08	T-II	20.11	2.43	4.70	0.00	2.27	15.41
USTCSFF-MW09	T-II	20.11	2.43	5.78	0.00	3.35	14.33
USTCSFF-MW10	T-II	20.80	2.39	5.28	0.00	2.89	15.52

Notes:
1. TII = Type II monitoring well
   TIII = Type III monitoring well
   RW = Recovery well
2. TOC = Top of well casing elevation.
3. STICK UP = Height of well casing above land surface in feet.
4. DTW = Depth to water (in feet) from top of well casing.
5. Product thickness is measured in feet.
6. DTW BGS = Depth to water below ground surface in feet.
7. GW Elevation = Ground water elevation (not adjusted for free product)
8. A zero ("0.00") in the product thickness column indicates no measureable thickness.
9. Top of casing elevations are measured in feet relative to Mean Sea Level (NAD83).
10. Stick up values were not available for wells with no values in the STICK UP and DTW BGS columns.

Date Measured: 4/13/2006

Well No.	Type	TOC	Stick up	DTW	Product Thickness	DTW BGS	GW Elevation
USTCSFF-MW11	T-II	21.68	2.42	7.10	0.00	4.68	14.58
USTCSFF-MW12	T-II	21.09	2.39	6.88	0.00	4.49	14.21
USTCSFF-MW13	T-II	22.47	2.42	8.98	1.59	6.56	13.49
USTCSFF-MW14	T-II	19.71	2.39	5.56	0.00	3.17	14.15
USTCSFF-MW15	T-II	21.29	2.36	7.28	0.00	4.92	14.01
USTCSFF-MW16	T-II	21.16	2.36	6.81	0.00	4.45	14.35
USTCSFF-MW17	T-II	22.14	2.39	5.22	0.00	2.83	16.92
USTCSFF-MW18	T-II			2.17	0.00		
USTCSFF-MW21	T-II	21.39	2.33	7.00	0.00	4.67	14.39
USTCSFF-MW22	T-II	20.80	2.43	6.87	0.00	4.44	13.93
USTCSFF-MW24	T-II	21.32	2.36	7.09	0.00	4.73	14.23
USTJP5-MW01	T-II	100.00	0.00	3.10	0.00	3.10	96.90

Notes:
1. TII = Type II monitoring well
   TIII = Type III monitoring well
   RW = Recovery well
2. TOC = Top of well casing elevation.
3. STICK UP = Height of well casing above land surface in feet.
4. DTW = Depth to water (in feet) from top of well casing.
5. Product thickness is measured in feet.
6. DTW BGS = Depth to water below ground surface in feet.
7. GW Elevation = Ground water elevation (not adjusted for free product)
8. A zero ("0.00") in the product thickness column indicates no measureable thickness.
9. Top of casing elevations are measured in feet relative to Mean Sea Level (NAD83).
10. Stick up values were not available for wells with no values in the STICK UP and DTW BGS columns.

MCB CAMP LEJEUNE
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N

WHITE STREET

CAMPBELL STREET

CANAL ST

USTCSFF-MW11
USTCSFF-MW17
USTCSFF-MW10
USTCSFF-MW07
USTCSFF-DW05
USTCSFF-MW13
USTCSFF-DW02
USTCSFF-DW01
USTCSFF-MW04
USTCSFF-MW03
USTCSFF-MW08
USTCSFF-RW01
USTCSFF-MW16
USTCSFF-DW04
USTCSFF-RW02A
USTCSFF-MW09
USTCSFF-RW01A
USTCSFF-MW12
USTCSFF-MW14
USTCSFF-MW20
USTCSFF-MW05
USTCSFF-DW06
USTAS142-MW01
USTCSFF-MW21
USTCSFF-RW02B
USTCSFF-RW04B
USTAS143-MW26
USTCSFF-RW01B
USTCSFF-RW03B
USTCSFF-MW24
USTCSFF-MW22
USTJPS-MW01
USTCSFF-MW15
USTCSFF-MW06
USTAS4151-MW13
USTAS4151-MW12
USTAS4151-MW07
USTAS4151-MW08
USTAS4151-MW04
USTAS4151-MW03
USTAS4151-RW02C
USTAS4151-MW13A
USTAS4151-RW01A
USTAS4151-RW01C
USTAS4151-DW01A
USTAS4151-MW05
USTAS4151-RW01
USTAS4151-MW09
USTAS4151-DW02
USTAS4151-MW02
USTAS4151-DW01
USTAS4151-MW11
USTAS4151-MW01
USTAS4151-MW02A
USTAS4151-MW10
USTAS4151-MW14
USTAS4151-MW06

AS1141 AS1146 AS1145 AS1143 AS4135 AS4145 AS553 AS583 AS518 AS4151 AS4147

SA[illegible]155 SA[illegible]164 SA[illegible]146

LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Free Product
- Free Product Detected
- No Measurable Product
- Free Product Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. Free product was not detected at this site in any of the wells gauged during this monitoring event.

100 50 0 100 Feet
SCALE

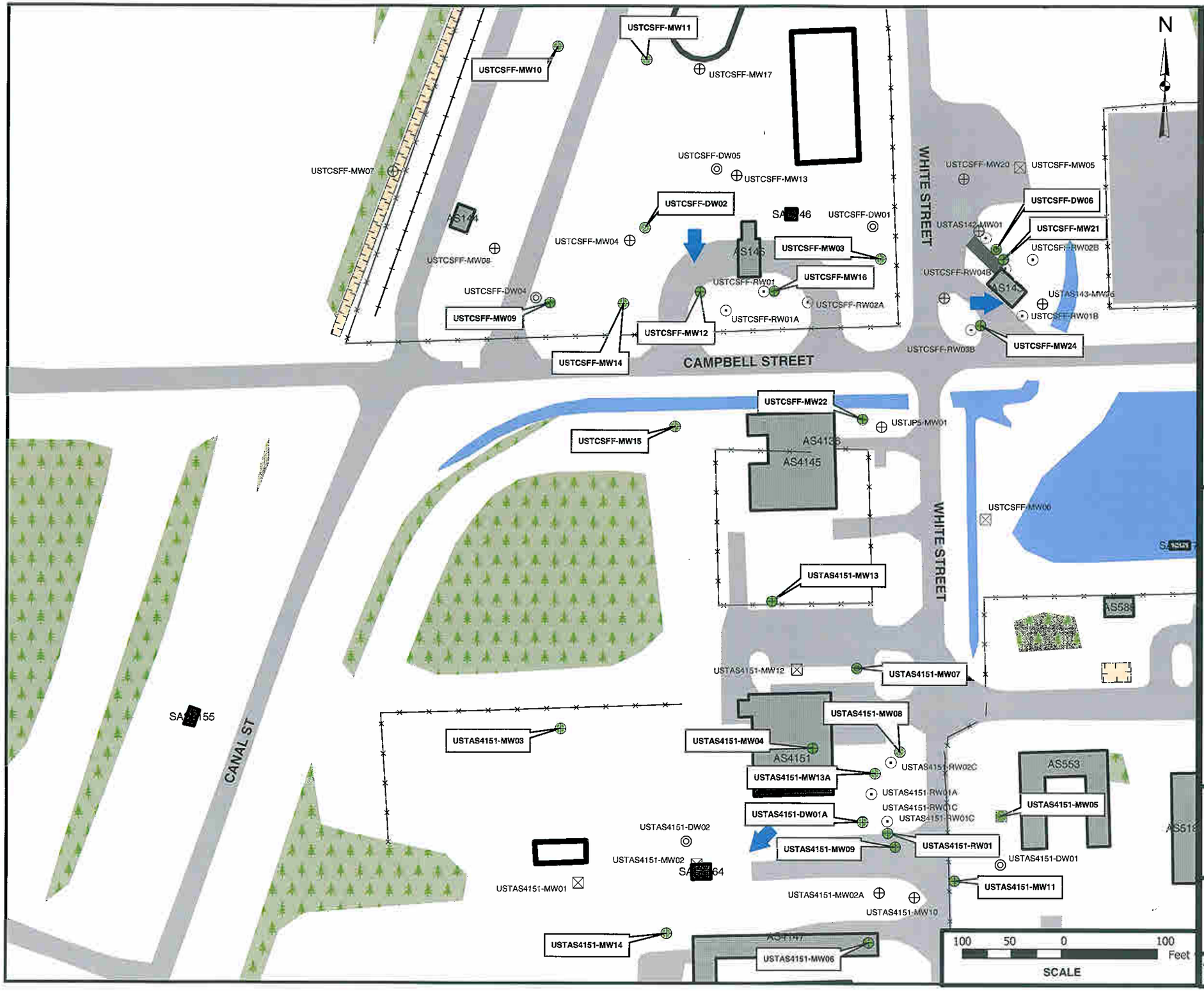
CATLIN ENGINEERS and SCIENTISTS

SITE Campbell Street Fuel Farm
FREE PRODUCT PLUME MAP
THIRD QUARTER 2005

FIGURE
4.1A

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

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LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Free Product
- Free Product Detected
- No Measurable Product
- Free Product Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. Free product was not detected at this site in any of the wells gauged during this monitoring event.

CATLIN ENGINEERS and SCIENTISTS

SITE Campbell Street Fuel Farm
FREE PRODUCT PLUME MAP
FOURTH QUARTER 2005

FIGURE **4.1B**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM

N

USTCSFF-MW11
USTCSFF-MW17
USTCSFF-MW10
USTCSFF-MW07
USTCSFF-DW05
USTCSFF-MW13
USTCSFF-DW02
USTCSFF-DW01
USTCSFF-MW04
USTCSFF-MW09
USTCSFF-DW04
USTCSFF-MW09
USTCSFF-MW14
USTCSFF-MW12
USTCSFF-RW01
USTCSFF-MW16
USTCSFF-RW01A
USTCSFF-RW02A
USTCSFF-MW03
AS144
AS145
AS146
CAMPBELL STREET
WHITE STREET
USTCSFF-MW20
USTCSFF-MW05
USTCSFF-DW06
USTAS142-MW01
USTCSFF-MW21
USTCSFF-RW02B
USTCSFF-RW04B
AS147
USTAS143-MW26
USTCSFF-RW01B
USTCSFF-RW03B
USTCSFF-MW24
USTCSFF-MW22
USTJP5-MW01
USTCSFF-MW15
AS4135
AS4145
USTCSFF-MW06
USTAS4151-MW13
AS580
USTAS4151-MW12
USTAS4151-MW07
USTAS4151-MW08
USTAS4151-MW04
AS4151
USTAS4151-RW02C
USTAS4151-MW13A
USTAS4151-RW01A
USTAS4151-RW01C
AS553
USTAS4151-MW05
USTAS4151-DW01A
USTAS4151-RW01
USTAS4151-MW09
USTAS4151-DW01
USTAS4151-DW02
USTAS4151-MW02
USTAS4151-MW11
USTAS4151-MW01
USTAS4151-MW02A
USTAS4151-MW10
USTAS4151-MW14
USTAS4151-MW06
CANAL ST
100 50 0 100 Feet
SCALE

LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Free Product
- Free Product Detected
- No Measurable Product
- Free Product Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. Free product was not detected at this site in any of the wells gauged during this monitoring event.

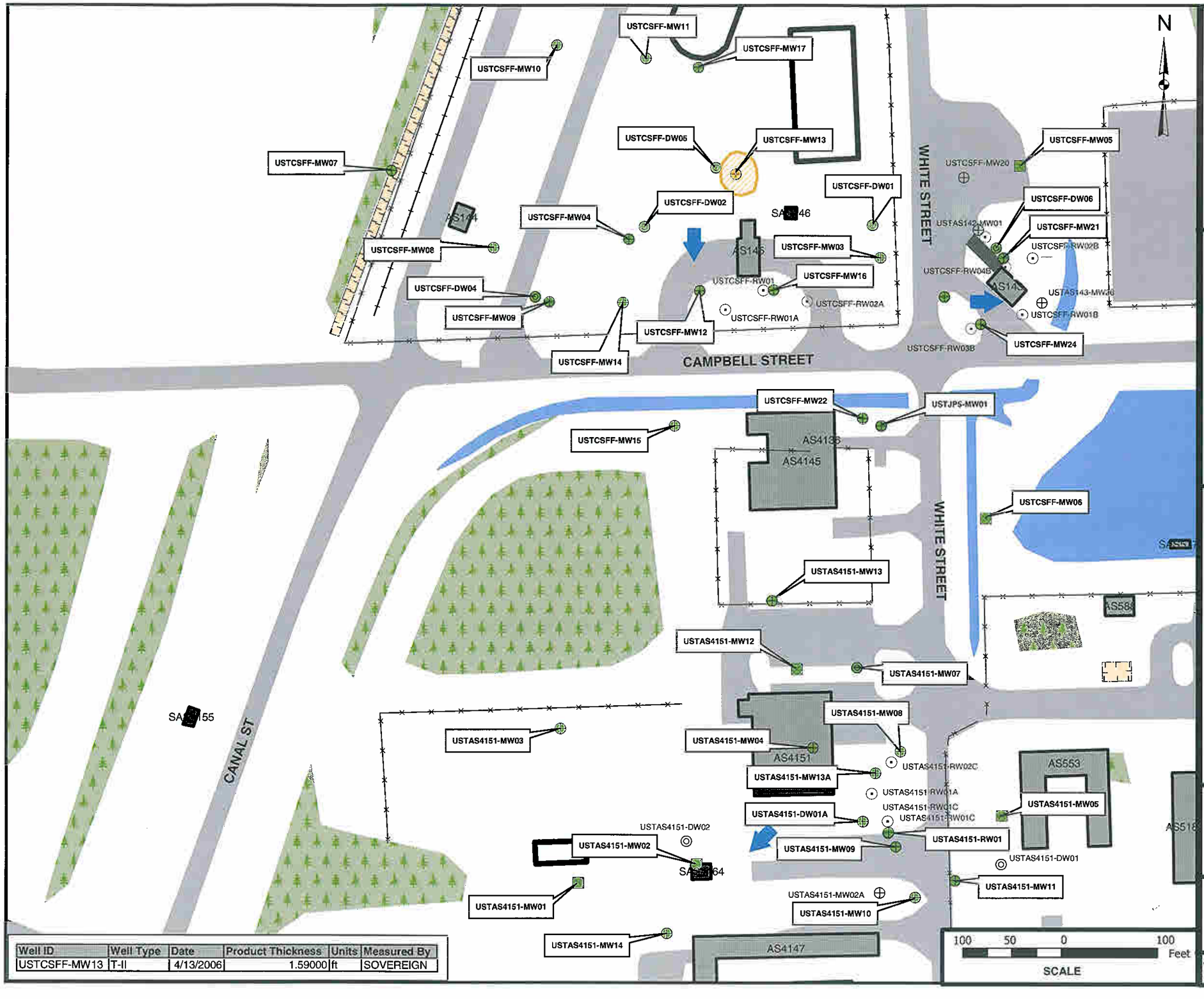
CATLIN ENGINEERS and SCIENTISTS

SITE Campbell Street Fuel Farm
FREE PRODUCT PLUME MAP
FIRST QUARTER 2006

FIGURE 4.1C

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

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LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Free Product
- Free Product Detected
- No Measurable Product
- Free Product Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

Well ID	Well Type	Date	Product Thickness	Units	Measured By
USTCSFF-MW13	T-II	4/13/2006	1.59000	ft	SOVEREIGN

CATLIN ENGINEERS and SCIENTISTS

SITE Campbell Street Fuel Farm
FREE PRODUCT PLUME MAP
SECOND QUARTER 2006

FIGURE **4.1D**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

SECTION 5.0

OF THE

ANNUAL MANAGEMENT REPORT
MCB CAMP LEJEUNE UST MANAGEMENT PROGRAM

MONITORING EVENT:

SECOND SEMESTER 2005/FIRST SEMESTER 2006
(JULY 2005 THROUGH JUNE 2006)

SITE-SPECIFIC MONITORING REPORT
FOR

SITE RAPID REFUELER

NCDENR INCIDENT NO. 5668



5.0 EXECUTIVE SUMMARY
SITE RAPID REFUELER

5.1 Site Information

5.1.1 Site Location: MCAS New River
5.1.2 Incident Number(s): 5668
5.1.3 UTM Coordinates (WGS84) (Meters): 276092.65 Easting, 3843771.97 Northing
5.1.4 Risk Classification: Intermediate
5.1.5 Land Use Classification: Industrial/Commercial
5.1.6 Source Type(s): JP5 fuel pipeline release

5.2 Monitoring Event Information

5.2.1 Sampling Performed By: Shaw and Sovereign
5.2.2 Date(s) of This Monitoring Event: September 2005 (Shaw) and April 2006 (Sovereign)
5.2.3 Date(s) of Previous Monitoring Event: Monthly gauging 1st semester 2005
5.2.4 Reason(s) for This Monitoring Event: Track migration and attenuation of free-phase product and dissolved-phase plume.
5.2.5 Site Monitoring Status at Time of This Event: Semi-annual sampling of select on-site monitoring wells per EPA Method 602 and 625.

5.3 Groundwater Hydraulics

5.3.1 Hydraulic Conductivity: 31 ft/day
5.3.2 Effective Porosity: Unknown
5.3.3 Hydraulic Gradient: Unknown
5.3.4 Average Linear Groundwater Flow Velocity: 1.6 ft/day
5.3.5 Groundwater Flow Direction: Northeast
5.3.6 Range of Measured Water Table Elevations: See Tables 5.1A and 5.1B
5.3.7 Significant Changes from Previously Reported Data: Not Applicable. This is the first Management Report prepared by CATLIN.

5.4 Free Product Plume

5.4.1 Free Product Present?: Yes
5.4.2 Free Product Thickness Measured: See Tables 5.1A and 5.1B
5.4.3 Plume Size and Location: See Figures 5.1A and 5.1B
5.4.4 Free Product Removed from Site This Period: Unknown
5.4.5 Significant Changes from Previously Reported Data: Not Applicable. This is the first Management Report prepared by CATLIN. Gauging data from September 2005 indicated 10 on-site monitoring wells with measurable levels of free product. However, gauging data for these 10 wells was not provided for April 2006. Therefore, free product plume boundaries on Figures 5.1A and 5.1B are identical.

5.5 Dissolved-Phase Plume

5.5.1 Plume Concentrations: See Tables 5.2A through 5.3B

5.5.2 Plume Size and Location: See Figures 5.2A through 5.3B

5.5.3 Significant Changes from Previously Reported Data: Not Applicable. This is the first Management Report prepared by CATLIN.

EPA Method 602

Benzene and 1,2-Dichlorobenzene were detected above the 2L GWQS in several on-site monitoring wells. However, no compounds were detected at concentrations above any of the established GCLs. Also, it should be noted that it is surmised that the samples analyzed in September 2005 and labeled as USTAS522-MW03, USTAS522-MW04, USTAS522-MW08, USTAS522-MW10 andUSTAS522-MW12 were actually collected from monitoring wells USTAS527-MW03, USTAS527-MW04, USTAS527-MW08, USTAS527-MW10 andUSTAS527-MW12.

EPA Method 625

Various EPA Method 625 compounds were detected above the 2L GWQS in several on-site monitoring wells. However, no compounds were detected at concentrations above any of the established GCLs. Also, it should be noted that it is surmised that the samples analyzed in September 2005 and labeled as USTAS522-MW03, USTAS522-MW04, USTAS522-MW08, USTAS522-MW10 andUSTAS522-MW12 were actually collected from monitoring wells USTAS527-MW03, USTAS527-MW04, USTAS527-MW08, USTAS527-MW10 andUSTAS527-MW12.

5.6 Potential Receptors

5.6.1 Contaminated Water Supply Well(s)?: No

5.6.2 Potable Water Supply Well Within 1,000 Feet of Source Area?: No

5.6.3 Any Water Supply Well Within 250 Feet of Source Area?: No

5.6.4 Surface Water Body Within 500 Feet?: No

5.6.5 Past Evidence of Vapors?: No

5.6.6 Significant Changes from Previously Reported Data?: Not Applicable. This is the first Management Report prepared by CATLIN.

5.7 Remediation

5.7.1 Status: Modifications to the remediation system are being evaluated

5.7.2 Type: Free Product Recovery Wells, Free Product Recovery Trenches, AFVR and MMPE

5.7.3 Progress: On-going

5.7.4 Construction Contractor: Shaw

5.7.5 Operating Contractor: Shaw

5.8 Observations and Comments

A Draft RAO & RCAP was submitted by CATLIN in April 2006. Additional remedial system modifications are currently being evaluated.

TABLE 5.1A
SITE Rapid Refueler
FIELD MEASUREMENTS - THIRD QUARTER 2005

Date Measured: 9/23/2005

Well No.	Type	TOC	Stick up	DTW	Product Thickness	DTW BGS	GW Elevation
USTAS497-MW01	T-II	17.76		5.80	0.00		11.96
USTAS497-MW02	T-II	20.25		7.81	0.00		12.44
USTAS497-MW03	T-II	18.13		6.27	0.00		11.86
USTAS497-MW04	T-II	17.84		6.30	0.00		11.54
USTAS497-MW05	T-II	16.69		8.03	2.72		8.66
USTAS497-MW06	T-III	18.13		6.68	0.00		11.45
USTAS511-MW01	T-II	20.74	-1.21	6.75	0.00	7.96	13.99
USTAS511-MW02	T-II	20.96	-0.96	6.83	0.00	7.79	14.13
USTAS511-MW03	T-II	21.53	-1.11	7.55	0.00	8.66	13.98
USTAS511-MW04	T-II	21.74	-1.29	6.52	0.00	7.81	15.22
USTAS511-MW05	T-III	21.01	-0.91	7.41	0.00	8.32	13.60
USTAS511-MW06	T-III	20.83	-1.09	7.32	0.00	8.41	13.51
USTAS511-MW07	T-III	21.43	-1.14	7.85	0.00	8.99	13.58
USTAS511-MW08	T-II	21.57	-1.07	7.06	0.00	8.13	14.51
USTAS527-MW08				8.42	0.00		
USTAS527-MW10				8.32	0.00		
USTAS527-MW12				7.86	0.00		
USTAS527-MW15	T-II	21.61		9.98	1.63		11.63
USTAS527-MW16	T-II	19.94		6.32	0.00		13.62
USTRF-MW01G	RW	17.99		8.15	2.31		9.84
USTRF-MW02	T-II			4.98	0.00		
USTRF-MW02G	RW	17.42		4.02	0.22		13.40
USTRF-MW03	T-II			5.32	0.00		
USTRF-MW03G	RW	17.17		6.56	0.00		10.61
USTRF-MW04G	RW	17.67		3.72	0.00		13.95
USTRF-MW05	T-II			6.89	0.00		
USTRF-MW05G	RW	19.04		6.72	0.04		12.32
USTRF-MW06	T-II			4.17	0.00		
USTRF-MW06G	RW	17.86		6.72	0.00		11.14
USTRF-MW07	T-II			6.57	0.00		
USTRF-MW09	T-II			8.30	0.00		
USTRF-MW10	T-II	22.48		6.50	0.00		15.98

Notes:
1. TII = Type II monitoring well
   TIII = Type III monitoring well
   RW = Recovery well
2. TOC = Top of well casing elevation.
3. STICK UP = Height of well casing above land surface in feet.
4. DTW = Depth to water (in feet) from top of well casing.
5. Product thickness is measured in feet.
6. DTW BGS = Depth to water below ground surface in feet.
7. GW Elevation = Ground water elevation (not adjusted for free product)
8. A zero ("0.00") in the product thickness column indicates no measureable thickness.
9. Top of casing elevations are measured in feet relative to Mean Sea Level (NAD83).
10. Stick up values were not available for wells with no values in the STICK UP and DTW BGS columns.

Date Measured: 9/23/2005

Well No.	Type	TOC	Stick up	DTW	Product Thickness	DTW BGS	GW Elevation
USTRF-MW11	T-II			6.37	0.00		
USTRF-MW12	T-II			4.71	0.73		
USTRF-MW14	T-III			5.98	0.00		
USTRF-MW15	RW			6.41	0.00		
USTRF-MW16	T-II	19.76		8.34	0.13		11.42
USTRF-MW17	T-II	16.50		2.09	0.00		14.41
USTRF-MW18	T-II	20.65		11.01	2.96		9.64
USTRF-MW19	T-II	20.69		12.17	5.67		8.52
USTRF-MW20	T-II	21.31		9.72	1.22		11.59
USTRF-MW21	T-II	20.63		4.10	0.00		16.53
USTRF-MW22	T-II	20.98		7.00	0.00		13.98
USTRF-MW23	T-II	19.31		6.91	0.00		12.40

Notes:
1. TII = Type II monitoring well
   TIII = Type III monitoring well
   RW = Recovery well
2. TOC = Top of well casing elevation.
3. STICK UP = Height of well casing above land surface in feet.
4. DTW = Depth to water (in feet) from top of well casing.
5. Product thickness is measured in feet.
6. DTW BGS = Depth to water below ground surface in feet.
7. GW Elevation = Ground water elevation (not adjusted for free product)
8. A zero ("0.00") in the product thickness column indicates no measureable thickness.
9. Top of casing elevations are measured in feet relative to Mean Sea Level (NAD83).
10. Stick up values were not available for wells with no values in the STICK UP and DTW BGS columns.

TABLE 5.1B
SITE Rapid Refueler
FIELD MEASUREMENTS - SECOND QUARTER 2006

Date Measured: 4/18/2006

Well No.	Type	TOC	Stick up	DTW	Product Thickness	DTW BGS	GW Elevation
USTAS497-MW01	T-II	17.76		5.78	0.00		11.98
USTAS497-MW02	T-II	20.25		7.83	0.00		12.42
USTAS497-MW03	T-II	18.13		6.33	0.00		11.80
USTAS497-MW04	T-II	17.84		6.41	0.00		11.43
USTAS497-MW06	T-III	18.13		6.48	0.00		11.65
USTAS511-MW01	T-II	20.74	-1.21	6.43	0.00	7.64	14.31
USTAS511-MW02	T-II	20.96	-0.96	7.15	0.00	8.11	13.81
USTAS511-MW03	T-II	21.53	-1.11	7.55	0.00	8.66	13.98
USTAS511-MW04	T-II	21.74	-1.29	7.00	0.00	8.29	14.74
USTAS511-MW05	T-III	21.01	-0.91	7.94	0.00	8.85	13.07
USTAS511-MW06	T-III	20.83	-1.09	7.33	0.00	8.42	13.50
USTAS511-MW07	T-III	21.43	-1.14	7.97	0.00	9.11	13.46
USTAS511-MW08	T-II	21.57	-1.07	7.40	0.00	8.47	14.17
USTAS527-MW10				8.72	0.00		
USTAS527-MW12				7.99	0.00		
USTAS527-MW16	T-II	19.94		6.60	0.00		13.34
USTRF-MW02	T-II			4.60	0.00		
USTRF-MW03	T-II			5.00	0.00		
USTRF-MW03G	RW	17.17		6.58	0.00		10.59
USTRF-MW04G	RW	17.67		4.96	0.00		12.71
USTRF-MW05	T-II			7.80	0.00		
USTRF-MW06	T-II			4.25	0.00		
USTRF-MW06G	RW	17.86		6.81	0.00		11.05
USTRF-MW07	T-II			6.70	0.00		
USTRF-MW09	T-II			8.82	0.00		
USTRF-MW10	T-II	22.48		6.51	0.00		15.97
USTRF-MW11	T-II			6.31	0.00		
USTRF-MW14	T-III			5.86	0.00		
USTRF-MW15	RW			6.37	0.00		
USTRF-MW17	T-II	16.50		2.83	0.00		13.67
USTRF-MW21	T-II	20.63		4.48	0.00		16.15
USTRF-MW22	T-II	20.98		7.92	0.00		13.06

Notes:
1. TII = Type II monitoring well
   TIII = Type III monitoring well
   RW = Recovery well
2. TOC = Top of well casing elevation.
3. STICK UP = Height of well casing above land surface in feet.
4. DTW = Depth to water (in feet) from top of well casing.
5. Product thickness is measured in feet.
6. DTW BGS = Depth to water below ground surface in feet.
7. GW Elevation = Ground water elevation (not adjusted for free product)
8. A zero ("0.00") in the product thickness column indicates no measureable thickness.
9. Top of casing elevations are measured in feet relative to Mean Sea Level (NAD83).
10. Stick up values were not available for wells with no values in the STICK UP and DTW BGS columns.

Date Measured: 4/19/2006

Well No.	Type	TOC	Stick up	DTW	Product Thickness	DTW BGS	GW Elevation
USTRF-MW23	T-II	19.31		7.57	0.00		11.74

Notes:
1. TII = Type II monitoring well
   TIII = Type III monitoring well
   RW = Recovery well
2. TOC = Top of well casing elevation.
3. STICK UP = Height of well casing above land surface in feet.
4. DTW = Depth to water (in feet) from top of well casing.
5. Product thickness is measured in feet.
6. DTW BGS = Depth to water below ground surface in feet.
7. GW Elevation = Ground water elevation (not adjusted for free product)
8. A zero ("0.00") in the product thickness column indicates no measureable thickness.
9. Top of casing elevations are measured in feet relative to Mean Sea Level (NAD83).
10. Stick up values were not available for wells with no values in the STICK UP and DTW BGS columns.

TABLE 5.2A

SITE Rapid Refueler

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 602

Contaminant of Concern →		1,2-Dichlorobenzene	1,3-Dichlorobenzene	aaa-Trifluorotoluene	Benzene	Ethylbenzene	Methyl Tert Butyl Ether	Toluene	Xylenes (total)
Well ID	**Date**								
2L GWQS		24	170		1	550	200	1000	530
GCL		72500	61500		5000	550000	200000	257500	87500
USTAS497-MW01	9/27/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS497-MW01	4/18/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS497-MW02	9/27/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS497-MW02	4/18/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS497-MW03	9/27/2005	BQL	BQL	87.00	BQL	BQL	BQL	BQL	BQL
USTAS497-MW03	4/22/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS497-MW04	9/27/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS497-MW04	4/22/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS497-MW06	9/27/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS497-MW06	4/18/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 5.2A

SITE Rapid Refueler

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 602

Contaminant of Concern →		1,2-Dichlorobenzene	1,3-Dichlorobenzene	aaa-Trifluorotoluene	Benzene	Ethylbenzene	Methyl Tert Butyl Ether	Toluene	Xylenes (total)
Well ID	**Date**								
2L GWQS		24	170		1	550	200	1000	530
GCL		72500	61500		5000	550000	200000	257500	87500
USTAS511-MW01	9/29/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS511-MW01	4/19/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS511-MW02	9/29/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS511-MW02	4/19/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS511-MW03	9/27/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS511-MW03	4/17/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS511-MW04	9/27/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS511-MW04	4/22/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS511-MW05	9/29/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS511-MW05	4/17/2006	BQL	BQL	BQL	0.69	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 5.2A

SITE Rapid Refueler

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 602

Contaminant of Concern →		1,2-Dichlorobenzene	1,3-Dichlorobenzene	aaa-Trifluorotoluene	Benzene	Ethylbenzene	Methyl Tert Butyl Ether	Toluene	Xylenes (total)
Well ID	**Date**								
2L GWQS		24	170		1	550	200	1000	530
GCL		72500	61500		5000	550000	200000	257500	87500
USTAS511-MW06	9/29/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS511-MW06	4/17/2006	BQL	BQL	BQL	0.71	BQL	BQL	BQL	BQL
USTAS511-MW07	9/27/2005	0.54	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS511-MW07	4/17/2006	BQL	BQL	BQL	0.75	0.99	BQL	3.00	5.30
USTAS511-MW08	9/27/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS511-MW08	4/22/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS522-MW03	9/29/2005	BQL	BQL	BQL	BQL	BQL	BQL	1.10	BQL
USTAS522-MW04	9/29/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS522-MW08	9/27/2005	40.00	BQL	BQL	13.80	59.40	BQL	42.10	262.00
USTAS522-MW10	9/29/2005	BQL	BQL	BQL	BQL	3.70	BQL	BQL	3.10
USTAS522-MW12	9/27/2005	BQL	BQL	BQL	2.40	6.90	1.10	BQL	7.10

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 5.2A

SITE Rapid Refueler

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 602

Contaminant of Concern →		1,2-Dichlorobenzene	1,3-Dichlorobenzene	aaa-Trifluorotoluene	Benzene	Ethylbenzene	Methyl Tert Butyl Ether	Toluene	Xylenes (total)
Well ID	**Date**								
2L GWQS		24	170		1	550	200	1000	530
GCL		72500	61500		5000	550000	200000	257500	87500
USTAS527-DW02	9/29/2005	BQL	BQL	BQL	7.00	61.20	BQL	0.75	41.20
USTAS527-DW06	9/27/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS527-MW02	4/17/2006	BQL	BQL	BQL	4.20	40.20	BQL	BQL	10.30
USTAS527-MW03	4/17/2006	BQL	BQL	BQL	BQL	BQL	BQL	0.54	BQL
USTAS527-MW04	4/17/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS527-MW06	4/22/2006	BQL	BQL	BQL	0.64	BQL	BQL	BQL	BQL
USTAS527-MW10	4/19/2006	BQL	BQL	BQL	BQL	6.70	BQL	1.10	5.50
USTAS527-MW12	4/22/2006	BQL	BQL	BQL	3.30	15.70	1.40	BQL	10.10
USTRF-MW02	9/27/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTRF-MW02	4/22/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 5.2A

SITE Rapid Refueler

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 602

Contaminant of Concern →		1,2-Dichlorobenzene	1,3-Dichlorobenzene	aaa-Trifluorotoluene	Benzene	Ethylbenzene	Methyl Tert Butyl Ether	Toluene	Xylenes (total)
Well ID	**Date**								
2L GWQS		24	170		1	550	200	1000	530
GCL		72500	61500		5000	550000	200000	257500	87500
USTRF-MW03	9/27/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTRF-MW03	4/22/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTRF-MW03G	9/28/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTRF-MW03G	4/18/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTRF-MW04G	9/29/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTRF-MW04G	4/18/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTRF-MW05	9/27/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTRF-MW05	4/22/2006	BQL	BQL	BQL	BQL	2.40	BQL	BQL	BQL
USTRF-MW06	9/28/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTRF-MW06	4/19/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 5.2A

SITE Rapid Refueler

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 602

Contaminant of Concern →		1,2-Dichlorobenzene	1,3-Dichlorobenzene	aaa-Trifluorotoluene	Benzene	Ethylbenzene	Methyl Tert Butyl Ether	Toluene	Xylenes (total)
Well ID	**Date**								
2L GWQS		24	170		1	550	200	1000	530
GCL		72500	61500		5000	550000	200000	257500	87500
USTRF-MW06G	9/29/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTRF-MW06G	4/18/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTRF-MW07	9/28/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTRF-MW07	4/19/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTRF-MW09	9/28/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTRF-MW09	4/19/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTRF-MW10	9/28/2005	BQL	BQL	BQL	18.80	78.10	BQL	0.86	16.30
USTRF-MW10	4/22/2006	BQL	BQL	BQL	8.80	62.30	BQL	0.59	22.60
USTRF-MW11	9/27/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTRF-MW11	4/18/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 5.2A

SITE Rapid Refueler

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 602

Contaminant of Concern →		1,2-Dichlorobenzene	1,3-Dichlorobenzene	aaa-Trifluorotoluene	Benzene	Ethylbenzene	Methyl Tert Butyl Ether	Toluene	Xylenes (total)
Well ID	**Date**								
2L GWQS		24	170		1	550	200	1000	530
GCL		72500	61500		5000	550000	200000	257500	87500
USTRF-MW14	9/27/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTRF-MW14	4/17/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTRF-MW15	9/27/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTRF-MW15	4/17/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTRF-MW17	9/27/2005	BQL	BQL	BQL	3.70	29.40	4.10	BQL	5.30
USTRF-MW17	4/22/2006	BQL	BQL	BQL	5.10	28.40	16.50	BQL	2.40
USTRF-MW21	9/28/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTRF-MW21	4/19/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTRF-MW22	9/29/2005	BQL	10.00	BQL	3.40	16.40	BQL	BQL	28.50
USTRF-MW22	4/22/2006	BQL	BQL	BQL	0.66	6.50	BQL	BQL	4.60

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 5.2A

SITE Rapid Refueler

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 602

Contaminant of Concern →		1,2-Dichlorobenzene	1,3-Dichlorobenzene	aaa-Trifluorotoluene	Benzene	Ethylbenzene	Methyl Tert Butyl Ether	Toluene	Xylenes (total)
Well ID	**Date**								
2L GWQS		24	170		1	550	200	1000	530
GCL		72500	61500		5000	550000	200000	257500	87500
USTRF-MW23	9/28/2005	BQL	BQL	BQL	BQL	10.70	BQL	BQL	2.00
USTRF-MW23	4/19/2006	BQL	BQL	BQL	BQL	8.20	BQL	BQL	4.40

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 5.2B

SITE Rapid Refueler

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 602

Contaminant of Concern →		1,2-Dichlorobenzene	1,3-Dichlorobenzene	aaa-Trifluorotoluene	Benzene	Ethylbenzene	Methyl Tert Butyl Ether	Toluene	Xylenes (total)
Well ID	Date								
2L GWQS		24	170		1	550	200	1000	530
GCL		72500	61500		5000	550000	200000	257500	87500
USTAS497-MW01	9/27/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS497-MW01	4/18/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS497-MW02	9/27/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS497-MW02	4/18/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS497-MW03	9/27/2005	BQL	BQL	87.00	BQL	BQL	BQL	BQL	BQL
USTAS497-MW03	4/22/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS497-MW04	9/27/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS497-MW04	4/22/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS497-MW06	9/27/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS497-MW06	4/18/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 5.2B

SITE Rapid Refueler

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 602

Contaminant of Concern →		1,2-Dichlorobenzene	1,3-Dichlorobenzene	aaa-Trifluorotoluene	Benzene	Ethylbenzene	Methyl Tert Butyl Ether	Toluene	Xylenes (total)
Well ID	**Date**								
2L GWQS		24	170		1	550	200	1000	530
GCL		72500	61500		5000	550000	200000	257500	87500
USTAS511-MW01	9/29/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS511-MW01	4/19/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS511-MW02	9/29/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS511-MW02	4/19/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS511-MW03	9/27/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS511-MW03	4/17/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS511-MW04	9/27/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS511-MW04	4/22/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS511-MW05	9/29/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS511-MW05	4/17/2006	BQL	BQL	BQL	0.69	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 5.2B

SITE Rapid Refueler

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 602

Contaminant of Concern →		1,2-Dichlorobenzene	1,3-Dichlorobenzene	aaa-Trifluorotoluene	Benzene	Ethylbenzene	Methyl Tert Butyl Ether	Toluene	Xylenes (total)
Well ID	**Date**								
2L GWQS		24	170		1	550	200	1000	530
GCL		72500	61500		5000	550000	200000	257500	87500
USTAS511-MW06	9/29/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS511-MW06	4/17/2006	BQL	BQL	BQL	0.71	BQL	BQL	BQL	BQL
USTAS511-MW07	9/27/2005	0.54	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS511-MW07	4/17/2006	BQL	BQL	BQL	0.75	0.99	BQL	3.00	5.30
USTAS511-MW08	9/27/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS511-MW08	4/22/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS522-MW03	9/29/2005	BQL	BQL	BQL	BQL	BQL	BQL	1.10	BQL
USTAS522-MW04	9/29/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS522-MW08	9/27/2005	**40.00**	BQL	BQL	**13.80**	59.40	BQL	42.10	262.00
USTAS522-MW10	9/29/2005	BQL	BQL	BQL	BQL	3.70	BQL	BQL	3.10
USTAS522-MW12	9/27/2005	BQL	BQL	BQL	**2.40**	6.90	1.10	BQL	7.10

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 5.2B

SITE Rapid Refueler

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 602

Contaminant of Concern →		1,2-Dichlorobenzene	1,3-Dichlorobenzene	aaa-Trifluorotoluene	Benzene	Ethylbenzene	Methyl Tert Butyl Ether	Toluene	Xylenes (total)
Well ID	**Date**								
2L GWQS		24	170		1	550	200	1000	530
GCL		72500	61500		5000	550000	200000	257500	87500
USTAS527-DW02	9/29/2005	BQL	BQL	BQL	**7.00**	61.20	BQL	0.75	41.20
USTAS527-DW06	9/27/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS527-MW02	4/17/2006	BQL	BQL	BQL	**4.20**	40.20	BQL	BQL	10.30
USTAS527-MW03	4/17/2006	BQL	BQL	BQL	BQL	BQL	BQL	0.54	BQL
USTAS527-MW04	4/17/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS527-MW06	4/22/2006	BQL	BQL	BQL	0.64	BQL	BQL	BQL	BQL
USTAS527-MW10	4/19/2006	BQL	BQL	BQL	BQL	6.70	BQL	1.10	5.50
USTAS527-MW12	4/22/2006	BQL	BQL	BQL	**3.30**	15.70	1.40	BQL	10.10
USTRF-MW02	9/27/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTRF-MW02	4/22/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 5.2B

SITE Rapid Refueler

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 602

Contaminant of Concern →		1,2-Dichlorobenzene	1,3-Dichlorobenzene	aaa-Trifluorotoluene	Benzene	Ethylbenzene	Methyl Tert Butyl Ether	Toluene	Xylenes (total)
Well ID	**Date**								
2L GWQS		24	170		1	550	200	1000	530
GCL		72500	61500		5000	550000	200000	257500	87500
USTRF-MW03	9/27/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTRF-MW03	4/22/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTRF-MW03G	9/28/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTRF-MW03G	4/18/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTRF-MW04G	9/29/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTRF-MW04G	4/18/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTRF-MW05	9/27/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTRF-MW05	4/22/2006	BQL	BQL	BQL	BQL	2.40	BQL	BQL	BQL
USTRF-MW06	9/28/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTRF-MW06	4/19/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 5.2B

SITE Rapid Refueler

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 602

Contaminant of Concern →		1,2-Dichlorobenzene	1,3-Dichlorobenzene	aaa-Trifluorotoluene	Benzene	Ethylbenzene	Methyl Tert Butyl Ether	Toluene	Xylenes (total)
Well ID	**Date**								
2L GWQS		24	170		1	550	200	1000	530
GCL		72500	61500		5000	550000	200000	257500	87500
USTRF-MW06G	9/29/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTRF-MW06G	4/18/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTRF-MW07	9/28/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTRF-MW07	4/19/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTRF-MW09	9/28/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTRF-MW09	4/19/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTRF-MW10	9/28/2005	BQL	BQL	BQL	16.80	78.10	BQL	0.86	16.30
USTRF-MW10	4/22/2006	BQL	BQL	BQL	6.80	62.30	BQL	0.59	22.60
USTRF-MW11	9/27/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTRF-MW11	4/18/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 5.2B

SITE Rapid Refueler

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 602

Contaminant of Concern →		1,2-Dichlorobenzene	1,3-Dichlorobenzene	aaa-Trifluorotoluene	Benzene	Ethylbenzene	Methyl Tert Butyl Ether	Toluene	Xylenes (total)
Well ID	**Date**								
2L GWQS		24	170		1	550	200	1000	530
GCL		72500	61500		5000	550000	200000	257500	87500
USTRF-MW14	9/27/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTRF-MW14	4/17/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTRF-MW15	9/27/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTRF-MW15	4/17/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTRF-MW17	9/27/2005	BQL	BQL	BQL	3.70	29.40	4.10	BQL	5.30
USTRF-MW17	4/22/2006	BQL	BQL	BQL	5.10	28.40	16.50	BQL	2.40
USTRF-MW21	9/28/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTRF-MW21	4/19/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTRF-MW22	9/29/2005	BQL	10.00	BQL	3.40	16.40	BQL	BQL	28.50
USTRF-MW22	4/22/2006	BQL	BQL	BQL	0.66	6.50	BQL	BQL	4.60

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 5.2B

SITE Rapid Refueler

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 602

Contaminant of Concern →		1,2-Dichlorobenzene	1,3-Dichlorobenzene	aaa-Trifluorotoluene	Benzene	Ethylbenzene	Methyl Tert Butyl Ether	Toluene	Xylenes (total)
Well ID	**Date**								
2L GWQS		24	170		1	550	200	1000	530
GCL		72500	61500		5000	550000	200000	257500	87500
USTRF-MW23	9/28/2005	BQL	BQL	BQL	BQL	10.70	BQL	BQL	2.00
USTRF-MW23	4/19/2006	BQL	BQL	BQL	BQL	8.20	BQL	BQL	4.40

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 5.3A

SITE Rapid Refueler

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 625

Contaminant of Concern →		2,4-Dimethylphenol	2,6-Dinitrotoluene	2-Methylnaphthalene	3&4-Methylphenol	bis(2-Ethylhexyl)phthalate	Dibenzofuran	Diethyl phthalate	Naphthalene
Well ID	**Date**								
2L GWQS		140	0	14		3	28	5000	21
GCL		140000	0	12500		0	28000	0	15500
USTAS497-MW01	9/27/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS497-MW01	4/18/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS497-MW02	9/27/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS497-MW02	4/18/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS497-MW03	9/27/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS497-MW03	4/22/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS497-MW04	9/27/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS497-MW04	4/22/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS497-MW06	9/27/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS497-MW06	4/18/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 5.3A

SITE Rapid Refueler

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 625

Contaminant of Concern →		2,4-Dimethylphenol	2,6-Dinitrotoluene	2-Methylnaphthalene	3&4-Methylphenol	bis(2-Ethylhexyl)phthalate	Dibenzofuran	Diethyl phthalate	Naphthalene
Well ID	**Date**								
2L GWQS		140	0	14		3	28	5000	21
GCL		140000	0	12500		0	28000	0	15500
USTAS511-MW01	9/29/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS511-MW01	4/19/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS511-MW02	9/29/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS511-MW02	4/19/2006	BQL	BQL	BQL	BQL	5.80	BQL	BQL	BQL
USTAS511-MW03	9/27/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS511-MW03	4/17/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS511-MW04	9/27/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS511-MW04	4/22/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS511-MW05	9/29/2005	BQL	BQL	BQL	BQL	14.10	BQL	BQL	BQL
USTAS511-MW05	4/17/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 5.3A

SITE Rapid Refueler

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 625

Contaminant of Concern →		2,4-Dimethylphenol	2,6-Dinitrotoluene	2-Methylnaphthalene	3&4-Methylphenol	bis(2-Ethylhexyl)phthalate	Dibenzofuran	Diethyl phthalate	Naphthalene
Well ID	**Date**								
2L GWQS		140	0	14		3	28	5000	21
GCL		140000	0	12500		0	28000	0	15500
USTAS511-MW06	9/29/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS511-MW06	4/17/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS511-MW07	9/27/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS511-MW07	4/17/2006	BQL	BQL	BQL	BQL	8.80	BQL	BQL	BQL
USTAS511-MW08	9/27/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS511-MW08	4/22/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS522-MW03	9/29/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS522-MW04	9/29/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	1.00
USTAS522-MW08	9/27/2005	2.70	BQL	95.20	BQL	BQL	BQL	BQL	236.00
USTAS522-MW10	9/29/2005	BQL	3.40	13.30	4.30	BQL	BQL	BQL	20.80
USTAS522-MW12	9/27/2005	BQL	BQL	65.60	BQL	BQL	BQL	BQL	116.00

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 5.3A

SITE Rapid Refueler

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 625

Contaminant of Concern →		2,4-Dimethylphenol	2,6-Dinitrotoluene	2-Methylnaphthalene	3&4-Methylphenol	bis(2-Ethylhexyl)phthalate	Dibenzofuran	Diethyl phthalate	Naphthalene
Well ID	**Date**								
2L GWQS		140	0	14		3	28	5000	21
GCL		140000	0	12500		0	28000	0	15500
USTAS527-DW02	9/29/2005	BQL	BQL	**69.50**	BQL	BQL	BQL	BQL	**203.00**
USTAS527-DW06	9/27/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS527-MW02	4/17/2006	BQL	BQL	**45.90**	BQL	**32.20**	BQL	BQL	**105.00**
USTAS527-MW03	4/17/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS527-MW04	4/17/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS527-MW06	4/22/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS527-MW10	4/19/2006	BQL	BQL	**15.10**	BQL	2.80	BQL	BQL	**36.50**
USTAS527-MW12	4/22/2006	BQL	BQL	**93.30**	BQL	BQL	BQL	BQL	**169.00**
USTRF-MW02	9/27/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTRF-MW02	4/22/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 5.3A

SITE Rapid Refueler

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 625

Contaminant of Concern →		2,4-Dimethylphenol	2,6-Dinitrotoluene	2-Methylnaphthalene	3&4-Methylphenol	bis(2-Ethylhexyl)phthalate	Dibenzofuran	Diethyl phthalate	Naphthalene
Well ID	**Date**								
2L GWQS		140	0	14		3	28	5000	21
GCL		140000	0	12500		0	28000	0	15500
USTRF-MW03	9/27/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTRF-MW03	4/22/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTRF-MW03G	9/28/2005	BQL	BQL	BQL	BQL	103.00	BQL	2.10	BQL
USTRF-MW03G	4/18/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTRF-MW04G	9/29/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTRF-MW04G	4/18/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTRF-MW05	9/27/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	1.00
USTRF-MW05	4/22/2006	BQL	BQL	BQL	BQL	7.70	BQL	BQL	BQL
USTRF-MW06	9/28/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTRF-MW06	4/19/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 5.3A

SITE Rapid Refueler

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 625

Contaminant of Concern →		2,4-Dimethylphenol	2,6-Dinitrotoluene	2-Methylnaphthalene	3&4-Methylphenol	bis(2-Ethylhexyl)phthalate	Dibenzofuran	Diethyl phthalate	Naphthalene
Well ID	**Date**								
2L GWQS		140	0	14		3	28	5000	21
GCL		140000	0	12500		0	28000	0	15500
USTRF-MW06G	9/29/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	2.70
USTRF-MW06G	4/18/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTRF-MW07	9/28/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTRF-MW07	4/19/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTRF-MW09	9/28/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	1.40
USTRF-MW09	4/19/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTRF-MW10	9/28/2005	8.20	BQL	108.00	BQL	BQL	2.00	BQL	BQL
USTRF-MW10	4/22/2006	BQL	BQL	88.30	BQL	4.00	1.90	BQL	190.00
USTRF-MW11	9/27/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTRF-MW11	4/18/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 5.3A

SITE Rapid Refueler

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 625

Contaminant of Concern →		2,4-Dimethylphenol	2,6-Dinitrotoluene	2-Methylnaphthalene	3&4-Methylphenol	bis(2-Ethylhexyl)phthalate	Dibenzofuran	Diethyl phthalate	Naphthalene
Well ID	**Date**								
2L GWQS		140	0	14		3	28	5000	21
GCL		140000	0	12500		0	28000	0	15500
USTRF-MW14	9/27/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTRF-MW14	4/17/2006	BQL	BQL	BQL	BQL	13.70	BQL	BQL	BQL
USTRF-MW15	9/27/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTRF-MW15	4/17/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTRF-MW17	9/27/2005	11.40	BQL	23.00	BQL	19.90	BQL	BQL	52.80
USTRF-MW17	4/22/2006	11.00	BQL	25.70	BQL	489.00	BQL	BQL	41.20
USTRF-MW21	9/28/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTRF-MW21	4/19/2006	BQL	BQL	BQL	BQL	3.40	BQL	BQL	BQL
USTRF-MW22	9/29/2005	2.40	BQL	33.50	3.30	BQL	1.10	BQL	47.90
USTRF-MW22	4/22/2006	BQL	BQL	24.60	BQL	3.20	BQL	BQL	31.00

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 5.3A

SITE Rapid Refueler

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 625

Contaminant of Concern →		2,4-Dimethylphenol	2,6-Dinitrotoluene	2-Methylnaphthalene	3&4-Methylphenol	bis(2-Ethylhexyl)phthalate	Dibenzofuran	Diethyl phthalate	Naphthalene
Well ID	**Date**								
2L GWQS		140	0	14		3	28	5000	21
GCL		140000	0	12500		0	28000	0	15500
USTRF-MW23	9/28/2005	BQL	BQL	**41.80**	BQL	BQL	1.40	BQL	**66.60**
USTRF-MW23	4/19/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 5.3B

SITE Rapid Refueler

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 625

Contaminant of Concern →		2,4-Dimethylphenol	2,6-Dinitrotoluene	2-Methylnaphthalene	3&4-Methylphenol	bis(2-Ethylhexyl)phthalate	Dibenzofuran	Diethyl phthalate	Naphthalene
Well ID	**Date**								
2L GWQS		140	0	14		3	28	5000	21
GCL		140000	0	12500		0	28000	0	15500
USTAS497-MW01	9/27/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS497-MW01	4/18/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS497-MW02	9/27/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS497-MW02	4/18/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS497-MW03	9/27/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS497-MW03	4/22/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS497-MW04	9/27/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS497-MW04	4/22/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS497-MW06	9/27/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS497-MW06	4/18/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 5.3B

SITE Rapid Refueler

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 625

Contaminant of Concern →		2,4-Dimethylphenol	2,6-Dinitrotoluene	2-Methylnaphthalene	3&4-Methylphenol	bis(2-Ethylhexyl)phthalate	Dibenzofuran	Diethyl phthalate	Naphthalene
Well ID	**Date**								
2L GWQS		140	0	14		3	28	5000	21
GCL		140000	0	12500		0	28000	0	15500
USTAS511-MW01	9/29/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS511-MW01	4/19/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS511-MW02	9/29/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS511-MW02	4/19/2006	BQL	BQL	BQL	BQL	**5.80**	BQL	BQL	BQL
USTAS511-MW03	9/27/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS511-MW03	4/17/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS511-MW04	9/27/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS511-MW04	4/22/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS511-MW05	9/29/2005	BQL	BQL	BQL	BQL	**14.10**	BQL	BQL	BQL
USTAS511-MW05	4/17/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 5.3B

SITE Rapid Refueler

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 625

Contaminant of Concern →		2,4-Dimethylphenol	2,6-Dinitrotoluene	2-Methylnaphthalene	3&4-Methylphenol	bis(2-Ethylhexyl)phthalate	Dibenzofuran	Diethyl phthalate	Naphthalene
Well ID	**Date**								
2L GWQS		140	0	14		3	28	5000	21
GCL		140000	0	12500		0	28000	0	15500
USTAS511-MW06	9/29/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS511-MW06	4/17/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS511-MW07	9/27/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS511-MW07	4/17/2006	BQL	BQL	BQL	BQL	**8.80**	BQL	BQL	BQL
USTAS511-MW08	9/27/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS511-MW08	4/22/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS522-MW03	9/29/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS522-MW04	9/29/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	1.00
USTAS522-MW08	9/27/2005	2.70	BQL	**95.20**	BQL	BQL	BQL	BQL	**236.00**
USTAS522-MW10	9/29/2005	BQL	**3.40**	13.30	4.30	BQL	BQL	BQL	20.80
USTAS522-MW12	9/27/2005	BQL	BQL	**65.60**	BQL	BQL	BQL	BQL	**116.00**

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 5.3B

SITE Rapid Refueler

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 625

Contaminant of Concern →		2,4-Dimethylphenol	2,6-Dinitrotoluene	2-Methylnaphthalene	3&4-Methylphenol	bis(2-Ethylhexyl)phthalate	Dibenzofuran	Diethyl phthalate	Naphthalene
Well ID	**Date**								
2L GWQS		140	0	14		3	28	5000	21
GCL		140000	0	12500		0	28000	0	15500
USTAS527-DW02	9/29/2005	BQL	BQL	**69.50**	BQL	BQL	BQL	BQL	**203.00**
USTAS527-DW06	9/27/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS527-MW02	4/17/2006	BQL	BQL	**45.90**	BQL	**32.20**	BQL	BQL	**105.00**
USTAS527-MW03	4/17/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS527-MW04	4/17/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS527-MW06	4/22/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTAS527-MW10	4/19/2006	BQL	BQL	**15.10**	BQL	2.80	BQL	BQL	**36.50**
USTAS527-MW12	4/22/2006	BQL	BQL	**93.30**	BQL	BQL	BQL	BQL	**169.00**
USTRF-MW02	9/27/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTRF-MW02	4/22/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 5.3B

SITE Rapid Refueler

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 625

Contaminant of Concern →		2,4-Dimethylphenol	2,6-Dinitrotoluene	2-Methylnaphthalene	3&4-Methylphenol	bis(2-Ethylhexyl)phthalate	Dibenzofuran	Diethyl phthalate	Naphthalene
Well ID	**Date**								
2L GWQS		140	0	14		3	28	5000	21
GCL		140000	0	12500		0	28000	0	15500
USTRF-MW03	9/27/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTRF-MW03	4/22/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTRF-MW03G	9/28/2005	BQL	BQL	BQL	BQL	103.00	BQL	2.10	BQL
USTRF-MW03G	4/18/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTRF-MW04G	9/29/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTRF-MW04G	4/18/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTRF-MW05	9/27/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	1.00
USTRF-MW05	4/22/2006	BQL	BQL	BQL	BQL	7.70	BQL	BQL	BQL
USTRF-MW06	9/28/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTRF-MW06	4/19/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 5.3B

SITE Rapid Refueler

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 625

Contaminant of Concern →		2,4-Dimethylphenol	2,6-Dinitrotoluene	2-Methylnaphthalene	3&4-Methylphenol	bis(2-Ethylhexyl)phthalate	Dibenzofuran	Diethyl phthalate	Naphthalene
Well ID	**Date**								
2L GWQS		140	0	14		3	28	5000	21
GCL		140000	0	12500		0	28000	0	15500
USTRF-MW06G	9/29/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	2.70
USTRF-MW06G	4/18/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTRF-MW07	9/28/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTRF-MW07	4/19/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTRF-MW09	9/28/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	1.40
USTRF-MW09	4/19/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTRF-MW10	9/28/2005	8.20	BQL	108.00	BQL	BQL	2.00	BQL	BQL
USTRF-MW10	4/22/2006	BQL	BQL	88.30	BQL	4.00	1.90	BQL	190.00
USTRF-MW11	9/27/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTRF-MW11	4/18/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 5.3B

SITE Rapid Refueler

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 625

Contaminant of Concern →		2,4-Dimethylphenol	2,6-Dinitrotoluene	2-Methylnaphthalene	3&4-Methylphenol	bis(2-Ethylhexyl)phthalate	Dibenzofuran	Diethyl phthalate	Naphthalene
Well ID	**Date**								
2L GWQS		140	0	14		3	28	5000	21
GCL		140000	0	12500		0	28000	0	15500
USTRF-MW14	9/27/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTRF-MW14	4/17/2006	BQL	BQL	BQL	BQL	**13.70**	BQL	BQL	BQL
USTRF-MW15	9/27/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTRF-MW15	4/17/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTRF-MW17	9/27/2005	11.40	BQL	**23.00**	BQL	**19.90**	BQL	BQL	**52.80**
USTRF-MW17	4/22/2006	11.00	BQL	**25.70**	BQL	**489.00**	BQL	BQL	**41.20**
USTRF-MW21	9/28/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTRF-MW21	4/19/2006	BQL	BQL	BQL	BQL	**3.40**	BQL	BQL	BQL
USTRF-MW22	9/29/2005	2.40	BQL	**33.50**	3.30	BQL	1.10	BQL	**47.90**
USTRF-MW22	4/22/2006	BQL	BQL	**24.60**	BQL	**3.20**	BQL	BQL	**31.00**

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 5.3B

SITE Rapid Refueler

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 625

Contaminant of Concern →		2,4-Dimethylphenol	2,6-Dinitrotoluene	2-Methylnaphthalene	3&4-Methylphenol	bis(2-Ethylhexyl)phthalate	Dibenzofuran	Diethyl phthalate	Naphthalene
Well ID	**Date**								
2L GWQS		140	0	14		3	28	5000	21
GCL		140000	0	12500		0	28000	0	15500
USTRF-MW23	9/28/2005	BQL	BQL	**41.80**	BQL	BQL	1.40	BQL	**66.60**
USTRF-MW23	4/19/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
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8. Only compounds which were detected are shown on table. All other compounds were BQL

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM

N

USTRF-MW06
USTRF-MW07
USTRF-MW03G
USTRF-MW10
USTRF-MW05
USTRF-MW04
USTRF-MW16
USTRF-MW02G
USTRF-MW09
USTRF-MW01G
USTRF-MW04G
USTRF-MW06G
USTRF-MW11
USTRF-MW18
USTRF-MW14
USTRF-MW05G
USTRF-MW15
USTRF-MW13
USTRF-MW23
USTAS497-MW04
USTRF-MW20
USTRF-MW03
USTAS527-MW10
USTAS511-MW05
USTRF-MW19
USTAS497-MW05
USTRF-MW22
USTAS497-MW03
USTRF-MW12
USTAS527-MW03
USTAS527-MW11
USTAS527-MW12
USTAS497-MW06
USTAS527-MW04
USTRF-MW21
USTRF-MW17
USTRF-MW02
USTAS527-MW15
USTAS511-MW02
USTAS497-MW02
USTAS497-MW01
USTAS527-DW02
USTAS511-MW01
USTAS527-MW08
USTAS527-MW16
USTAS511-MW06
USTAS527-DW05
USTAS511-MW03
USTRF-MW01
USTAS511-MW07
USTAS527-MW13
USTAS511-MW08
USTAS527-DW06
USTAS527-MW14
USTAS527-MW09
USTAS511-MW04

Well ID	Well Type	Date	Product Thickness	Units	Measured By
USTAS497-MW05	T-II	9/23/2005	2.72000	ft	SHAW
USTAS527-MW15	T-II	9/23/2005	1.63000	ft	SHAW
USTRF-MW01G	RW	9/23/2005	2.31000	ft	SHAW
USTRF-MW02G	RW	9/23/2005	0.22000	ft	SHAW
USTRF-MW05G	RW	9/23/2005	0.04000	ft	SHAW
USTRF-MW12	T-II	9/23/2005	0.73000	ft	SHAW
USTRF-MW16	T-II	9/23/2005	0.13000	ft	SHAW
USTRF-MW18	T-II	9/23/2005	2.96000	ft	SHAW
USTRF-MW19	T-II	9/23/2005	5.67000	ft	SHAW
USTRF-MW20	T-II	9/23/2005	1.22000	ft	SHAW

200 100 0 200 Feet
SCALE

LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Free Product
- Free Product Detected
- No Measurable Thickness
- Free Product Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

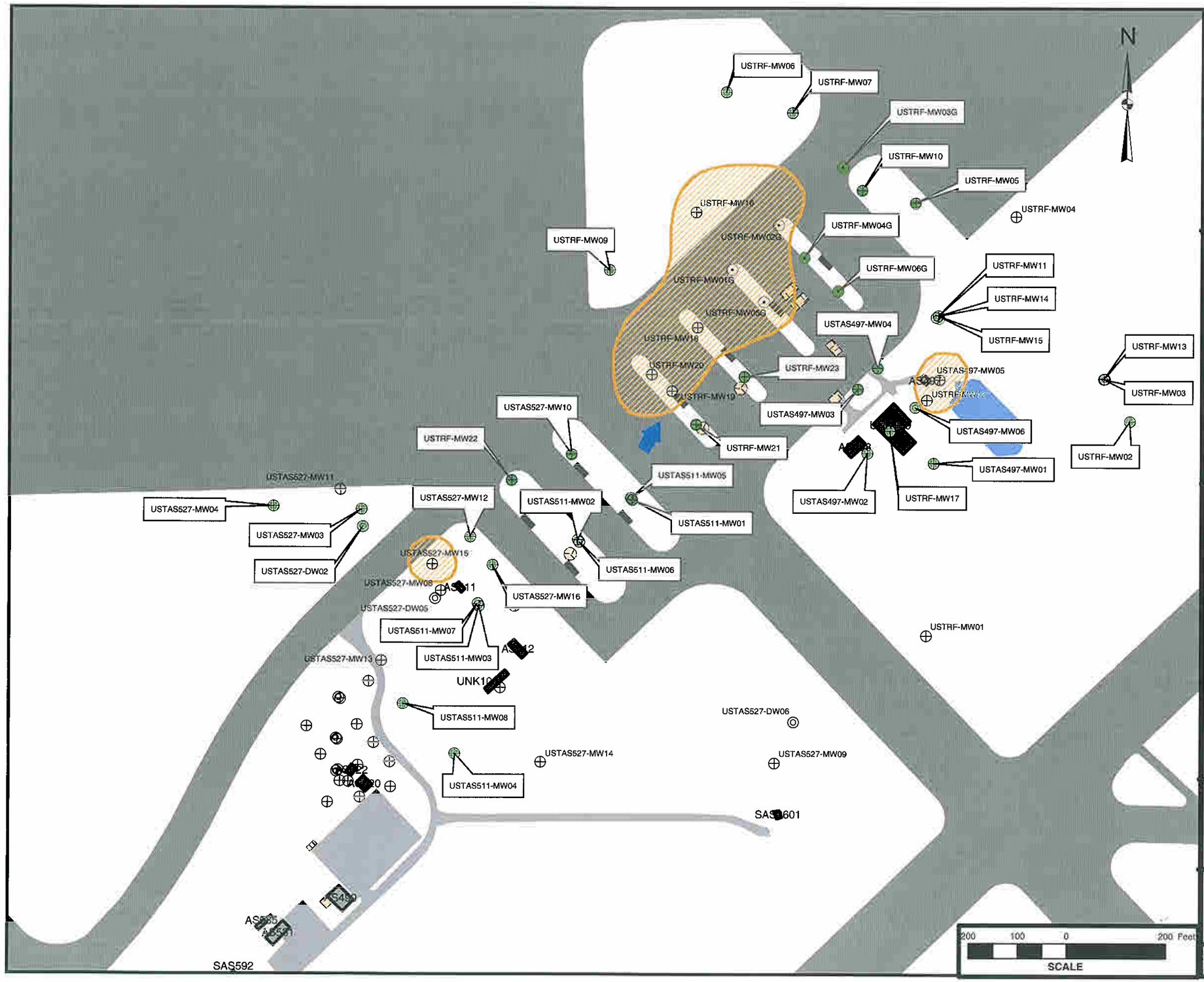
CATLIN ENGINEERS and SCIENTISTS

SITE Rapid Refueler
FREE PRODUCT PLUME MAP
THIRD QUARTER 2005

FIGURE
5.1A

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM



LEGEND

Monitoring Wells
- Type I
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- Water Supply Wells
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- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. The Free Product Plume geometry is based on data collected on September 23, 2005.

200 100 0 200 Feet
SCALE

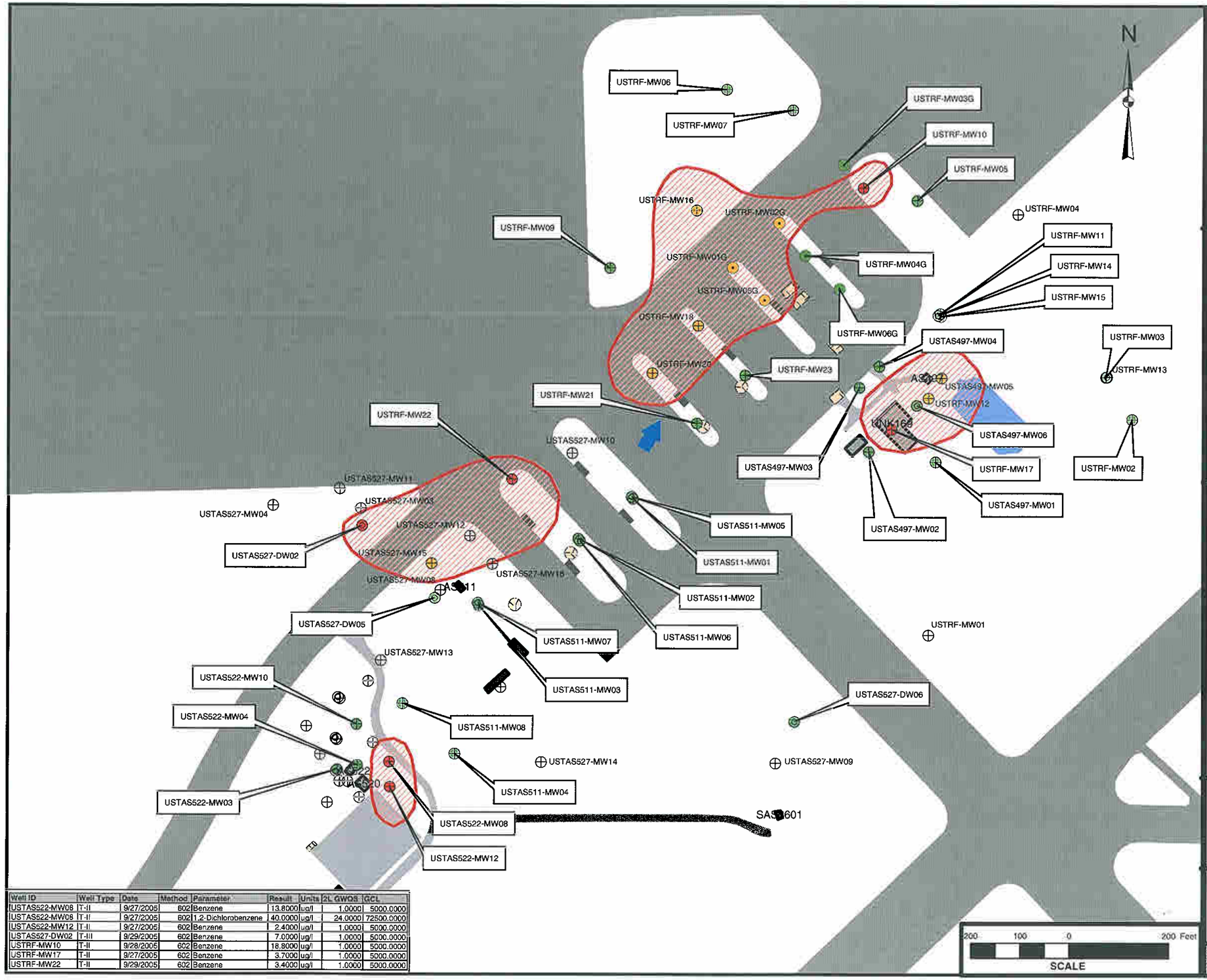
CATLIN ENGINEERS and SCIENTISTS

SITE Rapid Refueler
FREE PRODUCT PLUME MAP
SECOND QUARTER 2006

FIGURE **5.1B**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
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MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM



Well ID	Well Type	Date	Method	Parameter	Result	Units	2L GWQS	GCL
USTAS522-MW08	T-II	9/27/2005	602	Benzene	13.8000	ug/l	1.0000	5000.0000
USTAS522-MW08	T-II	9/27/2005	602	1,2-Dichlorobenzene	40.0000	ug/l	24.0000	72500.0000
USTAS522-MW12	T-II	9/27/2005	602	Benzene	2.4000	ug/l	1.0000	5000.0000
USTAS527-DW02	T-III	9/29/2005	602	Benzene	7.0000	ug/l	1.0000	5000.0000
USTRF-MW10	T-II	9/28/2005	602	Benzene	18.8000	ug/l	1.0000	5000.0000
USTRF-MW17	T-II	9/27/2005	602	Benzene	3.7000	ug/l	1.0000	5000.0000
USTRF-MW22	T-II	9/29/2005	602	Benzene	3.4000	ug/l	1.0000	5000.0000

LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Analytical Results
- Free Product Detected
- 2L Non-Compliant
- 2L Compliant
- EPA 602 Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. 2L Standard refers to North Carolina Groundwater Quality Standard 15A NCAC 2L.0202.
2. GCL refers to Gross Contaminant Level as defined in Table 7 of "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Ground Water", Volume II, dated January 2, 1998.
3. A 2L Standard of "0.00" implies a standard has not yet been established. According to NCAC T15:02L, any compound found above laboratory detection limits is considered noncompliant unless otherwise specified by the NCDENR.
4. EPA Method 602 plume geometry based on current monitoring events analytical results and free product gauging data from September 23, 2005.

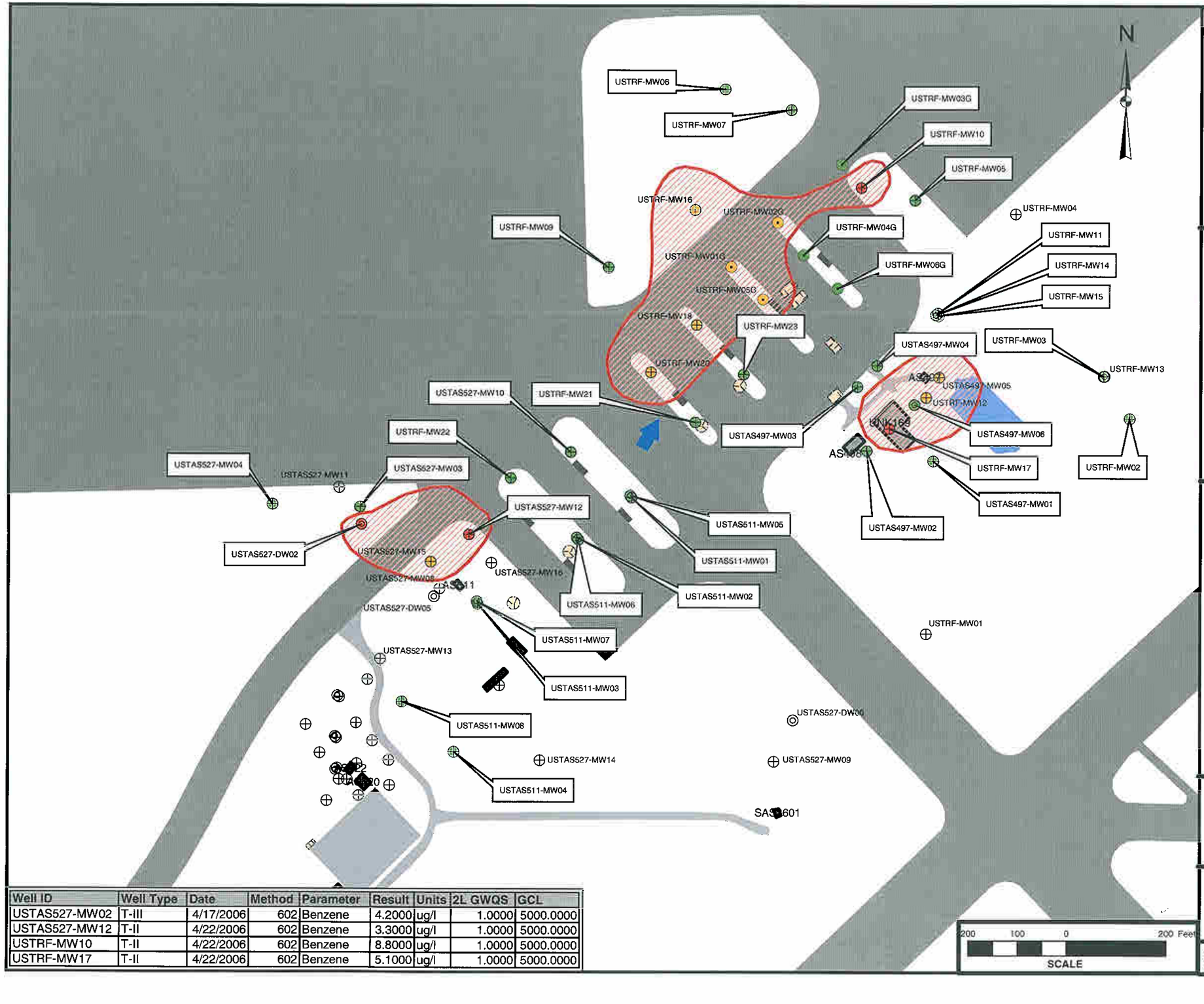
CATLIN ENGINEERS and SCIENTISTS

SITE Rapid Refueler
EPA METHOD 602 COLORIMETRY AND PLUME IN EXCESS OF 2L
THIRD QUARTER 2005

FIGURE 5.2A

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MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM



Well ID	Well Type	Date	Method	Parameter	Result	Units	2L GWQS	GCL
USTAS527-MW02	T-III	4/17/2006	602	Benzene	4.2000	ug/l	1.0000	5000.0000
USTAS527-MW12	T-II	4/22/2006	602	Benzene	3.3000	ug/l	1.0000	5000.0000
USTRF-MW10	T-II	4/22/2006	602	Benzene	8.8000	ug/l	1.0000	5000.0000
USTRF-MW17	T-II	4/22/2006	602	Benzene	5.1000	ug/l	1.0000	5000.0000

LEGEND

Monitoring Wells
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- GATE
- WALL

Analytical Results
- Free Product Detected
- 2L Non-Compliant
- 2L Compliant
- EPA 602 Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
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NOTES

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200 100 0 200 Feet
SCALE

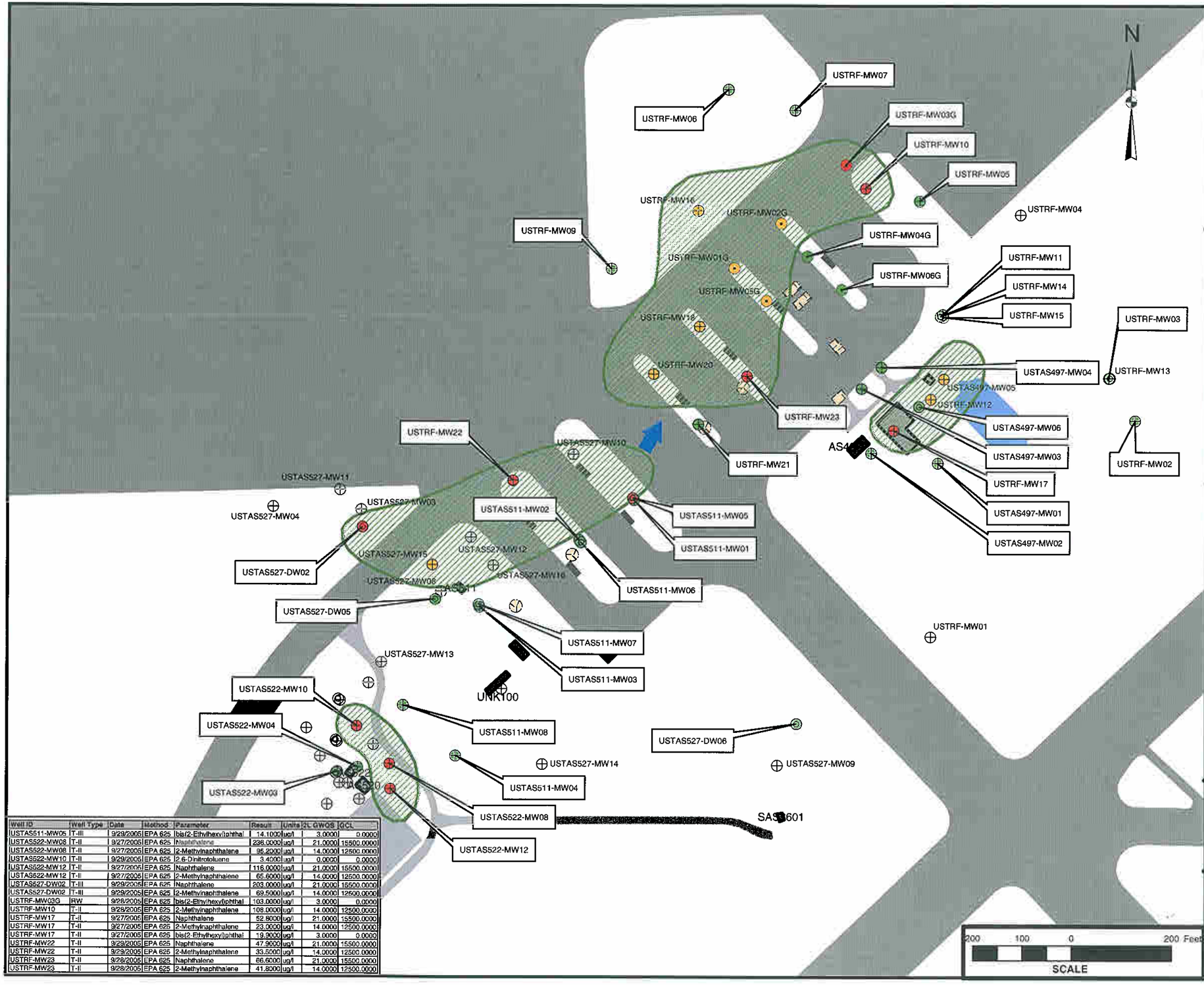
CATLIN ENGINEERS and SCIENTISTS

SITE Rapid Refueler
EPA METHOD 602 COLORIMETRY AND PLUME IN EXCESS OF 2L
SECOND QUARTER 2006

FIGURE 5.2B

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM



Well ID	Well Type	Date	Method	Parameter	Result	Units	2L GWQS	GCL
USTAS511-MW05	T-III	9/29/2005	EPA 625	bis(2-Ethylhexyl)phthal	14.1000	ug/l	3.0000	0.0000
USTAS522-MW08	T-II	9/27/2005	EPA 625	Naphthalene	236.0000	ug/l	21.0000	15500.0000
USTAS522-MW08	T-II	9/27/2005	EPA 625	2-Methylnaphthalene	95.2000	ug/l	14.0000	12500.0000
USTAS522-MW10	T-II	9/29/2005	EPA 625	2,6-Dinitrotoluene	3.4000	ug/l	0.0000	0.0000
USTAS522-MW12	T-II	9/27/2005	EPA 625	Naphthalene	116.0000	ug/l	21.0000	15500.0000
USTAS522-MW12	T-II	9/27/2005	EPA 625	2-Methylnaphthalene	65.6000	ug/l	14.0000	12500.0000
USTAS527-DW02	T-III	9/29/2005	EPA 625	Naphthalene	203.0000	ug/l	21.0000	15500.0000
USTAS527-DW02	T-III	9/29/2005	EPA 625	2-Methylnaphthalene	69.5000	ug/l	14.0000	12500.0000
USTRF-MW03G	RW	9/28/2005	EPA 625	bis(2-Ethylhexyl)phthal	103.0000	ug/l	3.0000	0.0000
USTRF-MW10	T-II	9/28/2005	EPA 625	2-Methylnaphthalene	108.0000	ug/l	14.0000	12500.0000
USTRF-MW17	T-II	9/27/2005	EPA 625	Naphthalene	52.8000	ug/l	21.0000	15500.0000
USTRF-MW17	T-II	9/27/2005	EPA 625	2-Methylnaphthalene	23.0000	ug/l	14.0000	12500.0000
USTRF-MW17	T-II	9/27/2005	EPA 625	bis(2-Ethylhexyl)phthal	19.9000	ug/l	3.0000	0.0000
USTRF-MW22	T-II	9/29/2005	EPA 625	Naphthalene	47.9000	ug/l	21.0000	15500.0000
USTRF-MW22	T-II	9/29/2005	EPA 625	2-Methylnaphthalene	33.5000	ug/l	14.0000	12500.0000
USTRF-MW23	T-II	9/28/2005	EPA 625	Naphthalene	66.6000	ug/l	21.0000	15500.0000
USTRF-MW23	T-II	9/28/2005	EPA 625	2-Methylnaphthalene	41.8000	ug/l	14.0000	12500.0000

LEGEND

Monitoring Wells
- Type I
- Type II
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Walls and Fences
- FENCE
- GATE
- WALL

Analytical Results
- Free Product Detected
- 2L Non-Compliant
- 2L Compliant
- EPA 625 Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. 2L Standard refers to North Carolina Groundwater Quality Standard 15A NCAC 2L.0202.
2. GCL refers to Gross Contaminant Level as defined in Table 7 of "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Ground Water", Volume II, dated January 2, 1998.
3. A 2L Standard of "0.00" implies a standard has not yet been established. According to NCAC T15:02L, any compound found above laboratory detection limits is considered noncompliant unless otherwise specified by the NCDENR.
4. EPA Method 625 plume geometry based on current monitoring events analytical results and free product gauging data from September 23, 2005.

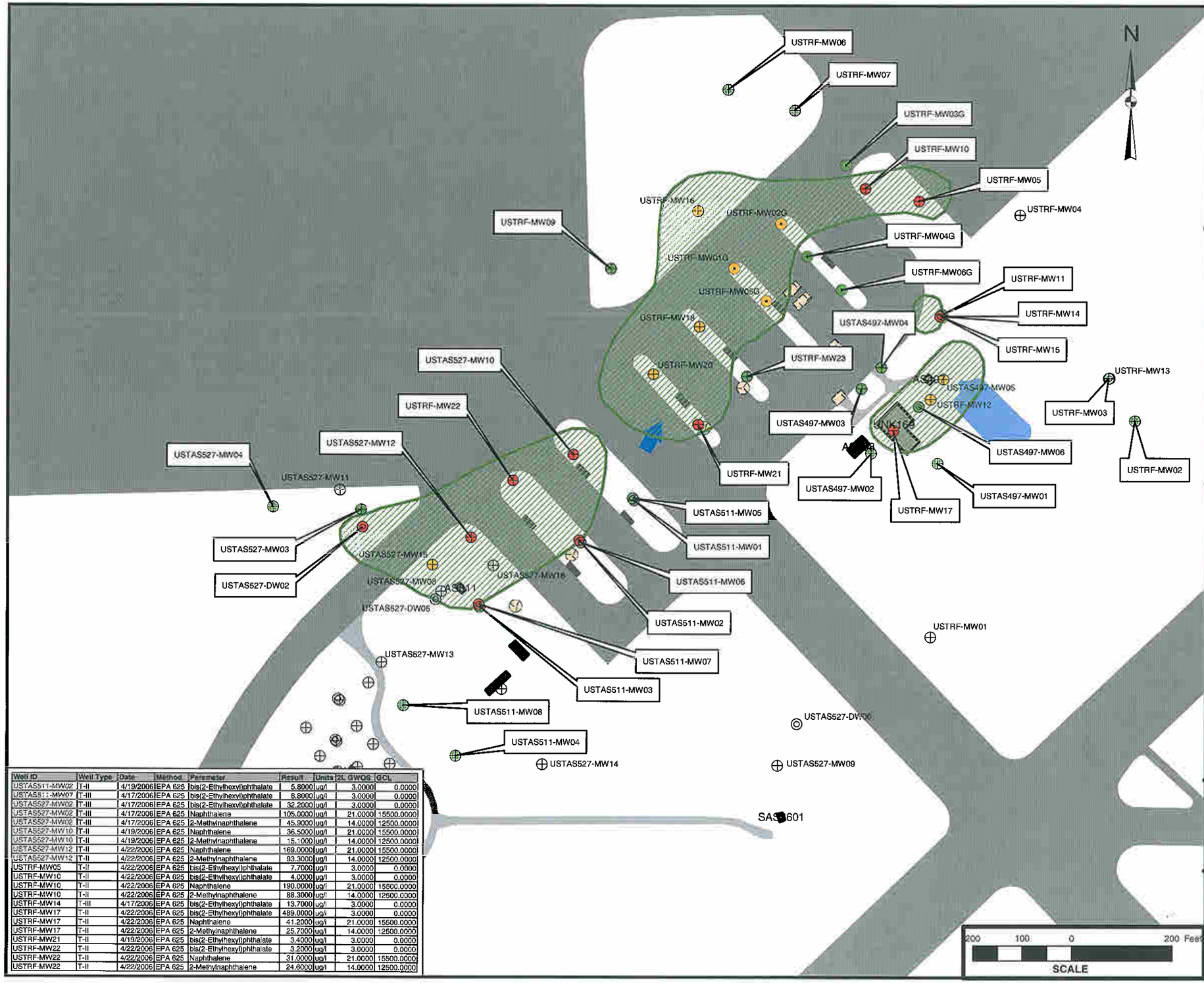
CATLIN ENGINEERS and SCIENTISTS

SITE Rapid Refueler
EPA METHOD 625 COLORIMETRY AND PLUME IN EXCESS OF 2L THIRD QUARTER 2005

FIGURE **5.3A**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM



Well ID	Well Type	Date	Method	Parameter	Result	Units	2L GWQS	GCL
USTAS511-MW02	T-II	4/19/2006	EPA 625	bis(2-Ethylhexyl)phthalate	5.8000	ug/l	3.0000	0.0000
USTAS511-MW07	T-III	4/17/2006	EPA 625	bis(2-Ethylhexyl)phthalate	8.8000	ug/l	3.0000	0.0000
USTAS527-MW02	T-III	4/17/2006	EPA 625	bis(2-Ethylhexyl)phthalate	32.2000	ug/l	3.0000	0.0000
USTAS527-MW02	T-III	4/17/2006	EPA 625	Naphthalene	105.0000	ug/l	21.0000	15500.0000
USTAS527-MW02	T-III	4/17/2006	EPA 625	2-Methylnaphthalene	45.9000	ug/l	14.0000	12500.0000
USTAS527-MW10	T-II	4/19/2006	EPA 625	Naphthalene	36.5000	ug/l	21.0000	15500.0000
USTAS527-MW10	T-II	4/19/2006	EPA 625	2-Methylnaphthalene	15.1000	ug/l	14.0000	12500.0000
USTAS527-MW12	T-II	4/22/2006	EPA 625	Naphthalene	169.0000	ug/l	21.0000	15500.0000
USTAS527-MW12	T-II	4/22/2006	EPA 625	2-Methylnaphthalene	93.3000	ug/l	14.0000	12500.0000
USTRF-MW05	T-II	4/22/2006	EPA 625	bis(2-Ethylhexyl)phthalate	7.7000	ug/l	3.0000	0.0000
USTRF-MW10	T-II	4/22/2006	EPA 625	bis(2-Ethylhexyl)phthalate	4.0000	ug/l	3.0000	0.0000
USTRF-MW10	T-II	4/22/2006	EPA 625	Naphthalene	190.0000	ug/l	21.0000	15500.0000
USTRF-MW10	T-II	4/22/2006	EPA 625	2-Methylnaphthalene	88.3000	ug/l	14.0000	12500.0000
USTRF-MW14	T-III	4/17/2006	EPA 625	bis(2-Ethylhexyl)phthalate	13.7000	ug/l	3.0000	0.0000
USTRF-MW17	T-II	4/22/2006	EPA 625	bis(2-Ethylhexyl)phthalate	489.0000	ug/l	3.0000	0.0000
USTRF-MW17	T-II	4/22/2006	EPA 625	Naphthalene	41.2000	ug/l	21.0000	15500.0000
USTRF-MW17	T-II	4/22/2006	EPA 625	2-Methylnaphthalene	25.7000	ug/l	14.0000	12500.0000
USTRF-MW21	T-II	4/19/2006	EPA 625	bis(2-Ethylhexyl)phthalate	3.4000	ug/l	3.0000	0.0000
USTRF-MW22	T-II	4/22/2006	EPA 625	bis(2-Ethylhexyl)phthalate	3.2000	ug/l	3.0000	0.0000
USTRF-MW22	T-II	4/22/2006	EPA 625	Naphthalene	31.0000	ug/l	21.0000	15500.0000
USTRF-MW22	T-II	4/22/2006	EPA 625	2-Methylnaphthalene	24.6000	ug/l	14.0000	12500.0000

LEGEND

Monitoring Wells
- Type I
- Type II
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- Unknown Well Type
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- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Analytical Results
- Free Product Detected
- 2L Non-Compliant
- 2L Compliant
- EPA 625 Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
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Airfield Pavement
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- SHLDR_OVERRUN
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NOTES

1. 2L Standard refers to North Carolina Groundwater Quality Standard 15A NCAC 2L.0202.
2. GCL refers to Gross Contaminant Level as defined in Table 7 of "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Ground Water", Volume II, dated January 2, 1998.
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4. EPA Method 625 plume geometry based on current monitoring events analytical results and free product gauging data from September 23, 2005.

200 100 0 200 Feet
SCALE

CATLIN ENGINEERS and SCIENTISTS

SITE Rapid Refueler
EPA METHOD 625 COLORIMETRY AND PLUME IN EXCESS OF 2L
SECOND QUARTER 2006

FIGURE **5.3B**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

SECTION 6.0

OF THE

ANNUAL MANAGEMENT REPORT
MCB CAMP LEJEUNE UST MANAGEMENT PROGRAM

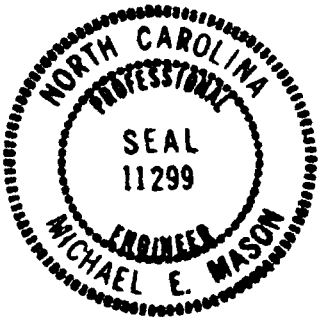
MONITORING EVENT:

SECOND SEMESTER 2005/FIRST SEMESTER 2006
(JULY 2005 THROUGH JUNE 2006)

SITE-SPECIFIC MONITORING REPORT
FOR

SITE 1613

NCDENR INCIDENT NO. 20660



6.0 EXECUTIVE SUMMARY
SITE 1613

6.1 Site Information

6.1.1 Site Location: MCB Camp Lejeune (Hadnot Point)
6.1.2 Incident Number(s): 20660
6.1.3 UTM Coordinates (WGS84) (Meters): 285543.32 Easting, 3838804.85 Northing
6.1.4 Risk Classification: Low
6.1.5 Land Use Classification: Industrial/Commercial
6.1.6 Source Type(s): Gasoline

6.2 Monitoring Event Information

6.2.1 Sampling Performed By: Shaw (August 2005) and Sovereign (April 2006)
6.2.2 Date(s) of This Monitoring Event: 8/10/05 and 4/6/06
6.2.3 Date(s) of Previous Monitoring Event: 6/21/03
6.2.4 Reason(s) for This Monitoring Event: Track migration and attenuation of dissolved-phase plume.
6.2.5 Site Monitoring Status at Time of This Event: Semi-annual sampling of on-site monitoring wells per EPA Methods 504.1, 601, 602, and 625 and MADEP EPH/VPH.

6.3 Groundwater Hydraulics

6.3.1 Hydraulic Conductivity: 4.3 feet/day
6.3.2 Effective Porosity: 0.25
6.3.3 Hydraulic Gradient: 0.0314 feet/feet
6.3.4 Average Linear Groundwater Flow Velocity: 0.54 feet/day to the Northeast
6.3.5 Groundwater Flow Direction: Erratic direction (See Figure 6.1A and 6.1B)
6.3.6 Range of Measured Water Table Elevations: 12.16 to 22.82 feet MSL, see Tables 6.1A and 6.1B
6.3.7 Significant Changes from Previously Reported Data: Not Applicable. This is the first Management Report prepared by CATLIN.

6.4 Free Product Plume

6.4.1 Free Product Present?: No, see Tables 6.1A and 6.1B. (Last observed in 2000)
6.4.2 Free Product Thickness Measured: None, see Figures 6.1A and 6.1B
6.4.3 Plume Size and Location: None, see Figures 6.1A and 6.1B, previously observed at 1613-6, 1613-17, and 1613-18
6.4.4 Free Product Removed from Site This Period: None
6.4.5 Significant Changes from Previously Reported Data: Not Applicable. This is the first Management Report prepared by CATLIN.

6.5 Dissolved-Phase Plume

6.5.1 Plume Concentrations: See Tables 6.2A through 6.6B

6.5.2 Plume Size and Location: See Figures 6.2, 6.3, 6.4A, 6.4B, 6.5, and 6.6

6.5.3 Significant Changes from Previously Reported Data: Not Applicable. This is the first Management Report prepared by CATLIN. Groundwater sample analytical results compared to the 2L GWQS are discussed as follows:

EPA METHOD 504.1

No EPA Method 504.1 compounds were detected above the corresponding 2L GWQS.

EPA METHOD 601

No EPA Method 601 compounds were detected above the corresponding 2L GWQS.

EPA METHOD 602

1,2-Dichloroethane concentrations were detected above the 2L GWQS in the UST1613-MW15 groundwater sample. The UST1613-HPGW6, UST 1613-MW19, and UST1613-MW22 groundwater samples revealed Benzene concentrations above the 2L GWQS. Ethylbenzene, Toluene and Total Xylene concentrations were detected above the corresponding 2L GWQS in the UST1613-MW22 groundwater sample. The UST1613-MW15 groundwater sample revealed MTBE concentrations above the 2L GWQS. Tetrachloroethene concentrations were detected above the 2L GWQS in the UST1613-MW20 groundwater sample. The UST1613-MW13 and UST1613-MW14 groundwater samples revealed Trichloroethene at concentrations above the 2L GWQS. Total Xylenes were detected above the 2L GWQS in the IR78-GW06 and UST1613-HPGW6 groundwater samples. All other EPA Method 602 compounds were either detected at concentrations below the 2L GWQS or below the laboratory quantitation limits.

EPA METHOD 625

Naphthalene concentrations were detected in the IR78-GW06 and UST1613-MW22 groundwater samples above the 2L GWQS. All other EPA Method 625 compounds were either detected at concentrations below the 2L GWQS or below the laboratory quantitation limits.

MADEP VPH/EPH

The IR78-GW06 and UST1613-MW22 groundwater samples revealed concentrations of C5-C8 Aliphatics and C9-C22 Aromatics above the 2L GWQS. The UST1613-MW22 groundwater sample also revealed C9-C18 Aliphatics concentrations above the 2L GWQS. All other MADEP VPH/EPH compounds were either detected at concentrations below the 2L GWQS or below the laboratory quantitation limits.

6.6 Potential Receptors

6.6.1 Contaminated Water Supply Well(s)?: None
6.6.2 Potable Water Supply Well Within 1,000 Feet of Source Area?: No
6.6.3 Any Water Supply Well Within 250 Feet of Source Area?: No
6.6.4 Surface Water Body Within 500 Feet?: No
6.6.5 Past Evidence of Vapors?: No
6.6.6 Significant Changes from Previously Reported Data?: All water supply wells previously identified within 1,500 feet of the subject site have been permanently abandoned.

6.7 Remediation

6.7.1 Status: Ten AS wells (~35 feet BLS) and 20 SVE wells (~8 feet BLS) operated continuously from November 16, 1998 to June 2004, with the exception of maintenance downtime.
6.7.2 Type: AS/SVE
6.7.3 Progress: System appears to be effective in removal of Free Product and reducing dissolved-phase groundwater contamination.
6.7.4 Construction Contractor: OHM (now Shaw) installed the current remediation system. Startup, November 16, 1998.
6.7.5 Operating Contractor: Sovereign

6.8 Observations and Comments

As this site has been classified as Low Risk and Industrial/Commercial Land Use and no contaminant concentrations are above any of the established GCLs, NFA with LURs could be requested. However, it has been decided (NCDENR and MCB Camp Lejeune) that groundwater at this site be sampled bi-annual (once every other year) in an attempt to close the site without LURs. CATLIN recommends continuing with the sample approach for this site.

Also, it should be stated that the chlorinated compounds detected in samples from on-site monitoring wells are believed to be associated with historical dry cleaning activities and not related to Site 1613 activities.

TABLE 6.1A
SITE 1613
FIELD MEASUREMENTS - THIRD QUARTER 2005

Date Measured: 8/10/2005

Well No.	Type	TOC	Stick up	DTW	Product Thickness	DTW BGS	GW Elevation
IR78-GW05		28.63	2.53	9.84	0.00	7.31	18.79
IR78-GW06		27.94	2.64	14.16	0.00	11.52	13.78
UST1613-MW01	T-II	28.22	2.01	13.90	0.00	11.89	14.32
UST1613-MW02	T-II	28.69	1.98	11.39	0.00	9.41	17.30
UST1613-MW03	T-II	25.50		11.32	0.00		14.18
UST1613-MW04	T-II	26.28	1.38	7.07	0.00	5.69	19.21
UST1613-MW05	T-II	24.89	1.19	7.19	0.00	6.00	17.70
UST1613-MW06	T-II	27.77	1.27	13.61	0.00	12.34	14.16
UST1613-MW07	T-II	25.34	0.74	8.94	0.00	8.20	16.40
UST1613-MW08	T-II	29.15	1.08	6.33	0.00	5.25	22.82
UST1613-MW09	T-II	25.89		5.73	0.00		20.16
UST1613-MW10	T-II	28.67	1.55	14.62	0.00	13.07	14.05
UST1613-MW11	T-II	25.24	-0.37	10.74	0.00	11.11	14.50
UST1613-MW12	T-II	26.45	-0.15	11.92	0.00	12.07	14.53
UST1613-MW13	T-III	25.59	0.76	11.11	0.00	10.35	14.48
UST1613-MW14	T-III	27.65	0.46	14.40	0.00	13.94	13.25
UST1613-MW15	T-III	29.27	1.19	17.11	0.00	15.92	12.16
UST1613-MW16	RW	27.03	-0.11	13.31	0.00	13.42	13.72
UST1613-MW17	T-II	25.62		11.63	0.00		13.99
UST1613-MW18	T-II	25.25		11.32	0.00		13.93
UST1613-MW19	T-II	24.93		10.79	0.00		14.14
UST1613-MW20	T-II	25.72		11.76	0.00		13.96
UST1613-MW21	T-II	26.24		11.64	0.00		14.60
UST1613-MW22	T-II	25.52		11.50	0.00		14.02

Notes:
1. TII = Type II monitoring well
   TIII = Type III monitoring well
   RW = Recovery well
2. TOC = Top of well casing elevation.
3. STICK UP = Height of well casing above land surface in feet.
4. DTW = Depth to water (in feet) from top of well casing.
5. Product thickness is measured in feet.
6. DTW BGS = Depth to water below ground surface in feet.
7. GW Elevation = Ground water elevation (not adjusted for free product)
8. A zero ("0.00") in the product thickness column indicates no measureable thickness.
9. Top of casing elevations are measured in feet relative to Mean Sea Level (NAD83).
10. Stick up values were not available for wells with no values in the STICK UP and DTW BGS columns.

TABLE 6.1B
SITE 1613
FIELD MEASUREMENTS - SECOND QUARTER 2006

Date Measured: 4/6/2006

Well No.	Type	TOC	Stick up	DTW	Product Thickness	DTW BGS	GW Elevation
IR78-GW06		27.94	2.64	13.85	0.00	11.21	14.09
UST1613-MW06	T-II	27.77	1.27	13.57	0.00	12.30	14.20
UST1613-MW10	T-II	28.67	1.55	14.63	0.00	13.08	14.04
UST1613-MW11	T-II	25.24	-0.37	10.48	0.00	10.85	14.76
UST1613-MW16	RW	27.03	-0.11	13.36	0.00	13.47	13.67
UST1613-MW20	T-II	25.72		11.71	0.00		14.01
UST1613-MW21	T-II	26.24		11.71	0.00		14.53
UST1613-MW22	T-II	25.52		11.36	0.00		14.16

Notes:
1. TII = Type II monitoring well
   TIII = Type III monitoring well
   RW = Recovery well
2. TOC = Top of well casing elevation.
3. STICK UP = Height of well casing above land surface in feet.
4. DTW = Depth to water (in feet) from top of well casing.
5. Product thickness is measured in feet.
6. DTW BGS = Depth to water below ground surface in feet.
7. GW Elevation = Ground water elevation (not adjusted for free product)
8. A zero ("0.00") in the product thickness column indicates no measureable thickness.
9. Top of casing elevations are measured in feet relative to Mean Sea Level (NAD83).
10. Stick up values were not available for wells with no values in the STICK UP and DTW BGS columns.

TABLE 6.2A

SITE 1613

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 504.1

Contaminant of Concern →		
Well ID	**Date**	
2L GWQS		
GCL		
UST1613-HPGW6	8/3/2005	
UST1613-MW01	8/2/2005	
UST1613-MW02	8/2/2005	
UST1613-MW03	8/5/2005	
UST1613-MW04	8/3/2005	
UST1613-MW05	8/3/2005	
UST1613-MW06	8/2/2005	
UST1613-MW07	8/2/2005	
UST1613-MW08	8/4/2005	
UST1613-MW09	8/3/2005	

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 6.2A

SITE 1613

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 504.1

Contaminant of Concern →		
Well ID	**Date**	
2L GWQS		
GCL		
UST1613-MW10	8/4/2005	
UST1613-MW11	8/5/2005	
UST1613-MW12	8/4/2005	
UST1613-MW13	8/2/2005	
UST1613-MW14	8/4/2005	
UST1613-MW15	8/4/2005	
UST1613-MW16	8/4/2005	
UST1613-MW19	8/3/2005	
UST1613-MW20	8/4/2005	
UST1613-MW21	8/4/2005	

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 6.2A

SITE 1613

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 504.1

Contaminant of Concern →		
Well ID	**Date**	
2L GWQS		
GCL		
UST1613-MW22	8/4/2005	

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 6.2B

SITE 1613

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINING JULY 2005

EPA METHOD 504.1

Contaminant of Concern →		
Well ID	**Date**	
2L GWQS		
GCL		
UST1613-HPGW6	8/3/2005	
UST1613-MW01	8/2/2005	
UST1613-MW02	8/2/2005	
UST1613-MW03	8/5/2005	
UST1613-MW04	8/3/2005	
UST1613-MW05	8/3/2005	
UST1613-MW06	8/2/2005	
UST1613-MW07	8/2/2005	
UST1613-MW08	8/4/2005	
UST1613-MW09	8/3/2005	

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 6.2B

SITE 1613

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINING JULY 2005

EPA METHOD 504.1

Contaminant of Concern →		
Well ID	**Date**	
2L GWQS		
GCL		
UST1613-MW10	8/4/2005	
UST1613-MW11	8/5/2005	
UST1613-MW12	8/4/2005	
UST1613-MW13	8/2/2005	
UST1613-MW14	8/4/2005	
UST1613-MW15	8/4/2005	
UST1613-MW16	8/4/2005	
UST1613-MW19	8/3/2005	
UST1613-MW20	8/4/2005	
UST1613-MW21	8/4/2005	

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 6.2B

SITE 1613

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINING JULY 2005

EPA METHOD 504.1

Contaminant of Concern →		
Well ID	**Date**	
2L GWQS		
GCL		
UST1613-MW22	8/4/2005	

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 6.3A

SITE 1613

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 601

Contaminant of Concern →		
Well ID	**Date**	
2L GWQS		
GCL		
IR78-GW06	4/7/2006	
UST1613-MW06	4/7/2006	
UST1613-MW10	4/7/2006	
UST1613-MW11	4/7/2006	
UST1613-MW16	4/10/2006	
UST1613-MW20	4/10/2006	
UST1613-MW21	4/10/2006	
UST1613-MW22	4/10/2006	

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 6.3B

SITE 1613

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 601

Contaminant of Concern →		
Well ID	**Date**	
2L GWQS		
GCL		
IR78-GW06	4/7/2006	
UST1613-MW06	4/7/2006	
UST1613-MW10	4/7/2006	
UST1613-MW11	4/7/2006	
UST1613-MW16	4/10/2006	
UST1613-MW20	4/10/2006	
UST1613-MW21	4/10/2006	
UST1613-MW22	4/10/2006	

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 6.4A

SITE 1613

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 602

Contaminant of Concern →		1,2-Dichloroethane	Benzene	cis-1,2-Dichloroethene	Ethylbenzene	Methyl Tert Butyl Ether	Methyl-tert butyl ether	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	Trichloroethene	Xylenes (total)
Well ID	**Date**											
2L GWQS		0.38	1	70	550	200	200	0.7	1000	100	2.8	530
GCL		380	5000	70000	550000	200000	200000	700	257500	100000	2800	87500
IR78-GW06	4/7/2006	BQL	BQL	BQL	48.80	BQL	BQL	BQL	105.00	BQL	BQL	991.00
UST1613-HPGW6	8/3/2005	BQL	35.20	BQL	243.00	BQL	BQL	BQL	199.00	BQL	BQL	3080.00
UST1613-MW01	8/2/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW02	8/2/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW03	8/5/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW04	8/3/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW05	8/3/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW06	8/2/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW06	4/7/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW07	8/2/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 6.4A

SITE 1613

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 602

Contaminant of Concern →		1,2-Dichloroethane	Benzene	cis-1,2-Dichloroethene	Ethylbenzene	Methyl Tert Butyl Ether	Methyl-tert butyl ether	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	Trichloroethene	Xylenes (total)
Well ID	**Date**											
2L GWQS		0.38	1	70	550	200	200	0.7	1000	100	2.8	530
GCL		380	5000	70000	550000	200000	200000	700	257500	100000	2800	87500
UST1613-MW08	8/4/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW09	8/3/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW10	8/4/2005	BQL	BQL	BQL	BQL	1.50	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW10	4/7/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW11	8/5/2005	BQL	0.71	BQL	BQL	0.99	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW11	4/7/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW12	8/4/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW13	8/2/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	6.40	BQL
UST1613-MW14	8/4/2005	BQL	BQL	8.60	BQL	BQL	BQL	BQL	BQL	0.84	25.20	BQL
UST1613-MW15	8/4/2005	0.67	BQL	25.90	BQL	289.00	BQL	BQL	BQL	0.57	10.80	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 6.4A

SITE 1613

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 602

Contaminant of Concern →		1,2-Dichloroethane	Benzene	cis-1,2-Dichloroethene	Ethylbenzene	Methyl Tert Butyl Ether	Methyl-tert butyl ether	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	Trichloroethene	Xylenes (total)
Well ID	Date											
2L GWQS		0.38	1	70	550	200	200	0.7	1000	100	2.8	530
GCL		380	5000	70000	550000	200000	200000	700	257500	100000	2800	87500
UST1613-MW16	8/4/2005	BQL	BQL	BQL	BQL	13.80	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW16	4/10/2006	BQL	BQL	BQL	BQL	BQL	7.18	BQL	1.85	BQL	BQL	BQL
UST1613-MW19	8/3/2005	BQL	2.50	BQL	BQL	0.98	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW20	8/4/2005	BQL	BQL	BQL	BQL	6.00	BQL	0.82	BQL	BQL	BQL	BQL
UST1613-MW20	4/10/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW21	8/4/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW21	4/10/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW22	8/4/2005	BQL	119.00	BQL	908.00	BQL	BQL	BQL	1070.00	BQL	BQL	3240.00
UST1613-MW22	4/10/2006	BQL	120.00	BQL	983.00	BQL	BQL	BQL	1950.00	BQL	BQL	4010.00

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 6.4B

SITE 1613

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 602

Contaminant of Concern →		1,2-Dichloroethane	Benzene	cis-1,2-Dichloroethene	Ethylbenzene	Methyl Tert Butyl Ether	Methyl-tert butyl ether	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	Trichloroethene	Xylenes (total)
Well ID	**Date**											
2L GWQS		0.38	1	70	550	200	200	0.7	1000	100	2.8	530
GCL		380	5000	70000	550000	200000	200000	700	257500	100000	2800	87500
IR78-GW06	4/7/2006	BQL	BQL	BQL	48.80	BQL	BQL	BQL	105.00	BQL	BQL	**991.00**
UST1613-HPGW6	8/3/2005	BQL	**35.20**	BQL	243.00	BQL	BQL	BQL	199.00	BQL	BQL	**3080.00**
UST1613-MW01	8/2/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW02	8/2/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW03	8/5/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW04	8/3/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW05	8/3/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW06	8/2/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW06	4/7/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW07	8/2/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 6.4B

SITE 1613

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 602

Contaminant of Concern →		1,2-Dichloroethane	Benzene	cis-1,2-Dichloroethene	Ethylbenzene	Methyl Tert Butyl Ether	Methyl-tert butyl ether	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	Trichloroethene	Xylenes (total)
Well ID	**Date**											
2L GWQS		0.38	1	70	550	200	200	0.7	1000	100	2.8	530
GCL		380	5000	70000	550000	200000	200000	700	257500	100000	2800	87500
UST1613-MW08	8/4/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW09	8/3/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW10	8/4/2005	BQL	BQL	BQL	BQL	1.50	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW10	4/7/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW11	8/5/2005	BQL	0.71	BQL	BQL	0.99	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW11	4/7/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW12	8/4/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW13	8/2/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	6.40	BQL
UST1613-MW14	8/4/2005	BQL	BQL	8.60	BQL	BQL	BQL	BQL	BQL	0.84	25.20	BQL
UST1613-MW15	8/4/2005	0.67	BQL	25.90	BQL	269.00	BQL	BQL	BQL	0.57	10.80	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 6.4B

SITE 1613

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 602

Contaminant of Concern →		1,2-Dichloroethane	Benzene	cis-1,2-Dichloroethene	Ethylbenzene	Methyl Tert Butyl Ether	Methyl-tert butyl ether	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	Trichloroethene	Xylenes (total)
Well ID	**Date**											
2L GWQS		0.38	1	70	550	200	200	0.7	1000	100	2.8	530
GCL		380	5000	70000	550000	200000	200000	700	257500	100000	2800	87500
UST1613-MW16	8/4/2005	BQL	BQL	BQL	BQL	13.80	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW16	4/10/2006	BQL	BQL	BQL	BQL	BQL	7.18	BQL	1.85	BQL	BQL	BQL
UST1613-MW19	8/3/2005	BQL	**2.50**	BQL	BQL	0.98	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW20	8/4/2005	BQL	BQL	BQL	BQL	6.00	BQL	**0.82**	BQL	BQL	BQL	BQL
UST1613-MW20	4/10/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW21	8/4/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW21	4/10/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST1613-MW22	8/4/2005	BQL	**119.00**	BQL	**908.00**	BQL	BQL	BQL	**1070.00**	BQL	BQL	**3240.00**
UST1613-MW22	4/10/2006	BQL	**120.00**	BQL	**983.00**	BQL	BQL	BQL	**1950.00**	BQL	BQL	**4010.00**

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 6.5A

SITE 1613

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 625

Contaminant of Concern →		
Well ID	**Date**	**Naphthalene**
2L GWQS		21
GCL		15500
IR78-GW06	4/7/2006	**34.00**
UST1613-MW06	4/7/2006	BQL
UST1613-MW10	4/7/2006	BQL
UST1613-MW11	4/7/2006	BQL
UST1613-MW16	4/10/2006	BQL
UST1613-MW20	4/10/2006	BQL
UST1613-MW21	4/10/2006	BQL
UST1613-MW22	4/10/2006	**471.00**

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 6.5B

SITE 1613

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 625

Contaminant of Concern →		
Well ID	**Date**	**Naphthalene**
2L GWQS		21
GCL		15500
IR78-GW06	4/7/2006	**34.00**
UST1613-MW06	4/7/2006	BQL
UST1613-MW10	4/7/2006	BQL
UST1613-MW11	4/7/2006	BQL
UST1613-MW16	4/10/2006	BQL
UST1613-MW20	4/10/2006	BQL
UST1613-MW21	4/10/2006	BQL
UST1613-MW22	4/10/2006	**471.00**

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 6.6A

SITE 1613

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

MADEP VPH/EPH

Contaminant of Concern →		C19-C36 Aliphatics	C5-C8 Aliphatics	C9-C18 Aliphatics	C9-C22 Aromatics
Well ID	Date				
2L GWQS		42000	420	4200	210
GCL		0	0	0	0
IR78-GW06	4/7/2006	BQL	**720.00**	2100.00	**1910.00**
UST1613-MW06	4/7/2006	BQL	BQL	BQL	BQL
UST1613-MW10	4/7/2006	BQL	BQL	BQL	BQL
UST1613-MW11	4/7/2006	BQL	BQL	BQL	BQL
UST1613-MW16	4/10/2006	BQL	BQL	BQL	BQL
UST1613-MW20	4/10/2006	BQL	BQL	BQL	BQL
UST1613-MW21	4/10/2006	BQL	BQL	BQL	BQL
UST1613-MW22	4/10/2006	410.00	**3900.00**	**8500.00**	**4100.00**

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 6.6B

SITE 1613

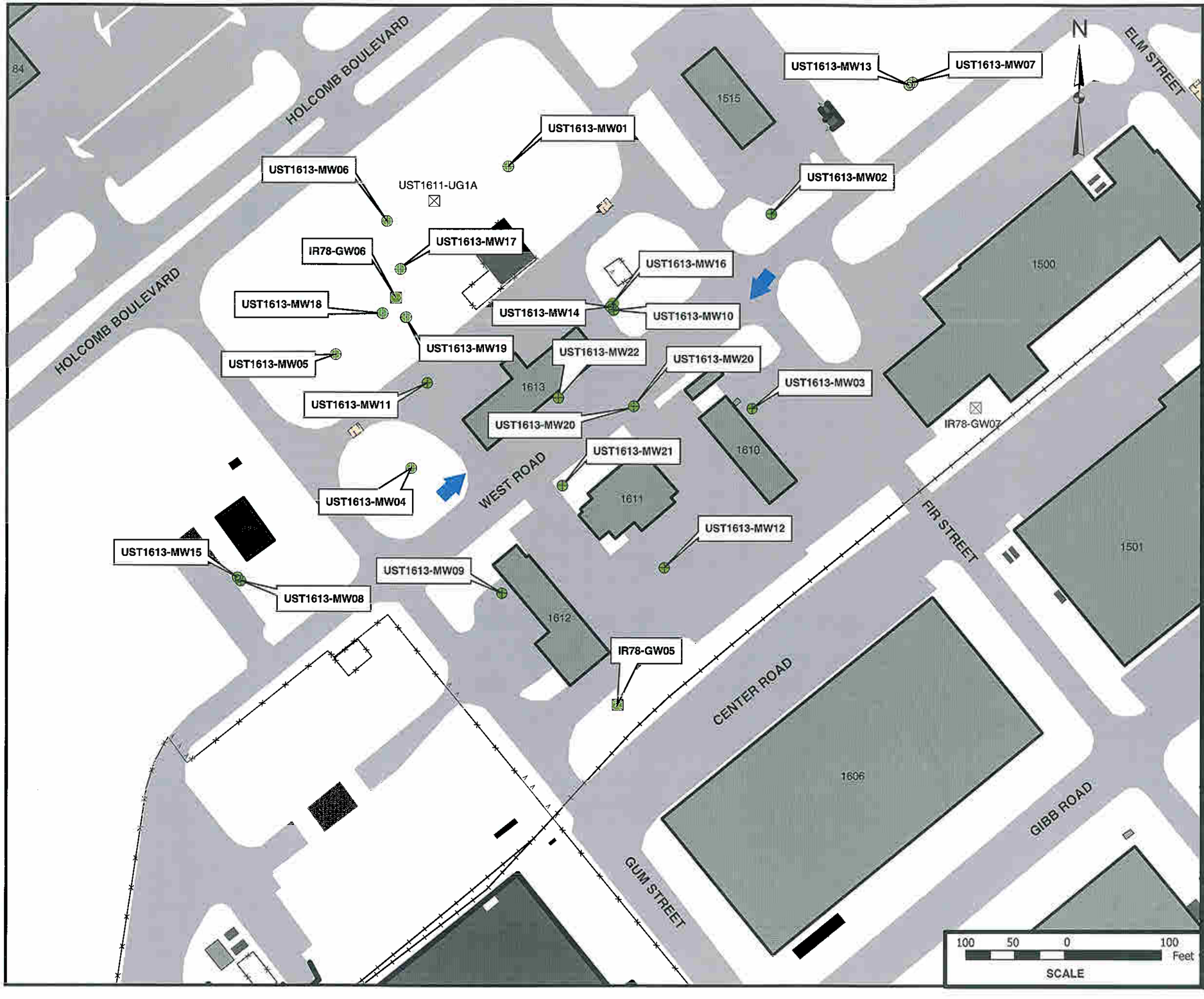
HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

MADEP VPH/EPH

Contaminant of Concern →		C19-C36 Aliphatics	C5-C8 Aliphatics	C9-C18 Aliphatics	C9-C22 Aromatics
Well ID	**Date**				
2L GWQS		42000	420	4200	210
GCL		0	0	0	0
IR78-GW06	4/7/2006	BQL	**720.00**	2100.00	**1910.00**
UST1613-MW06	4/7/2006	BQL	BQL	BQL	BQL
UST1613-MW10	4/7/2006	BQL	BQL	BQL	BQL
UST1613-MW11	4/7/2006	BQL	BQL	BQL	BQL
UST1613-MW16	4/10/2006	BQL	BQL	BQL	BQL
UST1613-MW20	4/10/2006	BQL	BQL	BQL	BQL
UST1613-MW21	4/10/2006	BQL	BQL	BQL	BQL
UST1613-MW22	4/10/2006	410.00	**3900.00**	**8500.00**	**4100.00**

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM



LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Free Product
- Free Product Detected
- No Measurable Product
- Free Product Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. Free product was not detected at this site in any of the wells gauged during this monitoring event.

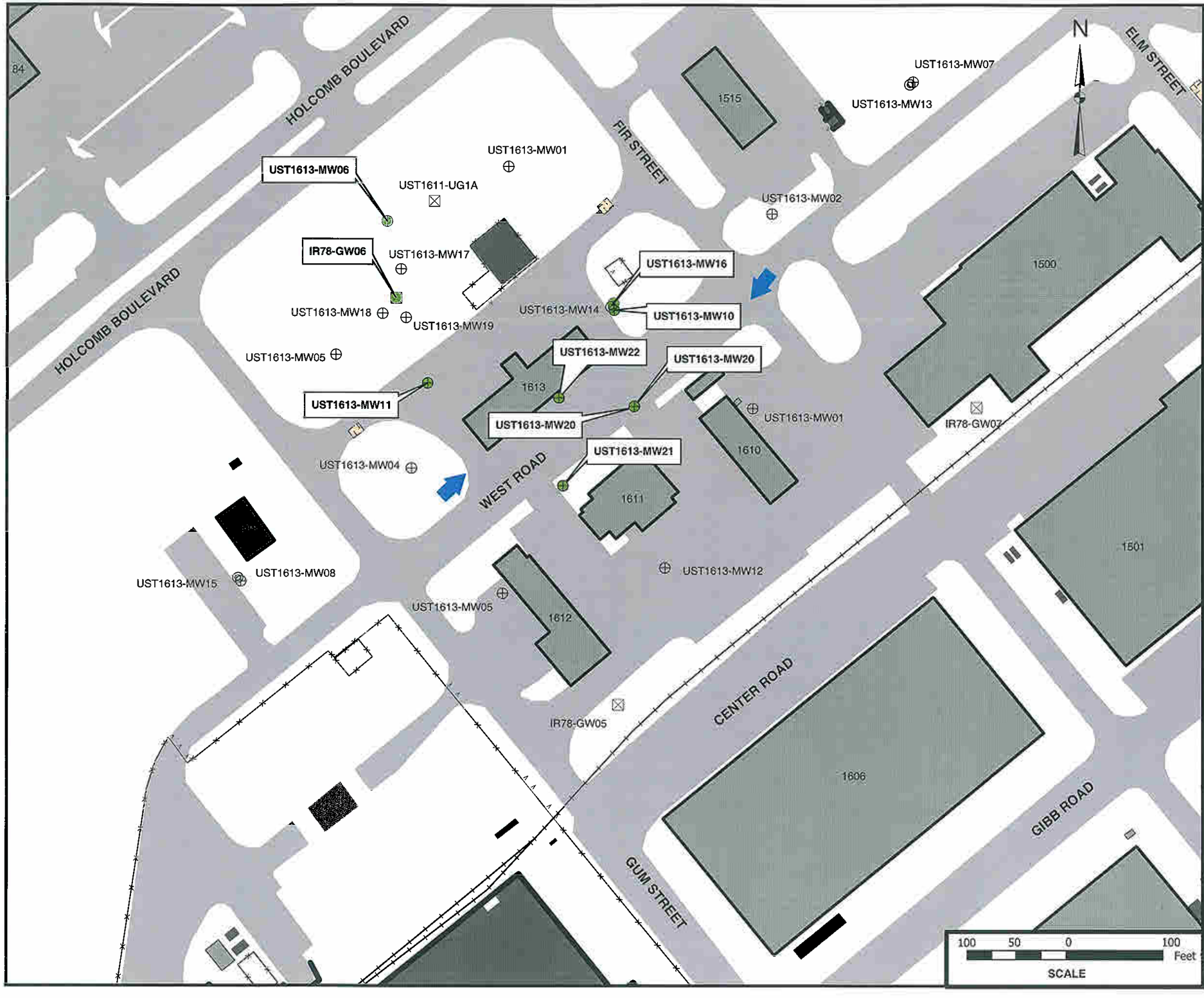
CATLIN ENGINEERS and SCIENTISTS

SITE 1613
FREE PRODUCT PLUME MAP
THIRD QUARTER 2005

FIGURE **6.1A**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM



LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Free Product
- Free Product Detected
- No Measurable Product
- Free Product Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. **Free product was not detected at this site in any of the wells gauged during this monitoring event.**

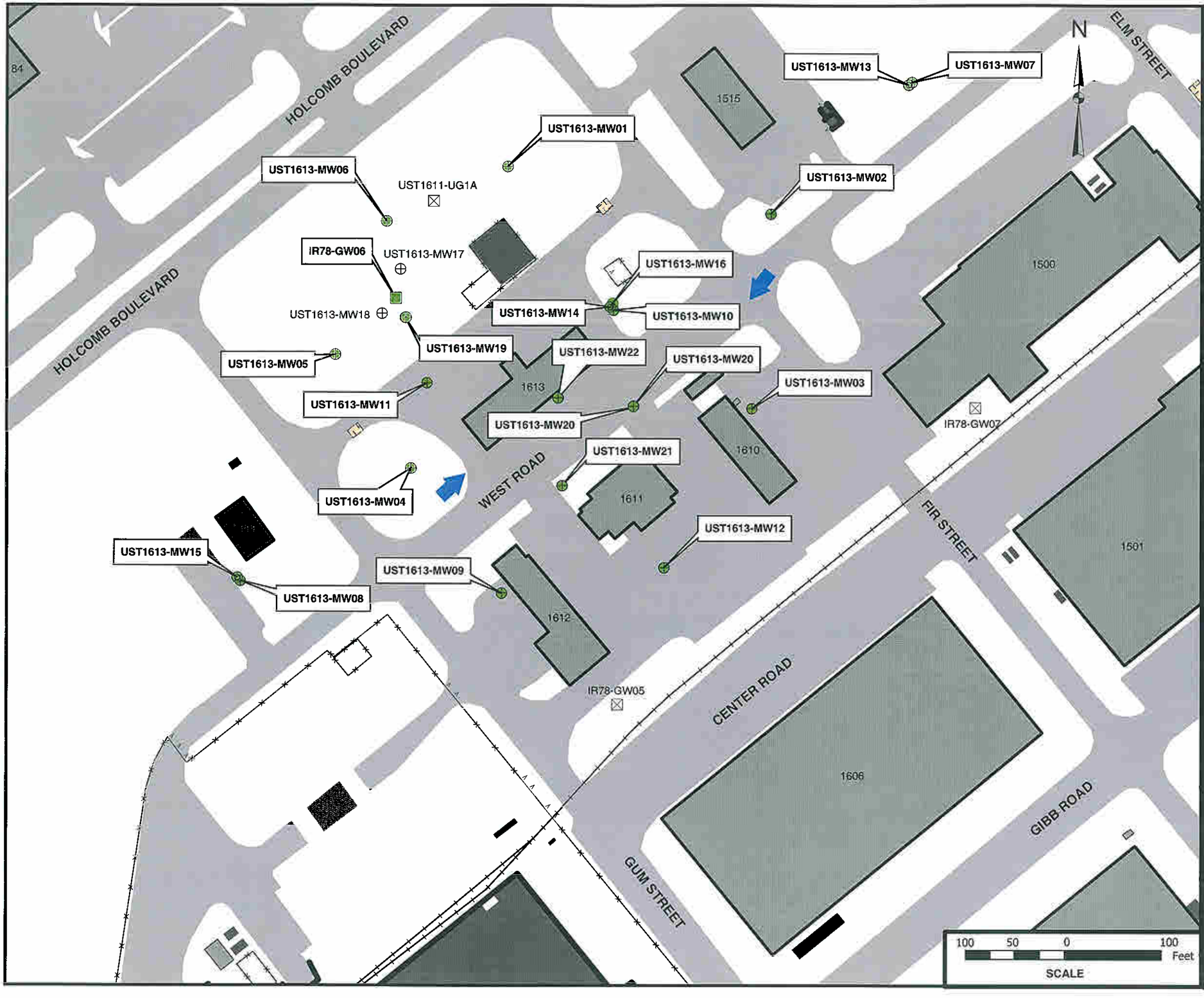
CATLIN ENGINEERS and SCIENTISTS

SITE 1613
FREE PRODUCT PLUME MAP
SECOND QUARTER 2006

FIGURE **6.1B**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM



LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Analytical Results
- 2L Non-Compliant
- 2L Compliant
- EPA 504.1 Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. No EPA Method 504.1 compounds were detected above 2L Standards for any wells sampled during this monitoring event.

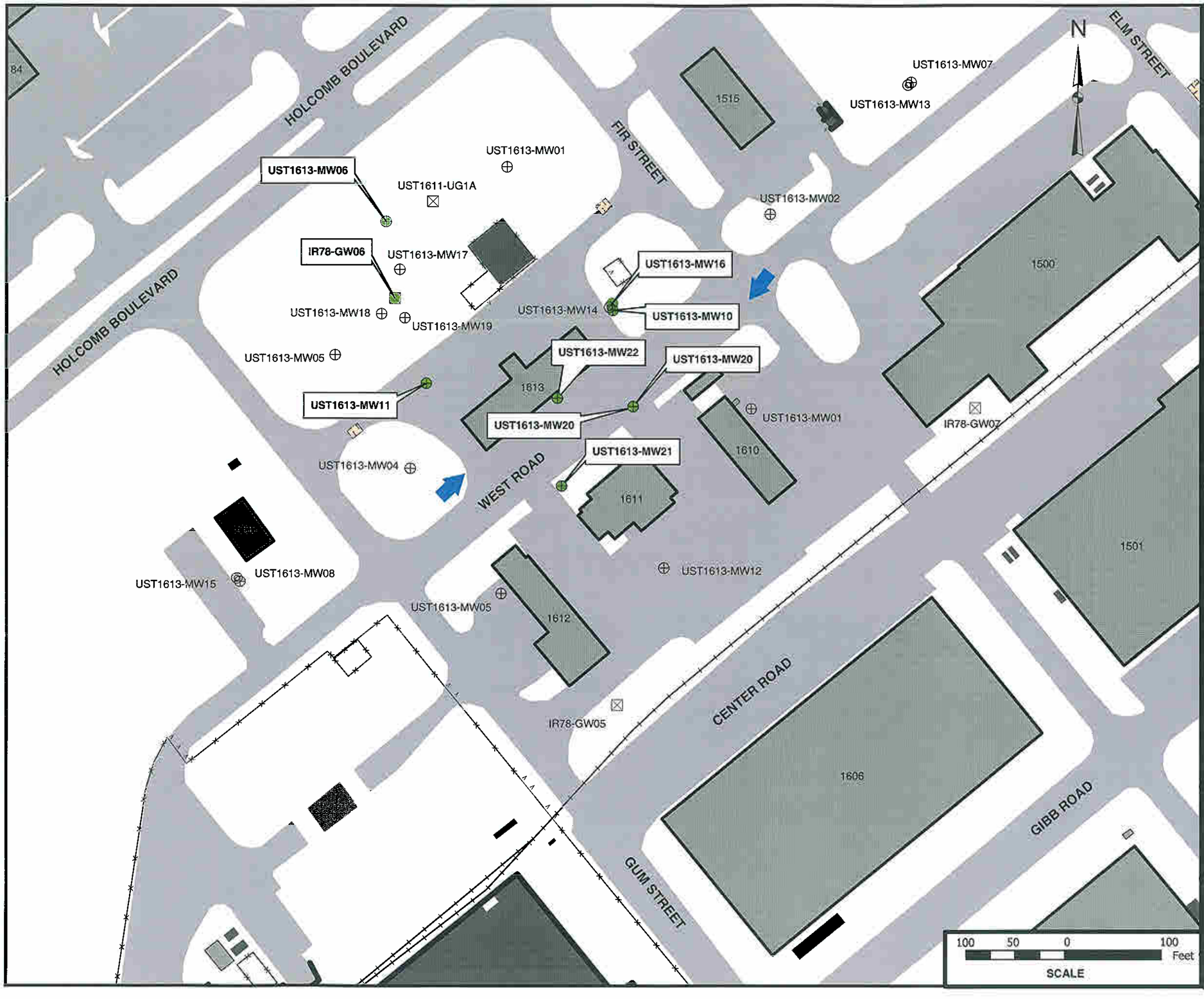
CATLIN ENGINEERS and SCIENTISTS

SITE 1613
EPA METHOD 504.1 COLORIMETRY
AND PLUME IN EXCESS OF 2L
THIRD QUARTER 2005

FIGURE 6.2

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM



LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Analytical Results
- 2L Non-Compliant
- 2L Compliant
- EPA 601 Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. No EPA Method 601 compounds were detected above 2L Standards for any wells sampled during this monitoring event.

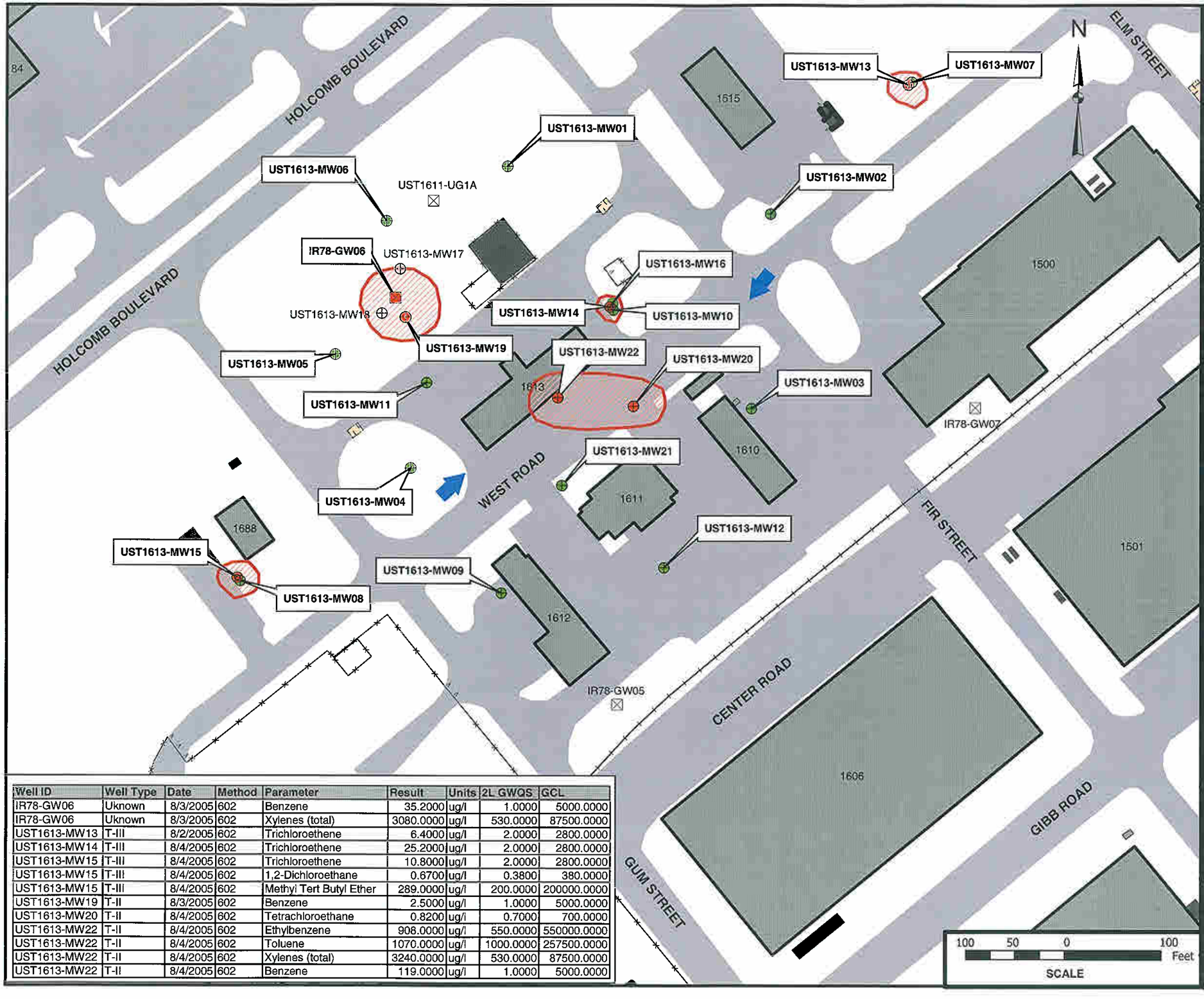
CATLIN ENGINEERS and SCIENTISTS

SITE 1613
EPA METHOD 601 COLORIMETRY
AND PLUME IN EXCESS OF 2L
SECOND QUARTER 2006

FIGURE 6.3

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM



LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Analytical Results
- 2L Non-Compliant
- 2L Compliant
- EPA 602 Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. 2L Standard refers to North Carolina Groundwater Quality Standard 15A NCAC 2L.0202.
2. GCL refers to Gross Contaminant Level as defined in Table 7 of "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Ground Water", Volume II, dated January 2, 1998.
3. A 2L Standard of "0.00" implies a standard has not yet been established. According to NCAC T15:02L, any compound found above laboratory detection limits is considered noncompliant unless otherwise specified by the NCDENR.

Well ID	Well Type	Date	Method	Parameter	Result	Units	2L GWQS	GCL
IR78-GW06	Uknown	8/3/2005	602	Benzene	35.2000	ug/l	1.0000	5000.0000
IR78-GW06	Uknown	8/3/2005	602	Xylenes (total)	3080.0000	ug/l	530.0000	87500.0000
UST1613-MW13	T-III	8/2/2005	602	Trichloroethene	6.4000	ug/l	2.0000	2800.0000
UST1613-MW14	T-III	8/4/2005	602	Trichloroethene	25.2000	ug/l	2.0000	2800.0000
UST1613-MW15	T-III	8/4/2005	602	Trichloroethene	10.8000	ug/l	2.0000	2800.0000
UST1613-MW15	T-III	8/4/2005	602	1,2-Dichloroethane	0.6700	ug/l	0.3800	380.0000
UST1613-MW15	T-III	8/4/2005	602	Methyl Tert Butyl Ether	289.0000	ug/l	200.0000	200000.0000
UST1613-MW19	T-II	8/3/2005	602	Benzene	2.5000	ug/l	1.0000	5000.0000
UST1613-MW20	T-II	8/4/2005	602	Tetrachloroethane	0.8200	ug/l	0.7000	700.0000
UST1613-MW22	T-II	8/4/2005	602	Ethylbenzene	908.0000	ug/l	550.0000	550000.0000
UST1613-MW22	T-II	8/4/2005	602	Toluene	1070.0000	ug/l	1000.0000	257500.0000
UST1613-MW22	T-II	8/4/2005	602	Xylenes (total)	3240.0000	ug/l	530.0000	87500.0000
UST1613-MW22	T-II	8/4/2005	602	Benzene	119.0000	ug/l	1.0000	5000.0000

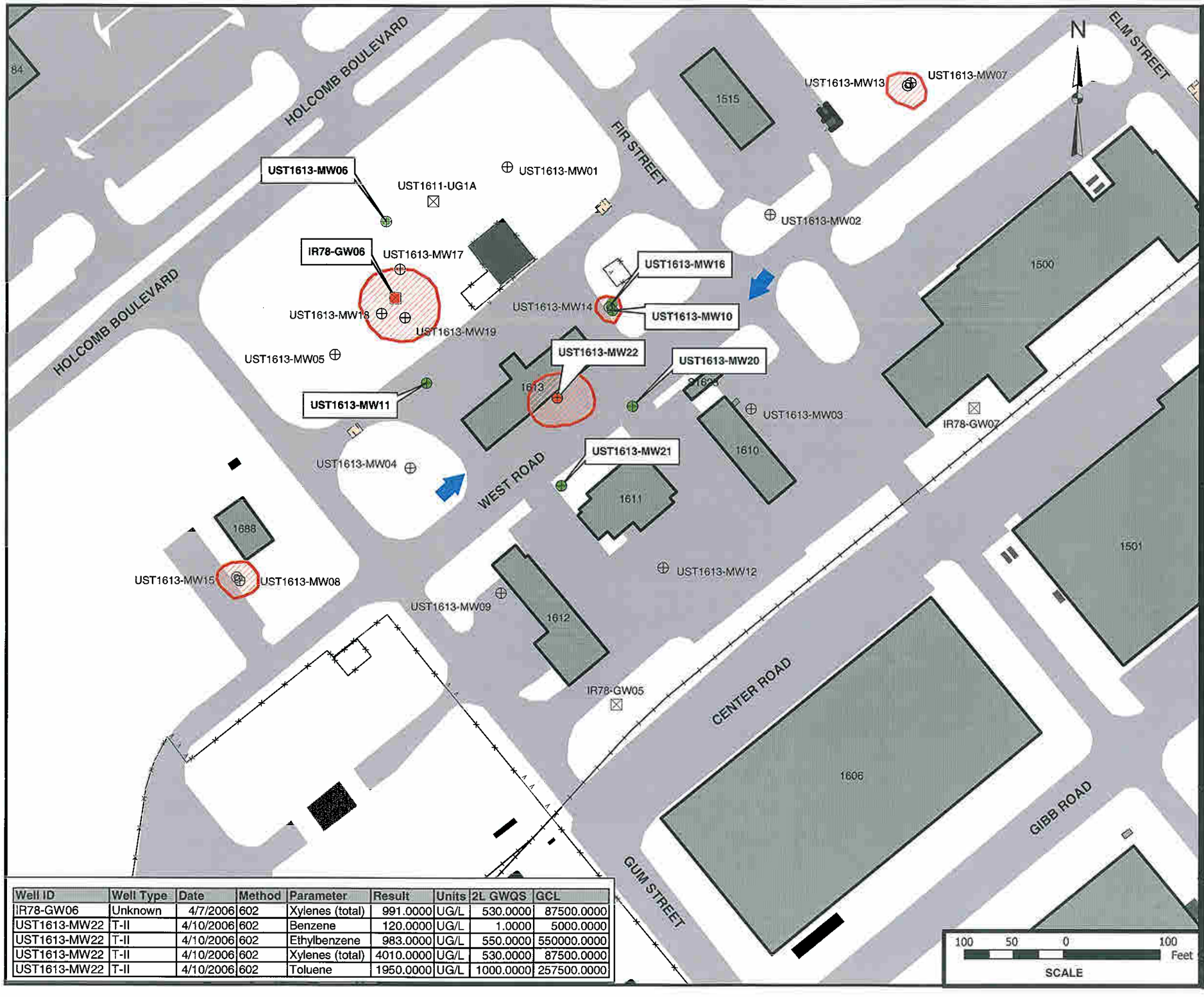
CATLIN ENGINEERS and SCIENTISTS

SITE 1613
EPA METHOD 602 COLORIMETRY
AND PLUME IN EXCESS OF 2L
THIRD QUARTER 2005

FIGURE **6.4A**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM



LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Analytical Results
- 2L Non-Compliant
- 2L Compliant
- EPA 602 Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. 2L Standard refers to North Carolina Groundwater Quality Standard 15A NCAC 2L.0202.
2. GCL refers to Gross Contaminant Level as defined in Table 7 of "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Ground Water", Volume II, dated January 2, 1998.
3. A 2L Standard of "0.00" implies a standard has not yet been established. According to NCAC T15:02L, any compound found above laboratory detection limits is considered noncompliant unless otherwise specified by the NCDENR.
4. EPA Method 602 plume geometry based on August 2005 and April 2006 analytical data.

Well ID	Well Type	Date	Method	Parameter	Result	Units	2L GWQS	GCL
IR78-GW06	Unknown	4/7/2006	602	Xylenes (total)	991.0000	UG/L	530.0000	87500.0000
UST1613-MW22	T-II	4/10/2006	602	Benzene	120.0000	UG/L	1.0000	5000.0000
UST1613-MW22	T-II	4/10/2006	602	Ethylbenzene	983.0000	UG/L	550.0000	550000.0000
UST1613-MW22	T-II	4/10/2006	602	Xylenes (total)	4010.0000	UG/L	530.0000	87500.0000
UST1613-MW22	T-II	4/10/2006	602	Toluene	1950.0000	UG/L	1000.0000	257500.0000

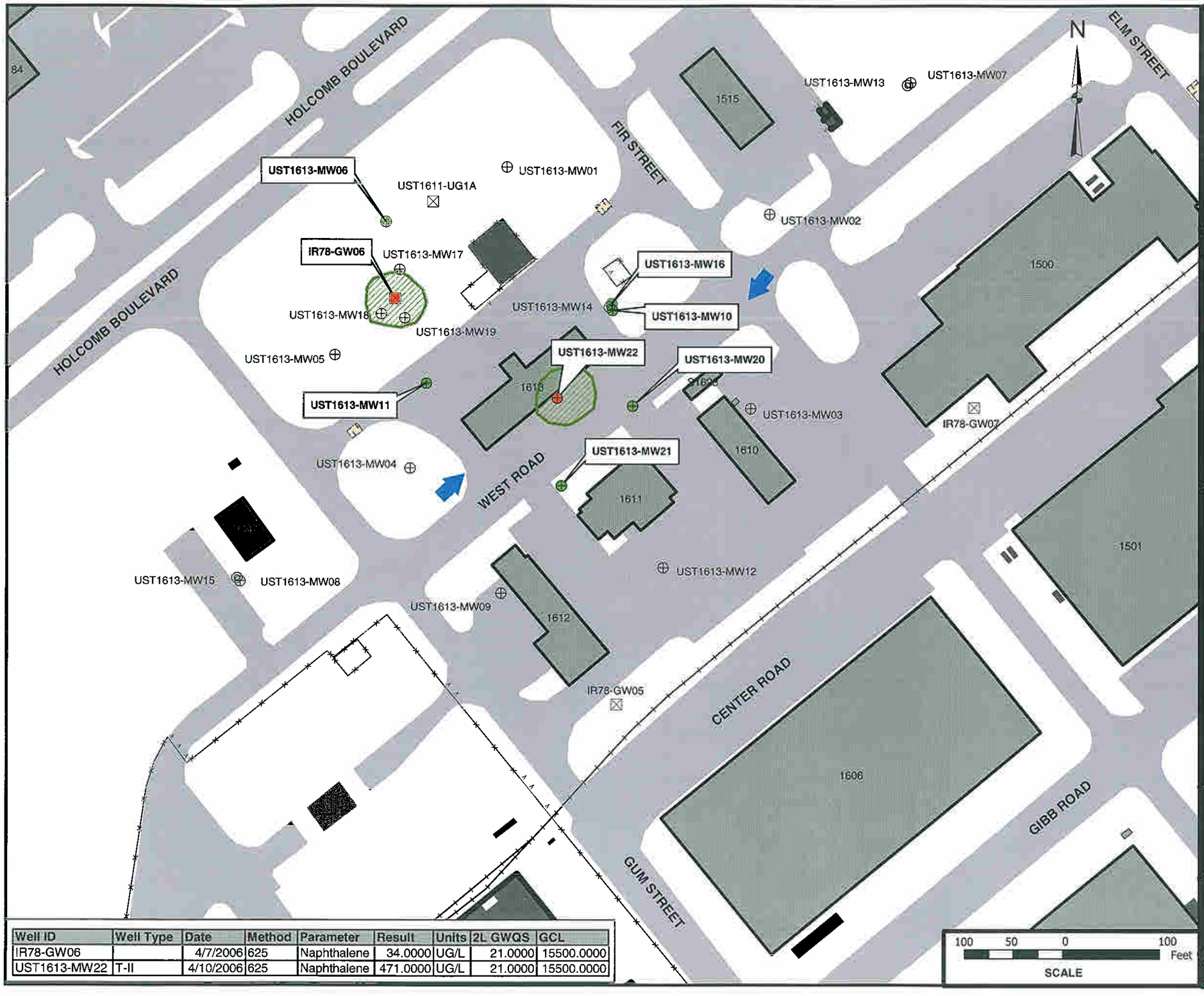
CATLIN ENGINEERS and SCIENTISTS

SITE 1613
EPA METHOD 602 COLORIMETRY AND PLUME IN EXCESS OF 2L
SECOND QUARTER 2006

FIGURE **6.4B**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM



Well ID	Well Type	Date	Method	Parameter	Result	Units	2L GWQS	GCL
IR78-GW06		4/7/2006	625	Naphthalene	34.0000	UG/L	21.0000	15500.0000
UST1613-MW22	T-II	4/10/2006	625	Naphthalene	471.0000	UG/L	21.0000	15500.0000

LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Analytical Results
- 2L Non-Compliant
- 2L Compliant
- EPA 625 Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

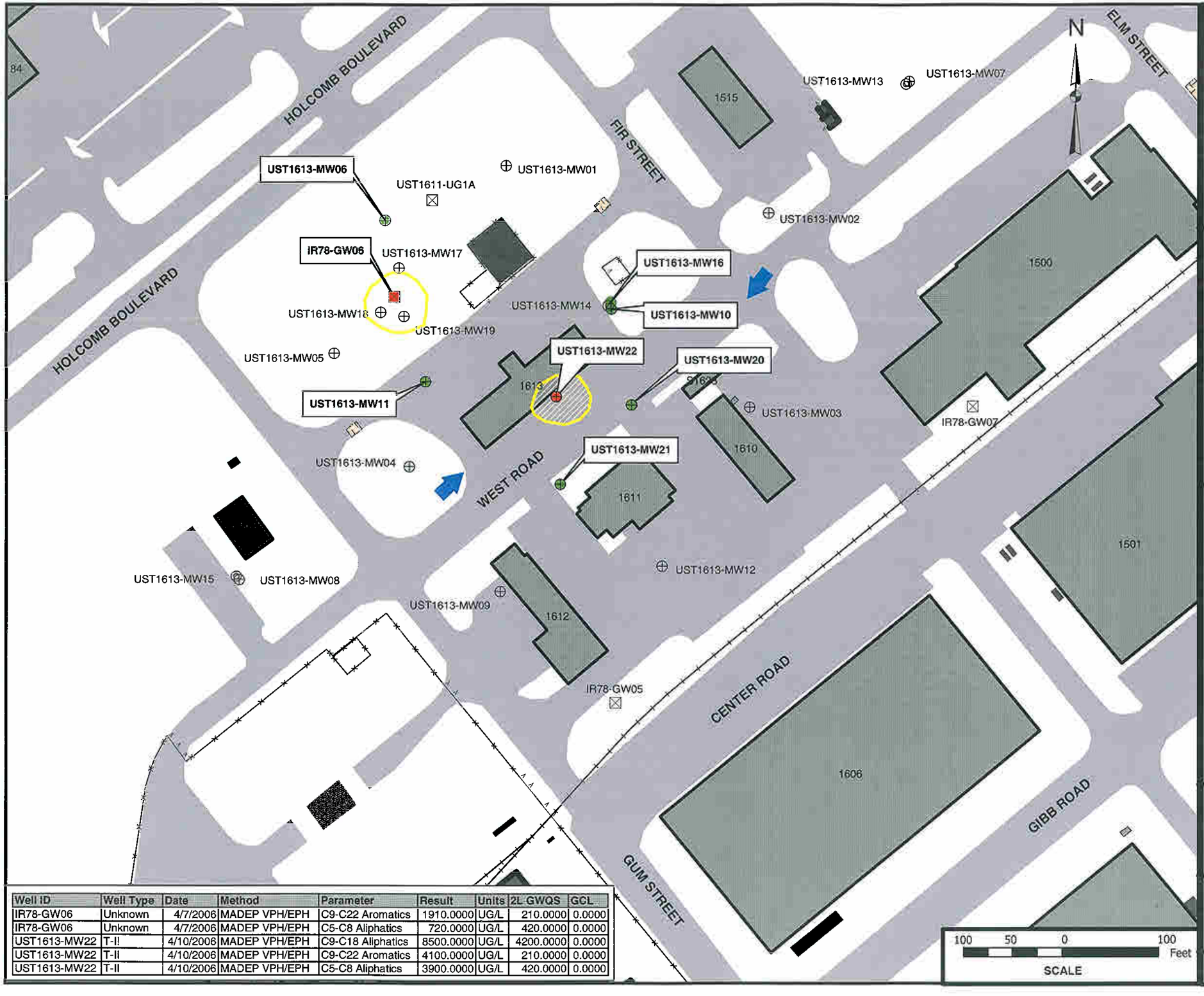
1. 2L Standard refers to North Carolina Groundwater Quality Standard 15A NCAC 2L.0202.
2. GCL refers to Gross Contaminant Level as defined in Table 7 of "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Ground Water", Volume II, dated January 2, 1998.
3. A 2L Standard of "0.00" implies a standard has not yet been established. According to NCAC T15:02L, any compound found above laboratory detection limits is considered noncompliant unless otherwise specified by the NCDENR.

CATLIN ENGINEERS and SCIENTISTS

SITE 1613
EPA METHOD 625 COLORIMETRY AND PLUME IN EXCESS OF 2L
SECOND QUARTER 2006

FIGURE **6.5**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM



Well ID	Well Type	Date	Method	Parameter	Result	Units	2L GWQS	GCL
IR78-GW06	Unknown	4/7/2006	MADEP VPH/EPH	C9-C22 Aromatics	1910.0000	UG/L	210.0000	0.0000
IR78-GW06	Unknown	4/7/2006	MADEP VPH/EPH	C5-C8 Aliphatics	720.0000	UG/L	420.0000	0.0000
UST1613-MW22	T-II	4/10/2006	MADEP VPH/EPH	C9-C18 Aliphatics	8500.0000	UG/L	4200.0000	0.0000
UST1613-MW22	T-II	4/10/2006	MADEP VPH/EPH	C9-C22 Aromatics	4100.0000	UG/L	210.0000	0.0000
UST1613-MW22	T-II	4/10/2006	MADEP VPH/EPH	C5-C8 Aliphatics	3900.0000	UG/L	420.0000	0.0000

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM

LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Analytical Results
- 2L Non-Compliant
- 2L Compliant
- MADEP Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. 2L Standard refers to North Carolina Groundwater Quality Standard 15A NCAC 2L.0202.
2. GCL refers to Gross Contaminant Level as defined in Table 7 of "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Ground Water", Volume II, dated January 2, 1998.
3. A 2L Standard of "0.00" implies a standard has not yet been established. According to NCAC T15:02L, any compound found above laboratory detection limits is considered noncompliant unless otherwise specified by the NCDENR.

CATLIN ENGINEERS and SCIENTISTS

SITE 1613
MADEP VPH/EPH COLORIMETRY AND PLUME IN EXCESS OF 2L
SECOND QUARTER 2006

FIGURE **6.6**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

SECTION 7.0

OF THE

ANNUAL MANAGEMENT REPORT
MCB CAMP LEJEUNE UST MANAGEMENT PROGRAM

MONITORING EVENT:

SECOND SEMESTER 2005/FIRST SEMESTER 2006
(JULY 2005 THROUGH JUNE 2006)

SITE-SPECIFIC MONITORING REPORT
FOR

SITE 45/S941-1, S941-2

NCDENR INCIDENT NO. 22890



7.0 EXECUTIVE SUMMARY
SITE 45/S941-1, S941-2

7.1 Site Information

7.1.1 Site Location: MCB Camp Lejeune
7.1.2 Incident Number(s): 22890
7.1.3 UTM Coordinates (WGS84) (Meters): 284764.88 Easting, 3845768.15 Northing
7.1.4 Risk Classification: Intermediate
7.1.5 Land Use Classification: Industrial/Commercial
7.1.6 Source Type(s): Gasoline, Diesel Fuel

7.2 Monitoring Event Information

7.2.1 Sampling Performed By: EEI and Sovereign
7.2.2 Date(s) of This Monitoring Event: October and November 2005 and April 2006
7.2.3 Date(s) of Previous Monitoring Event: 12/12/03 and 12/15/03
7.2.4 Reason(s) for This Monitoring Event: Track migration and attenuation of dissolved-phase plume.
7.2.5 Site Monitoring Status at Time of This Event: Semi-annual sampling.

7.3 Groundwater Hydraulics

7.3.1 Hydraulic Conductivity: 0.769
7.3.2 Effective Porosity: 0.20
7.3.3 Hydraulic Gradient: 0.034 feet/feet
7.3.4 Average Linear Groundwater Flow Velocity: 0.131 feet/day
7.3.5 Groundwater Flow Direction: Towards the Northwest
7.3.6 Range of Measured Water Table Elevations: -7.5 to 6.49 feet MSL (4/6/06)
7.3.7 Significant Changes from Previously Reported Data: Not Applicable. This is the first Management Report prepared by CATLIN.

7.4 Free Product Plume

7.4.1 Free Product Present?: No.
7.4.2 Free Product Thickness Measured: None. See Tables 7.1A and B
7.4.3 Plume Size and Location: None. See Figures 7.1A and B
7.4.4 Free Product Removed from Site This Period: None since December 2001 AFVR
7.4.5 Significant Changes from Previously Reported Data: Not Applicable. This is the first Management Report prepared by CATLIN.

7.5 Dissolved-Phase Plume

7.5.1 Plume Concentrations: See Tables 7.2A and B, 7.3A and B, and 7.4A and B.
7.5.2 Plume Size and Location: See Figures 7.2A and B, 7.3A and B, and 7.4A and B
7.5.3 Significant Changes from Previously Reported Data: Not Applicable. This is the first Management Report prepared by CATLIN. Groundwater sample analytical results compared to the 2L GWQS are discussed as follows:

EPA Method 602
Benzene concentrations were detected above the 2L GWQS in the UST45/S941-MW09 groundwater sample.

EPA Methods 625 and 6020
No EPA Method 625 or 6020 compounds were detected above the 2L GWQS.

7.6 Potential Receptors

7.6.1 Contaminated Water Supply Well(s)?: None
7.6.2 Potable Water Supply Well Within 1,000 Feet of Source Area?: No
7.6.3 Any Water Supply Well Within 250 Feet of Source Area?: No
7.6.4 Surface Water Body Within 500 Feet?: No
7.6.5 Past Evidence of Vapors?: No
7.6.6 Significant Changes from Previously Reported Data?: Not Applicable. This is the first Management Report prepared by CATLIN.

7.7 Remediation

7.7.1 Status: Continuous operation since system startup in April 1998.
7.7.2 Type: AS/SVE
7.7.3 Progress: Shallow contamination concentrations have been significantly reduced since system startup. Deep concentrations have remained consistent since the CAP.
7.7.4 Construction Contractor: J. A. Jones
7.7.5 Operating Contractor: Sovereign

7.8 Observations and Comments

The recommendations from the RAO and RCAP are as follow: AS/SVE system shutdown; Collection of soil samples as indicated in RAO; Implementation of a new groundwater schedule as indicated in RAO; Prepare ROF and subsequent RAO addendum to address additional assessment findings; Preparation of Annual Groundwater Monitoring reports.

TABLE 7.1A
SITE 45/S941
FIELD MEASUREMENTS - FOURTH QUARTER 2005

Date Measured: 10/28/2005

Well No.	Type	TOC	Stick up	DTW	Product Thickness	DTW BGS	GW Elevation
UST45/S941-MW01/45	T-II	11.43	-9.47	9.42	0.00	18.89	2.01
UST45/S941-MW02R				3.58	0.00		
UST45/S941-MW03R				4.61	0.00		
UST45/S941-MW04	T-II			5.07	0.00		
UST45/S941-MW04/45	T-II	18.61	2.41	12.25	0.00	9.84	6.36
UST45/S941-MW05	T-II	9.73		5.77	0.00		3.96
UST45/S941-MW06	T-I	10.71		16.22	0.00		-5.51
UST45/S941-MW07	T-II	10.00		2.52	0.00		7.48
UST45/S941-MW08	T-II	10.73		3.71	0.00		7.02
UST45/S941-MW09	T-III	10.27		15.75	0.00		-5.48
UST45/S941-MW12	T-II			2.66	0.00		
UST45/S941-MW13	T-II	8.32		4.25	0.00		4.07
UST45/S941-MW14	T-II	7.32		7.15	0.00		0.17
UST45/S941-MW15		8.26		6.56	0.00		1.70
UST45/S941-MW17	T-II	8.95		3.42	0.00		5.53
UST45/S941-MW18	T-II	10.80		4.47	0.00		6.33
UST45/S941-MW19	T-II	11.85		2.98	0.00		8.87
UST45/S941-MW20	T-II	10.64		2.60	0.00		8.04
UST45/S941-MW21		7.13		12.40	0.00		-5.27
UST45/S941-PW01R				4.76	0.00		

Notes:
1. TII = Type II monitoring well
   TIII = Type III monitoring well
   RW = Recovery well
2. TOC = Top of well casing elevation.
3. STICK UP = Height of well casing above land surface in feet.
4. DTW = Depth to water (in feet) from top of well casing.
5. Product thickness is measured in feet.
6. DTW BGS = Depth to water below ground surface in feet.
7. GW Elevation = Ground water elevation (not adjusted for free product)
8. A zero ("0.00") in the product thickness column indicates no measureable thickness.
9. Top of casing elevations are measured in feet relative to Mean Sea Level (NAD83).
10. Stick up values were not available for wells with no values in the STICK UP and DTW BGS columns.

TABLE 7.1B
SITE 45/S941
FIELD MEASUREMENTS - SECOND QUARTER 2006

Date Measured: 4/6/2006

Well No.	Type	TOC	Stick up	DTW	Product Thickness	DTW BGS	GW Elevation
UST45/S941-MW01/45	T-II	11.43	-9.47	11.27	0.00	20.74	0.16
UST45/S941-MW02R				6.31	0.00		
UST45/S941-MW03R					0.00		
UST45/S941-MW04	T-II			7.67	0.00		
UST45/S941-MW04/45	T-II	18.61	2.41	14.64	0.00	12.23	3.97
UST45/S941-MW05	T-II	9.73		8.51	0.00		1.22
UST45/S941-MW06	T-I	10.71		17.65	0.00		-6.94
UST45/S941-MW07	T-II	10.00		5.13	0.00		4.87
UST45/S941-MW08	T-II	10.73		5.69	0.00		5.04
UST45/S941-MW09	T-III	10.27		17.22	0.00		-6.95
UST45/S941-MW12	T-II			4.93	0.00		
UST45/S941-MW13	T-II	8.32		6.23	0.00		2.09
UST45/S941-MW14	T-II	7.32		11.38	0.00		-4.06
UST45/S941-MW15		8.26		9.59	0.00		-1.33
UST45/S941-MW17	T-II	8.95		6.74	0.00		2.21
UST45/S941-MW18	T-II	10.80		7.26	0.00		3.54
UST45/S941-MW19	T-II	11.85		5.36	0.00		6.49
UST45/S941-MW20	T-II	10.64		5.08	0.00		5.56
UST45/S941-MW21		7.13		14.63	0.00		-7.50
UST45/S941-PW01R				7.59	0.00		

Notes:
1. TII = Type II monitoring well
   TIII = Type III monitoring well
   RW = Recovery well
2. TOC = Top of well casing elevation.
3. STICK UP = Height of well casing above land surface in feet.
4. DTW = Depth to water (in feet) from top of well casing.
5. Product thickness is measured in feet.
6. DTW BGS = Depth to water below ground surface in feet.
7. GW Elevation = Ground water elevation (not adjusted for free product)
8. A zero ("0.00") in the product thickness column indicates no measureable thickness.
9. Top of casing elevations are measured in feet relative to Mean Sea Level (NAD83).
10. Stick up values were not available for wells with no values in the STICK UP and DTW BGS columns.

TABLE 7.2A

SITE 45/S941

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 602

Contaminant of Concern →		Benzene	Methyl-tert butyl ether
Well ID	**Date**		
2L GWQS		1	200
GCL		5000	200000
UST45/S941-MW01/45	10/27/2005	BQL	BQL
UST45/S941-MW01/45	4/6/2006	BQL	BQL
UST45/S941-MW02R	4/7/2006	BQL	BQL
UST45/S941-MW03R	4/6/2006	BQL	BQL
UST45/S941-MW04	11/4/2005	BQL	BQL
UST45/S941-MW04	4/6/2006	BQL	BQL
UST45/S941-MW04/45	10/27/2005	BQL	BQL
UST45/S941-MW04/45	4/6/2006	BQL	BQL
UST45/S941-MW05	11/4/2005	BQL	BQL
UST45/S941-MW05	4/6/2006	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 7.2A

SITE 45/S941

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 602

Contaminant of Concern →			
Well ID	**Date**	**Benzene**	**Methyl-tert butyl ether**
2L GWQS		1	200
GCL		5000	200000
UST45/S941-MW06	11/2/2005	BQL	BQL
UST45/S941-MW06	4/7/2006	BQL	BQL
UST45/S941-MW07	11/2/2005	BQL	BQL
UST45/S941-MW07	4/10/2006	BQL	BQL
UST45/S941-MW08	11/2/2005	BQL	BQL
UST45/S941-MW08	4/7/2006	BQL	BQL
UST45/S941-MW09	11/2/2005	**4.00**	4.00
UST45/S941-MW09	4/6/2006	**5.87**	4.46
UST45/S941-MW12	11/4/2005	BQL	BQL
UST45/S941-MW12	4/6/2006	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 7.2A

SITE 45/S941

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 602

Contaminant of Concern →		Benzene	Methyl-tert butyl ether
Well ID	Date		
2L GWQS		1	200
GCL		5000	200000
UST45/S941-MW13	10/27/2005	BQL	BQL
UST45/S941-MW13	4/6/2006	BQL	BQL
UST45/S941-MW14	10/28/2005	BQL	BQL
UST45/S941-MW14	4/6/2006	BQL	BQL
UST45/S941-MW15	10/28/2005	BQL	BQL
UST45/S941-MW15	4/6/2006	BQL	BQL
UST45/S941-MW17	11/4/2005	BQL	BQL
UST45/S941-MW17	4/7/2006	BQL	BQL
UST45/S941-MW18	11/3/2005	BQL	BQL
UST45/S941-MW18	4/6/2006	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 7.2A

SITE 45/S941

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 602

Contaminant of Concern →		Benzene	Methyl-tert butyl ether
Well ID	Date		
2L GWQS		1	200
GCL		5000	200000
UST45/S941-MW19	11/3/2005	BQL	BQL
UST45/S941-MW19	4/6/2006	BQL	BQL
UST45/S941-MW20	11/4/2005	BQL	BQL
UST45/S941-MW20	4/6/2006	BQL	BQL
UST45/S941-MW21	10/27/2005	BQL	BQL
UST45/S941-MW21	4/6/2006	BQL	BQL
UST45/S941-PW01R	4/6/2006	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 7.2B

SITE 45/S941

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 602

Contaminant of Concern →		Benzene	Methyl-tert butyl ether
Well ID	Date		
2L GWQS		1	200
GCL		5000	200000
UST45/S941-MW01/45	10/27/2005	BQL	BQL
UST45/S941-MW01/45	4/6/2006	BQL	BQL
UST45/S941-MW02R	4/7/2006	BQL	BQL
UST45/S941-MW03R	4/6/2006	BQL	BQL
UST45/S941-MW04	11/4/2005	BQL	BQL
UST45/S941-MW04	4/6/2006	BQL	BQL
UST45/S941-MW04/45	10/27/2005	BQL	BQL
UST45/S941-MW04/45	4/6/2006	BQL	BQL
UST45/S941-MW05	11/4/2005	BQL	BQL
UST45/S941-MW05	4/6/2006	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 7.2B

SITE 45/S941

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 602

Contaminant of Concern →		Benzene	Methyl-tert butyl ether
Well ID	Date		
2L GWQS		1	200
GCL		5000	200000
UST45/S941-MW06	11/2/2005	BQL	BQL
UST45/S941-MW06	4/7/2006	BQL	BQL
UST45/S941-MW07	11/2/2005	BQL	BQL
UST45/S941-MW07	4/10/2006	BQL	BQL
UST45/S941-MW08	11/2/2005	BQL	BQL
UST45/S941-MW08	4/7/2006	BQL	BQL
UST45/S941-MW09	11/2/2005	4.00	4.00
UST45/S941-MW09	4/6/2006	5.07	4.46
UST45/S941-MW12	11/4/2005	BQL	BQL
UST45/S941-MW12	4/6/2006	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 7.2B

SITE 45/S941

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 602

Contaminant of Concern →		Benzene	Methyl-tert butyl ether
Well ID	**Date**		
2L GWQS		1	200
GCL		5000	200000
UST45/S941-MW13	10/27/2005	BQL	BQL
UST45/S941-MW13	4/6/2006	BQL	BQL
UST45/S941-MW14	10/28/2005	BQL	BQL
UST45/S941-MW14	4/6/2006	BQL	BQL
UST45/S941-MW15	10/28/2005	BQL	BQL
UST45/S941-MW15	4/6/2006	BQL	BQL
UST45/S941-MW17	11/4/2005	BQL	BQL
UST45/S941-MW17	4/7/2006	BQL	BQL
UST45/S941-MW18	11/3/2005	BQL	BQL
UST45/S941-MW18	4/6/2006	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 7.2B

SITE 45/S941

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 602

Contaminant of Concern →		Benzene	Methyl-tert butyl ether
Well ID	Date		
2L GWQS		1	200
GCL		5000	200000
UST45/S941-MW19	11/3/2005	BQL	BQL
UST45/S941-MW19	4/6/2006	BQL	BQL
UST45/S941-MW20	11/4/2005	BQL	BQL
UST45/S941-MW20	4/6/2006	BQL	BQL
UST45/S941-MW21	10/27/2005	BQL	BQL
UST45/S941-MW21	4/6/2006	BQL	BQL
UST45/S941-PW01R	4/6/2006	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 7.3A

SITE 45/S941

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 625

Contaminant of Concern →	
Well ID	**Date**
2L GWQS	
GCL	
UST45/S941-MW01/45	10/27/2005
UST45/S941-MW01/45	4/6/2006
UST45/S941-MW02R	4/7/2006
UST45/S941-MW03R	4/6/2006
UST45/S941-MW04	11/4/2005
UST45/S941-MW04	4/6/2006
UST45/S941-MW04/45	10/27/2005
UST45/S941-MW04/45	4/6/2006
UST45/S941-MW05	11/4/2005
UST45/S941-MW05	4/6/2006

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 7.3A

SITE 45/S941

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 625

Contaminant of Concern →		
Well ID	**Date**	
2L GWQS		
GCL		
UST45/S941-MW06	11/2/2005	
UST45/S941-MW06	4/7/2006	
UST45/S941-MW07	11/2/2005	
UST45/S941-MW07	4/6/2006	
UST45/S941-MW08	11/2/2005	
UST45/S941-MW08	4/7/2006	
UST45/S941-MW09	11/2/2005	
UST45/S941-MW09	4/6/2006	
UST45/S941-MW12	11/4/2005	
UST45/S941-MW12	4/6/2006	

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 7.3A

SITE 45/S941

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 625

Contaminant of Concern →		
Well ID	**Date**	
2L GWQS		
GCL		
UST45/S941-MW13	10/27/2005	
UST45/S941-MW13	4/6/2006	
UST45/S941-MW14	10/28/2005	
UST45/S941-MW14	4/6/2006	
UST45/S941-MW15	10/28/2005	
UST45/S941-MW15	4/6/2006	
UST45/S941-MW17	11/4/2005	
UST45/S941-MW17	4/7/2006	
UST45/S941-MW18	11/3/2005	
UST45/S941-MW18	4/6/2006	

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 7.3A

SITE 45/S941

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 625

Contaminant of Concern →		
Well ID	**Date**	
2L GWQS		
GCL		
UST45/S941-MW19	11/3/2005	
UST45/S941-MW19	4/6/2006	
UST45/S941-MW20	11/4/2005	
UST45/S941-MW20	4/6/2006	
UST45/S941-MW21	10/27/2005	
UST45/S941-MW21	4/6/2006	
UST45/S941-PW01R	4/6/2006	

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 7.3B

SITE 45/S941

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 625

Contaminant of Concern →		
Well ID	**Date**	
2L GWQS		
GCL		
UST45/S941-MW01/45	10/27/2005	
UST45/S941-MW01/45	4/6/2006	
UST45/S941-MW02R	4/7/2006	
UST45/S941-MW03R	4/6/2006	
UST45/S941-MW04	11/4/2005	
UST45/S941-MW04	4/6/2006	
UST45/S941-MW04/45	10/27/2005	
UST45/S941-MW04/45	4/6/2006	
UST45/S941-MW05	11/4/2005	
UST45/S941-MW05	4/6/2006	

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 7.3B

SITE 45/S941

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 625

Contaminant of Concern →		
Well ID	**Date**	
2L GWQS		
GCL		
UST45/S941-MW06	11/2/2005	
UST45/S941-MW06	4/7/2006	
UST45/S941-MW07	11/2/2005	
UST45/S941-MW07	4/6/2006	
UST45/S941-MW08	11/2/2005	
UST45/S941-MW08	4/7/2006	
UST45/S941-MW09	11/2/2005	
UST45/S941-MW09	4/6/2006	
UST45/S941-MW12	11/4/2005	
UST45/S941-MW12	4/6/2006	

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 7.3B

SITE 45/S941

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 625

Contaminant of Concern →		
Well ID	**Date**	
2L GWQS		
GCL		
UST45/S941-MW13	10/27/2005	
UST45/S941-MW13	4/6/2006	
UST45/S941-MW14	10/28/2005	
UST45/S941-MW14	4/6/2006	
UST45/S941-MW15	10/28/2005	
UST45/S941-MW15	4/6/2006	
UST45/S941-MW17	11/4/2005	
UST45/S941-MW17	4/7/2006	
UST45/S941-MW18	11/3/2005	
UST45/S941-MW18	4/6/2006	

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 7.3B

SITE 45/S941

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 625

Contaminant of Concern →		
Well ID	**Date**	
2L GWQS		
GCL		
UST45/S941-MW19	11/3/2005	
UST45/S941-MW19	4/6/2006	
UST45/S941-MW20	11/4/2005	
UST45/S941-MW20	4/6/2006	
UST45/S941-MW21	10/27/2005	
UST45/S941-MW21	4/6/2006	
UST45/S941-PW01R	4/6/2006	

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 7.4A

SITE 45/S941

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 6020

Contaminant of Concern →		
Well ID	**Date**	
2L GWQS		
GCL		
UST45/S941-MW01/45	10/27/2005	
UST45/S941-MW01/45	4/6/2006	
UST45/S941-MW02R	4/21/2006	
UST45/S941-MW03R	4/6/2006	
UST45/S941-MW04	4/6/2006	
UST45/S941-MW04/45	10/27/2005	
UST45/S941-MW04/45	4/6/2006	
UST45/S941-MW05	4/6/2006	
UST45/S941-MW06	4/21/2006	
UST45/S941-MW07	4/6/2006	
UST45/S941-MW08	4/21/2006	

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 7.4A

SITE 45/S941

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 6020

Contaminant of Concern →		
Well ID	**Date**	
2L GWQS		
GCL		
UST45/S941-MW09	4/6/2006	
UST45/S941-MW12	4/6/2006	
UST45/S941-MW13	10/27/2005	
UST45/S941-MW13	4/6/2006	
UST45/S941-MW14	10/28/2005	
UST45/S941-MW14	4/6/2006	
UST45/S941-MW15	10/28/2005	
UST45/S941-MW15	4/6/2006	
UST45/S941-MW17	4/21/2006	
UST45/S941-MW18	4/6/2006	
UST45/S941-MW19	4/6/2006	

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 7.4A

SITE 45/S941

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 6020

Contaminant of Concern →		
Well ID	**Date**	
2L GWQS		
GCL		
UST45/S941-MW20	4/6/2006	
UST45/S941-MW21	10/27/2005	
UST45/S941-MW21	4/6/2006	
UST45/S941-PW01R	4/6/2006	

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 7.4B

SITE 45/S941

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 6020

Contaminant of Concern →		
Well ID	**Date**	
2L GWQS		
GCL		
UST45/S941-MW01/45	10/27/2005	
UST45/S941-MW01/45	4/6/2006	
UST45/S941-MW02R	4/21/2006	
UST45/S941-MW03R	4/6/2006	
UST45/S941-MW04	4/6/2006	
UST45/S941-MW04/45	10/27/2005	
UST45/S941-MW04/45	4/6/2006	
UST45/S941-MW05	4/6/2006	
UST45/S941-MW06	4/21/2006	
UST45/S941-MW07	4/6/2006	
UST45/S941-MW08	4/21/2006	

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 7.4B

SITE 45/S941

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 6020

Contaminant of Concern →		
Well ID	**Date**	
2L GWQS		
GCL		
UST45/S941-MW09	4/6/2006	
UST45/S941-MW12	4/6/2006	
UST45/S941-MW13	10/27/2005	
UST45/S941-MW13	4/6/2006	
UST45/S941-MW14	10/28/2005	
UST45/S941-MW14	4/6/2006	
UST45/S941-MW15	10/28/2005	
UST45/S941-MW15	4/6/2006	
UST45/S941-MW17	4/21/2006	
UST45/S941-MW18	4/6/2006	
UST45/S941-MW19	4/6/2006	

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 7.4B

SITE 45/S941

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 6020

Contaminant of Concern →		
Well ID	**Date**	
2L GWQS		
GCL		
UST45/S941-MW20	4/6/2006	
UST45/S941-MW21	10/27/2005	
UST45/S941-MW21	4/6/2006	
UST45/S941-PW01R	4/6/2006	

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM

N

NC ROUTE 24

NC ROUTE 24

IR84-MW20
IR84-MW05
IR84-MW06
IR84-MW-B
IR84-MW-A
IR84-MW13
IR84-GW01
IR84-MW14
IR84-MW16
IR84-MW17
IR84-MW02
IR84-MW01
IR84-MW04
IR84-MW03
IR84-MW22
IR84-MW19
IR84-MW15
IR84-MW21
IR84-MW16
IR84-MW18
IR84-MW11
IR84-MW12
IR84-MW10
IR84-MW09

UST45/S941-MW05
UST45/S941-MW06
UST45/S941-MW08
UST45/S941-MW17
UST45/S941-MW09
UST45/S941-PWO1R
UST45/S941-MW07
UST45/S941-MW20
UST45/S941-MW15
UST45/S941-MW18
UST45/S941-MW04/45
UST45/S941-MW01/45
UST45/S941-MW03R
UST45/S941-MW21
UST45/S941-MW14
UST45/S941-MW19
UST45/S941-MW02R
UST45/S941-MW13
UST45/S941-MW12
UST45/S941-MW04

100 50 0 100 Feet
SCALE

LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Free Product
- Free Product Detected
- No Measurable Thickness
- Free Product Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. Free Product was not detected at this site in any of the wells gauged during this monitoring event.

CATLIN ENGINEERS and SCIENTISTS

SITE 45/S941
FREE PRODUCT PLUME MAP
FOURTH QUARTER 2005

FIGURE 7.1A

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM

N

NC ROUTE 24

NC ROUTE 24

IR84-MW20
IR84-MW05
IR84-MW06
IR84-MW-B
IR84-MW-A
IR84-MW13
IR84-GW01
IR84-MW14
IR84-MW16
IR84-MW17
IR84-MW02
IR84-MW01
IR84-MW04
IR84-MW03
IR84-MW22
UST45/S941-MW05
UST45/S941-MW06
UST45/S941-MW08
UST45/S941-MW17
UST45/S941-MW09
UST45/S941-MW07
UST45/S941-PWO1R
UST45/S941-MW20
IR84-MW19
UST45/S941-MW15
UST45/S941-MW04/45
UST45/S941-MW18
IR84-MW15
UST45/S941-MW01/45
IR84-MW21
UST45/S941-MW03R
UST45/S941-MW21
UST45/S941-MW16
UST45/S941-MW19
UST45/S941-MW14
IR84-MW18
UST45/S941-MW02R
IR84-MW11
IR84-MW12
UST45/S941-MW13
IR84-MW10
IR84-MW09
UST45/S941-MW12
UST45/S941-MW04

100 50 0 100 Feet
SCALE

LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Free Product
- Free Product Detected
- No Measurable Thickness
- Free Product Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. Free Product was not detected at this site in any of the wells gauged during this monitoring event.

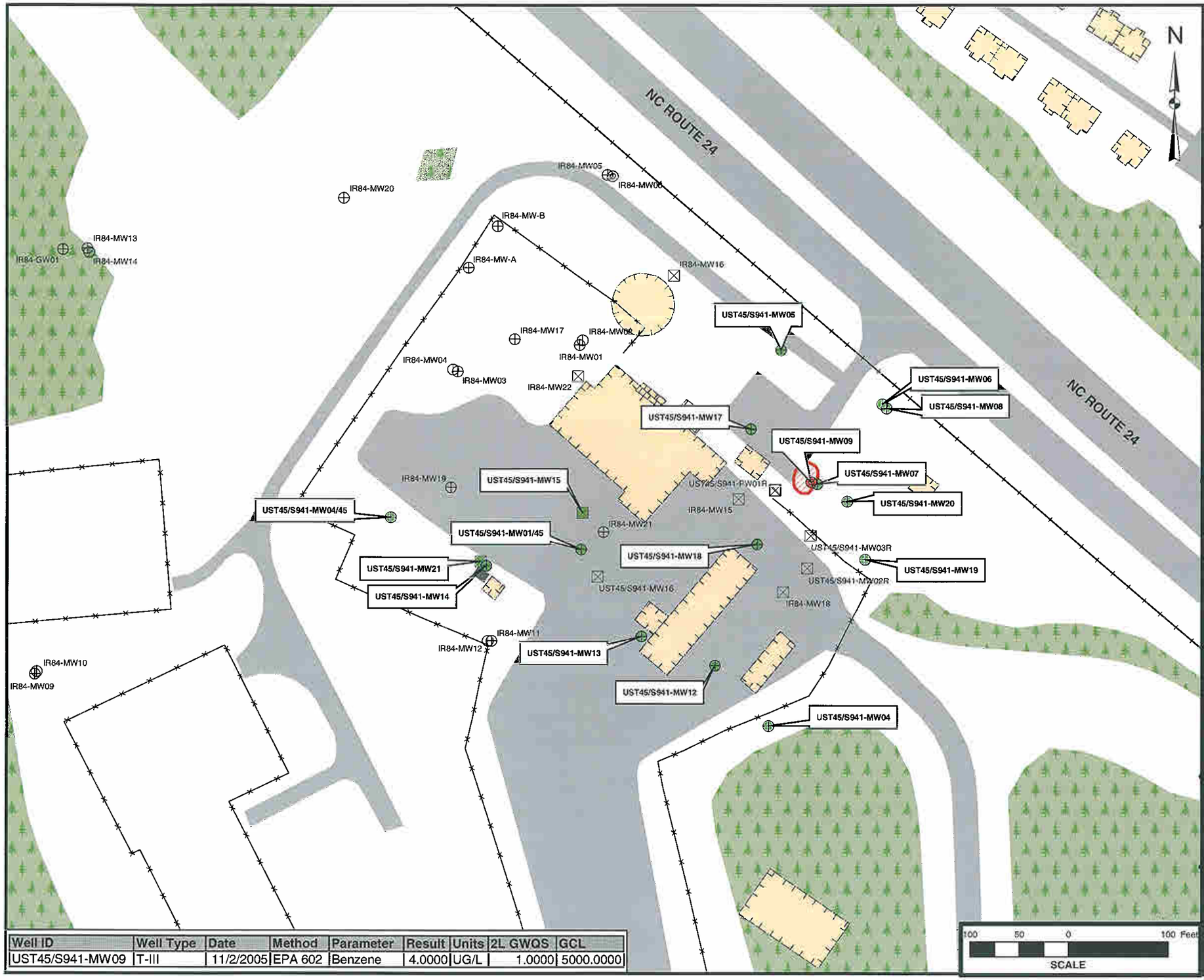
CATLIN ENGINEERS and SCIENTISTS

SITE 45/S941
FREE PRODUCT PLUME MAP
SECOND QUARTER 2006

FIGURE **7.1B**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM



Well ID	Well Type	Date	Method	Parameter	Result	Units	2L GWQS	GCL
UST45/S941-MW09	T-III	11/2/2005	EPA 602	Benzene	4.0000	UG/L	1.0000	5000.0000

100 50 0 100 Feet
SCALE

LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Analytical Results
- 2L Non-Compliant
- 2L Compliant
- EPA 602 Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. 2L Standard refers to North Carolina Groundwater Quality Standard 15A NCAC 2L.0202.
2. GCL refers to Gross Contaminant Level as defined in Table 7 of "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Ground Water", Volume II, dated January 2, 1998.
3. A 2L Standard of "0.00" implies a standard has not yet been established. According to NCAC T15:02L, any compound found above laboratory detection limits is considered noncompliant unless otherwise specified by the NCDENR.

CATLIN ENGINEERS and SCIENTISTS

SITE 45/S941
EPA METHOD 602 COLORIMETRY AND PLUME IN EXCESS OF 2L FOURTH QUARTER 2005

FIGURE 7.2A

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM

N

NC ROUTE 24

NC ROUTE 24

IR84-MW20
IR84-MW05
IR84-MW06
IR84-MW-B
IR84-MW-A
IR84-MW13
IR84-GW01
IR84-MW14
IR84-MW16
IR84-MW17
IR84-MW02
IR84-MW01
IR84-MW04
IR84-MW03
IR84-MW22
IR84-MW19
IR84-MW15
IR84-MW21
IR84-MW16
IR84-MW18
IR84-MW11
IR84-MW12
IR84-MW10
IR84-MW09

UST45/S941-MW05
UST45/S941-MW06
UST45/S941-MW08
UST45/S941-MW17
UST45/S941-MW09
UST45/S941-PW01R
UST45/S941-MW07
UST45/S941-MW15
UST45/S941-MW20
UST45/S941-MW04/45
UST45/S941-MW03R
UST45/S941-MW01/45
UST45/S941-MW18
UST45/S941-MW19
UST45/S941-MW21
UST45/S941-MW14
UST45/S941-MW02R
UST45/S941-MW13
UST45/S941-MW12
UST45/S941-MW04

LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Analytical Results
- 2L Non-Compliant
- 2L Compliant
- EPA 602 Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. 2L Standard refers to North Carolina Groundwater Quality Standard 15A NCAC 2L.0202.
2. GCL refers to Gross Contaminant Level as defined in Table 7 of "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Ground Water", Volume II, dated January 2, 1998.
3. A 2L Standard of "0.00" implies a standard has not yet been established. According to NCAC T15:02L, any compound found above laboratory detection limits is considered noncompliant unless otherwise specified by the NCDENR.

Well ID	Well Type	Date	Method	Parameter	Result	Units	2L GWQS	GCL
UST45/S941-MW09	T-III	4/6/2006	EPA 602	Benzene	5.8700	UG/L	1.0000	5000.0000

100 50 0 100 Feet
SCALE

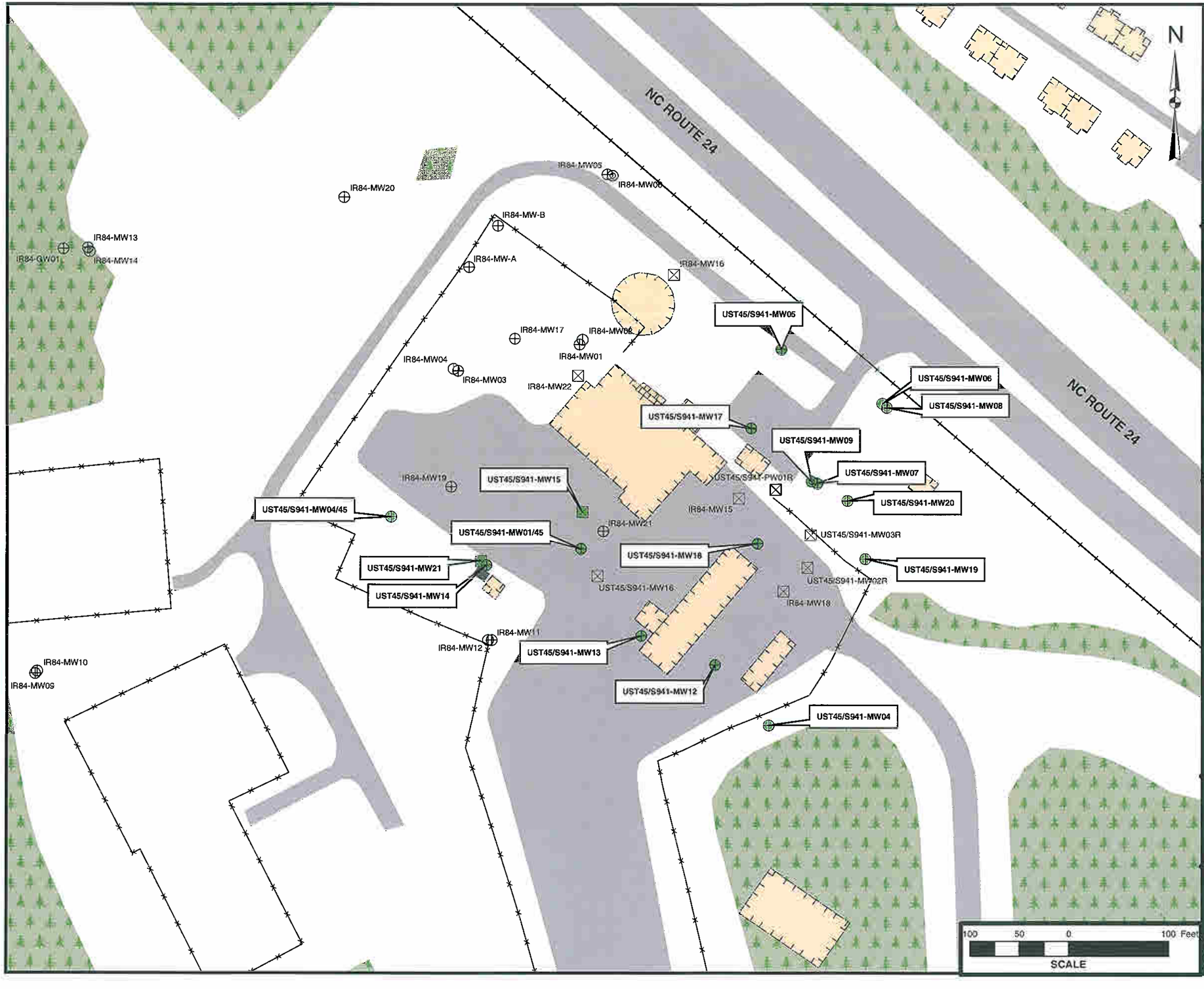
CATLIN ENGINEERS and SCIENTISTS

SITE 45/S941
EPA METHOD 602 COLORIMETRY AND PLUME IN EXCESS OF 2L SECOND QUARTER 2006

FIGURE **7.2B**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM



LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Analytical Results
- 2L Non-Compliant
- 2L Compliant
- EPA 625 Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

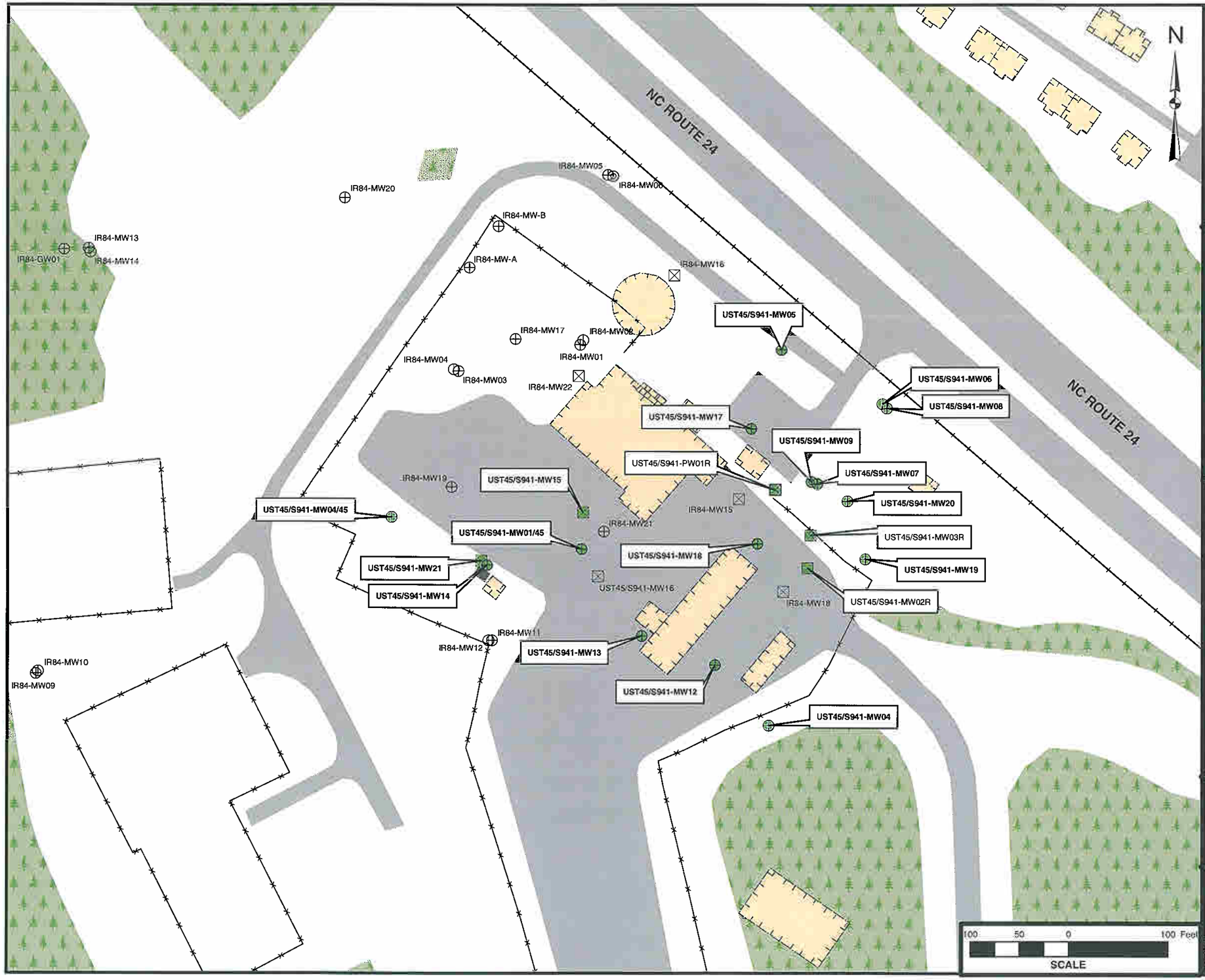
1. No EPA Method 625 compounds were detected above 2L Standards for any wells sampled during this monitoring event.

CATLIN ENGINEERS and SCIENTISTS

SITE 45/S941
EPA METHOD 625 COLORIMETRY AND PLUME IN EXCESS OF 2L
FOURTH QUARTER 2005

FIGURE **7.3A**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM



MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM

LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Analytical Results
- 2L Non-Compliant
- 2L Compliant
- EPA 625 Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. No EPA Method 625 compounds were detected above 2L Standards for any wells sampled during this monitoring event.

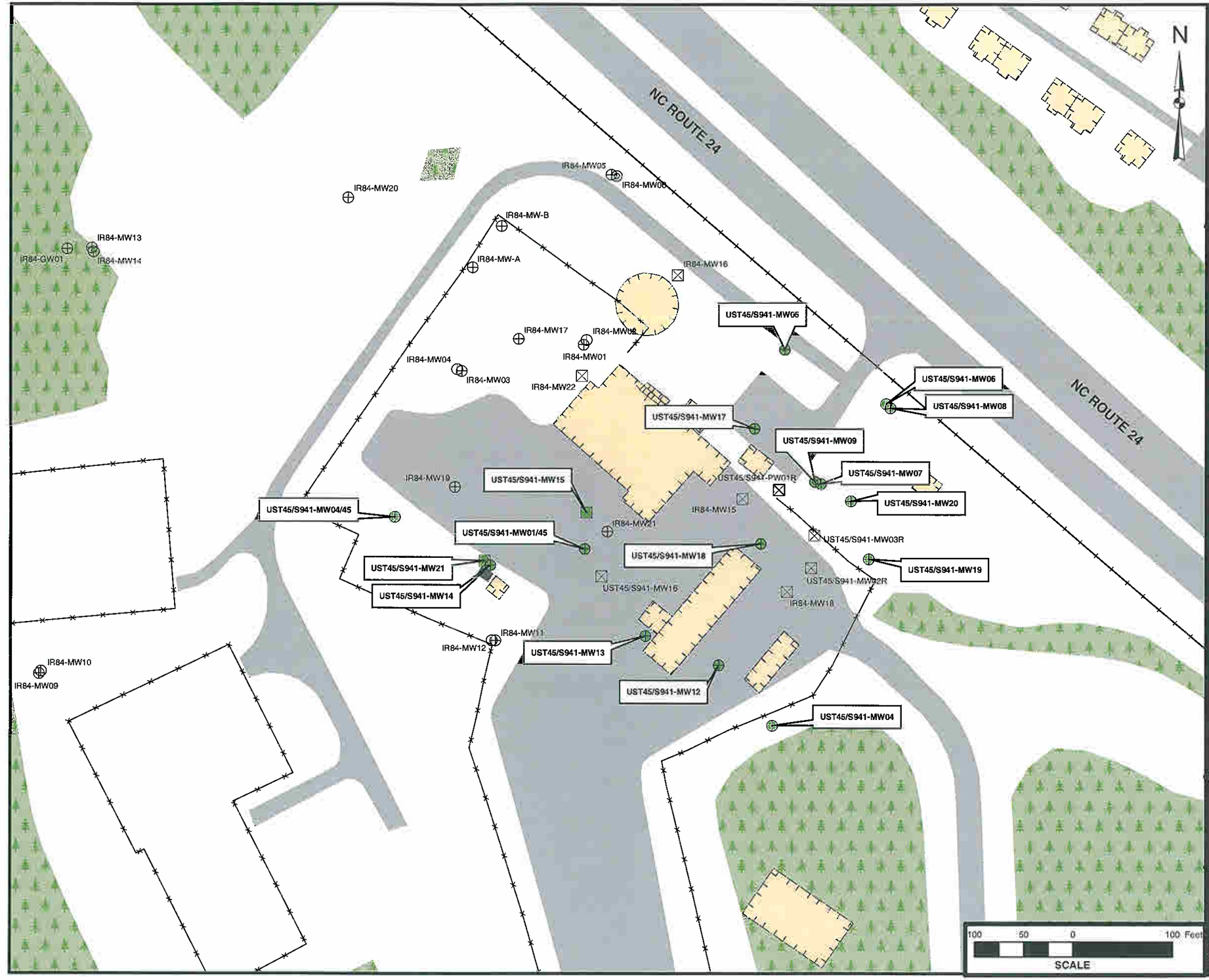
CATLIN ENGINEERS and SCIENTISTS

SITE 45/S941
EPA METHOD 625 COLORIMETRY AND PLUME IN EXCESS OF 2L SECOND QUARTER 2006

FIGURE 7.3B

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM



LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Analytical Results
- 2L Non-Compliant
- 2L Compliant
- EPA 6020 Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. No EPA Method 6020 compounds were detected above 2L Standards for any wells sampled during this monitoring event.

CATLIN ENGINEERS and SCIENTISTS

SITE 45/S941
EPA METHOD 6020 COLORIMETRY AND PLUME IN EXCESS OF 2L
FOURTH QUARTER 2005

FIGURE **7.4A**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM

N

NC ROUTE 24

NC ROUTE 24

IR84-MW20
IR84-MW05
IR84-MW06
IR84-MW-B
IR84-MW-A
IR84-MW13
IR84-GW01
IR84-MW14
IR84-MW16
IR84-MW17
IR84-MW02
IR84-MW01
IR84-MW04
IR84-MW03
IR84-MW22
IR84-MW19
IR84-MW15
IR84-MW21
IR84-MW18
IR84-MW11
IR84-MW12
IR84-MW10
IR84-MW09

UST45/S941-MW05
UST45/S941-MW06
UST45/S941-MW08
UST45/S941-MW17
UST45/S941-MW09
UST45/S941-PW01R
UST45/S941-MW07
UST45/S941-MW15
UST45/S941-MW20
UST45/S941-MW04/45
UST45/S941-MW03R
UST45/S941-MW01/45
UST45/S941-MW18
UST45/S941-MW19
UST45/S941-MW21
UST45/S941-MW16
UST45/S941-MW02R
UST45/S941-MW14
UST45/S941-MW13
UST45/S941-MW12
UST45/S941-MW04

100 50 0 100 Feet
SCALE

LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Analytical Results
- 2L Non-Compliant
- 2L Compliant
- EPA 6020 Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. No EPA Method 6020 compounds were detected above 2L Standards for any wells sampled during this monitoring event.

CATLIN ENGINEERS and SCIENTISTS

SITE 45/S941
EPA METHOD 6020 COLORIMETRY AND PLUME IN EXCESS OF 2L
SECOND QUARTER 2006

FIGURE **7.4B**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

SECTION 8.0

OF THE

ANNUAL MANAGEMENT REPORT
MCB CAMP LEJEUNE UST MANAGEMENT PROGRAM

MONITORING EVENT:

SECOND SEMESTER 2005/FIRST SEMESTER 2006
(JULY 2005 THROUGH JUNE 2006)

SITE-SPECIFIC MONITORING REPORT
FOR

SITE BUILDING 645

NCDENR INCIDENT NO. 87556



8.0 EXECUTIVE SUMMARY
SITE BUILDING 645

8.1 Site Information

8.1.1 Site Location: MCB Camp Lejeune
8.1.2 Incident Number(s): 87556
8.1.3 UTM Coordinates (WGS84) (Meters): 285302.37 Easting, 3844264.45 Northing
8.1.4 Risk Classification: Not Applicable
8.1.5 Land Use Classification: Not Applicable
8.1.6 Source Type(s): Gasoline

8.2 Monitoring Event Information

8.2.1 Sampling Performed By: EEI, CATLIN and Sovereign
8.2.2 Date(s) of This Monitoring Event: Gauging December 2005, gauging and sampling September 2006, January 2006, and April 2006.
8.2.3 Date(s) of Previous Monitoring Event: 6/10/02. Most recent reported monitoring event date is June 10, 2002 from Shaw Environmental (Shaw) Annual Monitoring Report dated January 2004. The sampling was conducted by J. A. Jones Environmental Services Company (J. A. Jones). Quarterly events as reported in the 2004 Shaw report included: March 20, June 12, September 11, and December 10, 2001; March 11 and June 10, 2002. More recent sampling events have likely been conducted, but the exact dates are unknown.
8.2.4 Reason(s) for This Monitoring Event: Scheduled monitoring events.
8.2.5 Site Monitoring Status at Time of This Event: Active. Current monitoring and remedial system operation and maintenance activities are under the direction of Sovereign. Sampling and gauging are reportedly semi-annually.

8.3 Groundwater Hydraulics

8.3.1 Hydraulic Conductivity: The aquifer's hydraulic conductivity was calculated during the site assessment activities (CATLIN, 1995) and was based on slug tests performed on three Type II wells (645-5, 645-6, and 645-9), on grain size analysis from 645-5, 645-7, and 645-12, and on an eight-hour pump test conducted on well 645-12. The average hydraulic conductivity of the surficial aquifer as determined from the pumping test at the site was 254.7 feet per day. The average hydraulic gradient along the project site utilizing wells 645-5 and 645-2 was determined to be 0.019 feet per foot or 1.8 percent. Using the above referenced values, an average linear groundwater flow velocity of 19.4 feet per day was estimated for the site.
8.3.2 Effective Porosity: 0.25 (assumed value from CATLIN CAP dated September 25, 1996)
8.3.3 Hydraulic Gradient: 0.019 feet/feet
8.3.4 Average Linear Groundwater Flow Velocity: 19.4 feet/day
8.3.5 Groundwater Flow Direction: South-Southwest
8.3.6 Range of Measured Water Table Elevations: See Tables 8.1A through 8.1D
8.3.7 Significant Changes from Previously Reported Data: Not Applicable. This is the first Management Report prepared by CATLIN.

8.4 Free Product Plume

8.4.1 Free Product Present?: No

8.4.2 Free Product Thickness Measured: Not Applicable, see Tables 8.1A, B, C, and D.

8.4.3 Plume Size and Location: Not Applicable, see Figures 8.1A, B, C, and D.

8.4.4 Free Product Removed from Site This Period: Not Applicable

8.4.5 Significant Changes from Previously Reported Data: Not Applicable. This is the first Management Report prepared by CATLIN.

8.5 Dissolved-Phase Plume

8.5.1 Plume Concentrations: See Tables 8.2A and B, 8.3A and B, and 8.4A and B

8.5.2 Plume Size and Location: See Figures 8.2, 8.3A, 8.3C, 8.3D, 8.4A, 8.4C, and 8.4D.

8.5.3 Significant Changes from Previously Reported Data: Not Applicable. This is the first Management Report prepared by CATLIN. Groundwater sample analytical results compared to the 2L GWQS are discussed as follows:

EPA Method 601

Only groundwater samples during January 2006 are discussed in this section. The UST645-MW28 and UST645-MW31 groundwater samples revealed Bromodichloromethane and Dibromochloromethane concentrations above the corresponding 2L GWQS. Bromodichloromethane concentrations were also detected above the 2L GWQS in the UST645-MW26 groundwater sample.

EPA Method 602

The UST645-MW01 and UST645-MW-12 September 2005 groundwater samples revealed 1,2-Dichlorobenzene and Benzene concentrations above the corresponding 2L GWQS. 1,2-Dichlorobenzen concentrations were also detected above the 2L GWQS in the September 2005 UST645-MW02 groundwater sample. Benzene and total Xylenes were also detected above the 2L GWQS in the January 2006 UST645-MW12 groundwater sample. Benzene was detected above the 2L GWQS in the UST645-MW-18 groundwater samples collected in September 2005, February 2006, and May 2006 and in the January 2006 UST645-MW30 groundwater sample. The January 2006 UST645-MW26 groundwater sample revealed Benzene above the 2L GWQS and the February groundwater sample revealed Benzene and Toluene above the 2L GWQS.

EPA Method 625

The UST645-MW02 and UST645-MW12 groundwater samples collected in September 2005 revealed Naphthalene concentrations above the 2L GWQS. Bis(2-ethylhexyl)phthalate concentrations were detected above the 2L GWQS in the UST645-MW11, UST645-MW18, UST645-MW19, and UST645-MW21 groundwater samples collected in January 2006. The January 2006 UST645-MW12 groundwater sample revealed Bis(2-ethylhexyl)phthalate and Naphthalene concentrations above the 2L GWQS.

8.6 Potential Receptors

8.6.1 Contaminated Water Supply Well(s)?: No
8.6.2 Potable Water Supply Well Within 1,000 Feet of Source Area?: No
8.6.3 Any Water Supply Well Within 250 Feet of Source Area?: No
8.6.4 Surface Water Body Within 500 Feet?: No
8.6.5 Past Evidence of Vapors?: No
8.6.6 Significant Changes from Previously Reported Data?: Not Applicable. This is the first Management Report prepared by CATLIN.

8.7 Remediation

8.7.1 Status: Active
8.7.2 Type: AS/SVE. A remediation system, consisting of air sparge and soil vapor extraction (AS/SVE) was installed by J. A. Jones in 1998.

The installed treatment system consists of fourteen vertical air-sparge wells (AS-1 through AS-14) and four horizontal vapor extraction wells (SVE-1 through SVE-4). Air-sparge wells AS-1 through AS-6 were installed to a depth of 80 feet BLS and air-sparge wells AS-7 through AS-14 were constructed to a depth of 50 feet BLS. Twenty-one soil vapor collection vent borings were installed below the horizontal soil vapor extraction line from 4.5 to 20 feet BLS. The vent borings were intended to allow vertical migration of soil vapor through the zone of lower permeability to the soil vapor extraction lines.

The soil and groundwater treatment system was started on September 10, 1998. An additional 19 soil vapor collection vent borings were installed at the site in 2000.

8.7.3 Progress: On-going
8.7.4 Construction Contractor: J. A. Jones Environmental Services Company
8.7.5 Operating Contractor: Sovereign

8.8 Observations and Comments

A Remedial Action Optimization and Revised Corrective Action Plan Addendum is in progress by CATLIN and includes additional delineation of shallow and deep dissolved groundwater contamination.

TABLE 8.1A
SITE 645
FIELD MEASUREMENTS - THIRD QUARTER 2005

Date Measured: 9/13/2005

Well No.	Type	TOC	Stick up	DTW	Product Thickness	DTW BGS	GW Elevation
UST645-MW01	T-II	28.55	2.30	11.67	0.00	9.37	16.88
UST645-MW02	T-II	29.52	2.65	11.46	0.00	8.81	18.06
UST645-MW03	T-II	29.78	2.58	11.78	0.00	9.20	18.00
UST645-MW04	T-II	25.32	2.81		0.00		
UST645-MW05	T-II	30.06	1.81	14.25	0.00	12.44	15.81
UST645-MW06	T-II	31.26	1.44	14.11	0.00	12.67	17.15
UST645-MW07	T-II	27.81	-0.47	9.69	0.00	10.16	18.12
UST645-MW08	T-II	29.59	2.10	13.09	0.00	10.99	16.50
UST645-MW09	T-III	29.78	1.86	9.65	0.00	7.79	20.13
UST645-MW10	T-III	27.86	-0.39	9.73	0.00	10.12	18.13
UST645-MW11	T-III	29.72	2.23	9.96	0.00	7.73	19.76
UST645-MW12	RW	29.39	1.40	10.07	0.00	8.67	19.32
UST645-MW13	T-III	29.81	2.32	10.07	0.00	7.75	19.74
UST645-MW14	T-II	28.10	-0.18	9.66	0.00	9.84	18.44
UST645-MW15	T-III	27.04	-0.13	9.45	0.00	9.58	17.59
UST645-MW16	T-III	28.26	-0.09	9.66	0.00	9.75	18.60
UST645-MW17	T-III	27.27	-0.29	13.20	0.00	13.49	14.07
UST645-MW18	T-III	31.45	2.41	12.54	0.00	10.13	18.91
UST645-MW19	T-II	28.34		9.75	0.00		18.59
UST645-MW20	T-III	28.34		9.82	0.00		18.52
UST645-MW21	T-III	23.08	0.00	9.88	0.00	9.88	13.20
UST645-MW22	T-III	28.51	0.00	9.44	0.00	9.44	19.07
UST645-MW23	T-II	28.57	0.00	11.41	0.00	11.41	17.16

Notes:
1. TII = Type II monitoring well
   TIII = Type III monitoring well
   RW = Recovery well
2. TOC = Top of well casing elevation.
3. STICK UP = Height of well casing above land surface in feet.
4. DTW = Depth to water (in feet) from top of well casing.
5. Product thickness is measured in feet.
6. DTW BGS = Depth to water below ground surface in feet.
7. GW Elevation = Ground water elevation (not adjusted for free product)
8. A zero ("0.00") in the product thickness column indicates no measureable thickness.
9. Top of casing elevations are measured in feet relative to Mean Sea Level (NAD83).
10. Stick up values were not available for wells with no values in the STICK UP and DTW BGS columns.

TABLE 8.1B
SITE 645
FIELD MEASUREMENTS - FOURTH QUARTER 2005

Date Measured: 12/16/2005

Well No.	Type	TOC	Stick up	DTW	Product Thickness	DTW BGS	GW Elevation
UST645-MW01	T-II	28.55	2.30	13.00	0.00	10.70	15.55
UST645-MW02	T-II	29.52	2.65	13.99	0.00	11.34	15.53
UST645-MW03	T-II	29.78	2.58	14.01	0.00	11.43	15.77
UST645-MW04	T-II	25.32	2.81	3.42	0.00	0.61	21.90
UST645-MW05	T-II	30.06	1.81	13.02	0.00	11.21	17.04
UST645-MW06	T-II	31.26	1.44	13.90	0.00	12.46	17.36
UST645-MW07	T-II	27.81	-0.47	17.11	0.00	17.58	10.70
UST645-MW08	T-II	29.59	2.10	12.57	0.00	10.47	17.02
UST645-MW09	T-III	29.78	1.86	18.37	0.00	16.51	11.41
UST645-MW10	T-III	27.86	-0.39	17.00	0.00	17.39	10.86
UST645-MW11	T-III	29.72	2.23	18.27	0.00	16.04	11.45
UST645-MW12	RW	29.39	1.40	16.70	0.00	15.30	12.69
UST645-MW13	T-III	29.81	2.32	18.08	0.00	15.76	11.73
UST645-MW14	T-II	28.10	-0.18	17.27	0.00	17.45	10.83
UST645-MW15	T-III	27.04	-0.13	16.40	0.00	16.53	10.64
UST645-MW16	T-III	28.26	-0.09	17.70	0.00	17.79	10.56
UST645-MW17	T-III	27.27	-0.29	17.92	0.00	18.21	9.35
UST645-MW18	T-III	31.45	2.41	17.59	0.00	15.18	13.86
UST645-MW19	T-II	28.34		17.33	0.00		11.01
UST645-MW20	T-III	28.34		17.20	0.00		11.14
UST645-MW21	T-III	23.08	0.00	12.16	0.00	12.16	10.92
UST645-MW22	T-III	28.51	0.00	17.67	0.00	17.67	10.84
UST645-MW23	T-II	28.57	0.00	12.27	0.00	12.27	16.30

Notes:
1. TII = Type II monitoring well
   TIII = Type III monitoring well
   RW = Recovery well
2. TOC = Top of well casing elevation.
3. STICK UP = Height of well casing above land surface in feet.
4. DTW = Depth to water (in feet) from top of well casing.
5. Product thickness is measured in feet.
6. DTW BGS = Depth to water below ground surface in feet.
7. GW Elevation = Ground water elevation (not adjusted for free product)
8. A zero ("0.00") in the product thickness column indicates no measureable thickness.
9. Top of casing elevations are measured in feet relative to Mean Sea Level (NAD83).
10. Stick up values were not available for wells with no values in the STICK UP and DTW BGS columns.

TABLE 8.1C
SITE 645
FIELD MEASUREMENTS - FIRST QUARTER 2006

Date Measured: 1/17/2006

Well No.	Type	TOC	Stick up	DTW	Product Thickness	DTW BGS	GW Elevation
UST645-MW01	T-II	28.55	2.30	9.73	0.00	7.43	18.82
UST645-MW02	T-II	29.52	2.65	10.75	0.00	8.10	18.77
UST645-MW03	T-II	29.78	2.58	10.63	0.00	8.05	19.15
UST645-MW04	T-II	25.32	2.81	2.93	0.00	0.12	22.39
UST645-MW05	T-II	30.06	1.81	10.18	0.00	8.37	19.88
UST645-MW06	T-II	31.26	1.44	10.79	0.00	9.35	20.47
UST645-MW07	T-II	27.81	-0.47	14.55	0.00	15.02	13.26
UST645-MW08	T-II	29.59	2.10	9.39	0.00	7.29	20.20
UST645-MW09	T-III	29.78	1.86	16.10	0.00	14.24	13.68
UST645-MW10	T-III	27.86	-0.39	14.45	0.00	14.84	13.41
UST645-MW11	T-III	29.72	2.23	15.85	0.00	13.62	13.87
UST645-MW12	RW	29.39	1.40	13.98	0.00	12.58	15.41
UST645-MW13	T-III	29.81	2.32	15.52	0.00	13.20	14.29
UST645-MW14	T-II	28.10	-0.18	14.70	0.00	14.88	13.40
UST645-MW15	T-III	27.04	-0.13	13.67	0.00	13.80	13.37
UST645-MW16	T-III	28.26	-0.09	14.85	0.00	14.94	13.41
UST645-MW17	T-III	27.27	-0.29	14.00	0.00	14.29	13.27
UST645-MW18	T-III	31.45	2.41	15.15	0.00	12.74	16.30
UST645-MW19	T-II	28.34		14.85	0.00		13.49
UST645-MW20	T-III	28.34		14.77	0.00		13.57
UST645-MW21	T-III	23.08	0.00	9.37	0.00	9.37	13.71
UST645-MW22	T-III	28.51	0.00	15.27	0.00	15.27	13.24
UST645-MW23	T-II	28.57	0.00	8.55	0.00	8.55	20.02

Notes:
1. TII = Type II monitoring well
   TIII = Type III monitoring well
   RW = Recovery well
2. TOC = Top of well casing elevation.
3. STICK UP = Height of well casing above land surface in feet.
4. DTW = Depth to water (in feet) from top of well casing.
5. Product thickness is measured in feet.
6. DTW BGS = Depth to water below ground surface in feet.
7. GW Elevation = Ground water elevation (not adjusted for free product)
8. A zero ("0.00") in the product thickness column indicates no measureable thickness.
9. Top of casing elevations are measured in feet relative to Mean Sea Level (NAD83).
10. Stick up values were not available for wells with no values in the STICK UP and DTW BGS columns.

TABLE 8.1D
SITE 645
FIELD MEASUREMENTS - SECOND QUARTER 2006

Date Measured: 4/18/2006

Well No.	Type	TOC	Stick up	DTW	Product Thickness	DTW BGS	GW Elevation
UST645-MW01	T-II	28.55	2.30		0.00		
UST645-MW02	T-II	29.52	2.65		0.00		
UST645-MW03	T-II	29.78	2.58		0.00		
UST645-MW04	T-II	25.32	2.81	3.62	0.00	0.81	21.70
UST645-MW05	T-II	30.06	1.81	14.81	0.00	13.00	15.25
UST645-MW06	T-II	31.26	1.44	16.03	0.00	14.59	15.23
UST645-MW07	T-II	27.81	-0.47	17.25	0.00	17.72	10.56
UST645-MW08	T-II	29.59	2.10	14.73	0.00	12.63	14.86
UST645-MW09	T-III	29.78	1.86		0.00		
UST645-MW10	T-III	27.86	-0.39	17.10	0.00	17.49	10.76
UST645-MW11	T-III	29.72	2.23	18.40	0.00	16.17	11.32
UST645-MW12	RW	29.39	1.40	18.06	0.00	16.66	11.33
UST645-MW13	T-III	29.81	2.32	18.35	0.00	16.03	11.46
UST645-MW14	T-II	28.10	-0.18	17.35	0.00	17.53	10.75
UST645-MW15	T-III	27.04	-0.13		0.00		
UST645-MW16	T-III	28.26	-0.09	17.60	0.00	17.69	10.66
UST645-MW17	T-III	27.27	-0.29	16.75	0.00	17.04	10.52
UST645-MW18	T-III	31.45	2.41	17.62	0.00	15.21	13.83
UST645-MW19	T-II	28.34		17.60	0.00		10.74
UST645-MW20	T-III	28.34		17.47	0.00		10.87
UST645-MW21	T-III	23.08	0.00	11.95	0.00	11.95	11.13
UST645-MW22	T-III	28.51	0.00		0.00		
UST645-MW23	T-II	28.57	0.00		0.00		

Notes:
1. TII = Type II monitoring well
   TIII = Type III monitoring well
   RW = Recovery well
2. TOC = Top of well casing elevation.
3. STICK UP = Height of well casing above land surface in feet.
4. DTW = Depth to water (in feet) from top of well casing.
5. Product thickness is measured in feet.
6. DTW BGS = Depth to water below ground surface in feet.
7. GW Elevation = Ground water elevation (not adjusted for free product)
8. A zero ("0.00") in the product thickness column indicates no measureable thickness.
9. Top of casing elevations are measured in feet relative to Mean Sea Level (NAD83).
10. Stick up values were not available for wells with no values in the STICK UP and DTW BGS columns.

TABLE 8.2A

SITE 645

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 601

Contaminant of Concern →		Bromodichloromethane	Chloroform	Chloromethane	Dibromochloromethane
Well ID	Date				
2L GWQS		0.6	70	2.6	0.41
GCL		0	70000	2600	0
UST645-MW01	1/4/2006	BQL	BQL	BQL	BQL
UST645-MW02	1/5/2006	BQL	BQL	BQL	BQL
UST645-MW03	1/4/2006	BQL	BQL	BQL	BQL
UST645-MW04	1/5/2006	BQL	BQL	BQL	BQL
UST645-MW05	1/4/2006	BQL	BQL	BQL	BQL
UST645-MW06	1/5/2006	BQL	BQL	BQL	BQL
UST645-MW08	1/4/2006	BQL	BQL	BQL	BQL
UST645-MW09	1/5/2006	BQL	BQL	BQL	BQL
UST645-MW10	1/6/2006	BQL	BQL	BQL	BQL
UST645-MW11	1/4/2006	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 8.2A

SITE 645

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 601

Contaminant of Concern →		Bromodichloromethane	Chloroform	Chloromethane	Dibromochloromethane
Well ID	Date				
2L GWQS		0.6	70	2.6	0.41
GCL		0	70000	2600	0
UST645-MW12	1/4/2006	BQL	BQL	BQL	BQL
UST645-MW13	1/4/2006	BQL	BQL	BQL	BQL
UST645-MW14	1/6/2006	BQL	BQL	BQL	BQL
UST645-MW15	1/5/2006	BQL	BQL	BQL	BQL
UST645-MW16	1/6/2006	BQL	BQL	BQL	BQL
UST645-MW17	1/5/2006	BQL	BQL	BQL	BQL
UST645-MW18	1/5/2006	BQL	BQL	BQL	BQL
UST645-MW19	1/6/2006	BQL	BQL	BQL	BQL
UST645-MW20	1/6/2006	BQL	BQL	BQL	BQL
UST645-MW21	1/5/2006	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 8.2A

SITE 645

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 601

Contaminant of Concern →		Bromodichloromethane	Chloroform	Chloromethane	Dibromochloromethane
Well ID	Date				
2L GWQS		0.6	70	2.6	0.41
GCL		0	70000	2600	0
UST645-MW22	1/5/2006	BQL	BQL	BQL	BQL
UST645-MW23	1/5/2006	BQL	BQL	BQL	BQL
UST645-MW24	1/6/2006	BQL	BQL	BQL	BQL
UST645-MW25	1/6/2006	BQL	BQL	BQL	BQL
UST645-MW26	1/6/2006	0.67	2.42	0.80	BQL
UST645-MW27	1/6/2006	BQL	1.96	BQL	BQL
UST645-MW28	1/6/2006	3.20	30.60	BQL	3.33
UST645-MW29	1/5/2006	BQL	4.20	BQL	BQL
UST645-MW30	1/6/2006	BQL	BQL	BQL	BQL
UST645-MW31	1/5/2006	5.48	17.80	BQL	4.91

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 8.2B

SITE 645

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 601

Contaminant of Concern →		Bromodichloromethane	Chloroform	Chloromethane	Dibromochloromethane
Well ID	**Date**				
2L GWQS		0.6	70	2.6	0.41
GCL		0	70000	2600	0
UST645-MW01	1/4/2006	BQL	BQL	BQL	BQL
UST645-MW02	1/5/2006	BQL	BQL	BQL	BQL
UST645-MW03	1/4/2006	BQL	BQL	BQL	BQL
UST645-MW04	1/5/2006	BQL	BQL	BQL	BQL
UST645-MW05	1/4/2006	BQL	BQL	BQL	BQL
UST645-MW06	1/5/2006	BQL	BQL	BQL	BQL
UST645-MW08	1/4/2006	BQL	BQL	BQL	BQL
UST645-MW09	1/5/2006	BQL	BQL	BQL	BQL
UST645-MW10	1/6/2006	BQL	BQL	BQL	BQL
UST645-MW11	1/4/2006	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 8.2B

SITE 645

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 601

Contaminant of Concern →		Bromodichloromethane	Chloroform	Chloromethane	Dibromochloromethane
Well ID	**Date**				
2L GWQS		0.6	70	2.6	0.41
GCL		0	70000	2600	0
UST645-MW12	1/4/2006	BQL	BQL	BQL	BQL
UST645-MW13	1/4/2006	BQL	BQL	BQL	BQL
UST645-MW14	1/6/2006	BQL	BQL	BQL	BQL
UST645-MW15	1/5/2006	BQL	BQL	BQL	BQL
UST645-MW16	1/6/2006	BQL	BQL	BQL	BQL
UST645-MW17	1/5/2006	BQL	BQL	BQL	BQL
UST645-MW18	1/5/2006	BQL	BQL	BQL	BQL
UST645-MW19	1/6/2006	BQL	BQL	BQL	BQL
UST645-MW20	1/6/2006	BQL	BQL	BQL	BQL
UST645-MW21	1/5/2006	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 8.2B

SITE 645

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 601

Contaminant of Concern →		Bromodichloromethane	Chloroform	Chloromethane	Dibromochloromethane
Well ID	**Date**				
2L GWQS		0.6	70	2.6	0.41
GCL		0	70000	2600	0
UST645-MW22	1/5/2006	BQL	BQL	BQL	BQL
UST645-MW23	1/5/2006	BQL	BQL	BQL	BQL
UST645-MW24	1/6/2006	BQL	BQL	BQL	BQL
UST645-MW25	1/6/2006	BQL	BQL	BQL	BQL
UST645-MW26	1/6/2006	0.67	2.42	0.80	BQL
UST645-MW27	1/6/2006	BQL	1.96	BQL	BQL
UST645-MW28	1/6/2006	3.20	30.60	BQL	3.33
UST645-MW29	1/5/2006	BQL	4.20	BQL	BQL
UST645-MW30	1/6/2006	BQL	BQL	BQL	BQL
UST645-MW31	1/5/2006	6.48	17.80	BQL	4.91

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 8.3A

SITE 645

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 602

Contaminant of Concern →		1,2-Dichlorobenzene	Benzene	Chlorobenzene	Diisopropyl ether (DIPE)	Ethylbenzene	m/p-Xylene	Methyl Tert Butyl Ether	Methyl-tert butyl ether	o-Xylene	Toluene	Xylenes (total)
Well ID	**Date**											
2L GWQS		24	1	50	70	550	530	200	200	530	1000	530
GCL		72500	5000	0	70000	550000	87500	200000	200000	87500	257500	87500
UST645-MW01	9/22/2005	75.60	2.00	0.84	BQL	35.20	BQL	2.70	BQL	BQL	27.90	64.70
UST645-MW01	1/4/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST645-MW01	1/16/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST645-MW01	4/18/2006	BQL	0.58	BQL	0.74	15.60	BQL	BQL	BQL	BQL	9.38	22.78
UST645-MW02	9/22/2005	69.90	0.73	BQL	BQL	53.80	BQL	6.10	BQL	BQL	9.30	240.00
UST645-MW02	1/5/2006	BQL	BQL	BQL	BQL	0.86	BQL	BQL	BQL	BQL	BQL	1.51
UST645-MW02	1/16/2006	BQL	BQL	BQL	BQL	0.36	BQL	BQL	BQL	BQL	BQL	BQL
UST645-MW02	4/18/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST645-MW03	9/22/2005	3.00	BQL	BQL	BQL	5.00	BQL	BQL	BQL	BQL	BQL	2.70
UST645-MW03	1/4/2006	BQL	BQL	BQL	BQL	9.92	BQL	BQL	BQL	BQL	1.00	7.98
UST645-MW03	1/16/2006	BQL	BQL	BQL	BQL	16.10	BQL	BQL	BQL	BQL	1.82	13.87
UST645-MW03	4/18/2006	BQL	0.47	BQL	BQL	20.40	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 8.3A

SITE 645

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 602

Contaminant of Concern →		1,2-Dichlorobenzene	Benzene	Chlorobenzene	Diisopropyl ether (DIPE)	Ethylbenzene	m/p-Xylene	Methyl Tert Butyl Ether	Methyl-tert butyl ether	o-Xylene	Toluene	Xylenes (total)
Well ID	**Date**											
2L GWQS		24	1	50	70	550	530	200	200	530	1000	530
GCL		72500	5000	0	70000	550000	87500	200000	200000	87500	257500	87500
UST645-MW04	1/5/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST645-MW05	1/4/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST645-MW06	1/5/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST645-MW08	1/4/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST645-MW09	9/22/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST645-MW09	1/5/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST645-MW09	1/17/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST645-MW09	4/18/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST645-MW10	1/6/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST645-MW11	1/4/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 8.3A

SITE 645

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 602

Contaminant of Concern →		1,2-Dichlorobenzene	Benzene	Chlorobenzene	Diisopropyl ether (DIPE)	Ethylbenzene	m/p-Xylene	Methyl Tert Butyl Ether	Methyl-tert butyl ether	o-Xylene	Toluene	Xylenes (total)
Well ID	**Date**											
2L GWQS		24	1	50	70	550	530	200	200	530	1000	530
GCL		72500	5000	0	70000	550000	87500	200000	200000	87500	257500	87500
UST645-MW12	9/22/2005	31.60	4.20	BQL	BQL	115.00	BQL	BQL	BQL	BQL	26.30	472.00
UST645-MW12	1/4/2006	BQL	BQL	BQL	BQL	6.26	BQL	BQL	BQL	BQL	2.41	34.13
UST645-MW12	1/17/2006	BQL	7.84	BQL	BQL	212.00	BQL	BQL	BQL	BQL	123.00	938.00
UST645-MW12	4/18/2006	BQL	BQL	BQL	BQL	8.23	BQL	BQL	BQL	BQL	1.23	32.74
UST645-MW13	1/4/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST645-MW14	1/6/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST645-MW15	9/22/2005	BQL	BQL	BQL	BQL	BQL	BQL	1.00	BQL	BQL	0.74	BQL
UST645-MW15	1/5/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	0.92	BQL	BQL	BQL
UST645-MW15	1/16/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST645-MW15	4/18/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	1.86	BQL	BQL	BQL
UST645-MW16	1/6/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 8.3A

SITE 645

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 602

Contaminant of Concern →		1,2-Dichlorobenzene	Benzene	Chlorobenzene	Diisopropyl ether (DIPE)	Ethylbenzene	m/p-Xylene	Methyl Tert Butyl Ether	Methyl-tert butyl ether	o-Xylene	Toluene	Xylenes (total)
Well ID	**Date**											
2L GWQS		24	1	50	70	550	530	200	200	530	1000	530
GCL		72500	5000	0	70000	550000	87500	200000	200000	87500	257500	87500
UST645-MW17	1/5/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST645-MW18	9/27/2005	BQL	**49.00**	BQL	BQL	273.00	BQL	BQL	BQL	BQL	259.00	281.00
UST645-MW18	1/5/2006	BQL	0.88	BQL	BQL	2.04	BQL	BQL	BQL	BQL	2.95	3.42
UST645-MW18	1/17/2006	BQL	0.81	BQL	BQL	1.90	BQL	BQL	BQL	BQL	3.10	4.57
UST645-MW18	2/21/2006	BQL	**27.70**	BQL	BQL	173.00	47.20	BQL	BQL	25.20	31.00	BQL
UST645-MW18	4/19/2006	BQL	**23.50**	BQL	BQL	112.00	BQL	BQL	BQL	BQL	10.40	32.60
UST645-MW19	1/6/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST645-MW20	1/6/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 8.3A

SITE 645

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 602

Contaminant of Concern →		1,2-Dichlorobenzene	Benzene	Chlorobenzene	Diisopropyl ether (DIPE)	Ethylbenzene	m/p-Xylene	Methyl Tert Butyl Ether	Methyl-tert butyl ether	o-Xylene	Toluene	Xylenes (total)
Well ID	**Date**											
2L GWQS		24	1	50	70	550	530	200	200	530	1000	530
GCL		72500	5000	0	70000	550000	87500	200000	200000	87500	257500	87500
UST645-MW21	9/22/2005	BQL	BQL	BQL	BQL	0.54	BQL	BQL	BQL	BQL	1.40	3.10
UST645-MW21	1/5/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST645-MW21	1/16/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST645-MW21	4/19/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST645-MW22	9/27/2005	BQL	BQL	BQL	BQL	BQL	BQL	5.40	BQL	BQL	0.82	BQL
UST645-MW22	1/5/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST645-MW22	1/16/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	2.32	BQL	BQL	BQL
UST645-MW22	4/18/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	0.61	BQL	BQL	BQL
UST645-MW23	9/27/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST645-MW23	1/5/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST645-MW23	1/16/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST645-MW23	4/19/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 8.3A

SITE 645

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 602

Contaminant of Concern →		1,2-Dichlorobenzene	Benzene	Chlorobenzene	Diisopropyl ether (DIPE)	Ethylbenzene	m/p-Xylene	Methyl Tert Butyl Ether	Methyl-tert butyl ether	o-Xylene	Toluene	Xylenes (total)
Well ID	**Date**											
2L GWQS		24	1	50	70	550	530	200	200	530	1000	530
GCL		72500	5000	0	70000	550000	87500	200000	200000	87500	257500	87500
UST645-MW24	1/6/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST645-MW25	1/6/2006	BQL	BQL	BQL	BQL	8.60	BQL	BQL	BQL	BQL	5.18	54.50
UST645-MW26	1/6/2006	BQL	**451.00**	BQL	BQL	BQL	BQL	BQL	35.90	BQL	990.00	BQL
UST645-MW26	2/21/2006	BQL	**964.00**	BQL	BQL	BQL	BQL	BQL	BQL	BQL	**2900.00**	BQL
UST645-MW27	1/6/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	2.20
UST645-MW28	1/6/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	7.62
UST645-MW29	1/5/2006	BQL	**2.17**	BQL	BQL	0.83	BQL	BQL	BQL	BQL	0.72	5.62
UST645-MW30	1/6/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	1.59
UST645-MW31	1/5/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 8.3B

SITE 645

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 602

Contaminant of Concern →		1,2-Dichlorobenzene	Benzene	Chlorobenzene	Diisopropyl ether (DIPE)	Ethylbenzene	m/p-Xylene	Methyl Tert Butyl Ether	Methyl-tert butyl ether	o-Xylene	Toluene	Xylenes (total)
Well ID	**Date**											
2L GWQS		24	1	50	70	550	530	200	200	530	1000	530
GCL		72500	5000	0	70000	550000	87500	200000	200000	87500	257500	87500
UST645-MW01	9/22/2005	75.60	2.00	0.84	BQL	35.20	BQL	2.70	BQL	BQL	27.90	64.70
UST645-MW01	1/4/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST645-MW01	1/16/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST645-MW01	4/18/2006	BQL	0.58	BQL	0.74	15.60	BQL	BQL	BQL	BQL	9.38	22.78
UST645-MW02	9/22/2005	69.90	0.73	BQL	BQL	53.80	BQL	6.10	BQL	BQL	9.30	240.00
UST645-MW02	1/5/2006	BQL	BQL	BQL	BQL	0.86	BQL	BQL	BQL	BQL	BQL	1.51
UST645-MW02	1/16/2006	BQL	BQL	BQL	BQL	0.36	BQL	BQL	BQL	BQL	BQL	BQL
UST645-MW02	4/18/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST645-MW03	9/22/2005	3.00	BQL	BQL	BQL	5.00	BQL	BQL	BQL	BQL	BQL	2.70
UST645-MW03	1/4/2006	BQL	BQL	BQL	BQL	9.92	BQL	BQL	BQL	BQL	1.00	7.98
UST645-MW03	1/16/2006	BQL	BQL	BQL	BQL	16.10	BQL	BQL	BQL	BQL	1.82	13.87
UST645-MW03	4/18/2006	BQL	0.47	BQL	BQL	20.40	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 8.3B

SITE 645

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 602

Contaminant of Concern →		1,2-Dichlorobenzene	Benzene	Chlorobenzene	Diisopropyl ether (DIPE)	Ethylbenzene	m/p-Xylene	Methyl Tert Butyl Ether	Methyl-tert butyl ether	o-Xylene	Toluene	Xylenes (total)
Well ID	**Date**											
2L GWQS		24	1	50	70	550	530	200	200	530	1000	530
GCL		72500	5000	0	70000	550000	87500	200000	200000	87500	257500	87500
UST645-MW04	1/5/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST645-MW05	1/4/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST645-MW06	1/5/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST645-MW08	1/4/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST645-MW09	9/22/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST645-MW09	1/5/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST645-MW09	1/17/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST645-MW09	4/18/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST645-MW10	1/6/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST645-MW11	1/4/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 8.3B

SITE 645

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 602

Contaminant of Concern →		1,2-Dichlorobenzene	Benzene	Chlorobenzene	Diisopropyl ether (DIPE)	Ethylbenzene	m/p-Xylene	Methyl Tert Butyl Ether	Methyl-tert butyl ether	o-Xylene	Toluene	Xylenes (total)
Well ID	**Date**											
2L GWQS		24	1	50	70	550	530	200	200	530	1000	530
GCL		72500	5000	0	70000	550000	87500	200000	200000	87500	257500	87500
UST645-MW12	9/22/2005	31.60	4.20	BQL	BQL	115.00	BQL	BQL	BQL	BQL	26.30	472.00
UST645-MW12	1/4/2006	BQL	BQL	BQL	BQL	6.26	BQL	BQL	BQL	BQL	2.41	34.13
UST645-MW12	1/17/2006	BQL	7.84	BQL	BQL	212.00	BQL	BQL	BQL	BQL	123.00	938.00
UST645-MW12	4/18/2006	BQL	BQL	BQL	BQL	8.23	BQL	BQL	BQL	BQL	1.23	32.74
UST645-MW13	1/4/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST645-MW14	1/6/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST645-MW15	9/22/2005	BQL	BQL	BQL	BQL	BQL	BQL	1.00	BQL	BQL	0.74	BQL
UST645-MW15	1/5/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	0.92	BQL	BQL	BQL
UST645-MW15	1/16/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST645-MW15	4/18/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	1.86	BQL	BQL	BQL
UST645-MW16	1/6/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 8.3B

SITE 645

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 602

Contaminant of Concern →		1,2-Dichlorobenzene	Benzene	Chlorobenzene	Diisopropyl ether (DIPE)	Ethylbenzene	m/p-Xylene	Methyl Tert Butyl Ether	Methyl-tert butyl ether	o-Xylene	Toluene	Xylenes (total)
Well ID	**Date**											
2L GWQS		24	1	50	70	550	530	200	200	530	1000	530
GCL		72500	5000	0	70000	550000	87500	200000	200000	87500	257500	87500
UST645-MW17	1/5/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST645-MW18	9/27/2005	BQL	**49.00**	BQL	BQL	273.00	BQL	BQL	BQL	BQL	259.00	281.00
UST645-MW18	1/5/2006	BQL	0.88	BQL	BQL	2.04	BQL	BQL	BQL	BQL	2.95	3.42
UST645-MW18	1/17/2006	BQL	0.81	BQL	BQL	1.90	BQL	BQL	BQL	BQL	3.10	4.57
UST645-MW18	2/21/2006	BQL	**27.70**	BQL	BQL	173.00	47.20	BQL	BQL	25.20	31.00	BQL
UST645-MW18	4/19/2006	BQL	**23.50**	BQL	BQL	112.00	BQL	BQL	BQL	BQL	10.40	32.60
UST645-MW19	1/6/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST645-MW20	1/6/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 8.3B

SITE 645

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 602

Contaminant of Concern →		1,2-Dichlorobenzene	Benzene	Chlorobenzene	Diisopropyl ether (DIPE)	Ethylbenzene	m/p-Xylene	Methyl Tert Butyl Ether	Methyl-tert butyl ether	o-Xylene	Toluene	Xylenes (total)
Well ID	**Date**											
2L GWQS		24	1	50	70	550	530	200	200	530	1000	530
GCL		72500	5000	0	70000	550000	87500	200000	200000	87500	257500	87500
UST645-MW21	9/22/2005	BQL	BQL	BQL	BQL	0.54	BQL	BQL	BQL	BQL	1.40	3.10
UST645-MW21	1/5/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST645-MW21	1/16/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST645-MW21	4/19/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST645-MW22	9/27/2005	BQL	BQL	BQL	BQL	BQL	BQL	5.40	BQL	BQL	0.82	BQL
UST645-MW22	1/5/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST645-MW22	1/16/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	2.32	BQL	BQL	BQL
UST645-MW22	4/18/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	0.61	BQL	BQL	BQL
UST645-MW23	9/27/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST645-MW23	1/5/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST645-MW23	1/16/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST645-MW23	4/19/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 8.3B

SITE 645

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 602

Contaminant of Concern →		1,2-Dichlorobenzene	Benzene	Chlorobenzene	Diisopropyl ether (DIPE)	Ethylbenzene	m/p-Xylene	Methyl Tert Butyl Ether	Methyl-tert butyl ether	o-Xylene	Toluene	Xylenes (total)
Well ID	**Date**											
2L GWQS		24	1	50	70	550	530	200	200	530	1000	530
GCL		72500	5000	0	70000	550000	87500	200000	200000	87500	257500	87500
UST645-MW24	1/6/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST645-MW25	1/6/2006	BQL	BQL	BQL	BQL	8.60	BQL	BQL	BQL	BQL	5.18	54.50
UST645-MW26	1/6/2006	BQL	**451.00**	BQL	BQL	BQL	BQL	BQL	35.90	BQL	990.00	BQL
UST645-MW26	2/21/2006	BQL	**964.00**	BQL	BQL	BQL	BQL	BQL	BQL	BQL	**2900.00**	BQL
UST645-MW27	1/6/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	2.20
UST645-MW28	1/6/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	7.62
UST645-MW29	1/5/2006	BQL	**2.17**	BQL	BQL	0.83	BQL	BQL	BQL	BQL	0.72	5.62
UST645-MW30	1/6/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	1.59
UST645-MW31	1/5/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 8.4A

SITE 645

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 625

Contaminant of Concern →		2,4-Dimethylphenol	Bis(2-ethylhexyl)phthalate	Naphthalene	Phenol
Well ID	Date				
2L GWQS		140	3	21	300
GCL		140000	0	15500	335000
UST645-MW01	9/22/2005	BQL	BQL	8.20	BQL
UST645-MW01	1/4/2006	BQL	2.00	BQL	BQL
UST645-MW01	1/16/2006	BQL	BQL	BQL	BQL
UST645-MW01	4/18/2006	BQL	BQL	6.40	BQL
UST645-MW02	9/22/2005	BQL	BQL	24.20	BQL
UST645-MW02	1/5/2006	BQL	BQL	BQL	BQL
UST645-MW02	1/16/2006	BQL	2.70	BQL	BQL
UST645-MW02	4/18/2006	BQL	BQL	BQL	BQL
UST645-MW03	9/22/2005	BQL	BQL	3.20	BQL
UST645-MW03	1/4/2006	BQL	BQL	2.50	BQL
UST645-MW03	1/16/2006	BQL	BQL	6.10	BQL
UST645-MW04	1/5/2006	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. *A zero in the GCL column indicates a GCL has not been established*
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 8.4A

SITE 645

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 625

Contaminant of Concern →		2,4-Dimethylphenol	Bis(2-ethylhexyl)phthalate	Naphthalene	Phenol
Well ID	Date				
2L GWQS		140	3	21	300
GCL		140000	0	15500	335000
UST645-MW05	1/4/2006	BQL	1.40	BQL	BQL
UST645-MW06	1/5/2006	BQL	1.90	BQL	BQL
UST645-MW08	1/4/2006	BQL	BQL	BQL	BQL
UST645-MW09	9/22/2005	BQL	BQL	BQL	BQL
UST645-MW09	1/5/2006	BQL	BQL	BQL	BQL
UST645-MW09	1/17/2006	BQL	BQL	BQL	BQL
UST645-MW09	4/18/2006	BQL	2.00	BQL	BQL
UST645-MW10	1/6/2006	BQL	BQL	BQL	BQL
UST645-MW11	1/4/2006	BQL	14.30	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 8.4A

SITE 645

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 625

Contaminant of Concern →		2,4-Dimethylphenol	Bis(2-ethylhexyl)phthalate	Naphthalene	Phenol
Well ID	Date				
2L GWQS		140	3	21	300
GCL		140000	0	15500	335000
UST645-MW12	9/22/2005	7.20	BQL	**61.20**	BQL
UST645-MW12	1/4/2006	BQL	BQL	8.60	BQL
UST645-MW12	1/17/2006	BQL	**3.90**	**101.00**	4.70
UST645-MW12	4/18/2006	BQL	BQL	BQL	BQL
UST645-MW13	1/4/2006	BQL	BQL	BQL	BQL
UST645-MW14	1/6/2006	BQL	BQL	BQL	BQL
UST645-MW15	9/22/2005	BQL	BQL	BQL	BQL
UST645-MW15	1/5/2006	BQL	BQL	BQL	BQL
UST645-MW15	1/16/2006	BQL	BQL	BQL	BQL
UST645-MW15	4/18/2006	BQL	BQL	BQL	BQL
UST645-MW16	1/6/2006	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 8.4A

SITE 645

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 625

Contaminant of Concern →		2,4-Dimethylphenol	Bis(2-ethylhexyl)phthalate	Naphthalene	Phenol
Well ID	**Date**				
2L GWQS		140	3	21	300
GCL		140000	0	15500	335000
UST645-MW17	1/5/2006	BQL	2.60	BQL	BQL
UST645-MW18	9/27/2005	BQL	BQL	4.90	BQL
UST645-MW18	1/5/2006	BQL	4.70	BQL	BQL
UST645-MW18	1/17/2006	BQL	1.90	BQL	BQL
UST645-MW18	4/19/2006	BQL	BQL	BQL	BQL
UST645-MW19	1/6/2006	BQL	4.10	BQL	BQL
UST645-MW20	1/6/2006	BQL	BQL	BQL	BQL
UST645-MW21	9/22/2005	BQL	BQL	BQL	BQL
UST645-MW21	1/5/2006	BQL	6.30	BQL	BQL
UST645-MW21	1/16/2006	BQL	BQL	BQL	BQL
UST645-MW21	4/19/2006	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 8.4A

SITE 645

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 625

Contaminant of Concern →		2,4-Dimethylphenol	Bis(2-ethylhexyl)phthalate	Naphthalene	Phenol
Well ID	**Date**				
2L GWQS		140	3	21	300
GCL		140000	0	15500	335000
UST645-MW22	9/27/2005	BQL	BQL	BQL	BQL
UST645-MW22	1/5/2006	BQL	BQL	BQL	BQL
UST645-MW22	1/16/2006	BQL	BQL	BQL	BQL
UST645-MW22	4/18/2006	BQL	BQL	BQL	BQL
UST645-MW23	9/27/2005	BQL	BQL	BQL	BQL
UST645-MW23	1/5/2006	BQL	1.70	BQL	BQL
UST645-MW23	1/16/2006	BQL	BQL	BQL	BQL
UST645-MW23	4/19/2006	BQL	BQL	BQL	BQL
UST645-MW24	1/6/2006	BQL	BQL	BQL	BQL
UST645-MW25	1/6/2006	BQL	BQL	BQL	BQL
UST645-MW26	1/6/2006	BQL	BQL	BQL	3.60

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 8.4A

SITE 645

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 625

Contaminant of Concern →		2,4-Dimethylphenol	Bis(2-ethylhexyl)phthalate	Naphthalene	Phenol
Well ID	Date				
2L GWQS		140	3	21	300
GCL		140000	0	15500	335000
UST645-MW27	1/6/2006	BQL	BQL	BQL	BQL
UST645-MW28	1/6/2006	BQL	BQL	BQL	BQL
UST645-MW29	1/5/2006	BQL	BQL	BQL	BQL
UST645-MW30	1/6/2006	BQL	BQL	BQL	BQL
UST645-MW31	1/5/2006	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 8.4B

SITE 645

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 625

Contaminant of Concern →		2,4-Dimethylphenol	Bis(2-ethylhexyl)phthalate	Naphthalene	Phenol
Well ID	**Date**				
2L GWQS		140	3	21	300
GCL		140000	0	15500	335000
UST645-MW01	9/22/2005	BQL	BQL	8.20	BQL
UST645-MW01	1/4/2006	BQL	2.00	BQL	BQL
UST645-MW01	1/16/2006	BQL	BQL	BQL	BQL
UST645-MW01	4/18/2006	BQL	BQL	6.40	BQL
UST645-MW02	9/22/2005	BQL	BQL	24.20	BQL
UST645-MW02	1/5/2006	BQL	BQL	BQL	BQL
UST645-MW02	1/16/2006	BQL	2.70	BQL	BQL
UST645-MW02	4/18/2006	BQL	BQL	BQL	BQL
UST645-MW03	9/22/2005	BQL	BQL	3.20	BQL
UST645-MW03	1/4/2006	BQL	BQL	2.50	BQL
UST645-MW03	1/16/2006	BQL	BQL	6.10	BQL
UST645-MW04	1/5/2006	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
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4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 8.4B

SITE 645

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 625

Contaminant of Concern →		2,4-Dimethylphenol	Bis(2-ethylhexyl)phthalate	Naphthalene	Phenol
Well ID	**Date**				
2L GWQS		140	3	21	300
GCL		140000	0	15500	335000
UST645-MW05	1/4/2006	BQL	1.40	BQL	BQL
UST645-MW06	1/5/2006	BQL	1.90	BQL	BQL
UST645-MW08	1/4/2006	BQL	BQL	BQL	BQL
UST645-MW09	9/22/2005	BQL	BQL	BQL	BQL
UST645-MW09	1/5/2006	BQL	BQL	BQL	BQL
UST645-MW09	1/17/2006	BQL	BQL	BQL	BQL
UST645-MW09	4/18/2006	BQL	2.00	BQL	BQL
UST645-MW10	1/6/2006	BQL	BQL	BQL	BQL
UST645-MW11	1/4/2006	BQL	14.30	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 8.4B

SITE 645

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 625

Contaminant of Concern →		2,4-Dimethylphenol	Bis(2-ethylhexyl)phthalate	Naphthalene	Phenol
Well ID	**Date**				
2L GWQS		140	3	21	300
GCL		140000	0	15500	335000
UST645-MW12	9/22/2005	7.20	BQL	61.20	BQL
UST645-MW12	1/4/2006	BQL	BQL	8.60	BQL
UST645-MW12	1/17/2006	BQL	3.90	101.00	4.70
UST645-MW12	4/18/2006	BQL	BQL	BQL	BQL
UST645-MW13	1/4/2006	BQL	BQL	BQL	BQL
UST645-MW14	1/6/2006	BQL	BQL	BQL	BQL
UST645-MW15	9/22/2005	BQL	BQL	BQL	BQL
UST645-MW15	1/5/2006	BQL	BQL	BQL	BQL
UST645-MW15	1/16/2006	BQL	BQL	BQL	BQL
UST645-MW15	4/18/2006	BQL	BQL	BQL	BQL
UST645-MW16	1/6/2006	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
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5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 8.4B

SITE 645

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 625

Contaminant of Concern →		2,4-Dimethylphenol	Bis(2-ethylhexyl)phthalate	Naphthalene	Phenol
Well ID	**Date**				
2L GWQS		140	3	21	300
GCL		140000	0	15500	335000
UST645-MW17	1/5/2006	BQL	2.60	BQL	BQL
UST645-MW18	9/27/2005	BQL	BQL	4.90	BQL
UST645-MW18	1/5/2006	BQL	4.70	BQL	BQL
UST645-MW18	1/17/2006	BQL	1.90	BQL	BQL
UST645-MW18	4/19/2006	BQL	BQL	BQL	BQL
UST645-MW19	1/6/2006	BQL	4.10	BQL	BQL
UST645-MW20	1/6/2006	BQL	BQL	BQL	BQL
UST645-MW21	9/22/2005	BQL	BQL	BQL	BQL
UST645-MW21	1/5/2006	BQL	6.30	BQL	BQL
UST645-MW21	1/16/2006	BQL	BQL	BQL	BQL
UST645-MW21	4/19/2006	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
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5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 8.4B

SITE 645

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 625

Contaminant of Concern →		2,4-Dimethylphenol	Bis(2-ethylhexyl)phthalate	Naphthalene	Phenol
Well ID	**Date**				
2L GWQS		140	3	21	300
GCL		140000	0	15500	335000
UST645-MW22	9/27/2005	BQL	BQL	BQL	BQL
UST645-MW22	1/5/2006	BQL	BQL	BQL	BQL
UST645-MW22	1/16/2006	BQL	BQL	BQL	BQL
UST645-MW22	4/18/2006	BQL	BQL	BQL	BQL
UST645-MW23	9/27/2005	BQL	BQL	BQL	BQL
UST645-MW23	1/5/2006	BQL	1.70	BQL	BQL
UST645-MW23	1/16/2006	BQL	BQL	BQL	BQL
UST645-MW23	4/19/2006	BQL	BQL	BQL	BQL
UST645-MW24	1/6/2006	BQL	BQL	BQL	BQL
UST645-MW25	1/6/2006	BQL	BQL	BQL	BQL
UST645-MW26	1/6/2006	BQL	BQL	BQL	3.60

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 8.4B

SITE 645

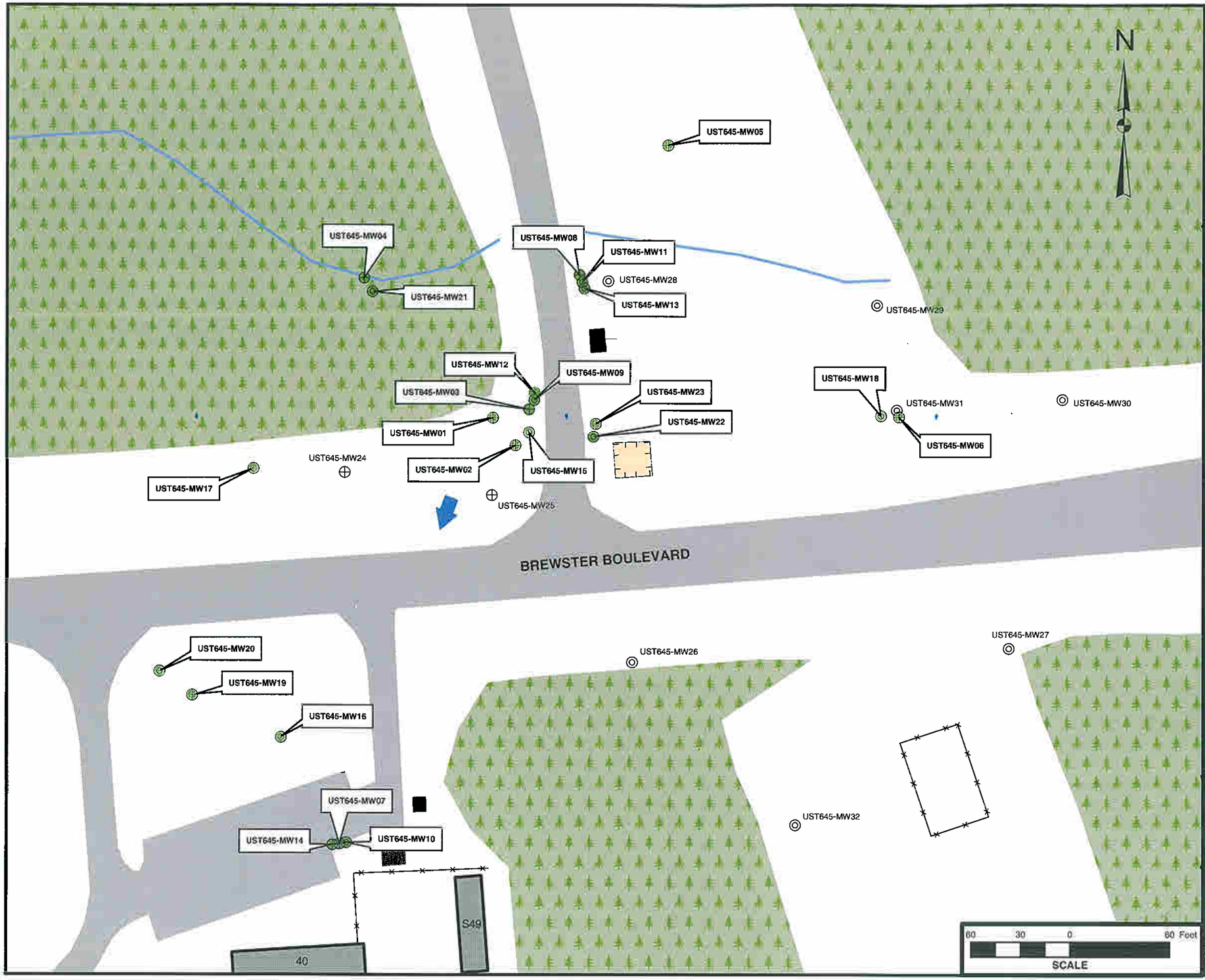
HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 625

Contaminant of Concern →		2,4-Dimethylphenol	Bis(2-ethylhexyl)phthalate	Naphthalene	Phenol
Well ID	Date				
2L GWQS		140	3	21	300
GCL		140000	0	15500	335000
UST645-MW27	1/6/2006	BQL	BQL	BQL	BQL
UST645-MW28	1/6/2006	BQL	BQL	BQL	BQL
UST645-MW29	1/5/2006	BQL	BQL	BQL	BQL
UST645-MW30	1/6/2006	BQL	BQL	BQL	BQL
UST645-MW31	1/5/2006	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM



LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Free Product
- Free Product Detected
- No Measurable Thickness
- Free Product Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. Free Product was not detected at this site in any of the wells gauged during this monitoring event.

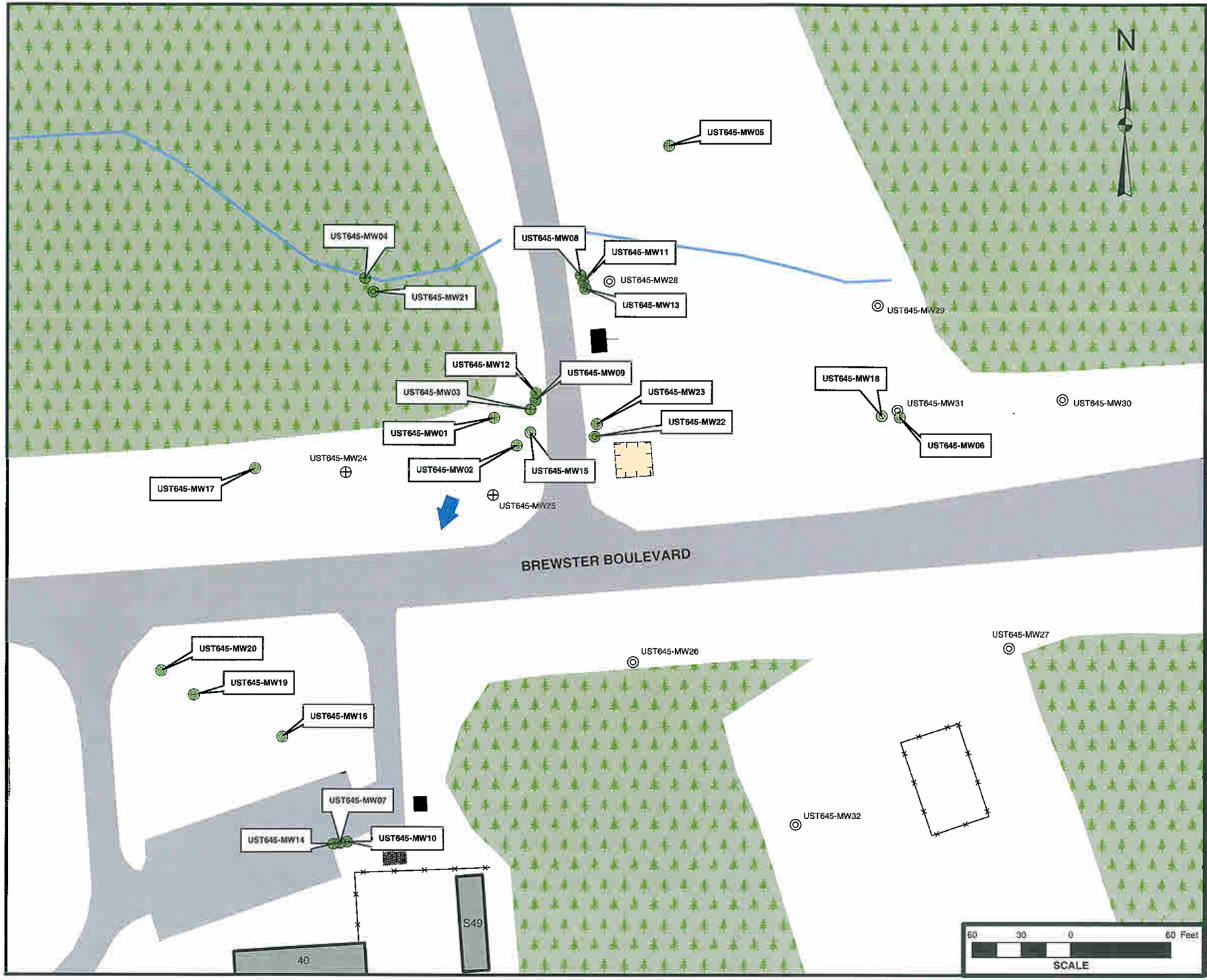
CATLIN ENGINEERS and SCIENTISTS

SITE 645
FREE PRODUCT PLUME MAP
THIRD QUARTER 2005

FIGURE **8.1A**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM



LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Free Product
- Free Product Detected
- No Measurable Thickness
- Free Product Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. Free Product was not detected at this site in any of the wells gauged during this monitoring event.

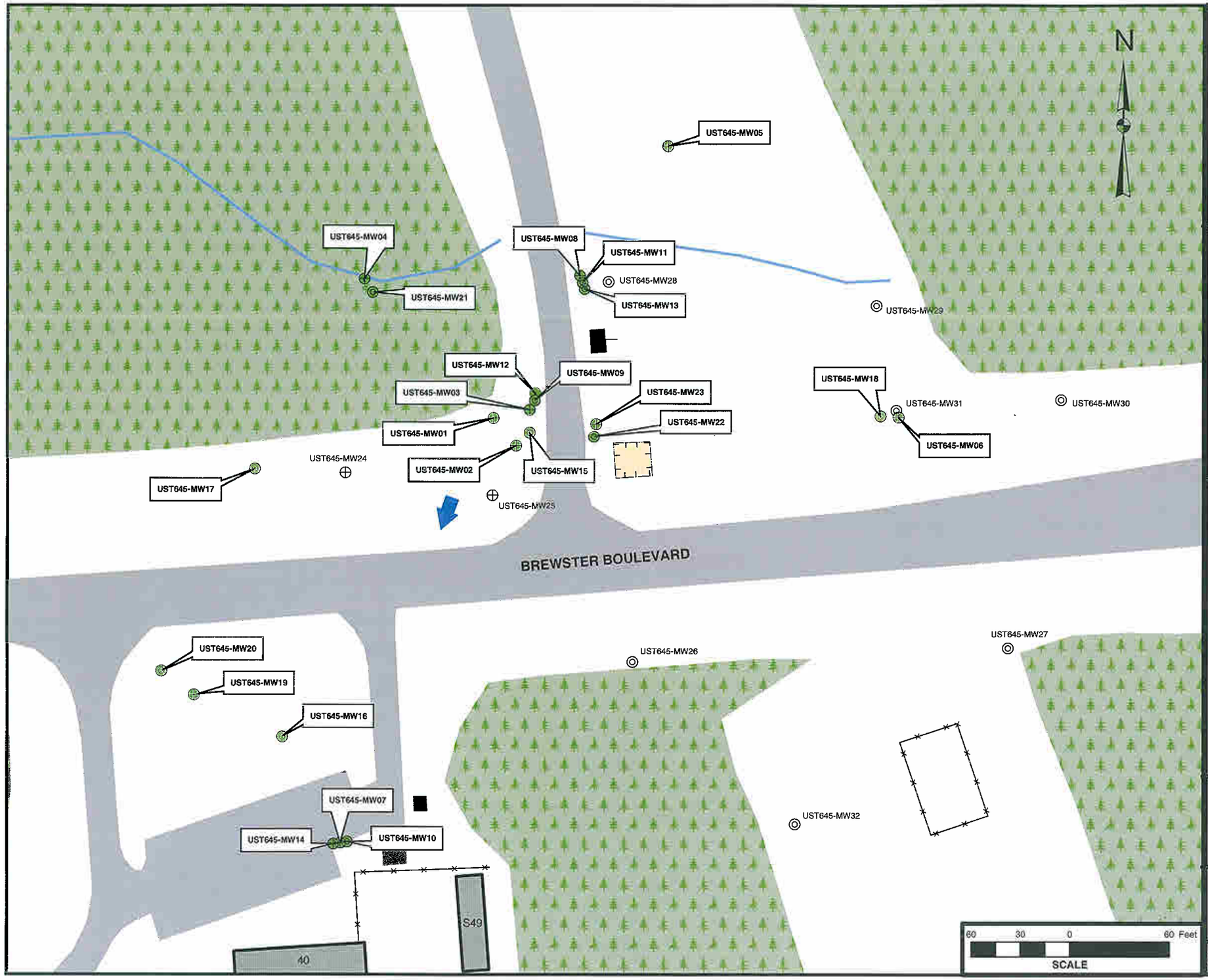
CATLIN ENGINEERS and SCIENTISTS

SITE 645
FREE PRODUCT PLUME MAP
FOURTH QUARTER 2005

FIGURE **8.1B**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM



LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Free Product
- Free Product Detected
- No Measurable Thickness
- Free Product Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. Free Product was not detected at this site in any of the wells gauged during this monitoring event.

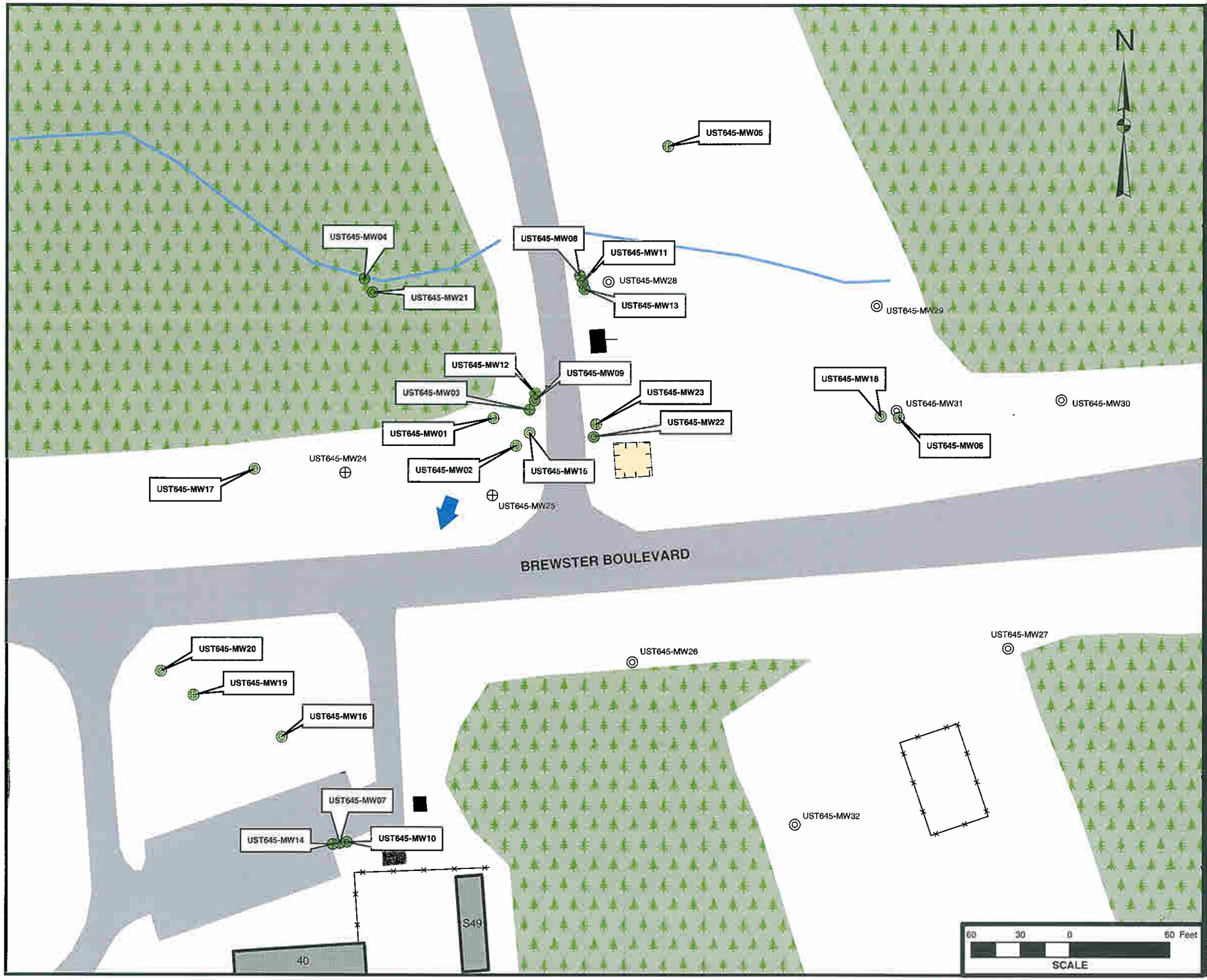
CATLIN ENGINEERS and SCIENTISTS

SITE 645
FREE PRODUCT PLUME MAP
FIRST QUARTER 2006

FIGURE 8.1C

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM



LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Free Product
- Free Product Detected
- No Measurable Thickness
- Free Product Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

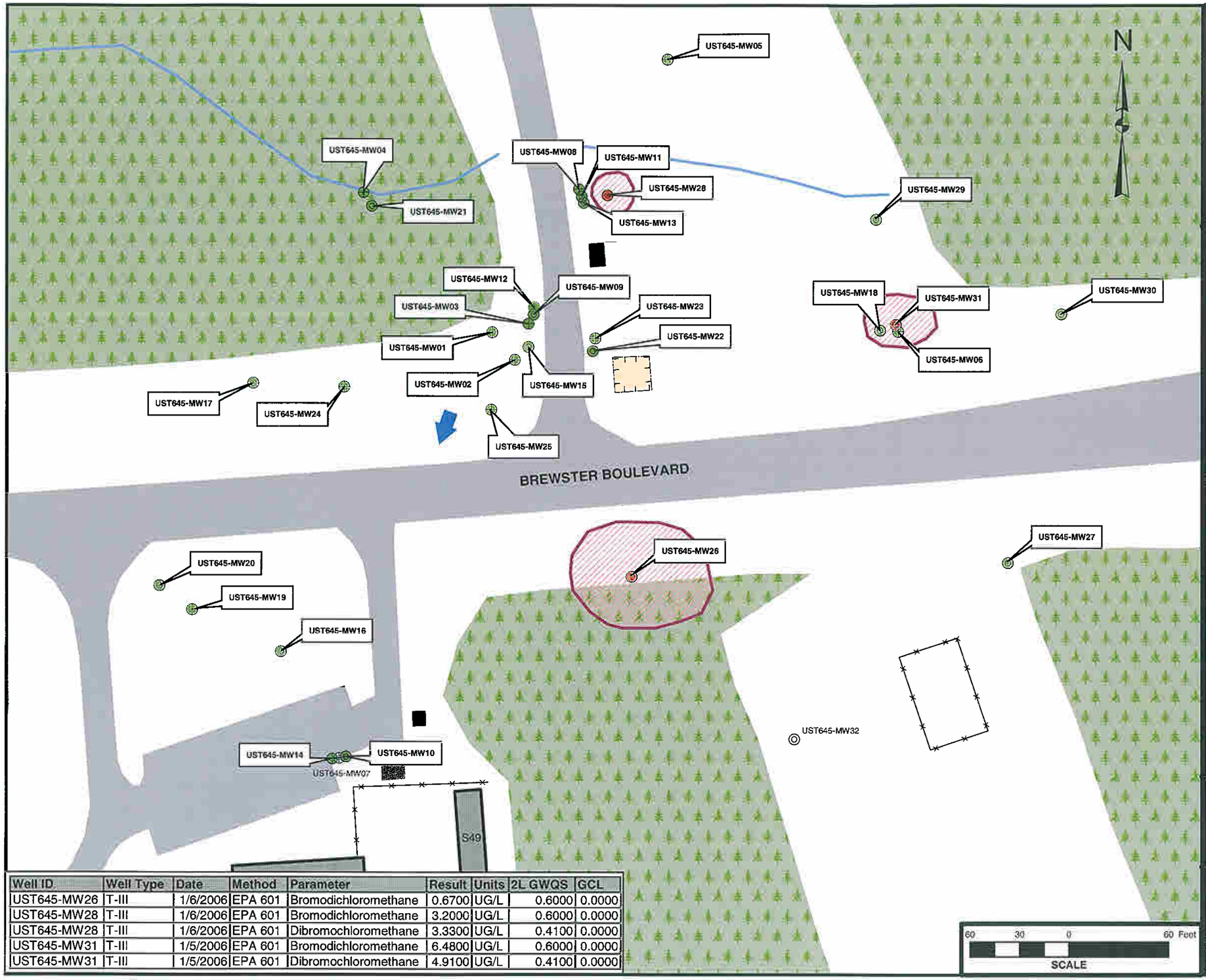
1. Free Product was not detected at this site in any of the wells gauged during this monitoring event.

CATLIN ENGINEERS and SCIENTISTS

SITE 645
FREE PRODUCT PLUME MAP
SECOND QUARTER 2006

FIGURE **8.1D**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM



Well ID	Well Type	Date	Method	Parameter	Result	Units	2L GWQS	GCL
UST645-MW26	T-III	1/6/2006	EPA 601	Bromodichloromethane	0.6700	UG/L	0.6000	0.0000
UST645-MW28	T-III	1/6/2006	EPA 601	Bromodichloromethane	3.2000	UG/L	0.6000	0.0000
UST645-MW28	T-III	1/6/2006	EPA 601	Dibromochloromethane	3.3300	UG/L	0.4100	0.0000
UST645-MW31	T-III	1/5/2006	EPA 601	Bromodichloromethane	6.4800	UG/L	0.6000	0.0000
UST645-MW31	T-III	1/5/2006	EPA 601	Dibromochloromethane	4.9100	UG/L	0.4100	0.0000

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM

LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Analytical Results
- 2L Non-Compliant
- 2L Compliant
- EPA 601 Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

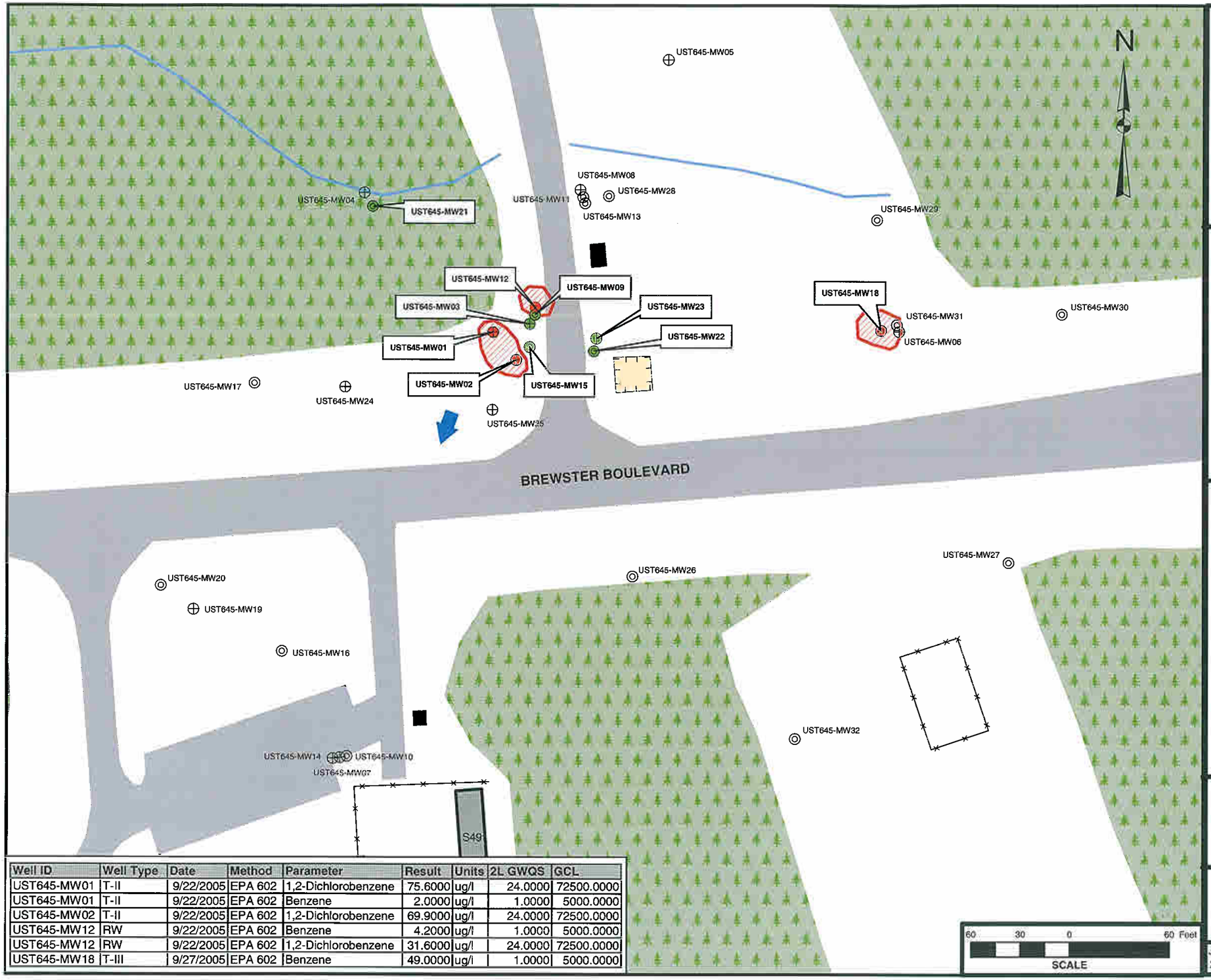
1. 2L Standard refers to North Carolina Groundwater Quality Standard 15A NCAC 2L.0202.
2. GCL refers to Gross Contaminant Level as defined in Table 7 of "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Ground Water", Volume II, dated January 2, 1998.
3. A 2L Standard of "0.00" implies a standard has not yet been established. According to NCAC T15:02L, any compound found above laboratory detection limits is considered noncompliant unless otherwise specified by the NCDENR.

CATLIN ENGINEERS and SCIENTISTS

SITE 645
EPA METHOD 601 COLORIMETRY AND PLUME IN EXCESS OF 2L
FIRST QUARTER 2006

FIGURE 8.2

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM



Well ID	Well Type	Date	Method	Parameter	Result	Units	2L GWQS	GCL
UST645-MW01	T-II	9/22/2005	EPA 602	1,2-Dichlorobenzene	75.6000	ug/l	24.0000	72500.0000
UST645-MW01	T-II	9/22/2005	EPA 602	Benzene	2.0000	ug/l	1.0000	5000.0000
UST645-MW02	T-II	9/22/2005	EPA 602	1,2-Dichlorobenzene	69.9000	ug/l	24.0000	72500.0000
UST645-MW12	RW	9/22/2005	EPA 602	Benzene	4.2000	ug/l	1.0000	5000.0000
UST645-MW12	RW	9/22/2005	EPA 602	1,2-Dichlorobenzene	31.6000	ug/l	24.0000	72500.0000
UST645-MW18	T-III	9/27/2005	EPA 602	Benzene	49.0000	ug/l	1.0000	5000.0000

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM

LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Analytical Results
- 2L Non-Compliant
- 2L Compliant
- EPA 602 Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

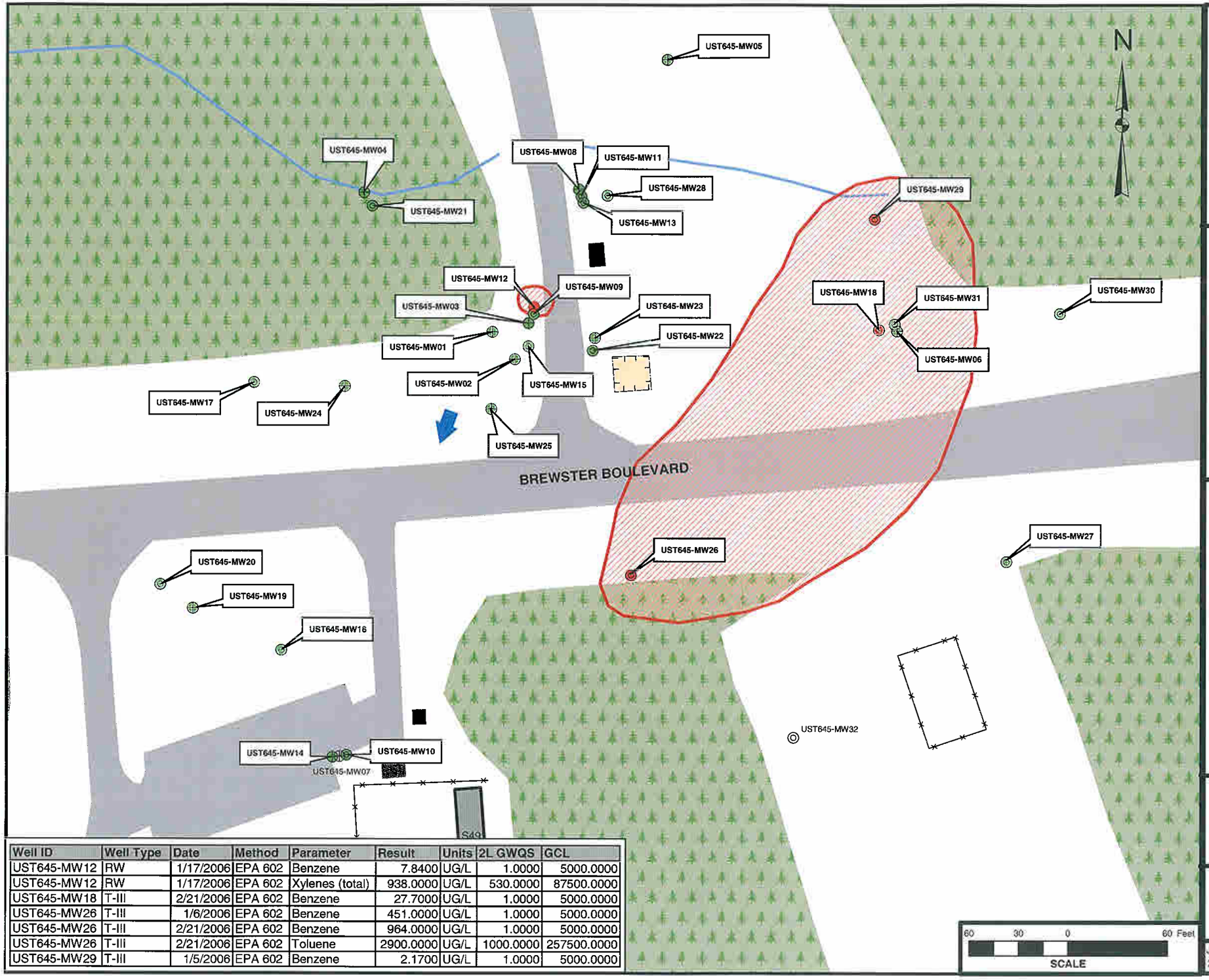
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3. A 2L Standard of "0.00" implies a standard has not yet been established. According to NCAC T15:02L, any compound found above laboratory detection limits is considered noncompliant unless otherwise specified by the NCDENR.

CATLIN ENGINEERS and SCIENTISTS

SITE 645
EPA METHOD 602 COLORIMETRY AND PLUME IN EXCESS OF 2L THIRD QUARTER 2005

FIGURE **8.3A**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM



Well ID	Well Type	Date	Method	Parameter	Result	Units	2L GWQS	GCL
UST645-MW12	RW	1/17/2006	EPA 602	Benzene	7.8400	UG/L	1.0000	5000.0000
UST645-MW12	RW	1/17/2006	EPA 602	Xylenes (total)	938.0000	UG/L	530.0000	87500.0000
UST645-MW18	T-III	2/21/2006	EPA 602	Benzene	27.7000	UG/L	1.0000	5000.0000
UST645-MW26	T-III	1/6/2006	EPA 602	Benzene	451.0000	UG/L	1.0000	5000.0000
UST645-MW26	T-III	2/21/2006	EPA 602	Benzene	964.0000	UG/L	1.0000	5000.0000
UST645-MW26	T-III	2/21/2006	EPA 602	Toluene	2900.0000	UG/L	1000.0000	257500.0000
UST645-MW29	T-III	1/5/2006	EPA 602	Benzene	2.1700	UG/L	1.0000	5000.0000

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM

LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Analytical Results
- 2L Non-Compliant
- 2L Compliant
- EPA 602 Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. 2L Standard refers to North Carolina Groundwater Quality Standard 15A NCAC 2L.0202.
2. GCL refers to Gross Contaminant Level as defined in Table 7 of "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Ground Water", Volume II, dated January 2, 1998.
3. A 2L Standard of "0.00" implies a standard has not yet been established. According to NCAC T15:02L, any compound found above laboratory detection limits is considered noncompliant unless otherwise specified by the NCDENR.

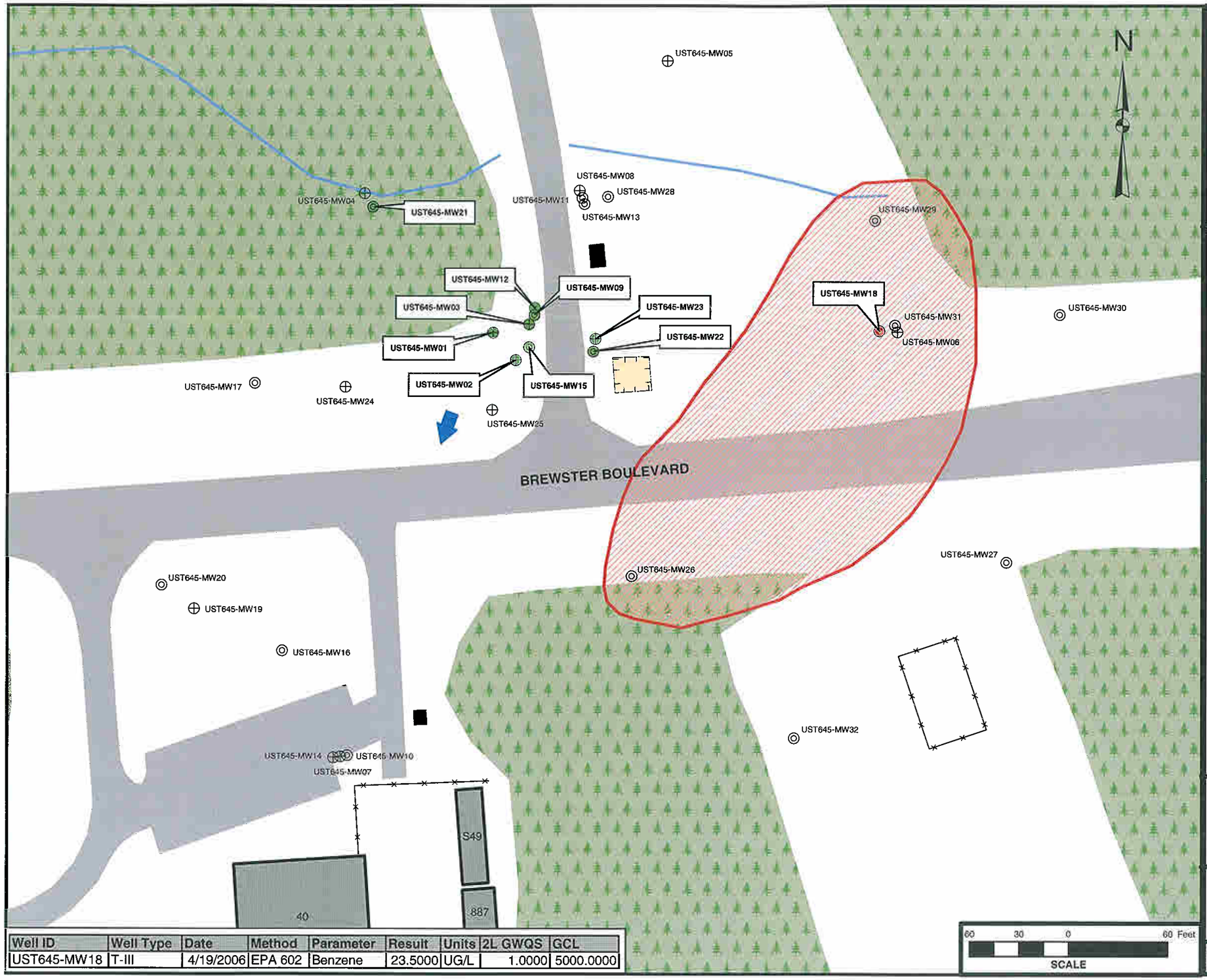
CATLIN ENGINEERS and SCIENTISTS

SITE 645
EPA METHOD 602 COLORIMETRY AND PLUME IN EXCESS OF 2L
FIRST QUARTER 2006

FIGURE 8.3C

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM



Well ID	Well Type	Date	Method	Parameter	Result	Units	2L GWQS	GCL
UST645-MW18	T-III	4/19/2006	EPA 602	Benzene	23.5000	UG/L	1.0000	5000.0000

LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Analytical Results
- 2L Non-Compliant
- 2L Compliant
- EPA 602 Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

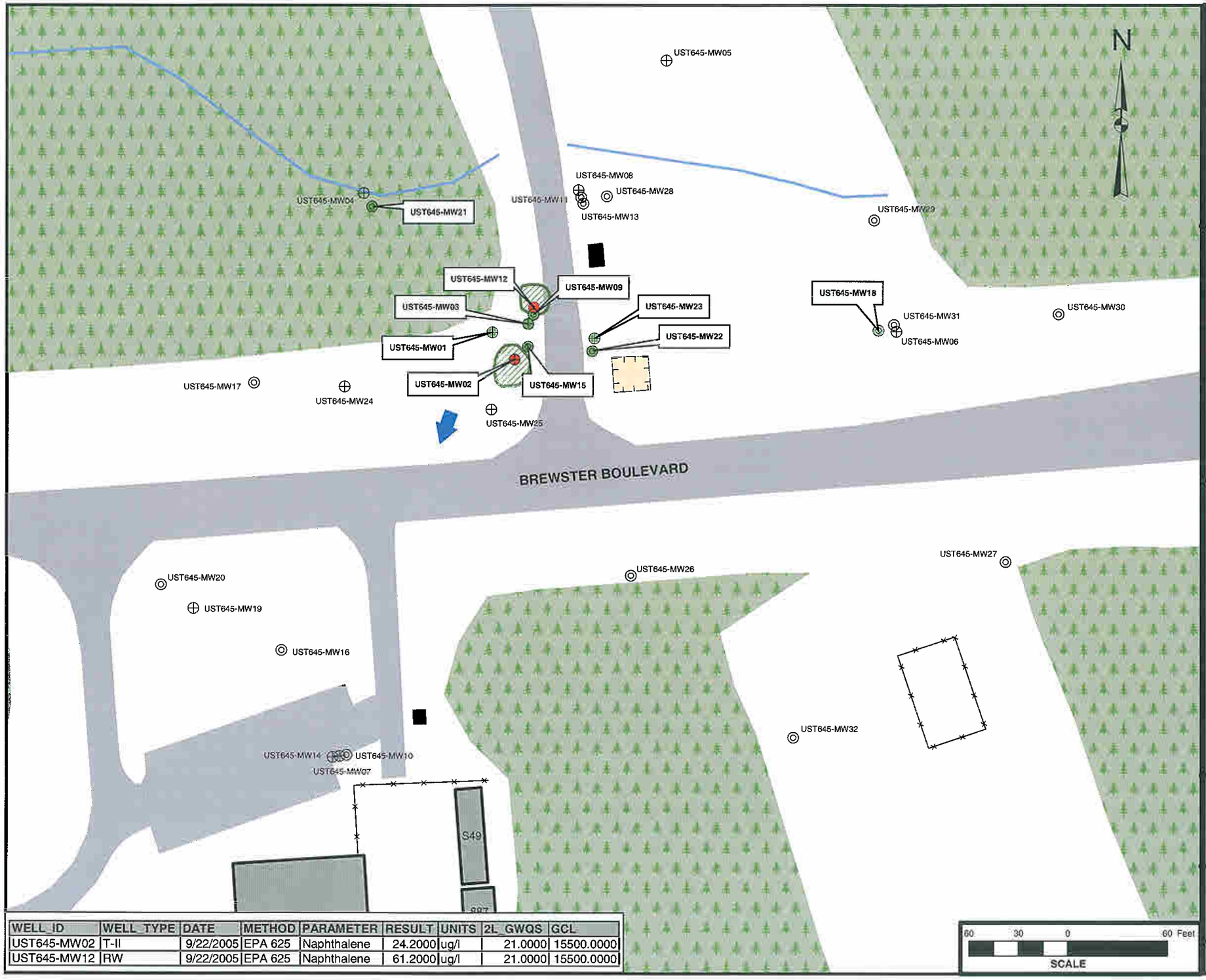
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3. A 2L Standard of "0.00" implies a standard has not yet been established. According to NCAC T15:02L, any compound found above laboratory detection limits is considered noncompliant unless otherwise specified by the NCDENR.
4. EPA Method 602 Plume geometry based on current analytical data and analytical data from the 1st Quarter 2006.

CATLIN ENGINEERS and SCIENTISTS

SITE 645
EPA METHOD 602 COLORIMETRY AND PLUME IN EXCESS OF 2L SECOND QUARTER 2006

FIGURE **8.3D**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM



WELL_ID	WELL_TYPE	DATE	METHOD	PARAMETER	RESULT	UNITS	2L_GWQS	GCL
UST645-MW02	T-II	9/22/2005	EPA 625	Naphthalene	24.2000	ug/l	21.0000	15500.0000
UST645-MW12	RW	9/22/2005	EPA 625	Naphthalene	61.2000	ug/l	21.0000	15500.0000

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM

LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Analytical Results
- 2L Non-Compliant
- 2L Compliant
- EPA 625 Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

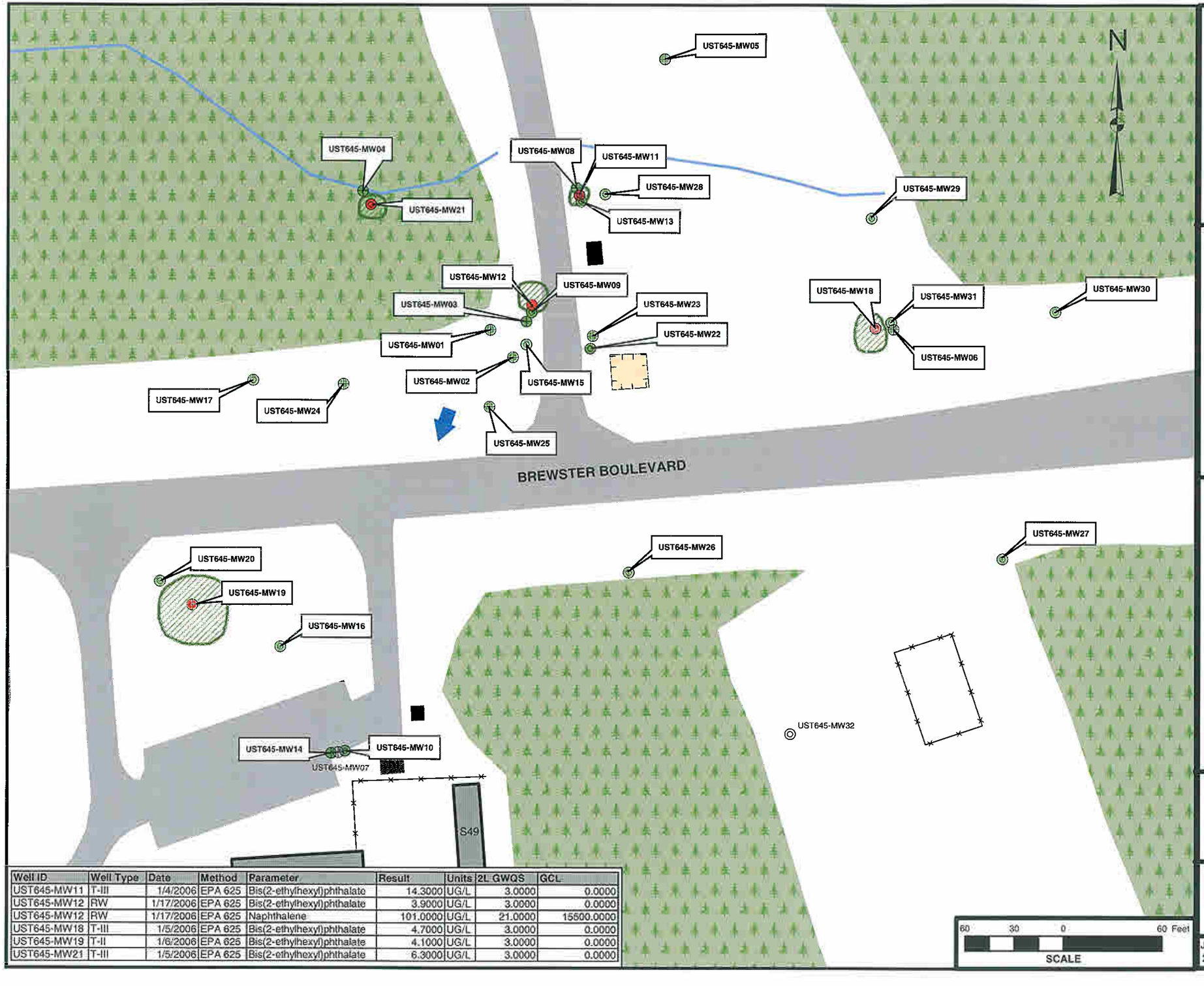
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3. A 2L Standard of "0.00" implies a standard has not yet been established. According to NCAC T15:02L, any compound found above laboratory detection limits is considered noncompliant unless otherwise specified by the NCDENR.

CATLIN ENGINEERS and SCIENTISTS

SITE 645
EPA METHOD 625 COLORIMETRY AND PLUME IN EXCESS OF 2L
THIRD QUARTER 2005

FIGURE **8.4A**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM



Well ID	Well Type	Date	Method	Parameter	Result	Units	2L GWQS	GCL
UST645-MW11	T-III	1/4/2006	EPA 625	Bis(2-ethylhexyl)phthalate	14.3000	UG/L	3.0000	0.0000
UST645-MW12	RW	1/17/2006	EPA 625	Bis(2-ethylhexyl)phthalate	3.9000	UG/L	3.0000	0.0000
UST645-MW12	RW	1/17/2006	EPA 625	Naphthalene	101.0000	UG/L	21.0000	15500.0000
UST645-MW18	T-III	1/5/2006	EPA 625	Bis(2-ethylhexyl)phthalate	4.7000	UG/L	3.0000	0.0000
UST645-MW19	T-II	1/6/2006	EPA 625	Bis(2-ethylhexyl)phthalate	4.1000	UG/L	3.0000	0.0000
UST645-MW21	T-III	1/5/2006	EPA 625	Bis(2-ethylhexyl)phthalate	6.3000	UG/L	3.0000	0.0000

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM

LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Analytical Results
- 2L Non-Compliant
- 2L Compliant
- EPA 625 Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
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NOTES

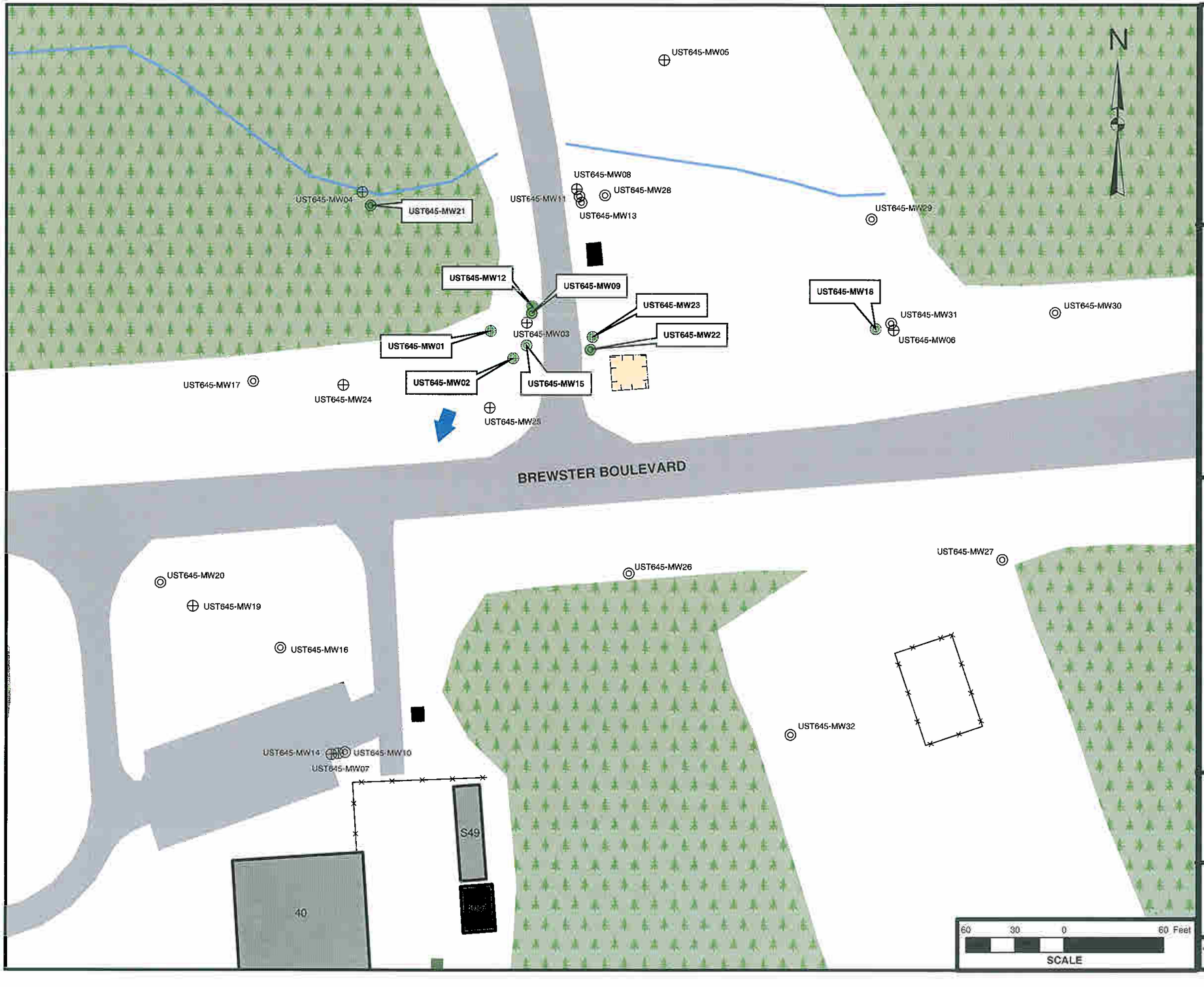
1. 2L Standard refers to North Carolina Groundwater Quality Standard 15A NCAC 2L.0202.
2. GCL refers to Gross Contaminant Level as defined in Table 7 of "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Ground Water", Volume II, dated January 2, 1998.
3. A 2L Standard of "0.00" implies a standard has not yet been established. According to NCAC T15:02L, any compound found above laboratory detection limits is considered noncompliant unless otherwise specified by the NCDENR.

CATLIN ENGINEERS and SCIENTISTS

SITE 645
EPA METHOD 625 COLORIMETRY AND PLUME IN EXCESS OF 2L
FIRST QUARTER 2006

FIGURE **8.4C**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM



MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM

LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Analytical Results
- 2L Non-Compliant
- 2L Compliant
- EPA 625 Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. No EPA Method 625 Compounds were detected above the 2L GWQS for any wells sampled during this monitoring event.

CATLIN ENGINEERS and SCIENTISTS

SITE 645
EPA METHOD 625 COLORIMETRY AND PLUME IN EXCESS OF 2L
SECOND QUARTER 2006

FIGURE **8.4D**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

SECTION 9.0

OF THE

ANNUAL MANAGEMENT REPORT
MCB CAMP LEJEUNE UST MANAGEMENT PROGRAM

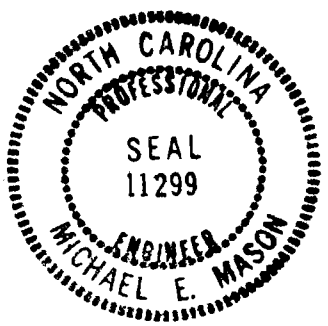
MONITORING EVENT:

SECOND SEMESTER 2005/FIRST SEMESTER 2006
(JULY 2005 THROUGH JUNE 2006)

SITE-SPECIFIC MONITORING REPORT
FOR

SITE 820-1 to 4

NCDENR INCIDENT NO. 23135



9.0 EXECUTIVE SUMMARY
SITE 820-1 to 4

9.1 Site Information

9.1.1 Site Location: MCB Camp Lejeune, Berkeley Manor
9.1.2 Incident Number(s): 23135
9.1.3 UTM Coordinates (WGS84) (Meters): 284380.73 Easting, 3842272.13 Northing
9.1.4 Risk Classification: Intermediate
9.1.5 Land Use Classification: Residential
9.1.6 Source Type(s): Gasoline, Diesel Fuel

9.2 Monitoring Event Information

9.2.1 Sampling Performed By: Shaw
9.2.2 Date(s) of This Monitoring Event: August 2005 and February 2006
9.2.3 Date(s) of Previous Monitoring Event: 4/08/03 to 4/18/03
9.2.4 Reason(s) for This Monitoring Event: Track migration and attenuation of dissolved-phase plume.
9.2.5 Site Monitoring Status at Time of This Event: 30 wells sampled annually and the results are summarized in an Annual Monitoring Report.

9.3 Groundwater Hydraulics

9.3.1 Hydraulic Conductivity: No Data
9.3.2 Effective Porosity: No Data
9.3.3 Hydraulic Gradient: Not Calculated
9.3.4 Average Linear Groundwater Flow Velocity: No Data
9.3.5 Groundwater Flow Direction: Shallow flow is to the South, Deep to the North/Northwest
9.3.6 Range of Measured Water Table Elevations: 12.34 to 23.02 feet MSL
9.3.7 Significant Changes from Previously Reported Data: Not Applicable. This is the first Management Report prepared by CATLIN.

9.4 Free Product Plume

9.4.1 Free Product Present?: No
9.4.2 Free Product Thickness Measured: None, see Tables 9.1A and B.
9.4.3 Plume Size and Location: None, see Figures 9.1A and B
9.4.4 Free Product Removed from Site This Period: None
9.4.5 Significant Changes from Previously Reported Data: Not Applicable. This is the first Management Report prepared by CATLIN.

9.5 Dissolved-Phase Plume

9.5.1 Plume Concentrations: See Tables 9.2A and B, 9.3A and B, 9.4A and B, and 9.5A and B

9.5.2 Plume Size and Location: See Figures 9.2A and B, 9.3, 9.4, and 9.5A and B.

9.5.3 Significant Changes from Previously Reported Data: Not Applicable. This is the first Management Report prepared by CATLIN. Groundwater sample analytical results compared to the 2L GWQS are discussed as follows:

EPA Method 602

1,2-Dichlorobenzene concentrations were detected above the 2L GWQS in the UST820-MW02 and UST820-MW06 groundwater samples. Benzene concentrations were detected above the 2L GWQS in the UST820-MW04, MST820-MW06, UST820-MW09, UST820-MW11, UST820-MW13, UST820-MW16, UST820-MW17, UST820-MW24, UST820-MW25, UST820-MW26, UST820-MW28, and UST820-MW29 groundwater samples. The UST820-MW06 groundwater sample also revealed Ethylbenzene concentrations above the 2L GWQS.

MTBE concentrations were detected above the 2L GWQS in the UST820-MW02, UST820-MW03, UST820-MW09, UST820-MW17, and UST820-MW28 groundwater samples. Total Xylene concentrations were detected above the 2L GWQS in the UST820-MW06, UST820-MW11, and UST820-MW13 groundwater samples.

EPA Method 610 (August 2005 only)

1-Methylnaphthalene concentrations were detected in the UST820-MW02 and UST820-MW09 groundwater samples. There is no established 1-Methylnaphthalene 2L GWQS. The UST820-MW02 groundwater sample also revealed 2-Methylnaphthalene above the 2L GWQS. The UST820-MW05 groundwater sample revealed Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, and Indeno(1,2,3-cd)pyrene concentrations above the 2L GWQS. Benzo(b)fluoranthene and Indeno(1,2,3-cd)pyrene concentrations were also detected above the 2L GWQS in the UST820-MW12 groundwater sample.

EPA Method 625 (February 2006 only)

1-Methylnaphthalene concentrations were detected in the UST820-MW02, UST820-MW06, UST820-MW11, and UST820-MW13 groundwater samples. There is no established 1-Methylnaphthalene 2L GWQS. The UST820-MW06 and UST820-MW11 groundwater samples also revealed 2-Methylnaphthalene above the 2L GWQS. Benzo(a)pyrene and Benzo(b)fluoranthene concentrations were detected above the 2L GWQS in the UST820-MW05 groundwater sample. The UST820-MW06 groundwater sample revealed Naphthalene concentrations above the 2L GWQS.

EPA Method 6010B

Lead concentrations were detected above the 2L GWQS in the August 2005 UST820-MW16 groundwater sample. The February 2006 UST820-MW16 groundwater sample did not reveal Lead concentrations above the 2L GWQS.

9.6 Potential Receptors

9.6.1 Contaminated Water Supply Well(s)?: None
9.6.2 Potable Water Supply Well Within 1,000 Feet of Source Area?: No
9.6.3 Any Water Supply Well Within 250 Feet of Source Area?: No
9.6.4 Surface Water Body Within 500 Feet?: No
9.6.5 Past Evidence of Vapors?: No
9.6.6 Significant Changes from Previously Reported Data?: Not Applicable. This is the first Management Report prepared by CATLIN.

9.7 Remediation

9.7.1 Status: 48 vertical AS wells set to 50 feet BLS, and 48 SVE wells set to 10 feet BLS in continuous operation (except downtime for maintenance) since October 1997.
9.7.2 Type: AS/SVE
9.7.3 Progress: System has been effective on shallow contamination
9.7.4 Construction Contractor: OHM (now Shaw)
9.7.5 Operating Contractor: Shaw

9.8 Observations and Comments

The recommendations from RAO and RCAP were as follows: shutdown potable water supply well 623 (1300 feet Northeast); shutdown selected AS/SVE wells; sample shutdown AS/SVE wells; collect six additional soil samples for risk-based analysis; prepare Soil Assessment Report and Soil Cleanup Plan if necessary; implement recommended sampling strategy; prepare Annual Groundwater Monitoring Reports; conduct AS Pilot Test if necessary; implement new remedial approach.

A portion of the AS/SVE system has been shut down as recommended in the RAO and RCAP along with the shut down of Potable Well 623. Additional delineation of the deep contamination has been completed. The active portion of AS/SVE system is to remain active and annual sampling is recommended. Natural attenuation of the deep contamination is currently being evaluated as a remediation alternative.

TABLE 9.1A
SITE 820
FIELD MEASUREMENTS - THIRD QUARTER 2005

Date Measured: 8/6/2005

Well No.	Type	TOC	Stick up	DTW	Product Thickness	DTW BGS	GW Elevation
UST820-MW02	Unknown	32.87	2.39	14.45	0.00	12.06	18.42
UST820-MW03	Unknown	32.78	2.47	14.63	0.00	12.16	18.15
UST820-MW04	T-II	33.33	2.72	14.62	0.00	11.90	18.71
UST820-MW05	T-II	30.28	-0.56	11.38	0.00	11.94	18.90
UST820-MW06	T-II	31.99	1.61	15.20	0.00	13.59	16.79
UST820-MW07	T-III	27.10	1.74	12.72	0.00	10.98	14.38
UST820-MW08	T-II	27.10	1.67	13.62	0.00	11.95	13.48
UST820-MW09	T-III	31.92	1.54	18.81	0.00	17.27	13.11
UST820-MW09D	T-III			20.90	0.00		
UST820-MW11	T-II	29.27	-0.95	10.58	0.00	11.53	18.69
UST820-MW12	T-II	31.73	0.82	14.21	0.00	13.39	17.52
UST820-MW13	T-II	29.07	-0.33	13.35	0.00	13.68	15.72
UST820-MW14	T-II	31.43	1.80	13.75	0.00	11.95	17.68
UST820-MW15	T-II	30.12	-0.36	10.36	0.00	10.72	19.76
UST820-MW16	T-II	31.99	1.15	13.29	0.00	12.14	18.70
UST820-MW17	T-III			19.81	0.00		
UST820-MW18	T-II	31.53	1.18	13.69	0.00	12.51	17.84
UST820-MW19	T-III	31.53	1.31	18.95	0.00	17.64	12.58
UST820-MW20	T-II	31.33	0.98	15.55	0.00	14.57	15.78
UST820-MW21	T-III	31.53	1.18	18.80	0.00	17.62	12.73
UST820-MW22	T-II	31.76	1.74	13.69	0.00	11.95	18.07
UST820-MW23	T-III	31.10	1.01	17.83	0.00	16.82	13.27
UST820-MW24	T-II	29.56	1.57	16.19	0.00	14.62	13.37
UST820-MW25	T-III	28.38	0.85	15.51	0.00	14.66	12.87
UST820-MW26	T-II	28.64	1.28	12.00	0.00	10.72	16.64
UST820-MW28	T-III	28.55	0.00	16.21	0.00	16.21	12.34

Notes:
1. TII = Type II monitoring well
   TIII = Type III monitoring well
   RW = Recovery well
2. TOC = Top of well casing elevation.
3. STICK UP = Height of well casing above land surface in feet.
4. DTW = Depth to water (in feet) from top of well casing.
5. Product thickness is measured in feet.
6. DTW BGS = Depth to water below ground surface in feet.
7. GW Elevation = Ground water elevation (not adjusted for free product)
8. A zero ("0.00") in the product thickness column indicates no measureable thickness.
9. Top of casing elevations are measured in feet relative to Mean Sea Level (NAD83).
10. Stick up values were not available for wells with no values in the STICK UP and DTW BGS columns.

TABLE 9.1B
SITE 820
FIELD MEASUREMENTS - FIRST QUARTER 2006

Date Measured: 2/1/2006

Well No.	Type	TOC	Stick up	DTW	Product Thickness	DTW BGS	GW Elevation
UST820-MW02	Unknown	32.87	2.39	11.10	0.00	8.71	21.77
UST820-MW03	Unknown	32.78	2.47	11.18	0.00	8.71	21.60
UST820-MW04	T-II	33.33	2.72	11.20	0.00	8.48	22.13
UST820-MW05	T-II	30.28	-0.56	7.71	0.00	8.27	22.57
UST820-MW06	T-II	31.99	1.61	11.62	0.00	10.01	20.37
UST820-MW07	T-III	27.10	1.74	9.68	0.00	7.94	17.42
UST820-MW08	T-II	27.10	1.67	10.61	0.00	8.94	16.49
UST820-MW09	T-III	31.92	1.54	11.40	0.00	9.86	20.52
UST820-MW09D	T-iII			16.24	0.00		
UST820-MW10	T-II	31.50	1.71	8.86	0.00	7.15	22.64
UST820-MW11	T-II	29.27	-0.95	7.16	0.00	8.11	22.11
UST820-MW12	T-II	31.73	0.82	11.64	0.00	10.82	20.09
UST820-MW13	T-II	29.07	-0.33	9.01	0.00	9.34	20.06
UST820-MW14	T-II	31.43	1.80	11.80	0.00	10.00	19.63
UST820-MW15	T-II	30.12	-0.36	7.10	0.00	7.46	23.02
UST820-MW16	T-II	31.99	1.15	9.08	0.00	7.93	22.91
UST820-MW17	T-III			16.46	0.00		
UST820-MW18	T-II	31.53	1.18	9.68	0.00	8.50	21.85
UST820-MW19	T-III	31.53	1.31		0.00		
UST820-MW20	T-II	31.33	0.98	11.62	0.00	10.64	19.71
UST820-MW21	T-III	31.53	1.18	14.86	0.00	13.68	16.67
UST820-MW22	T-II	31.76	1.74	14.42	0.00	12.68	17.34
UST820-MW23	T-III	31.10	1.01	14.84	0.00	13.83	16.26
UST820-MW24	T-II	29.56	1.57	13.20	0.00	11.63	16.36
UST820-MW25	T-III	28.38	0.85	12.35	0.00	11.50	16.03
UST820-MW26	T-II	28.64	1.28	9.19	0.00	7.91	19.45
UST820-MW28	T-III	28.55	0.00	15.05	0.00	15.05	13.50

Notes:
1. TII = Type II monitoring well
   TIII = Type III monitoring well
   RW = Recovery well
2. TOC = Top of well casing elevation.
3. STICK UP = Height of well casing above land surface in feet.
4. DTW = Depth to water (in feet) from top of well casing.
5. Product thickness is measured in feet.
6. DTW BGS = Depth to water below ground surface in feet.
7. GW Elevation = Ground water elevation (not adjusted for free product)
8. A zero ("0.00") in the product thickness column indicates no measureable thickness.
9. Top of casing elevations are measured in feet relative to Mean Sea Level (NAD83).
10. Stick up values were not available for wells with no values in the STICK UP and DTW BGS columns.

TABLE 9.2A

SITE 820

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 602

Contaminant of Concern →		1,2-Dichlorobenzene	Benzene	Ethylbenzene	Methyl Tert Butyl Ether	Toluene	Xylenes (total)
Well ID	**Date**						
	2L GWQS	24	1	550	200	1000	530
	GCL	72500	5000	550000	200000	257500	87500
UST820-MW02	8/6/2005	**169.00**	BQL	7.00	2.30	52.30	97.80
UST820-MW02	2/1/2006	**27.80**	BQL	BQL	**589.00**	BQL	BQL
UST820-MW03	2/2/2006	2.90	BQL	0.79	**1590.00**	10.00	86.90
UST820-MW04	2/5/2006	BQL	**2.10**	BQL	0.91	BQL	BQL
UST820-MW05	8/6/2005	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW05	2/5/2006	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW06	2/2/2006	**89.80**	**92.00**	**1130.00**	32.90	164.00	**1070.00**
UST820-MW07	8/9/2005	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW07	2/3/2006	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW08	8/9/2005	BQL	BQL	BQL	2.00	BQL	BQL
UST820-MW08	2/3/2006	BQL	0.55	BQL	2.30	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 9.2A

SITE 820

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 602

Contaminant of Concern →		1,2-Dichlorobenzene	Benzene	Ethylbenzene	Methyl Tert Butyl Ether	Toluene	Xylenes (total)
Well ID	**Date**						
2L GWQS		24	1	550	200	1000	530
GCL		72500	5000	550000	200000	257500	87500
UST820-MW09	8/6/2005	4.80	**1820.00**	168.00	**2410.00**	224.00	297.00
UST820-MW09	2/1/2006	BQL	**1710.00**	119.00	**2130.00**	75.60	242.00
UST820-MW09D	8/6/2005	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW09D	2/1/2006	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW10	2/2/2006	BQL	BQL	BQL	22.50	BQL	BQL
UST820-MW11	2/5/2006	BQL	**1.30**	55.20	BQL	249.00	**1390.00**
UST820-MW12	8/8/2005	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW12	2/2/2006	BQL	BQL	BQL	4.90	BQL	BQL
UST820-MW13	8/6/2005	BQL	**1.80**	21.70	BQL	41.60	148.00
UST820-MW13	2/2/2006	20.30	**6.80**	60.80	BQL	304.00	**903.00**

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 9.2A

SITE 820

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 602

Contaminant of Concern →		1,2-Dichlorobenzene	Benzene	Ethylbenzene	Methyl Tert Butyl Ether	Toluene	Xylenes (total)
Well ID	**Date**						
2L GWQS		24	1	550	200	1000	530
GCL		72500	5000	550000	200000	257500	87500
UST820-MW14	8/9/2005	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW14	2/3/2006	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW15	8/6/2005	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW15	2/2/2006	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW16	8/8/2005	BQL	**8.60**	BQL	2.70	BQL	BQL
UST820-MW16	2/2/2006	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW17	8/8/2005	BQL	**552.00**	1.20	**4250.00**	BQL	5.10
UST820-MW17	2/2/2006	BQL	**675.00**	BQL	**5180.00**	BQL	BQL
UST820-MW18	2/2/2006	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW19	8/8/2005	BQL	BQL	BQL	8.80	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 9.2A

SITE 820

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 602

Contaminant of Concern →		1,2-Dichlorobenzene	Benzene	Ethylbenzene	Methyl Tert Butyl Ether	Toluene	Xylenes (total)
Well ID	**Date**						
2L GWQS		24	1	550	200	1000	530
GCL		72500	5000	550000	200000	257500	87500
UST820-MW20	8/9/2005	BQL	BQL	BQL	0.53	BQL	BQL
UST820-MW20	2/2/2006	BQL	0.69	8.00	0.59	1.10	7.80
UST820-MW21	8/9/2005	BQL	BQL	BQL	0.85	BQL	BQL
UST820-MW21	2/2/2006	BQL	BQL	BQL	1.50	BQL	BQL
UST820-MW22	2/3/2006	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW23	2/3/2006	BQL	BQL	BQL	1.60	BQL	BQL
UST820-MW24	8/9/2005	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW24	2/2/2006	BQL	**2.90**	BQL	0.70	BQL	BQL
UST820-MW25	8/8/2005	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW25	2/2/2006	BQL	**4.50**	BQL	1.20	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 9.2A

SITE 820

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 602

Contaminant of Concern →		1,2-Dichlorobenzene	Benzene	Ethylbenzene	Methyl Tert Butyl Ether	Toluene	Xylenes (total)
Well ID	**Date**						
2L GWQS		24	1	550	200	1000	530
GCL		72500	5000	550000	200000	257500	87500
UST820-MW26	8/9/2005	BQL	BQL	BQL	1.50	BQL	BQL
UST820-MW26	2/5/2006	BQL	**5.10**	BQL	BQL	BQL	BQL
UST820-MW27	8/6/2005	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW27	2/5/2006	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW28	8/9/2005	BQL	**1130.00**	BQL	**2430.00**	BQL	BQL
UST820-MW28	2/5/2006	BQL	**258.00**	BQL	**576.00**	BQL	BQL
UST820-MW29	8/9/2005	BQL	**10.70**	BQL	23.20	BQL	BQL
UST820-MW29	2/3/2006	BQL	**10.60**	BQL	16.40	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 9.2B

SITE 820

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 602

Contaminant of Concern →		1,2-Dichlorobenzene	Benzene	Ethylbenzene	Methyl Tert Butyl Ether	Toluene	Xylenes (total)
Well ID	Date						
	2L GWQS	24	1	550	200	1000	530
	GCL	72500	5000	550000	200000	257500	87500
UST820-MW02	8/6/2005	**169.00**	BQL	7.00	2.30	52.30	97.80
UST820-MW02	2/1/2006	**27.80**	BQL	BQL	**589.00**	BQL	BQL
UST820-MW03	2/2/2006	2.90	BQL	0.79	**1590.00**	10.00	86.90
UST820-MW04	2/5/2006	BQL	**2.10**	BQL	0.91	BQL	BQL
UST820-MW05	8/6/2005	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW05	2/5/2006	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW06	2/2/2006	**89.80**	**92.00**	**1130.00**	32.90	164.00	**1070.00**
UST820-MW07	8/9/2005	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW07	2/3/2006	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW08	8/9/2005	BQL	BQL	BQL	2.00	BQL	BQL
UST820-MW08	2/3/2006	BQL	0.55	BQL	2.30	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 9.2B

SITE 820

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 602

Contaminant of Concern →		1,2-Dichlorobenzene	Benzene	Ethylbenzene	Methyl Tert Butyl Ether	Toluene	Xylenes (total)
Well ID	Date						
2L GWQS		24	1	550	200	1000	530
GCL		72500	5000	550000	200000	257500	87500
UST820-MW09	8/6/2005	4.80	**1820.00**	168.00	**2410.00**	224.00	297.00
UST820-MW09	2/1/2006	BQL	**1710.00**	119.00	**2130.00**	75.60	242.00
UST820-MW09D	8/6/2005	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW09D	2/1/2006	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW10	2/2/2006	BQL	BQL	BQL	22.50	BQL	BQL
UST820-MW11	2/5/2006	BQL	**1.30**	55.20	BQL	249.00	**1390.00**
UST820-MW12	8/8/2005	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW12	2/2/2006	BQL	BQL	BQL	4.90	BQL	BQL
UST820-MW13	8/6/2005	BQL	**1.80**	21.70	BQL	41.60	148.00
UST820-MW13	2/2/2006	20.30	**6.80**	60.80	BQL	304.00	**903.00**

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 9.2B

SITE 820

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 602

Contaminant of Concern →		1,2-Dichlorobenzene	Benzene	Ethylbenzene	Methyl Tert Butyl Ether	Toluene	Xylenes (total)
Well ID	**Date**						
2L GWQS		24	1	550	200	1000	530
GCL		72500	5000	550000	200000	257500	87500
UST820-MW14	8/9/2005	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW14	2/3/2006	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW15	8/6/2005	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW15	2/2/2006	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW16	8/8/2005	BQL	**8.60**	BQL	2.70	BQL	BQL
UST820-MW16	2/2/2006	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW17	8/8/2005	BQL	**552.00**	1.20	**4250.00**	BQL	5.10
UST820-MW17	2/2/2006	BQL	**675.00**	BQL	**5180.00**	BQL	BQL
UST820-MW18	2/2/2006	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW19	8/8/2005	BQL	BQL	BQL	8.80	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 9.2B

SITE 820

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 602

Contaminant of Concern →		1,2-Dichlorobenzene	Benzene	Ethylbenzene	Methyl Tert Butyl Ether	Toluene	Xylenes (total)
Well ID	**Date**						
2L GWQS		24	1	550	200	1000	530
GCL		72500	5000	550000	200000	257500	87500
UST820-MW20	8/9/2005	BQL	BQL	BQL	0.53	BQL	BQL
UST820-MW20	2/2/2006	BQL	0.69	8.00	0.59	1.10	7.80
UST820-MW21	8/9/2005	BQL	BQL	BQL	0.85	BQL	BQL
UST820-MW21	2/2/2006	BQL	BQL	BQL	1.50	BQL	BQL
UST820-MW22	2/3/2006	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW23	2/3/2006	BQL	BQL	BQL	1.60	BQL	BQL
UST820-MW24	8/9/2005	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW24	2/2/2006	BQL	**2.90**	BQL	0.70	BQL	BQL
UST820-MW25	8/8/2005	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW25	2/2/2006	BQL	**4.50**	BQL	1.20	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 9.2B

SITE 820

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 602

Contaminant of Concern →		1,2-Dichlorobenzene	Benzene	Ethylbenzene	Methyl Tert Butyl Ether	Toluene	Xylenes (total)
Well ID	**Date**						
2L GWQS		24	1	550	200	1000	530
GCL		72500	5000	550000	200000	257500	87500
UST820-MW26	8/9/2005	BQL	BQL	BQL	1.50	BQL	BQL
UST820-MW26	2/5/2006	BQL	**5.10**	BQL	BQL	BQL	BQL
UST820-MW27	8/6/2005	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW27	2/5/2006	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW28	8/9/2005	BQL	**1130.00**	BQL	**2430.00**	BQL	BQL
UST820-MW28	2/5/2006	BQL	**258.00**	BQL	**576.00**	BQL	BQL
UST820-MW29	8/9/2005	BQL	**10.70**	BQL	23.20	BQL	BQL
UST820-MW29	2/3/2006	BQL	**10.80**	BQL	16.40	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 9.3A

SITE 820

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 610

Contaminant of Concern →		1-Methylnaphthalene	2-Methylnaphthalene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Indeno(1,2,3-cd)pyrene	Naphthalene
Well ID	**Date**								
2L GWQS		0	14	0.05	0.0047	0.047	210	0.0479	21
GCL		0	12500	22	1.5	0.6	210	31	15500
UST820-MW02	8/6/2005	**61.80**	**63.80**	BQL	BQL	BQL	BQL	BQL	10.20
UST820-MW05	8/6/2005	BQL	BQL	**0.07**	**0.14**	**0.14**	0.15	**0.17**	BQL
UST820-MW07	8/9/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW08	8/9/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW09	8/6/2005	**0.97**	1.10	BQL	BQL	BQL	BQL	BQL	13.90
UST820-MW12	8/8/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW13	8/6/2005	BQL	BQL	BQL	BQL	**0.08**	0.12	**0.14**	1.10
UST820-MW14	8/9/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW15	8/6/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW16	8/8/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 9.3A

SITE 820

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 610

Contaminant of Concern →		1-Methylnaphthalene	2-Methylnaphthalene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Indeno(1,2,3-cd)pyrene	Naphthalene
Well ID	**Date**								
2L GWQS		0	14	0.05	0.0047	0.047	210	0.0479	21
GCL		0	12500	22	1.5	0.6	210	31	15500
UST820-MW17	8/8/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW19	8/8/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW20	8/9/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW21	8/9/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW24	8/9/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW25	8/8/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW26	8/9/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW27	8/6/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW28	8/9/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW29	8/9/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 9.3B

SITE 820

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 610

Contaminant of Concern →		1-Methylnaphthalene	2-Methylnaphthalene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Indeno(1,2,3-cd)pyrene	Naphthalene
Well ID	**Date**								
2L GWQS		0	14	0.05	0.0047	0.047	210	0.0479	21
GCL		0	12500	22	1.5	0.6	210	31	15500
UST820-MW02	8/6/2005	61.80	63.60	BQL	BQL	BQL	BQL	BQL	10.20
UST820-MW05	8/6/2005	BQL	BQL	0.07	0.14	0.14	0.15	0.17	BQL
UST820-MW07	8/9/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW08	8/9/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW09	8/6/2005	0.97	1.10	BQL	BQL	BQL	BQL	BQL	13.90
UST820-MW12	8/8/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW13	8/6/2005	BQL	BQL	BQL	BQL	0.06	0.12	0.14	1.10
UST820-MW14	8/9/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW15	8/6/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW16	8/8/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 9.3B

SITE 820

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 610

Contaminant of Concern →		1-Methylnaphthalene	2-Methylnaphthalene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Indeno(1,2,3-cd)pyrene	Naphthalene
Well ID	Date								
2L GWQS		0	14	0.05	0.0047	0.047	210	0.0479	21
GCL		0	12500	22	1.5	0.6	210	31	15500
UST820-MW17	8/8/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW19	8/8/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW20	8/9/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW21	8/9/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW24	8/9/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW25	8/8/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW26	8/9/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW27	8/6/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW28	8/9/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW29	8/9/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 9.4A

SITE 820

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 625

Contaminant of Concern →		1-Methylnaphthalene	2-Methylnaphthalene	Benzo(a)pyrene	Benzo(b)fluoranthene	Chrysene	Fluoranthene	Naphthalene	Pyrene
Well ID	**Date**								
2L GWQS		0	14	0.0047	0.047	4.79	280	21	210
GCL		0	12500	1.5	0.6	5	280	15500	210
UST820-MW02	2/1/2006	0.97	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW03	2/2/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW04	2/5/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW05	2/5/2006	BQL	BQL	1.00	1.40	1.00	1.70	BQL	1.30
UST820-MW06	2/2/2006	56.20	89.40	BQL	BQL	BQL	BQL	230.00	BQL
UST820-MW07	2/3/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW08	2/3/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW09	2/1/2006	BQL	BQL	BQL	BQL	BQL	BQL	6.20	BQL
UST820-MW09D	2/1/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW10	2/2/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 9.4A

SITE 820

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 625

Contaminant of Concern →		1-Methylnaphthalene	2-Methylnaphthalene	Benzo(a)pyrene	Benzo(b)fluoranthene	Chrysene	Fluoranthene	Naphthalene	Pyrene
Well ID	**Date**								
2L GWQS		0	14	0.0047	0.047	4.79	280	21	210
GCL		0	12500	1.5	0.6	5	280	15500	210
UST820-MW11	2/5/2006	21.40	24.00	BQL	BQL	BQL	BQL	3.40	BQL
UST820-MW12	2/2/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW13	2/2/2006	2.30	2.60	BQL	BQL	BQL	BQL	12.40	BQL
UST820-MW14	2/3/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW15	2/2/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW16	2/2/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW17	2/2/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW18	2/2/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW20	2/2/2006	BQL	BQL	BQL	BQL	BQL	BQL	1.50	BQL
UST820-MW21	2/2/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 9.4A

SITE 820

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 625

Contaminant of Concern →		1-Methylnaphthalene	2-Methylnaphthalene	Benzo(a)pyrene	Benzo(b)fluoranthene	Chrysene	Fluoranthene	Naphthalene	Pyrene
Well ID	**Date**								
2L GWQS		0	14	0.0047	0.047	4.79	280	21	210
GCL		0	12500	1.5	0.6	5	280	15500	210
UST820-MW22	2/3/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW23	2/3/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW24	2/2/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW25	2/2/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW26	2/5/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW27	2/5/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW28	2/5/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW29	2/3/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 9.4B

SITE 820

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 625

Contaminant of Concern →		1-Methylnaphthalene	2-Methylnaphthalene	Benzo(a)pyrene	Benzo(b)fluoranthene	Chrysene	Fluoranthene	Naphthalene	Pyrene
Well ID	**Date**								
2L GWQS		0	14	0.0047	0.047	4.79	280	21	210
GCL		0	12500	1.5	0.6	5	280	15500	210
UST820-MW02	2/1/2006	0.97	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW03	2/2/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW04	2/5/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW05	2/5/2006	BQL	BQL	1.00	1.40	1.00	1.70	BQL	1.30
UST820-MW06	2/2/2006	56.20	89.40	BQL	BQL	BQL	BQL	230.00	BQL
UST820-MW07	2/3/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW08	2/3/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW09	2/1/2006	BQL	BQL	BQL	BQL	BQL	BQL	6.20	BQL
UST820-MW09D	2/1/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW10	2/2/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 9.4B

SITE 820

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 625

Contaminant of Concern →		1-Methylnaphthalene	2-Methylnaphthalene	Benzo(a)pyrene	Benzo(b)fluoranthene	Chrysene	Fluoranthene	Naphthalene	Pyrene
Well ID	**Date**								
2L GWQS		0	14	0.0047	0.047	4.79	280	21	210
GCL		0	12500	1.5	0.6	5	280	15500	210
UST820-MW11	2/5/2006	21.40	24.00	BQL	BQL	BQL	BQL	3.40	BQL
UST820-MW12	2/2/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW13	2/2/2006	2.30	2.60	BQL	BQL	BQL	BQL	12.40	BQL
UST820-MW14	2/3/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW15	2/2/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW16	2/2/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW17	2/2/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW18	2/2/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW20	2/2/2006	BQL	BQL	BQL	BQL	BQL	BQL	1.50	BQL
UST820-MW21	2/2/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 9.4B

SITE 820

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 625

Contaminant of Concern →		1-Methylnaphthalene	2-Methylnaphthalene	Benzo(a)pyrene	Benzo(b)fluoranthene	Chrysene	Fluoranthene	Naphthalene	Pyrene
Well ID	Date								
2L GWQS		0	14	0.0047	0.047	4.79	280	21	210
GCL		0	12500	1.5	0.6	5	280	15500	210
UST820-MW22	2/3/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW23	2/3/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW24	2/2/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW25	2/2/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW26	2/5/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW27	2/5/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW28	2/5/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST820-MW29	2/3/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 9.5A

SITE 820

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 6010B

Contaminant of Concern →		
Well ID	**Date**	**Lead**
2L GWQS		15
GCL		15000
UST820-MW02	8/6/2005	BQL
UST820-MW02	2/1/2006	BQL
UST820-MW03	2/2/2006	BQL
UST820-MW04	2/5/2006	2.00
UST820-MW05	8/6/2005	BQL
UST820-MW05	2/5/2006	3.50
UST820-MW06	2/2/2006	BQL
UST820-MW07	8/9/2005	9.00
UST820-MW07	2/3/2006	3.60
UST820-MW08	8/9/2005	BQL
UST820-MW08	2/3/2006	2.10

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 9.5A

SITE 820

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 6010B

Contaminant of Concern →		
Well ID	**Date**	**Lead**
2L GWQS		15
GCL		15000
UST820-MW09	8/6/2005	BQL
UST820-MW09	2/1/2006	1.80
UST820-MW10	2/2/2006	4.30
UST820-MW11	2/5/2006	7.70
UST820-MW12	8/8/2005	BQL
UST820-MW12	2/2/2006	BQL
UST820-MW13	8/6/2005	7.30
UST820-MW13	2/2/2006	BQL
UST820-MW14	8/9/2005	BQL
UST820-MW14	2/3/2006	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 9.5A

SITE 820

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 6010B

Contaminant of Concern →		
Well ID	**Date**	**Lead**
2L GWQS		15
GCL		15000
UST820-MW15	8/6/2005	BQL
UST820-MW15	2/2/2006	BQL
UST820-MW16	8/8/2005	18.70
UST820-MW16	2/2/2006	BQL
UST820-MW17	8/8/2005	BQL
UST820-MW17	2/2/2006	5.20
UST820-MW18	2/2/2006	BQL
UST820-MW19	8/8/2005	BQL
UST820-MW20	8/9/2005	6.10
UST820-MW20	2/2/2006	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 9.5A

SITE 820

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 6010B

Contaminant of Concern →		
Well ID	**Date**	**Lead**
2L GWQS		15
GCL		15000
UST820-MW21	8/9/2005	BQL
UST820-MW21	2/2/2006	7.20
UST820-MW22	2/3/2006	BQL
UST820-MW23	2/3/2006	2.10
UST820-MW24	8/9/2005	9.50
UST820-MW24	2/2/2006	**18.20**
UST820-MW25	8/8/2005	BQL
UST820-MW25	2/2/2006	6.90
UST820-MW26	8/9/2005	7.50
UST820-MW26	2/5/2006	7.30

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 9.5A

SITE 820

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 6010B

Contaminant of Concern →		
Well ID	**Date**	**Lead**
2L GWQS		15
GCL		15000
UST820-MW27	8/6/2005	BQL
UST820-MW27	2/5/2006	4.10
UST820-MW28	8/9/2005	BQL
UST820-MW28	2/5/2006	BQL
UST820-MW29	8/9/2005	BQL
UST820-MW29	2/3/2006	14.60

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 9.5B

SITE 820

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 6010B

Contaminant of Concern →		
Well ID	**Date**	**Lead**
2L GWQS		15
GCL		15000
UST820-MW02	8/6/2005	BQL
UST820-MW02	2/1/2006	BQL
UST820-MW03	2/2/2006	BQL
UST820-MW04	2/5/2006	2.00
UST820-MW05	8/6/2005	BQL
UST820-MW05	2/5/2006	3.50
UST820-MW06	2/2/2006	BQL
UST820-MW07	8/9/2005	9.00
UST820-MW07	2/3/2006	3.60
UST820-MW08	8/9/2005	BQL
UST820-MW08	2/3/2006	2.10

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 9.5B

SITE 820

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 6010B

Contaminant of Concern →		
Well ID	**Date**	**Lead**
2L GWQS		15
GCL		15000
UST820-MW09	8/6/2005	BQL
UST820-MW09	2/1/2006	1.80
UST820-MW10	2/2/2006	4.30
UST820-MW11	2/5/2006	7.70
UST820-MW12	8/8/2005	BQL
UST820-MW12	2/2/2006	BQL
UST820-MW13	8/6/2005	7.30
UST820-MW13	2/2/2006	BQL
UST820-MW14	8/9/2005	BQL
UST820-MW14	2/3/2006	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 9.5B

SITE 820

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 6010B

Contaminant of Concern →		
Well ID	**Date**	**Lead**
2L GWQS		15
GCL		15000
UST820-MW15	8/6/2005	BQL
UST820-MW15	2/2/2006	BQL
UST820-MW16	8/8/2005	18.70
UST820-MW16	2/2/2006	BQL
UST820-MW17	8/8/2005	BQL
UST820-MW17	2/2/2006	5.20
UST820-MW18	2/2/2006	BQL
UST820-MW19	8/8/2005	BQL
UST820-MW20	8/9/2005	6.10
UST820-MW20	2/2/2006	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 9.5B

SITE 820

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 6010B

Contaminant of Concern →		
Well ID	**Date**	**Lead**
2L GWQS		15
GCL		15000
UST820-MW21	8/9/2005	BQL
UST820-MW21	2/2/2006	7.20
UST820-MW22	2/3/2006	BQL
UST820-MW23	2/3/2006	2.10
UST820-MW24	8/9/2005	9.50
UST820-MW24	2/2/2006	18.20
UST820-MW25	8/8/2005	BQL
UST820-MW25	2/2/2006	6.90
UST820-MW26	8/9/2005	7.50
UST820-MW26	2/5/2006	7.30

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 9.5B

SITE 820

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 6010B

Contaminant of Concern →		
Well ID	**Date**	**Lead**
2L GWQS		15
GCL		15000
UST820-MW27	8/6/2005	BQL
UST820-MW27	2/5/2006	4.10
UST820-MW28	8/9/2005	BQL
UST820-MW28	2/5/2006	BQL
UST820-MW29	8/9/2005	BQL
UST820-MW29	2/3/2006	14.60

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM

LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Free Product
- Free Product Detected
- No Measurable Thickness
- Free Product Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. Free Product was not detected at this site in any of the wells gauged during this monitoring event.

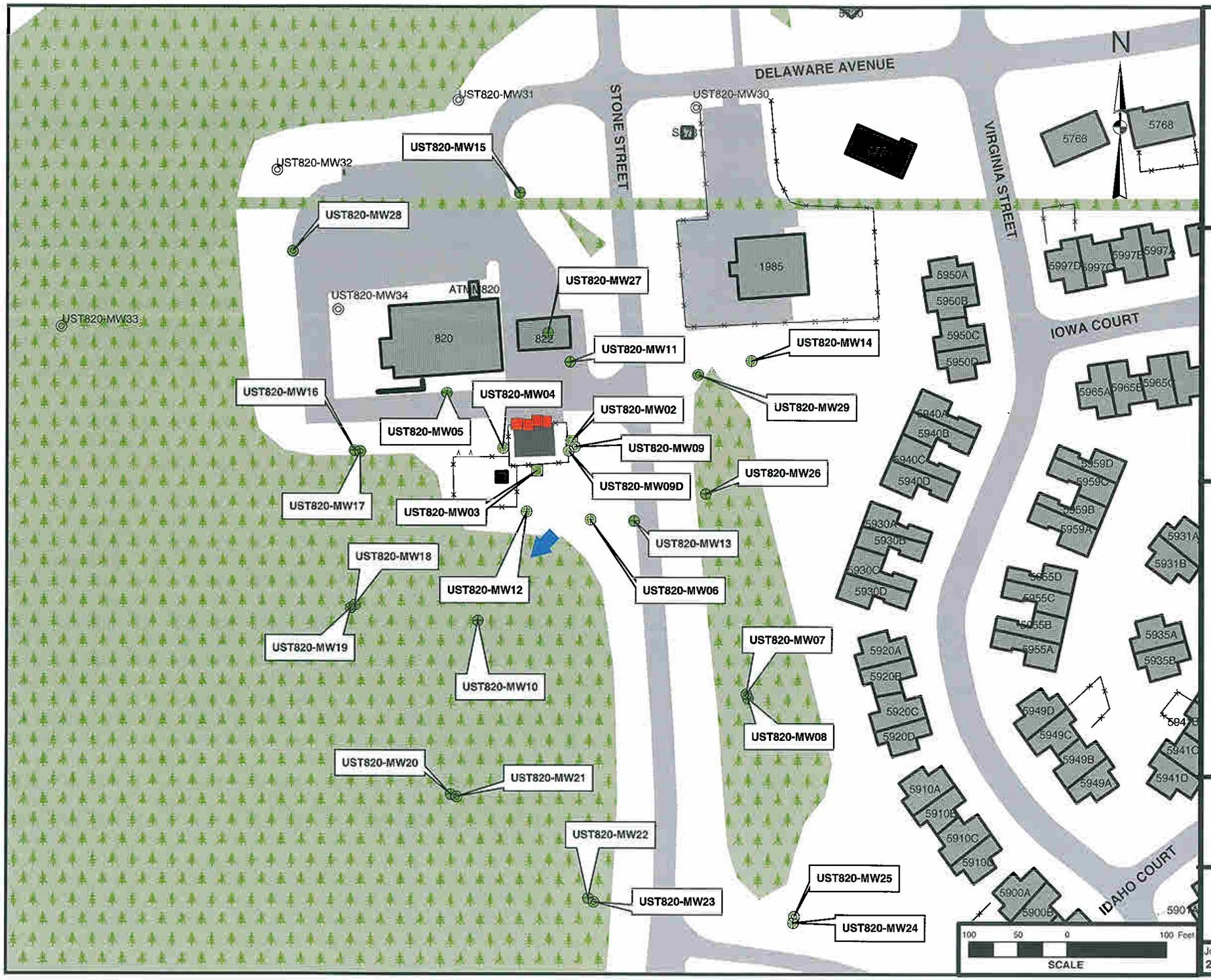
DELAWARE AVENUE
STONE STREET
VIRGINIA STREET
IOWA COURT
IDAHO COURT
N
100 50 0 100 Feet
SCALE

CATLIN ENGINEERS and SCIENTISTS

SITE 820
FREE PRODUCT PLUME MAP
THIRD QUARTER 2005

FIGURE 9.1A

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM



MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM

LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Free Product
- Free Product Detected
- No Measurable Thickness
- Free Product Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. Free Product was not detected at this site in any of the wells gauged during this monitoring event.

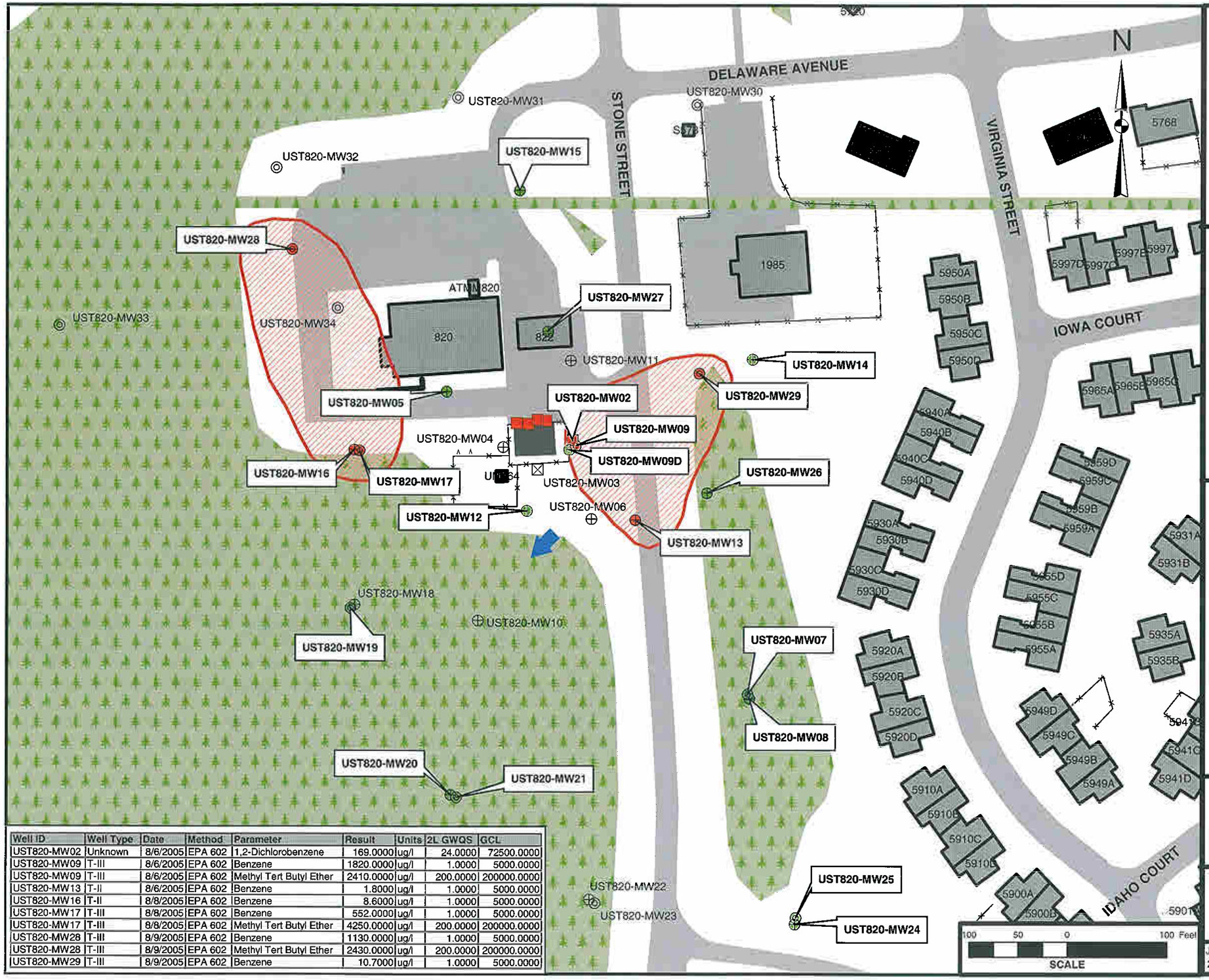
CATLIN ENGINEERS and SCIENTISTS

SITE 820
FREE PRODUCT PLUME MAP
FIRST QUARTER 2006

FIGURE **9.1B**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM



LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Analytical Results
- 2L Non-Compliant
- 2L Compliant
- EPA 602 Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. 2L Standard refers to North Carolina Groundwater Quality Standard 15A NCAC 2L.0202.
2. GCL refers to Gross Contaminant Level as defined in Table 7 of "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Ground Water", Volume II, dated January 2, 1998.
3. A 2L Standard of "0.00" implies a standard has not yet been established. According to NCAC T15:02L, any compound found above laboratory detection limits is considered noncompliant unless otherwise specified by the NCDENR.

Well ID	Well Type	Date	Method	Parameter	Result	Units	2L GWQS	GCL
UST820-MW02	Unknown	8/6/2005	EPA 602	1,2-Dichlorobenzene	169.0000	ug/l	24.0000	72500.0000
UST820-MW09	T-III	8/6/2005	EPA 602	Benzene	1820.0000	ug/l	1.0000	5000.0000
UST820-MW09	T-III	8/6/2005	EPA 602	Methyl Tert Butyl Ether	2410.0000	ug/l	200.0000	200000.0000
UST820-MW13	T-II	8/6/2005	EPA 602	Benzene	1.8000	ug/l	1.0000	5000.0000
UST820-MW16	T-II	8/8/2005	EPA 602	Benzene	8.6000	ug/l	1.0000	5000.0000
UST820-MW17	T-III	8/8/2005	EPA 602	Benzene	552.0000	ug/l	1.0000	5000.0000
UST820-MW17	T-III	8/8/2005	EPA 602	Methyl Tert Butyl Ether	4250.0000	ug/l	200.0000	200000.0000
UST820-MW28	T-III	8/9/2005	EPA 602	Benzene	1130.0000	ug/l	1.0000	5000.0000
UST820-MW28	T-III	8/9/2005	EPA 602	Methyl Tert Butyl Ether	2430.0000	ug/l	200.0000	200000.0000
UST820-MW29	T-III	8/9/2005	EPA 602	Benzene	10.7000	ug/l	1.0000	5000.0000

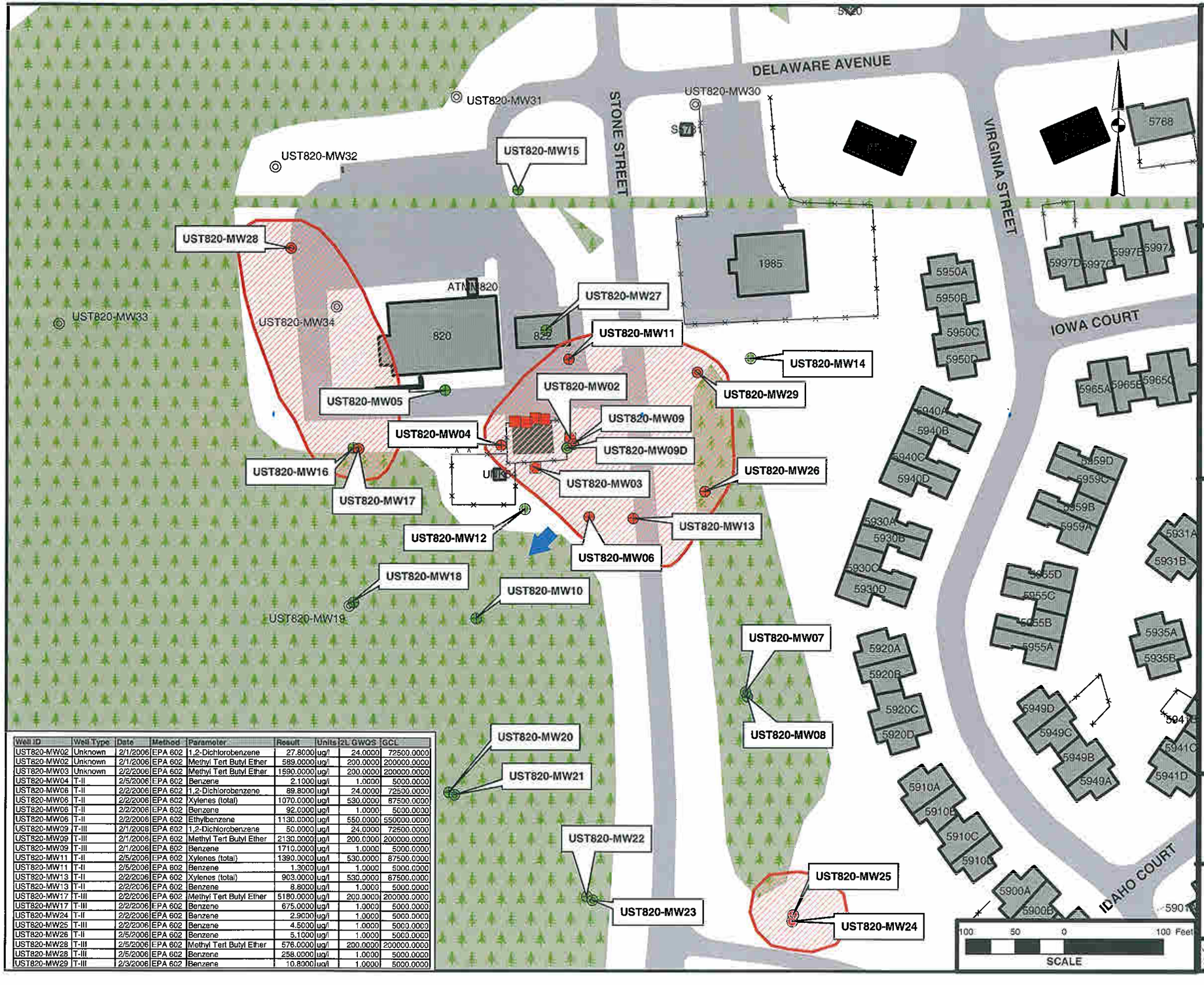
CATLIN ENGINEERS and SCIENTISTS

SITE 820
EPA METHOD 602 COLORIMETRY AND PLUME IN EXCESS OF 2L THIRD QUARTER 2005

FIGURE **9.2A**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM



Well ID	Well Type	Date	Method	Parameter	Result	Units	2L GWQS	GCL
UST820-MW02	Unknown	2/1/2006	EPA 602	1,2-Dichlorobenzene	27.8000	ug/l	24.0000	72500.0000
UST820-MW02	Unknown	2/1/2006	EPA 602	Methyl Tert Butyl Ether	589.0000	ug/l	200.0000	200000.0000
UST820-MW03	Unknown	2/2/2006	EPA 602	Methyl Tert Butyl Ether	1590.0000	ug/l	200.0000	200000.0000
UST820-MW04	T-II	2/5/2006	EPA 602	Benzene	2.1000	ug/l	1.0000	5000.0000
UST820-MW06	T-II	2/2/2006	EPA 602	1,2-Dichlorobenzene	89.8000	ug/l	24.0000	72500.0000
UST820-MW06	T-II	2/2/2006	EPA 602	Xylenes (total)	1070.0000	ug/l	530.0000	87500.0000
UST820-MW06	T-II	2/2/2006	EPA 602	Benzene	92.0000	ug/l	1.0000	5000.0000
UST820-MW06	T-II	2/2/2006	EPA 602	Ethylbenzene	1130.0000	ug/l	550.0000	550000.0000
UST820-MW09	T-III	2/1/2006	EPA 602	1,2-Dichlorobenzene	50.0000	ug/l	24.0000	72500.0000
UST820-MW09	T-III	2/1/2006	EPA 602	Methyl Tert Butyl Ether	2130.0000	ug/l	200.0000	200000.0000
UST820-MW09	T-III	2/1/2006	EPA 602	Benzene	1710.0000	ug/l	1.0000	5000.0000
UST820-MW11	T-II	2/5/2006	EPA 602	Xylenes (total)	1390.0000	ug/l	530.0000	87500.0000
UST820-MW11	T-II	2/5/2006	EPA 602	Benzene	1.3000	ug/l	1.0000	5000.0000
UST820-MW13	T-II	2/2/2006	EPA 602	Xylenes (total)	903.0000	ug/l	530.0000	87500.0000
UST820-MW13	T-II	2/2/2006	EPA 602	Benzene	8.8000	ug/l	1.0000	5000.0000
UST820-MW17	T-III	2/2/2006	EPA 602	Methyl Tert Butyl Ether	5180.0000	ug/l	200.0000	200000.0000
UST820-MW17	T-III	2/2/2006	EPA 602	Benzene	675.0000	ug/l	1.0000	5000.0000
UST820-MW24	T-II	2/2/2006	EPA 602	Benzene	2.9000	ug/l	1.0000	5000.0000
UST820-MW25	T-III	2/2/2006	EPA 602	Benzene	4.5000	ug/l	1.0000	5000.0000
UST820-MW26	T-II	2/5/2006	EPA 602	Benzene	5.1000	ug/l	1.0000	5000.0000
UST820-MW28	T-III	2/5/2006	EPA 602	Methyl Tert Butyl Ether	576.0000	ug/l	200.0000	200000.0000
UST820-MW28	T-III	2/5/2006	EPA 602	Benzene	258.0000	ug/l	1.0000	5000.0000
UST820-MW29	T-III	2/3/2006	EPA 602	Benzene	10.8000	ug/l	1.0000	5000.0000

LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Analytical Results
- 2L Non-Compliant
- 2L Compliant
- EPA 602 Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. 2L Standard refers to North Carolina Groundwater Quality Standard 15A NCAC 2L.0202.
2. GCL refers to Gross Contaminant Level as defined in Table 7 of "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Ground Water", Volume II, dated January 2, 1998.
3. A 2L Standard of "0.00" implies a standard has not yet been established. According to NCAC T15:02L, any compound found above laboratory detection limits is considered noncompliant unless otherwise specified by the NCDENR.

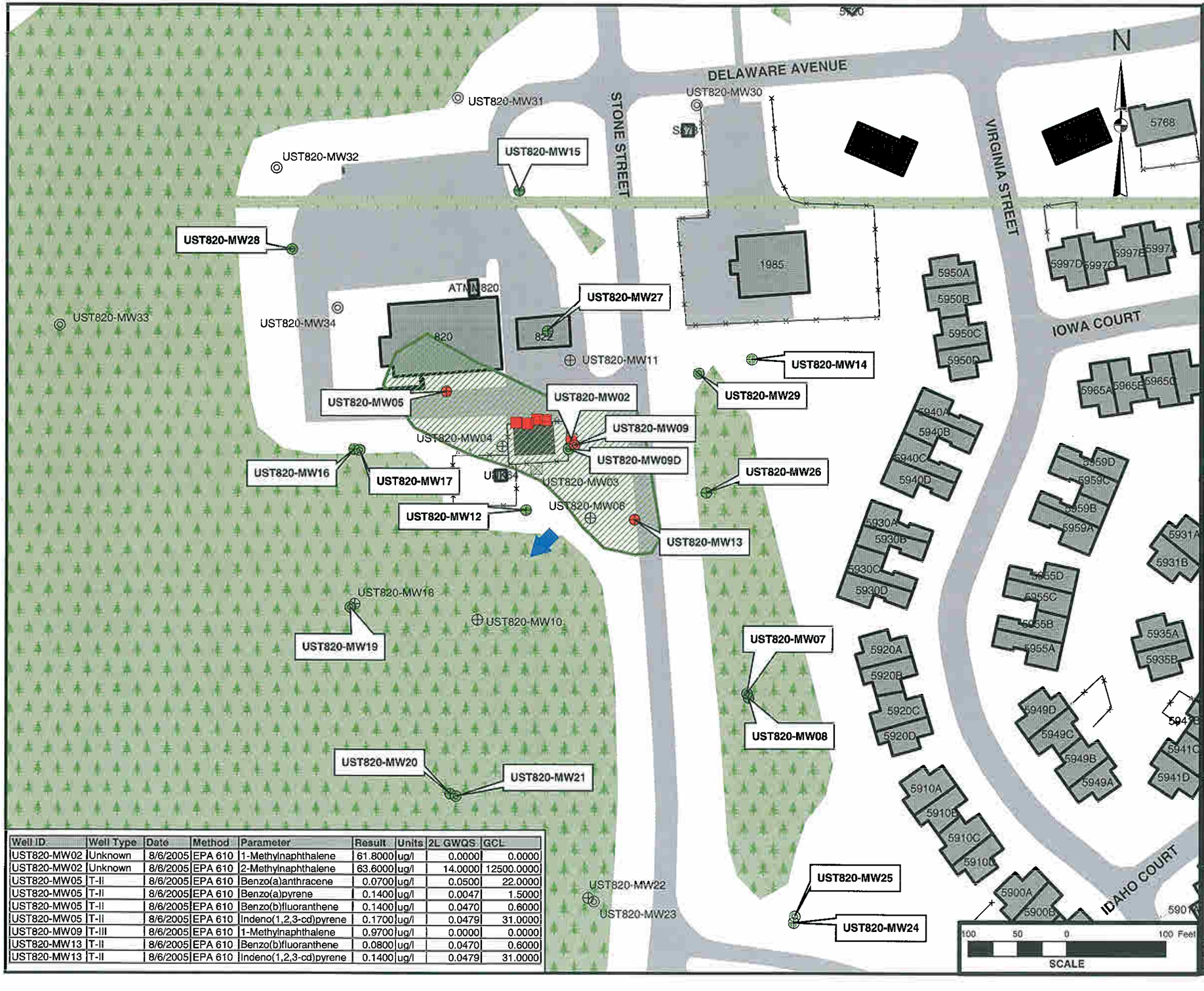
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SITE 820
EPA METHOD 602 COLORIMETRY AND PLUME IN EXCESS OF 2L
FIRST QUARTER 2006

FIGURE **9.2B**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM



LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Analytical Results
- 2L Non-Compliant
- 2L Compliant
- EPA 610 Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. 2L Standard refers to North Carolina Groundwater Quality Standard 15A NCAC 2L.0202.
2. GCL refers to Gross Contaminant Level as defined in Table 7 of "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Ground Water", Volume II, dated January 2, 1998.
3. A 2L Standard of "0.00" implies a standard has not yet been established. According to NCAC T15:02L, any compound found above laboratory detection limits is considered noncompliant unless otherwise specified by the NCDENR.

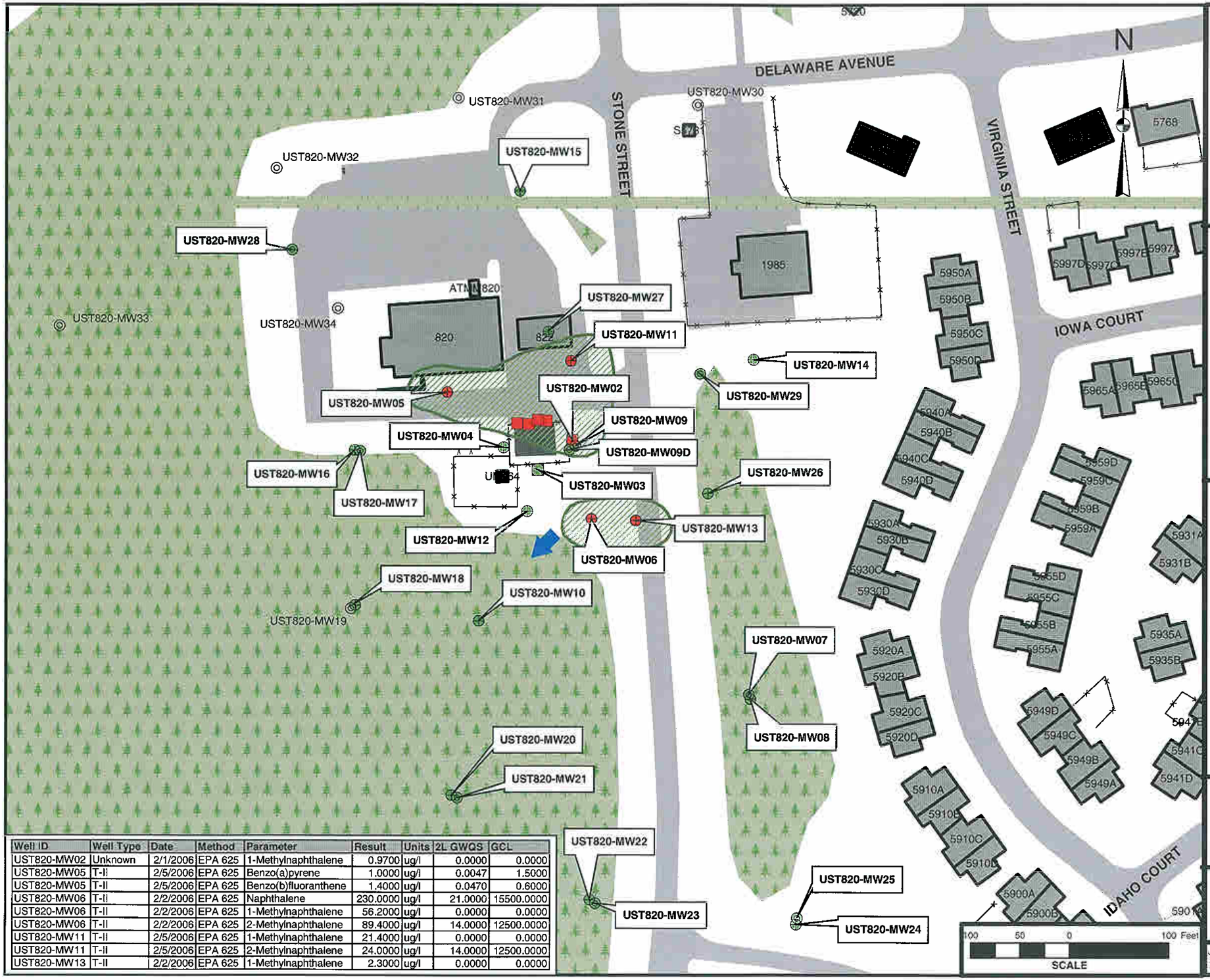
Well ID	Well Type	Date	Method	Parameter	Result	Units	2L GWQS	GCL
UST820-MW02	Unknown	8/6/2005	EPA 610	1-Methylnaphthalene	61.8000	ug/l	0.0000	0.0000
UST820-MW02	Unknown	8/6/2005	EPA 610	2-Methylnaphthalene	63.6000	ug/l	14.0000	12500.0000
UST820-MW05	T-II	8/6/2005	EPA 610	Benzo(a)anthracene	0.0700	ug/l	0.0500	22.0000
UST820-MW05	T-II	8/6/2005	EPA 610	Benzo(a)pyrene	0.1400	ug/l	0.0047	1.5000
UST820-MW05	T-II	8/6/2005	EPA 610	Benzo(b)fluoranthene	0.1400	ug/l	0.0470	0.6000
UST820-MW05	T-II	8/6/2005	EPA 610	Indeno(1,2,3-cd)pyrene	0.1700	ug/l	0.0479	31.0000
UST820-MW09	T-III	8/6/2005	EPA 610	1-Methylnaphthalene	0.9700	ug/l	0.0000	0.0000
UST820-MW13	T-II	8/6/2005	EPA 610	Benzo(b)fluoranthene	0.0800	ug/l	0.0470	0.6000
UST820-MW13	T-II	8/6/2005	EPA 610	Indeno(1,2,3-cd)pyrene	0.1400	ug/l	0.0479	31.0000

CATLIN ENGINEERS and SCIENTISTS

SITE 820
EPA METHOD 610 COLORIMETRY AND PLUME IN EXCESS OF 2L THIRD QUARTER 2005

FIGURE **9.3**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM



Well ID	Well Type	Date	Method	Parameter	Result	Units	2L GWQS	GCL
UST820-MW02	Unknown	2/1/2006	EPA 625	1-Methylnaphthalene	0.9700	ug/l	0.0000	0.0000
UST820-MW05	T-II	2/5/2006	EPA 625	Benzo(a)pyrene	1.0000	ug/l	0.0047	1.5000
UST820-MW05	T-II	2/5/2006	EPA 625	Benzo(b)fluoranthene	1.4000	ug/l	0.0470	0.6000
UST820-MW06	T-II	2/2/2006	EPA 625	Naphthalene	230.0000	ug/l	21.0000	15500.0000
UST820-MW06	T-II	2/2/2006	EPA 625	1-Methylnaphthalene	56.2000	ug/l	0.0000	0.0000
UST820-MW06	T-II	2/2/2006	EPA 625	2-Methylnaphthalene	89.4000	ug/l	14.0000	12500.0000
UST820-MW11	T-II	2/5/2006	EPA 625	1-Methylnaphthalene	21.4000	ug/l	0.0000	0.0000
UST820-MW11	T-II	2/5/2006	EPA 625	2-Methylnaphthalene	24.0000	ug/l	14.0000	12500.0000
UST820-MW13	T-II	2/2/2006	EPA 625	1-Methylnaphthalene	2.3000	ug/l	0.0000	0.0000

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM

LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Analytical Results
- 2L Non-Compliant
- 2L Compliant
- EPA 625 Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. 2L Standard refers to North Carolina Groundwater Quality Standard 15A NCAC 2L.0202.
2. GCL refers to Gross Contaminant Level as defined in Table 7 of "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Ground Water", Volume II, dated January 2, 1998.
3. A 2L Standard of "0.00" implies a standard has not yet been established. According to NCAC T15:02L, any compound found above laboratory detection limits is considered noncompliant unless otherwise specified by the NCDENR.

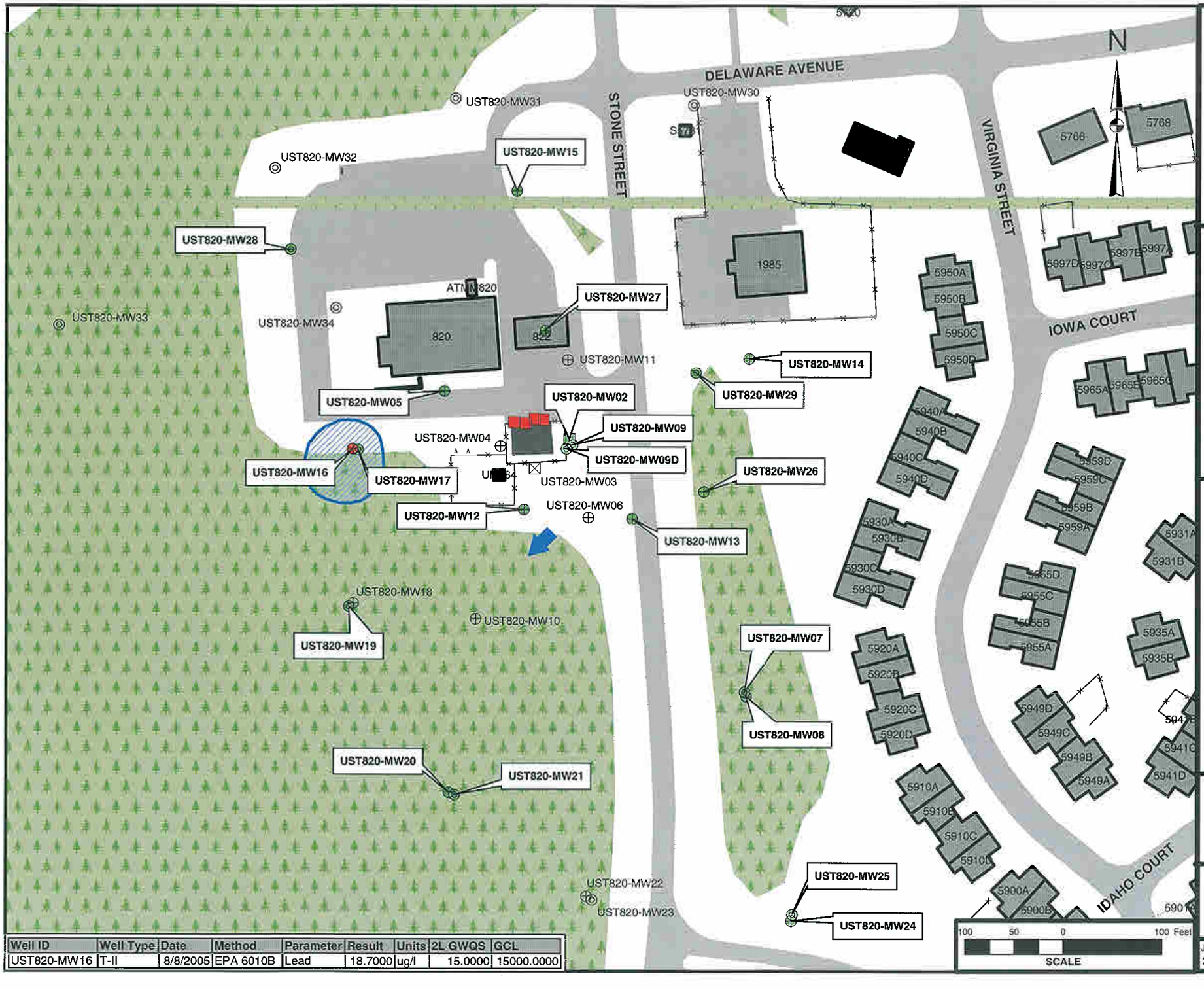
CATLIN ENGINEERS and SCIENTISTS

SITE 820
EPA METHOD 625 COLORIMETRY AND PLUME IN EXCESS OF 2L FIRST QUARTER 2006

FIGURE 9.4

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM



LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Analytical Results
- 2L Non-Compliant
- 2L Compliant
- EPA 6010B Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. 2L Standard refers to North Carolina Groundwater Quality Standard 15A NCAC 2L.0202.
2. GCL refers to Gross Contaminant Level as defined in Table 7 of "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Ground Water", Volume II, dated January 2, 1998.
3. A 2L Standard of "0.00" implies a standard has not yet been established. According to NCAC T15:02L, any compound found above laboratory detection limits is considered noncompliant unless otherwise specified by the NCDENR.

Well ID	Well Type	Date	Method	Parameter	Result	Units	2L GWQS	GCL
UST820-MW16	T-II	8/8/2005	EPA 6010B	Lead	18.7000	ug/l	15.0000	15000.0000

CATLIN ENGINEERS and SCIENTISTS

SITE 820
EPA METHOD 6010B COLORIMETRY AND PLUME IN EXCESS OF 2L THIRD QUARTER 2005

FIGURE **9.5A**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM

DELAWARE AVENUE
STONE STREET
VIRGINIA STREET
IOWA COURT
IDAHO COURT
N

UST820-MW31
UST820-MW30
UST820-MW32
UST820-MW15
UST820-MW28
UST820-MW33
UST820-MW34
UST820-MW27
UST820-MW11
UST820-MW14
UST820-MW29
UST820-MW05
UST820-MW02
UST820-MW09
UST820-MW04
UST820-MW09D
UST820-MW16
UST820-MW17
UST820-MW03
UST820-MW26
UST820-MW12
UST820-MW13
UST820-MW06
UST820-MW18
UST820-MW10
UST820-MW19
UST820-MW07
UST820-MW08
UST820-MW20
UST820-MW21
UST820-MW22
UST820-MW23
UST820-MW25
UST820-MW24

ATM 820
820
822
1985
5768
5997D 5997C 5997B 5997A
5950A 5950B 5950C 5950D
5965A 5965B 5965C
5940A 5940B 5940C 5940D
5930A 5930B 5930C 5930D
5959D 5959C 5959B 5959A
5955D 5955C 5955B 5955A
5935A 5935B
5931A 5931B
5920A 5920B 5920C 5920D
5949D 5949C 5949B 5949A
5941C 5941D
5910A 5910B 5910C 5910D
5900A 5900B

Well ID	Well Type	Date	Method	Parameter	Result	Units	2L GWQS	GCL
UST820-MW24	T-II	2/2/2006	EPA 6010B	Lead	18.2000	ug/l	15.0000	15000.0000

100 50 0 100 Feet
SCALE

LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Analytical Results
- 2L Non-Compliant
- 2L Compliant
- EPA 6010B Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. 2L Standard refers to North Carolina Groundwater Quality Standard 15A NCAC 2L.0202.
2. GCL refers to Gross Contaminant Level as defined in Table 7 of "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Ground Water", Volume II, dated January 2, 1998.
3. A 2L Standard of "0.00" implies a standard has not yet been established. According to NCAC T15:02L, any compound found above laboratory detection limits is considered noncompliant unless otherwise specified by the NCDENR.

CATLIN ENGINEERS and SCIENTISTS

SITE 820
EPA METHOD 6010B COLORIMETRY AND PLUME IN EXCESS OF 2L FIRST QUARTER 2006

FIGURE **9.5B**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

SECTION 10.0

OF THE

ANNUAL MANAGEMENT REPORT
MCB CAMP LEJEUNE UST MANAGEMENT PROGRAM

MONITORING EVENT:

SECOND SEMESTER 2005/FIRST SEMESTER 2006
(JULY 2005 THROUGH JUNE 2006)

SITE-SPECIFIC MONITORING REPORT
FOR

SITE 900

NCDENR INCIDENT NO. 32126



10.0 EXECUTIVE SUMMARY
SITE 900

10.1 Site Information

10.1.1 Site Location: MCB Camp Lejeune, Hadnot Point Industrial Area, approximately 650 feet northwest of the intersection of Michael and Sneads Ferry Roads.
10.1.2 Incident Number(s): 32126
10.1.3 UTM Coordinates (WGS84) (Meters): 286707.85 Easting, 3839385.51 Northing
10.1.4 Risk Classification: Low
10.1.5 Land Use Classification: Industrial/Commercial
10.1.6 Source Type(s): A 5000 gallon capacity UST (UST 900) was located at the former Building 900. The UST was reportedly installed in 1972 and removed in 1994 and was used to store diesel fuel and possibly gasoline. The exact usage of the UST has not been confirmed.

10.2 Monitoring Event Information

10.2.1 Sampling Performed By: Engineering and Environment, Inc. (2nd Semester 2005) and Sovereign (1st Semester 2006)
10.2.2 Date(s) of This Monitoring Event: July 2005, October 2005, January 2006, and April 2006
10.2.3 Date(s) of Previous Monitoring Event: On June 1, 2004 the on-site remediation system was shutdown and post-operation monitoring was initiated. Quarterly groundwater sampling was conducted in July 2004, October 2004, January 2005 and April 2005.
10.2.4 Reason(s) for This Monitoring Event: Track migration and attenuation of dissolved-phase plume
10.2.5 Site Monitoring Status at Time of This Event: Post-Operation Monitoring

10.3 Groundwater Hydraulics

10.3.1 Hydraulic Conductivity: 31 feet/day
10.3.2 Effective Porosity: 0.30
10.3.3 Hydraulic Gradient: 0.047
10.3.4 Average Linear Groundwater Flow Velocity: 4.82 feet/day
10.3.5 Groundwater Flow Direction: Towards the west
10.3.6 Range of Measured Water Table Elevations: 19.16 to 26.42, see Tables 10.1A through 10.1D
10.3.7 Significant Changes from Previously Reported Data: Not Applicable. This is the first Management Report prepared by CATLIN.

10.4 Free Product Plume

10.4.1 Free Product Present?: No
10.4.2 Free Product Thickness Measured: None, see Tables 10.1 A, B, C, and D
10.4.3 Plume Size and Location: None, see Figures 10.1A through 10.1D
10.4.4 Free Product Removed from Site This Period: None
13.4.5 Significant Changes from Previously Reported Data: Not Applicable. This is the first Management Report prepared by CATLIN.

10.5 Dissolved-Phase Plume

10.5.1 Plume Concentrations: See Tables 10.2A through 10.7B
10.5.2 Plume Size and Location: See Figures 10.2A through 10.7D
10.5.3 Significant Changes from Previously Reported Data: Not Applicable. This is the first Management Report prepared by CATLIN. Groundwater sample analytical results compared to the 2L GWQS are discussed as follows:

EPA Method 601

1,2 Dichloroethane concentrations were detected above the 2L GWQS in the IR78-RW10 (10/05) UST900-MW02 (10/05), UST900-MW04 (1/06 and 4/06), and UST900-MW09 (7/05, 10/05, and 1/06) groundwater samples. 1,2-Dichloropropane concentrations were detected above the 2L GWQS in the UST900-MW02 (10/05) and UST900-MW04 (1/06 and 4/06) groundwater samples. Cis-1,2-Dichloroethene concentrations were detected above the 2L GWQS in the IR78-GW23 groundwater samples collected in July 2005 and January and April 2006. The April 2006 IR78-RW10 groundwater sample revealed Methylene Chloride concentrations above the 2L GWQS. Trichloroethene concentrations were detected above the 2L GWQS in the IR78-GW23 (10/05) and IR78-GW10 (7/05, 10/05, 1/06, and 4/06) groundwater samples. The IR78-GW23 groundwater samples collected in July and October 2005 and January and April 2006 revealed Vinyl Chloride concentrations above the 2L GWQS.

EPA Method 602

Benzene was detected above the 2L GWQS in the IR78-GW23 (10/05, 1/06, and 4/06), IR78-RW10 (7/05, 10/05, 1/06, and 4/06), UST900-MW03 (7/05, 10/05, 1/06, and 4/06), UST900-MW04 (7/05, 10/05, 1/06, and 4/06), UST900-MW09 (7/05, 10/05, 1/06, and 4/06), and UST900-MW10 (7/05, 10/05, 1/06, and 4/06) groundwater samples. The UST900-MW04 groundwater samples revealed Ethylbenzene (7/05, 10/05, 1/06, and 4/06) and Total Xylenes (7/05 and 10/05) concentrations above the 2L GWQS.

EPA Method 625

Bis(2-ethylhexyl)phthalate concentrations were detected above the 2L GWQS in the IR78-GW22, IR78-GW23, IR78-RW10, UST900-MW01, UST900-MW02, UST900-MW03, UST900-MW04, and UST900-MW06 groundwater samples collected in January 2006. The UST900-MW04 groundwater sample collected in April 2006 also revealed Bis(2-ethylhexyl)phthalate concentrations above the 2L GWQS. Naphthalene concentrations were detected above the 2L GWQS in all the UST900-MW02, UST900-MW04, and UST900-MW09 groundwater samples except the UST900-MW09 October 2005 sample.

EPA Method 6010B/6020
No Lead concentrations were detected above the 2L GWQS.

MADEP VPH/EPH
C5-C8 Aliphatic concentrations were detected above the 2L GWQS in the IR78-GW23 (10/05), IR78-RW10 (1/06), UST900-MW02 (7/05, 10/05, 1/06, and 4/06), UST900-MW04 (7/05, 10/05, 1/06, and 4/06), and UST900-MW09 (10/05 and 1/06) groundwater samples. C9-C22 Aromatic concentrations were detected above the 2L GWQS in the IR78-RW10 (7/05) UST900-MW02 (7/05, 10/05, 1/06, and 4/06), and UST900-MW04 (7/05, 10/05, 1/06, and 4/06) groundwater samples.

10.6 Potential Receptors

10.6.1 Contaminated Water Supply Well(s)?: None
10.6.2 Potable Water Supply Well Within 1,000 Feet of Source Area?: No
10.6.3 Any Water Supply Well Within 250 Feet of Source Area?: No
10.6.4 Surface Water Body Within 500 Feet?: No
10.6.5 Past Evidence of Vapors?: No
10.6.6 Significant Changes from Previously Reported Data?: Not Applicable. This is the first Management Report prepared by CATLIN.

10.7 Remediation

10.7.1 Status: Remediation system has been shut down to facilitate site closure
10.7.2 Type: J. A. Jones installed an air sparge and soil vapor extraction (AS/SVE) remediation system in June through July of 1999. The treatment system installed at the site consists of four air sparge and soil vent well pairs. The remediation system was started on July 20, 1999 and operated until it was shut down on June 1, 2004.
10.7.3 Progress: Remediation to the cleanup goals has been achieved
10.7.4 Construction Contractor: J. A. Jones Environmental Services Company
10.7.5 Operating Contractor: Sovereign

10.8 Observations and Comments

No petroleum-related contaminants were detected in excess of any of the established GCLs. The detected chlorinated compounds are not related to on-site activities, rather from an adjacent IR site.

As Site 900 should be classified as Low Risk and Industrial/Commercial Land Use, the GCLs (groundwater) and Industrial/Commercial MSCCs (soil) are applicable. Based on the data collected during this monitoring period, CATLIN recommends "NFA with Land Use Restriction" be requested for this site. CATLIN further recommends that the site be sampled every two years to determine if groundwater contaminant levels have been reduced to below the 2L GWQS at which time the Land Use Restriction could be removed.

TABLE 10.1A
SITE 900
FIELD MEASUREMENTS - THIRD QUARTER 2005

Date Measured: 7/25/2005

Well No.	Type	TOC	Stick up	DTW	Product Thickness	DTW BGS	GW Elevation
IR78-GW22	T-II	32.36	1.96	6.44	0.00	4.48	25.92
IR78-GW23	T-II	32.08	2.08	3.98	0.00	1.90	28.10
IR78-RW10	RW	26.76		7.60	0.00		19.16
UST900-MW01	T-III	30.14	0.39	8.60	0.00	8.21	21.54
UST900-MW02	T-II	30.13	-0.35	4.43	0.00	4.78	25.70
UST900-MW03	T-III	29.96	0.25	8.82	0.00	8.57	21.14
UST900-MW04	T-II	29.89	-0.29	4.66	0.00	4.95	25.23
UST900-MW05	T-II	29.97	-0.31	4.60	0.00	4.91	25.37
UST900-MW06	T-II	30.77	-0.42	5.03	0.00	5.45	25.74
UST900-MW07	T-II	29.82	-0.35	3.81	0.00	4.16	26.01
UST900-MW08	T-II	29.98		6.60	0.00		23.38

Notes:
1. TII = Type II monitoring well
   TIII = Type III monitoring well
   RW = Recovery well
2. TOC = Top of well casing elevation.
3. STICK UP = Height of well casing above land surface in feet.
4. DTW = Depth to water (in feet) from top of well casing.
5. Product thickness is measured in feet.
6. DTW BGS = Depth to water below ground surface in feet.
7. GW Elevation = Ground water elevation (not adjusted for free product)
8. A zero ("0.00") in the product thickness column indicates no measureable thickness.
9. Top of casing elevations are measured in feet relative to Mean Sea Level (NAD83).
10. Stick up values were not available for wells with no values in the STICK UP and DTW BGS columns.

TABLE 10.1B
SITE 900
FIELD MEASUREMENTS - FOURTH QUARTER 2005

Date Measured: 10/19/2005

Well No.	Type	TOC	Stick up	DTW	Product Thickness	DTW BGS	GW Elevation
IR78-GW22	T-II	32.36	1.96	5.99	0.00	4.03	26.37
IR78-GW23	T-II	32.08	2.08	7.69	0.00	5.61	24.39
IR78-RW10	RW	26.76		5.60	0.00		21.16
UST900-MW01	T-III	30.14	0.39	6.90	0.00	6.51	23.24
UST900-MW02	T-II	30.13	-0.35	3.95	0.00	4.30	26.18
UST900-MW03	T-III	29.96	0.25	6.83	0.00	6.58	23.13
UST900-MW04	T-II	29.89	-0.29	4.11	0.00	4.40	25.78
UST900-MW05	T-II	29.97	-0.31	4.16	0.00	4.47	25.81
UST900-MW06	T-II	30.77	-0.42	4.35	0.00	4.77	26.42
UST900-MW07	T-II	29.82	-0.35	3.57	0.00	3.92	26.25
UST900-MW08	T-II	29.98		5.26	0.00		24.72

Notes:
1. TII = Type II monitoring well
   TIII = Type III monitoring well
   RW = Recovery well
2. TOC = Top of well casing elevation.
3. STICK UP = Height of well casing above land surface in feet.
4. DTW = Depth to water (in feet) from top of well casing.
5. Product thickness is measured in feet.
6. DTW BGS = Depth to water below ground surface in feet.
7. GW Elevation = Ground water elevation (not adjusted for free product)
8. A zero ("0.00") in the product thickness column indicates no measureable thickness.
9. Top of casing elevations are measured in feet relative to Mean Sea Level (NAD83).
10. Stick up values were not available for wells with no values in the STICK UP and DTW BGS columns.

TABLE 10.1C
SITE 900
FIELD MEASUREMENTS - FIRST QUARTER 2006

Date Measured: 1/10/2006

Well No.	Type	TOC	Stick up	DTW	Product Thickness	DTW BGS	GW Elevation
IR78-GW22	T-II	32.36	1.96	6.40	0.00	4.44	25.96
IR78-GW23	T-II	32.08	2.08	8.30	0.00	6.22	23.78
IR78-RW10	RW	26.76		6.43	0.00		20.33
UST900-MW01	T-III	30.14	0.39	7.80	0.00	7.41	22.34
UST900-MW02	T-II	30.13	-0.35	4.18	0.00	4.53	25.95
UST900-MW03	T-III	29.96	0.25	7.70	0.00	7.45	22.26
UST900-MW04	T-II	29.89	-0.29	4.40	0.00	4.69	25.49
UST900-MW05	T-II	29.97	-0.31	4.42	0.00	4.73	25.55
UST900-MW06	T-II	30.77	-0.42	4.72	0.00	5.14	26.05
UST900-MW08	T-II	29.98		6.11	0.00		23.87
UST900-MW09	T-II			5.73	0.00		
UST900-MW10	T-II			4.60	0.00		

Notes:
1. TII = Type II monitoring well
   TIII = Type III monitoring well
   RW = Recovery well
2. TOC = Top of well casing elevation.
3. STICK UP = Height of well casing above land surface in feet.
4. DTW = Depth to water (in feet) from top of well casing.
5. Product thickness is measured in feet.
6. DTW BGS = Depth to water below ground surface in feet.
7. GW Elevation = Ground water elevation (not adjusted for free product)
8. A zero ("0.00") in the product thickness column indicates no measureable thickness.
9. Top of casing elevations are measured in feet relative to Mean Sea Level (NAD83).
10. Stick up values were not available for wells with no values in the STICK UP and DTW BGS columns.

TABLE 10.1D
SITE 900
FIELD MEASUREMENTS - SECOND QUARTER 2006

Date Measured: 4/17/2006

Well No.	Type	TOC	Stick up	DTW	Product Thickness	DTW BGS	GW Elevation
IR78-GW22	T-II	32.36	1.96	7.00	0.00	5.04	25.36
IR78-GW23	T-II	32.08	2.08	9.46	0.00	7.38	22.62
IR78-RW10	RW	26.76		5.48	0.00		21.28
UST900-MW01	T-III	30.14	0.39	8.86	0.00	8.47	21.28
UST900-MW02	T-II	30.13	-0.35	4.71	0.00	5.06	25.42
UST900-MW03	T-III	29.96	0.25	8.80	0.00	8.55	21.16
UST900-MW04	T-II	29.89	-0.29	4.92	0.00	5.21	24.97
UST900-MW05	T-II	29.97	-0.31	4.68	0.00	4.99	25.29
UST900-MW06	T-II	30.77	-0.42	5.26	0.00	5.68	25.51
UST900-MW08	T-II	29.98		6.75	0.00		23.23
UST900-MW09	T-II			6.18	0.00		
UST900-MW10	T-II			4.83	0.00		

Notes:
1. TII = Type II monitoring well
   TIII = Type III monitoring well
   RW = Recovery well
2. TOC = Top of well casing elevation.
3. STICK UP = Height of well casing above land surface in feet.
4. DTW = Depth to water (in feet) from top of well casing.
5. Product thickness is measured in feet.
6. DTW BGS = Depth to water below ground surface in feet.
7. GW Elevation = Ground water elevation (not adjusted for free product)
8. A zero ("0.00") in the product thickness column indicates no measureable thickness.
9. Top of casing elevations are measured in feet relative to Mean Sea Level (NAD83).
10. Stick up values were not available for wells with no values in the STICK UP and DTW BGS columns.

TABLE 10.2A

SITE 900

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 601

Contaminant of Concern →		1,2-Dichloroethane	1,2-Dichloropropane	Carbon tetrachloride	cis-1,2-Dichloroethene	Methylene Chloride	trans-1,2-Dichloroethene	Trichloroethene	Vinyl Chloride
Well ID	**Date**								
2L GWQS		0.38	0.51	0.269	70	4.6	100	2.8	0.015
GCL		380	510	0	70000	4600	100000	2800	15
IR78-GW22	7/26/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
IR78-GW22	10/20/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
IR78-GW22	1/11/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
IR78-GW22	4/17/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
IR78-GW23	7/26/2005	BQL	BQL	BQL	769.00	BQL	43.60	BQL	59.30
IR78-GW23	10/20/2005	BQL	BQL	BQL	BQL	BQL	64.20	5.80	77.30
IR78-GW23	1/11/2006	BQL	BQL	BQL	674.00	BQL	BQL	BQL	57.20
IR78-GW23	4/17/2006	BQL	BQL	BQL	569.00	BQL	6.52	BQL	64.00
IR78-RW10	7/26/2005	BQL	BQL	BQL	116.00	BQL	BQL	105.00	BQL
IR78-RW10	10/20/2005	2.50	BQL	BQL	37.30	BQL	BQL	24.50	BQL
IR78-RW10	1/11/2006	BQL	BQL	BQL	60.50	BQL	BQL	56.90	BQL
IR78-RW10	4/17/2006	BQL	BQL	BQL	39.80	6.98	BQL	25.10	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 10.2A

SITE 900

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 601

Contaminant of Concern →		1,2-Dichloroethane	1,2-Dichloropropane	Carbon tetrachloride	cis-1,2-Dichloroethene	Methylene Chloride	trans-1,2-Dichloroethene	Trichloroethene	Vinyl Chloride
Well ID	**Date**								
2L GWQS		0.38	0.51	0.269	70	4.6	100	2.8	0.015
GCL		380	510	0	70000	4600	100000	2800	15
UST900-MW01	7/26/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW01	10/19/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW01	1/11/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW01	4/17/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW02	7/25/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW02	10/19/2005	2.60	1.00	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW02	1/11/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW02	4/17/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW03	7/25/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW03	10/19/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW03	1/11/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW03	4/17/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 10.2A

SITE 900

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 601

Contaminant of Concern →		1,2-Dichloroethane	1,2-Dichloropropane	Carbon tetrachloride	cis-1,2-Dichloroethene	Methylene Chloride	trans-1,2-Dichloroethene	Trichloroethene	Vinyl Chloride
Well ID	**Date**								
2L GWQS		0.38	0.51	0.269	70	4.6	100	2.8	0.015
GCL		380	510	0	70000	4600	100000	2800	15
UST900-MW04	7/25/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW04	10/19/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW04	1/11/2006	3.88	0.81	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW04	4/17/2006	4.21	0.90	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW05	7/25/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW05	10/19/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW05	1/10/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW05	4/17/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW06	7/26/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW06	10/20/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW06	1/11/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW06	4/17/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 10.2A

SITE 900

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 601

Contaminant of Concern →		1,2-Dichloroethane	1,2-Dichloropropane	Carbon tetrachloride	cis-1,2-Dichloroethene	Methylene Chloride	trans-1,2-Dichloroethene	Trichloroethene	Vinyl Chloride
Well ID	**Date**								
2L GWQS		0.38	0.51	0.269	70	4.6	100	2.8	0.015
GCL		380	510	0	70000	4600	100000	2800	15
UST900-MW08	7/25/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW08	10/19/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW08	1/10/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW08	4/17/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW09	7/25/2005	1.40	BQL	16.20	0.78	BQL	BQL	BQL	BQL
UST900-MW09	10/19/2005	1.70	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW09	1/10/2006	0.66	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW09	4/17/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW10	7/25/2005	BQL	BQL	BQL	2.10	BQL	BQL	BQL	BQL
UST900-MW10	10/19/2005	BQL	BQL	BQL	2.00	BQL	BQL	0.51	BQL
UST900-MW10	1/10/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW10	4/17/2006	BQL	BQL	BQL	0.95	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 10.2B

SITE 900

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINING JULY 2005

EPA METHOD 601

Contaminant of Concern →		1,2-Dichloroethane	1,2-Dichloropropane	Carbon tetrachloride	cis-1,2-Dichloroethene	Methylene Chloride	trans-1,2-Dichloroethene	Trichloroethene	Vinyl Chloride
Well ID	**Date**								
2L GWQS		0.38	0.51	0.269	70	4.6	100	2.8	0.015
GCL		380	510	0	70000	4600	100000	2800	15
IR78-GW22	7/26/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
IR78-GW22	10/20/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
IR78-GW22	1/11/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
IR78-GW22	4/17/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
IR78-GW23	7/26/2005	BQL	BQL	BQL	**769.00**	BQL	43.60	BQL	**59.30**
IR78-GW23	10/20/2005	BQL	BQL	BQL	BQL	BQL	64.20	**6.50**	**77.30**
IR78-GW23	1/11/2006	BQL	BQL	BQL	**674.00**	BQL	BQL	BQL	**57.20**
IR78-GW23	4/17/2006	BQL	BQL	BQL	**569.00**	BQL	6.52	BQL	**64.00**
IR78-RW10	7/26/2005	BQL	BQL	BQL	**116.00**	BQL	BQL	**105.00**	BQL
IR78-RW10	10/20/2005	**2.50**	BQL	BQL	37.30	BQL	BQL	**24.50**	BQL
IR78-RW10	1/11/2006	BQL	BQL	BQL	60.50	BQL	BQL	**56.90**	BQL
IR78-RW10	4/17/2006	BQL	BQL	BQL	39.80	**6.98**	BQL	**25.10**	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 10.2B

SITE 900

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINING JULY 2005

EPA METHOD 601

Contaminant of Concern →		1,2-Dichloroethane	1,2-Dichloropropane	Carbon tetrachloride	cis-1,2-Dichloroethene	Methylene Chloride	trans-1,2-Dichloroethene	Trichloroethene	Vinyl Chloride
Well ID	**Date**								
2L GWQS		0.38	0.51	0.269	70	4.6	100	2.8	0.015
GCL		380	510	0	70000	4600	100000	2800	15
UST900-MW01	7/26/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW01	10/19/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW01	1/11/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW01	4/17/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW02	7/25/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW02	10/19/2005	2.60	1.00	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW02	1/11/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW02	4/17/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW03	7/25/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW03	10/19/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW03	1/11/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW03	4/17/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 10.2B

SITE 900

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINING JULY 2005

EPA METHOD 601

Contaminant of Concern →		1,2-Dichloroethane	1,2-Dichloropropane	Carbon tetrachloride	cis-1,2-Dichloroethene	Methylene Chloride	trans-1,2-Dichloroethene	Trichloroethene	Vinyl Chloride
Well ID	**Date**								
2L GWQS		0.38	0.51	0.269	70	4.6	100	2.8	0.015
GCL		380	510	0	70000	4600	100000	2800	15
UST900-MW04	7/25/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW04	10/19/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW04	1/11/2006	3.88	0.81	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW04	4/17/2006	4.21	0.90	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW05	7/25/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW05	10/19/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW05	1/10/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW05	4/17/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW06	7/26/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW06	10/20/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW06	1/11/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW06	4/17/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 10.2B

SITE 900

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINING JULY 2005

EPA METHOD 601

Contaminant of Concern →		1,2-Dichloroethane	1,2-Dichloropropane	Carbon tetrachloride	cis-1,2-Dichloroethene	Methylene Chloride	trans-1,2-Dichloroethene	Trichloroethene	Vinyl Chloride
Well ID	**Date**								
2L GWQS		0.38	0.51	0.269	70	4.6	100	2.8	0.015
GCL		380	510	0	70000	4600	100000	2800	15
UST900-MW08	7/25/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW08	10/19/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW08	1/10/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW08	4/17/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW09	7/25/2005	1.40	BQL	16.20	0.78	BQL	BQL	BQL	BQL
UST900-MW09	10/19/2005	1.70	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW09	1/10/2006	0.68	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW09	4/17/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW10	7/25/2005	BQL	BQL	BQL	2.10	BQL	BQL	BQL	BQL
UST900-MW10	10/19/2005	BQL	BQL	BQL	2.00	BQL	BQL	0.51	BQL
UST900-MW10	1/10/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW10	4/17/2006	BQL	BQL	BQL	0.95	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 10.3A

SITE 900

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 602

Contaminant of Concern →		Benzene	Diisopropyl ether (DIPE)	Ethylbenzene	Methyl Tert Butyl Ether	Toluene	Xylenes (total)
Well ID	**Date**						
2L GWQS		1	70	550	200	1000	530
GCL		5000	70000	550000	200000	257500	87500
IR78-GW22	7/26/2005	BQL	BQL	BQL	BQL	BQL	BQL
IR78-GW22	10/20/2005	BQL	BQL	BQL	BQL	BQL	BQL
IR78-GW22	1/11/2006	BQL	BQL	BQL	BQL	BQL	BQL
IR78-GW22	4/17/2006	BQL	BQL	BQL	BQL	BQL	BQL
IR78-GW23	7/26/2005	BQL	BQL	BQL	BQL	BQL	24.70
IR78-GW23	10/20/2005	4.90	BQL	1.20	BQL	2.30	24.90
IR78-GW23	1/11/2006	4.56	BQL	1.33	BQL	1.95	20.92
IR78-GW23	4/17/2006	6.02	BQL	1.14	BQL	2.49	24.75
IR78-RW10	7/26/2005	168.00	BQL	18.10	BQL	2.60	12.60
IR78-RW10	10/20/2005	114.00	BQL	13.80	BQL	BQL	8.70
IR78-RW10	1/11/2006	138.00	2.53	13.30	BQL	BQL	5.33
IR78-RW10	4/17/2006	122.00	3.71	8.84	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 10.3A

SITE 900

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 602

Contaminant of Concern →		Benzene	Diisopropyl ether (DIPE)	Ethylbenzene	Methyl Tert Butyl Ether	Toluene	Xylenes (total)
Well ID	Date						
2L GWQS		1	70	550	200	1000	530
GCL		5000	70000	550000	200000	257500	87500
UST900-MW01	7/26/2005	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW01	10/19/2005	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW01	1/11/2006	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW01	4/17/2006	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW02	7/25/2005	**4.10**	BQL	8.60	14.10	8.50	13.90
UST900-MW02	10/19/2005	**129.00**	BQL	59.20	BQL	27.00	53.10
UST900-MW02	1/11/2006	**14.00**	BQL	21.20	BQL	11.60	21.79
UST900-MW02	4/17/2006	**26.00**	BQL	16.60	BQL	18.00	32.90
UST900-MW03	7/25/2005	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW03	10/19/2005	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW03	1/11/2006	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW03	4/17/2006	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 10.3A

SITE 900

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 602

Contaminant of Concern →		Benzene	Diisopropyl ether (DIPE)	Ethylbenzene	Methyl Tert Butyl Ether	Toluene	Xylenes (total)
Well ID	Date						
2L GWQS		1	70	550	200	1000	530
GCL		5000	70000	550000	200000	257500	87500
UST900-MW04	7/25/2005	1120.00	BQL	831.00	BQL	55.20	853.00
UST900-MW04	10/19/2005	1040.00	BQL	742.00	BQL	50.60	650.00
UST900-MW04	1/11/2006	717.00	36.60	509.00	BQL	29.30	329.60
UST900-MW04	4/17/2006	784.00	47.40	614.00	BQL	47.50	439.50
UST900-MW05	7/25/2005	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW05	10/19/2005	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW05	1/10/2006	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW05	4/17/2006	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW06	7/26/2005	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW06	10/20/2005	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW06	1/11/2006	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW06	4/17/2006	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 10.3A

SITE 900

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 602

Contaminant of Concern →		Benzene	Diisopropyl ether (DIPE)	Ethylbenzene	Methyl Tert Butyl Ether	Toluene	Xylenes (total)
Well ID	Date						
2L GWQS		1	70	550	200	1000	530
GCL		5000	70000	550000	200000	257500	87500
UST900-MW08	7/25/2005	BQL	BQL	BQL	1.50	BQL	BQL
UST900-MW08	10/19/2005	BQL	BQL	BQL	1.50	BQL	1.70
UST900-MW08	1/10/2006	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW08	4/17/2006	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW09	7/25/2005	91.50	BQL	10.20	BQL	1.30	3.30
UST900-MW09	10/19/2005	98.50	BQL	4.90	BQL	1.40	4.00
UST900-MW09	1/10/2006	133.00	7.10	11.70	BQL	BQL	BQL
UST900-MW09	4/17/2006	110.00	4.08	18.70	BQL	BQL	BQL
UST900-MW10	7/25/2005	2.60	BQL	BQL	BQL	BQL	BQL
UST900-MW10	10/19/2005	2.60	BQL	BQL	BQL	0.59	BQL
UST900-MW10	1/10/2006	2.33	BQL	BQL	BQL	BQL	BQL
UST900-MW10	4/17/2006	2.47	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 10.3B

SITE 900

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINING JULY 2005

EPA METHOD 602

Contaminant of Concern →		Benzene	Diisopropyl ether (DIPE)	Ethylbenzene	Methyl Tert Butyl Ether	Toluene	Xylenes (total)
Well ID	Date						
2L GWQS		1	70	550	200	1000	530
GCL		5000	70000	550000	200000	257500	87500
IR78-GW22	7/26/2005	BQL	BQL	BQL	BQL	BQL	BQL
IR78-GW22	10/20/2005	BQL	BQL	BQL	BQL	BQL	BQL
IR78-GW22	1/11/2006	BQL	BQL	BQL	BQL	BQL	BQL
IR78-GW22	4/17/2006	BQL	BQL	BQL	BQL	BQL	BQL
IR78-GW23	7/26/2005	BQL	BQL	BQL	BQL	BQL	24.70
IR78-GW23	10/20/2005	4.90	BQL	1.20	BQL	2.30	24.90
IR78-GW23	1/11/2006	4.56	BQL	1.33	BQL	1.95	20.92
IR78-GW23	4/17/2006	6.02	BQL	1.14	BQL	2.49	24.75
IR78-RW10	7/26/2005	168.00	BQL	18.10	BQL	2.60	12.60
IR78-RW10	10/20/2005	114.00	BQL	13.80	BQL	BQL	8.70
IR78-RW10	1/11/2006	138.00	2.53	13.30	BQL	BQL	5.33
IR78-RW10	4/17/2006	122.00	3.71	8.84	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 10.3B

SITE 900

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINING JULY 2005

EPA METHOD 602

Contaminant of Concern →		Benzene	Diisopropyl ether (DIPE)	Ethylbenzene	Methyl Tert Butyl Ether	Toluene	Xylenes (total)
Well ID	**Date**						
2L GWQS		1	70	550	200	1000	530
GCL		5000	70000	550000	200000	257500	87500
UST900-MW01	7/26/2005	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW01	10/19/2005	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW01	1/11/2006	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW01	4/17/2006	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW02	7/25/2005	4.10	BQL	8.60	14.10	8.50	13.90
UST900-MW02	10/19/2005	129.00	BQL	59.20	BQL	27.00	53.10
UST900-MW02	1/11/2006	14.00	BQL	21.20	BQL	11.60	21.79
UST900-MW02	4/17/2006	26.00	BQL	16.60	BQL	18.00	32.90
UST900-MW03	7/25/2005	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW03	10/19/2005	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW03	1/11/2006	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW03	4/17/2006	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 10.3B

SITE 900

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINING JULY 2005

EPA METHOD 602

Contaminant of Concern →		Benzene	Diisopropyl ether (DIPE)	Ethylbenzene	Methyl Tert Butyl Ether	Toluene	Xylenes (total)
Well ID	Date						
2L GWQS		1	70	550	200	1000	530
GCL		5000	70000	550000	200000	257500	87500
UST900-MW04	7/25/2005	**1120.00**	BQL	**831.00**	BQL	55.20	**853.00**
UST900-MW04	10/19/2005	**1040.00**	BQL	**742.00**	BQL	50.60	**650.00**
UST900-MW04	1/11/2006	**717.00**	36.60	**609.00**	BQL	29.30	329.60
UST900-MW04	4/17/2006	**784.00**	47.40	**514.00**	BQL	47.50	439.50
UST900-MW05	7/25/2005	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW05	10/19/2005	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW05	1/10/2006	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW05	4/17/2006	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW06	7/26/2005	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW06	10/20/2005	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW06	1/11/2006	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW06	4/17/2006	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 10.3B

SITE 900

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINING JULY 2005

EPA METHOD 602

Contaminant of Concern →		Benzene	Diisopropyl ether (DIPE)	Ethylbenzene	Methyl Tert Butyl Ether	Toluene	Xylenes (total)
Well ID	Date						
2L GWQS		1	70	550	200	1000	530
GCL		5000	70000	550000	200000	257500	87500
UST900-MW08	7/25/2005	BQL	BQL	BQL	1.50	BQL	BQL
UST900-MW08	10/19/2005	BQL	BQL	BQL	1.50	BQL	1.70
UST900-MW08	1/10/2006	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW08	4/17/2006	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW09	7/25/2005	91.50	BQL	10.20	BQL	1.30	3.30
UST900-MW09	10/19/2005	98.50	BQL	4.90	BQL	1.40	4.00
UST900-MW09	1/10/2006	133.00	7.10	11.70	BQL	BQL	BQL
UST900-MW09	4/17/2006	110.00	4.08	18.70	BQL	BQL	BQL
UST900-MW10	7/25/2005	2.60	BQL	BQL	BQL	BQL	BQL
UST900-MW10	10/19/2005	2.60	BQL	BQL	BQL	0.59	BQL
UST900-MW10	1/10/2006	2.33	BQL	BQL	BQL	BQL	BQL
UST900-MW10	4/17/2006	2.47	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 10.4A

SITE 900

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 625

Contaminant of Concern →		2,4-Dimethylphenol	Acenaphthene	Bis(2-ethylhexyl)phthalate	Diethyl phthalate	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Phenol
Well ID	**Date**									
2L GWQS		140	80	3	5000	280	280	21	210	300
GCL		140000	2120	0	0	280	950	15500	410	335000
IR78-GW22	7/26/2005	BQL	BQL	BQL	BQL	BQL	1.90	BQL	BQL	BQL
IR78-GW22	10/20/2005	BQL	1.10	BQL	BQL	BQL	2.50	BQL	BQL	BQL
IR78-GW22	1/11/2006	BQL	BQL	3.10	BQL	BQL	1.60	BQL	BQL	BQL
IR78-GW22	4/17/2006	BQL	BQL	BQL	BQL	BQL	1.50	BQL	BQL	BQL
IR78-GW23	7/26/2005	BQL	BQL	BQL	BQL	BQL	BQL	1.10	BQL	BQL
IR78-GW23	10/20/2005	BQL	BQL	BQL	BQL	BQL	BQL	1.20	BQL	BQL
IR78-GW23	1/11/2006	BQL	BQL	38.00	BQL	BQL	BQL	1.20	BQL	BQL
IR78-GW23	4/17/2006	BQL	BQL	BQL	BQL	BQL	BQL	1.20	BQL	BQL
IR78-RW10	7/26/2005	BQL	BQL	BQL	BQL	BQL	BQL	5.10	BQL	BQL
IR78-RW10	10/20/2005	BQL	BQL	BQL	BQL	BQL	BQL	10.40	BQL	BQL
IR78-RW10	1/11/2006	BQL	BQL	6.50	BQL	BQL	BQL	11.90	BQL	4.90
IR78-RW10	4/17/2006	BQL	3.10	BQL	BQL	BQL	BQL	7.90	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 10.4A

SITE 900

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 625

Contaminant of Concern →		2,4-Dimethylphenol	Acenaphthene	Bis(2-ethylhexyl)phthalate	Diethyl phthalate	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Phenol
Well ID	**Date**									
2L GWQS		140	80	3	5000	280	280	21	210	300
GCL		140000	2120	0	0	280	950	15500	410	335000
UST900-MW01	7/26/2005	BQL	10.40	BQL	BQL	BQL	1.50	BQL	BQL	BQL
UST900-MW01	10/19/2005	BQL	15.10	BQL	BQL	1.10	2.20	BQL	BQL	BQL
UST900-MW01	1/11/2006	BQL	12.30	**15.50**	BQL	BQL	1.90	BQL	BQL	BQL
UST900-MW01	4/17/2006	BQL	9.40	BQL	BQL	BQL	1.50	BQL	BQL	BQL
UST900-MW02	7/25/2005	BQL	1.20	BQL	BQL	BQL	BQL	**29.00**	BQL	BQL
UST900-MW02	10/19/2005	BQL	2.60	BQL	BQL	BQL	1.10	**89.40**	1.10	BQL
UST900-MW02	1/11/2006	BQL	BQL	**20.10**	BQL	BQL	BQL	**33.50**	BQL	BQL
UST900-MW02	4/17/2006	BQL	BQL	BQL	BQL	BQL	BQL	**43.10**	BQL	BQL
UST900-MW03	7/25/2005	BQL	1.10	BQL	3.00	BQL	BQL	BQL	BQL	BQL
UST900-MW03	10/19/2005	BQL	2.10	BQL	BQL	BQL	1.40	BQL	BQL	BQL
UST900-MW03	1/11/2006	BQL	BQL	**24.10**	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW03	4/17/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 10.4A

SITE 900

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 625

Contaminant of Concern →		2,4-Dimethylphenol	Acenaphthene	Bis(2-ethylhexyl)phthalate	Diethyl phthalate	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Phenol
Well ID	**Date**									
2L GWQS		140	80	3	5000	280	280	21	210	300
GCL		140000	2120	0	0	280	950	15500	410	335000
UST900-MW04	7/25/2005	2.30	1.40	BQL	BQL	BQL	BQL	**144.00**	BQL	BQL
UST900-MW04	10/19/2005	BQL	1.60	BQL	BQL	BQL	BQL	**122.00**	BQL	BQL
UST900-MW04	1/11/2006	BQL	BQL	**16.10**	BQL	BQL	BQL	**127.00**	BQL	13.50
UST900-MW04	4/17/2006	BQL	BQL	**9.10**	BQL	BQL	BQL	**109.00**	BQL	9.30
UST900-MW05	7/25/2005	BQL	2.20	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW05	10/19/2005	BQL	4.30	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW05	1/10/2006	BQL	2.30	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW05	4/17/2006	BQL	3.50	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW06	7/26/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW06	10/20/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW06	1/11/2006	BQL	BQL	**17.60**	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW06	4/17/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 10.4A

SITE 900

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 625

Contaminant of Concern →		2,4-Dimethylphenol	Acenaphthene	Bis(2-ethylhexyl)phthalate	Diethyl phthalate	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Phenol
Well ID	**Date**									
2L GWQS		140	80	3	5000	280	280	21	210	300
GCL		140000	2120	0	0	280	950	15500	410	335000
UST900-MW08	7/25/2005	BQL	BQL	BQL	BQL	BQL	BQL	2.40	BQL	BQL
UST900-MW08	10/19/2005	BQL	BQL	BQL	BQL	BQL	BQL	2.60	BQL	BQL
UST900-MW08	1/10/2006	BQL	BQL	3.10	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW08	4/17/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW09	7/25/2005	BQL	BQL	BQL	BQL	BQL	BQL	21.10	BQL	BQL
UST900-MW09	10/19/2005	BQL	BQL	BQL	BQL	BQL	BQL	20.20	BQL	BQL
UST900-MW09	1/10/2006	BQL	BQL	3.70	BQL	BQL	BQL	23.70	BQL	BQL
UST900-MW09	4/17/2006	BQL	BQL	BQL	BQL	BQL	BQL	22.60	BQL	BQL
UST900-MW10	7/25/2005	BQL	2.50	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW10	10/19/2005	BQL	2.90	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW10	1/10/2006	BQL	1.60	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW10	4/17/2006	BQL	2.40	BQL	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 10.4B

SITE 900

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 625

Contaminant of Concern →		2,4-Dimethylphenol	Acenaphthene	Bis(2-ethylhexyl)phthalate	Diethyl phthalate	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Phenol
Well ID	**Date**									
2L GWQS		140	80	3	5000	280	280	21	210	300
GCL		140000	2120	0	0	280	950	15500	410	335000
IR78-GW22	7/26/2005	BQL	BQL	BQL	BQL	BQL	1.90	BQL	BQL	BQL
IR78-GW22	10/20/2005	BQL	1.10	BQL	BQL	BQL	2.50	BQL	BQL	BQL
IR78-GW22	1/11/2006	BQL	BQL	3.10	BQL	BQL	1.60	BQL	BQL	BQL
IR78-GW22	4/17/2006	BQL	BQL	BQL	BQL	BQL	1.50	BQL	BQL	BQL
IR78-GW23	7/26/2005	BQL	BQL	BQL	BQL	BQL	BQL	1.10	BQL	BQL
IR78-GW23	10/20/2005	BQL	BQL	BQL	BQL	BQL	BQL	1.20	BQL	BQL
IR78-GW23	1/11/2006	BQL	BQL	38.00	BQL	BQL	BQL	1.20	BQL	BQL
IR78-GW23	4/17/2006	BQL	BQL	BQL	BQL	BQL	BQL	1.20	BQL	BQL
IR78-RW10	7/26/2005	BQL	BQL	BQL	BQL	BQL	BQL	5.10	BQL	BQL
IR78-RW10	10/20/2005	BQL	BQL	BQL	BQL	BQL	BQL	10.40	BQL	BQL
IR78-RW10	1/11/2006	BQL	BQL	6.50	BQL	BQL	BQL	11.90	BQL	4.90
IR78-RW10	4/17/2006	BQL	3.10	BQL	BQL	BQL	BQL	7.90	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 10.4B

SITE 900

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 625

Contaminant of Concern →		2,4-Dimethylphenol	Acenaphthene	Bis(2-ethylhexyl)phthalate	Diethyl phthalate	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Phenol
Well ID	**Date**									
2L GWQS		140	80	3	5000	280	280	21	210	300
GCL		140000	2120	0	0	280	950	15500	410	335000
UST900-MW01	7/26/2005	BQL	10.40	BQL	BQL	BQL	1.50	BQL	BQL	BQL
UST900-MW01	10/19/2005	BQL	15.10	BQL	BQL	1.10	2.20	BQL	BQL	BQL
UST900-MW01	1/11/2006	BQL	12.30	15.50	BQL	BQL	1.90	BQL	BQL	BQL
UST900-MW01	4/17/2006	BQL	9.40	BQL	BQL	BQL	1.50	BQL	BQL	BQL
UST900-MW02	7/25/2005	BQL	1.20	BQL	BQL	BQL	BQL	29.00	BQL	BQL
UST900-MW02	10/19/2005	BQL	2.60	BQL	BQL	BQL	1.10	89.40	1.10	BQL
UST900-MW02	1/11/2006	BQL	BQL	20.10	BQL	BQL	BQL	33.50	BQL	BQL
UST900-MW02	4/17/2006	BQL	BQL	BQL	BQL	BQL	BQL	43.10	BQL	BQL
UST900-MW03	7/25/2005	BQL	1.10	BQL	3.00	BQL	BQL	BQL	BQL	BQL
UST900-MW03	10/19/2005	BQL	2.10	BQL	BQL	BQL	1.40	BQL	BQL	BQL
UST900-MW03	1/11/2006	BQL	BQL	24.10	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW03	4/17/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 10.4B

SITE 900

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 625

Contaminant of Concern →		2,4-Dimethylphenol	Acenaphthene	Bis(2-ethylhexyl)phthalate	Diethyl phthalate	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Phenol
Well ID	**Date**									
2L GWQS		140	80	3	5000	280	280	21	210	300
GCL		140000	2120	0	0	280	950	15500	410	335000
UST900-MW04	7/25/2005	2.30	1.40	BQL	BQL	BQL	BQL	144.00	BQL	BQL
UST900-MW04	10/19/2005	BQL	1.60	BQL	BQL	BQL	BQL	122.00	BQL	BQL
UST900-MW04	1/11/2006	BQL	BQL	16.10	BQL	BQL	BQL	127.00	BQL	13.50
UST900-MW04	4/17/2006	BQL	BQL	9.10	BQL	BQL	BQL	109.00	BQL	9.30
UST900-MW05	7/25/2005	BQL	2.20	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW05	10/19/2005	BQL	4.30	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW05	1/10/2006	BQL	2.30	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW05	4/17/2006	BQL	3.50	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW06	7/26/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW06	10/20/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW06	1/11/2006	BQL	BQL	17.60	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW06	4/17/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 10.4B

SITE 900

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 625

Contaminant of Concern →		2,4-Dimethylphenol	Acenaphthene	Bis(2-ethylhexyl)phthalate	Diethyl phthalate	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Phenol
Well ID	**Date**									
2L GWQS		140	80	3	5000	280	280	21	210	300
GCL		140000	2120	0	0	280	950	15500	410	335000
UST900-MW08	7/25/2005	BQL	BQL	BQL	BQL	BQL	BQL	2.40	BQL	BQL
UST900-MW08	10/19/2005	BQL	BQL	BQL	BQL	BQL	BQL	2.60	BQL	BQL
UST900-MW08	1/10/2006	BQL	BQL	3.10	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW08	4/17/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW09	7/25/2005	BQL	BQL	BQL	BQL	BQL	BQL	21.10	BQL	BQL
UST900-MW09	10/19/2005	BQL	BQL	BQL	BQL	BQL	BQL	20.20	BQL	BQL
UST900-MW09	1/10/2006	BQL	BQL	3.70	BQL	BQL	BQL	23.70	BQL	BQL
UST900-MW09	4/17/2006	BQL	BQL	BQL	BQL	BQL	BQL	22.60	BQL	BQL
UST900-MW10	7/25/2005	BQL	2.50	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW10	10/19/2005	BQL	2.90	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW10	1/10/2006	BQL	1.60	BQL	BQL	BQL	BQL	BQL	BQL	BQL
UST900-MW10	4/17/2006	BQL	2.40	BQL	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 10.5A

SITE 900

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 6010B

Contaminant of Concern →		
Well ID	**Date**	**Lead**
2L GWQS		15
GCL		15000
IR78-GW22	7/26/2005	BQL
IR78-GW22	10/20/2005	BQL
IR78-GW23	7/26/2005	BQL
IR78-GW23	10/20/2005	BQL
IR78-RW10	7/26/2005	BQL
IR78-RW10	10/20/2005	BQL
UST900-MW01	7/26/2005	BQL
UST900-MW01	10/19/2005	BQL
UST900-MW02	7/25/2005	BQL
UST900-MW02	10/19/2005	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 10.5A

SITE 900

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 6010B

Contaminant of Concern →		
Well ID	**Date**	**Lead**
2L GWQS		15
GCL		15000
UST900-MW03	7/25/2005	BQL
UST900-MW03	10/19/2005	BQL
UST900-MW04	7/25/2005	BQL
UST900-MW04	10/19/2005	BQL
UST900-MW05	7/25/2005	BQL
UST900-MW05	10/19/2005	BQL
UST900-MW06	7/26/2005	BQL
UST900-MW06	10/20/2005	BQL
UST900-MW08	7/25/2005	BQL
UST900-MW08	10/19/2005	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 10.5A

SITE 900

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 6010B

Contaminant of Concern →		
Well ID	**Date**	**Lead**
2L GWQS		15
GCL		15000
UST900-MW09	7/25/2005	BQL
UST900-MW09	10/19/2005	BQL
UST900-MW10	7/25/2005	BQL
UST900-MW10	10/19/2005	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 10.5B

SITE 900

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 6010B

Contaminant of Concern →		
Well ID	**Date**	**Lead**
2L GWQS		15
GCL		15000
IR78-GW22	7/26/2005	BQL
IR78-GW22	10/20/2005	BQL
IR78-GW23	7/26/2005	BQL
IR78-GW23	10/20/2005	BQL
IR78-RW10	7/26/2005	BQL
IR78-RW10	10/20/2005	BQL
UST900-MW01	7/26/2005	BQL
UST900-MW01	10/19/2005	BQL
UST900-MW02	7/25/2005	BQL
UST900-MW02	10/19/2005	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 10.5B

SITE 900

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 6010B

Contaminant of Concern →		
Well ID	**Date**	**Lead**
2L GWQS		15
GCL		15000
UST900-MW03	7/25/2005	BQL
UST900-MW03	10/19/2005	BQL
UST900-MW04	7/25/2005	BQL
UST900-MW04	10/19/2005	BQL
UST900-MW05	7/25/2005	BQL
UST900-MW05	10/19/2005	BQL
UST900-MW06	7/26/2005	BQL
UST900-MW06	10/20/2005	BQL
UST900-MW08	7/25/2005	BQL
UST900-MW08	10/19/2005	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 10.5B

SITE 900

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 6010B

Contaminant of Concern →		
Well ID	**Date**	**Lead**
2L GWQS		15
GCL		15000
UST900-MW09	7/25/2005	BQL
UST900-MW09	10/19/2005	BQL
UST900-MW10	7/25/2005	BQL
UST900-MW10	10/19/2005	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 10.6A

SITE 900

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 6020

Contaminant of Concern →		
Well ID	**Date**	**Lead**
2L GWQS		15
GCL		15000
IR78-GW22	1/11/2006	BQL
IR78-GW22	4/17/2006	BQL
IR78-GW23	1/11/2006	BQL
IR78-GW23	4/17/2006	BQL
IR78-RW10	1/11/2006	BQL
IR78-RW10	4/17/2006	BQL
UST900-MW01	1/11/2006	BQL
UST900-MW01	4/17/2006	BQL
UST900-MW02	1/11/2006	BQL
UST900-MW02	4/17/2006	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 10.6A

SITE 900

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 6020

Contaminant of Concern →		
Well ID	**Date**	**Lead**
2L GWQS		15
GCL		15000
UST900-MW03	1/11/2006	BQL
UST900-MW03	4/17/2006	BQL
UST900-MW04	1/11/2006	BQL
UST900-MW04	4/17/2006	BQL
UST900-MW05	1/10/2006	BQL
UST900-MW05	4/17/2006	BQL
UST900-MW06	1/11/2006	BQL
UST900-MW06	4/17/2006	BQL
UST900-MW08	1/10/2006	BQL
UST900-MW08	4/17/2006	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 10.6A

SITE 900

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 6020

Contaminant of Concern →		
Well ID	**Date**	**Lead**
2L GWQS		15
GCL		15000
UST900-MW09	1/10/2006	BQL
UST900-MW09	4/17/2006	BQL
UST900-MW10	1/10/2006	BQL
UST900-MW10	4/17/2006	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 10.6B

SITE 900

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINING JULY 2005

EPA METHOD 6020

Contaminant of Concern →		
Well ID	**Date**	**Lead**
2L GWQS		15
GCL		15000
IR78-GW22	1/11/2006	BQL
IR78-GW22	4/17/2006	BQL
IR78-GW23	1/11/2006	BQL
IR78-GW23	4/17/2006	BQL
IR78-RW10	1/11/2006	1.50
IR78-RW10	4/17/2006	BQL
UST900-MW01	1/11/2006	BQL
UST900-MW01	4/17/2006	BQL
UST900-MW02	1/11/2006	BQL
UST900-MW02	4/17/2006	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 10.6B

SITE 900

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINING JULY 2005

EPA METHOD 6020

Contaminant of Concern →		
Well ID	**Date**	**Lead**
2L GWQS		15
GCL		15000
UST900-MW03	1/11/2006	BQL
UST900-MW03	4/17/2006	BQL
UST900-MW04	1/11/2006	BQL
UST900-MW04	4/17/2006	BQL
UST900-MW05	1/10/2006	BQL
UST900-MW05	4/17/2006	BQL
UST900-MW06	1/11/2006	BQL
UST900-MW06	4/17/2006	BQL
UST900-MW08	1/10/2006	BQL
UST900-MW08	4/17/2006	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 10.6B

SITE 900

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINING JULY 2005

EPA METHOD 6020

Contaminant of Concern →		
Well ID	**Date**	**Lead**
2L GWQS		15
GCL		15000
UST900-MW09	1/10/2006	BQL
UST900-MW09	4/17/2006	BQL
UST900-MW10	1/10/2006	BQL
UST900-MW10	4/17/2006	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 10.7A

SITE 900

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

MADEP VPH/EPH

Contaminant of Concern →		C19-C36 Aliphatics	C5-C8 Aliphatics	C9-C18 Aliphatics	C9-C22 Aromatics
Well ID	**Date**				
2L GWQS		42000	420	4200	210
GCL		0	0	0	0
IR78-GW22	7/26/2005	BQL	BQL	BQL	201.00
IR78-GW22	10/20/2005	BQL	BQL	BQL	189.00
IR78-GW22	1/11/2006	BQL	BQL	BQL	BQL
IR78-GW22	4/17/2006	BQL	BQL	BQL	BQL
IR78-GW23	7/26/2005	BQL	169.00	40.70	205.30
IR78-GW23	10/20/2005	BQL	**487.00**	89.60	BQL
IR78-GW23	1/11/2006	BQL	320.00	BQL	BQL
IR78-GW23	4/17/2006	BQL	310.00	BQL	BQL
IR78-RW10	7/26/2005	BQL	279.00	35.00	**213.20**
IR78-RW10	10/20/2005	BQL	396.00	88.20	60.70
IR78-RW10	1/11/2006	BQL	**450.00**	120.00	BQL
IR78-RW10	4/17/2006	BQL	330.00	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 10.7A

SITE 900

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

MADEP VPH/EPH

Contaminant of Concern →		C19-C36 Aliphatics	C5-C8 Aliphatics	C9-C18 Aliphatics	C9-C22 Aromatics
Well ID	**Date**				
2L GWQS		42000	420	4200	210
GCL		0	0	0	0
UST900-MW01	7/26/2005	BQL	BQL	BQL	BQL
UST900-MW01	10/19/2005	211.00	BQL	212.00	145.00
UST900-MW01	1/11/2006	BQL	BQL	BQL	BQL
UST900-MW01	4/17/2006	BQL	BQL	BQL	BQL
UST900-MW02	7/25/2005	BQL	**1820.00**	812.00	**707.00**
UST900-MW02	10/19/2005	BQL	**2920.00**	1089.00	**826.00**
UST900-MW02	1/11/2006	BQL	**1500.00**	290.00	**300.00**
UST900-MW02	4/17/2006	BQL	**1600.00**	350.00	**360.00**
UST900-MW03	7/25/2005	BQL	BQL	BQL	BQL
UST900-MW03	10/19/2005	BQL	BQL	BQL	BQL
UST900-MW03	1/11/2006	BQL	BQL	BQL	BQL
UST900-MW03	4/17/2006	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 10.7A

SITE 900

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

MADEP VPH/EPH

Contaminant of Concern →		C19-C36 Aliphatics	C5-C8 Aliphatics	C9-C18 Aliphatics	C9-C22 Aromatics
Well ID	**Date**				
2L GWQS		42000	420	4200	210
GCL		0	0	0	0
UST900-MW04	7/25/2005	BQL	**2540.00**	2564.00	**1098.00**
UST900-MW04	10/19/2005	BQL	**5050.00**	2630.00	**1537.00**
UST900-MW04	1/11/2006	BQL	**1800.00**	1300.00	**480.00**
UST900-MW04	4/17/2006	BQL	**2200.00**	1600.00	**680.00**
UST900-MW05	7/25/2005	BQL	BQL	BQL	BQL
UST900-MW05	10/19/2005	263.00	BQL	194.00	148.00
UST900-MW05	1/10/2006	BQL	BQL	BQL	BQL
UST900-MW05	4/17/2006	BQL	BQL	BQL	BQL
UST900-MW06	7/26/2005	BQL	BQL	BQL	164.00
UST900-MW06	10/20/2005	BQL	BQL	BQL	BQL
UST900-MW06	1/11/2006	BQL	BQL	BQL	BQL
UST900-MW06	4/17/2006	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 10.7A

SITE 900

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

MADEP VPH/EPH

Contaminant of Concern →					
Well ID	**Date**	C19-C36 Aliphatics	C5-C8 Aliphatics	C9-C18 Aliphatics	C9-C22 Aromatics
2L GWQS		42000	420	4200	210
GCL		0	0	0	0
UST900-MW08	7/25/2005	BQL	BQL	BQL	191.50
UST900-MW08	10/19/2005	BQL	BQL	BQL	31.70
UST900-MW08	1/10/2006	BQL	BQL	BQL	BQL
UST900-MW08	4/17/2006	BQL	BQL	BQL	BQL
UST900-MW09	7/25/2005	BQL	190.00	BQL	22.00
UST900-MW09	10/19/2005	272.00	**480.00**	215.00	22.00
UST900-MW09	1/10/2006	BQL	**470.00**	130.00	BQL
UST900-MW09	4/17/2006	BQL	340.00	BQL	BQL
UST900-MW10	7/25/2005	BQL	BQL	BQL	BQL
UST900-MW10	10/19/2005	196.00	BQL	BQL	BQL
UST900-MW10	1/10/2006	BQL	BQL	100.00	BQL
UST900-MW10	4/17/2006	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 10.7B

SITE 900

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

MADEP VPH/EPH

Contaminant of Concern →		C19-C36 Aliphatics	C5-C8 Aliphatics	C9-C18 Aliphatics	C9-C22 Aromatics
Well ID	**Date**				
2L GWQS		42000	420	4200	210
GCL		0	0	0	0
IR78-GW22	7/26/2005	BQL	BQL	BQL	201.00
IR78-GW22	10/20/2005	BQL	BQL	BQL	189.00
IR78-GW22	1/11/2006	BQL	BQL	BQL	BQL
IR78-GW22	4/17/2006	BQL	BQL	BQL	BQL
IR78-GW23	7/26/2005	BQL	169.00	40.70	205.30
IR78-GW23	10/20/2005	BQL	**487.00**	89.60	BQL
IR78-GW23	1/11/2006	BQL	320.00	BQL	BQL
IR78-GW23	4/17/2006	BQL	310.00	BQL	BQL
IR78-RW10	7/26/2005	BQL	279.00	35.00	**213.20**
IR78-RW10	10/20/2005	BQL	396.00	88.20	60.70
IR78-RW10	1/11/2006	BQL	**450.00**	120.00	BQL
IR78-RW10	4/17/2006	BQL	330.00	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 10.7B

SITE 900

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

MADEP VPH/EPH

Contaminant of Concern →		C19-C36 Aliphatics	C5-C8 Aliphatics	C9-C18 Aliphatics	C9-C22 Aromatics
Well ID	**Date**				
2L GWQS		42000	420	4200	210
GCL		0	0	0	0
UST900-MW01	7/26/2005	BQL	BQL	BQL	BQL
UST900-MW01	10/19/2005	211.00	BQL	212.00	145.00
UST900-MW01	1/11/2006	BQL	BQL	BQL	BQL
UST900-MW01	4/17/2006	BQL	BQL	BQL	BQL
UST900-MW02	7/25/2005	BQL	**1820.00**	812.00	**707.00**
UST900-MW02	10/19/2005	BQL	**2920.00**	1089.00	**826.00**
UST900-MW02	1/11/2006	BQL	**1500.00**	290.00	**300.00**
UST900-MW02	4/17/2006	BQL	**1600.00**	350.00	**360.00**
UST900-MW03	7/25/2005	BQL	BQL	BQL	BQL
UST900-MW03	10/19/2005	BQL	BQL	BQL	BQL
UST900-MW03	1/11/2006	BQL	BQL	BQL	BQL
UST900-MW03	4/17/2006	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 10.7B

SITE 900

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

MADEP VPH/EPH

Contaminant of Concern →		C19-C36 Aliphatics	C5-C8 Aliphatics	C9-C18 Aliphatics	C9-C22 Aromatics
Well ID	**Date**				
2L GWQS		42000	420	4200	210
GCL		0	0	0	0
UST900-MW04	7/25/2005	BQL	**2540.00**	2564.00	**1098.00**
UST900-MW04	10/19/2005	BQL	**5050.00**	2630.00	**1537.00**
UST900-MW04	1/11/2006	BQL	**1600.00**	1300.00	**480.00**
UST900-MW04	4/17/2006	BQL	**2200.00**	1600.00	**580.00**
UST900-MW05	7/25/2005	BQL	BQL	BQL	BQL
UST900-MW05	10/19/2005	263.00	BQL	194.00	148.00
UST900-MW05	1/10/2006	BQL	BQL	BQL	BQL
UST900-MW05	4/17/2006	BQL	BQL	BQL	BQL
UST900-MW06	7/26/2005	BQL	BQL	BQL	164.00
UST900-MW06	10/20/2005	BQL	BQL	BQL	BQL
UST900-MW06	1/11/2006	BQL	BQL	BQL	BQL
UST900-MW06	4/17/2006	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 10.7B

SITE 900

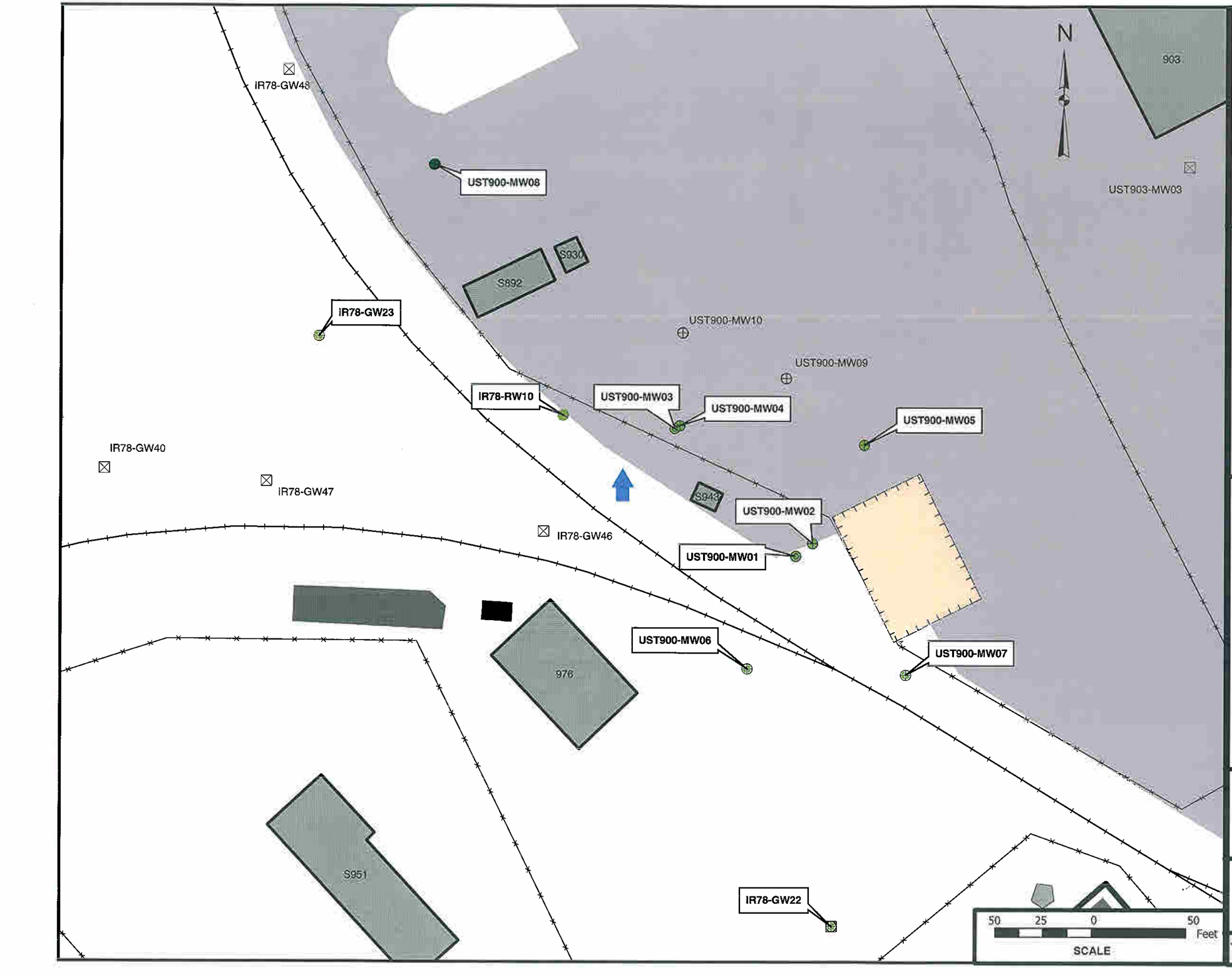
HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

MADEP VPH/EPH

Contaminant of Concern →		C19-C36 Aliphatics	C5-C8 Aliphatics	C9-C18 Aliphatics	C9-C22 Aromatics
Well ID	**Date**				
2L GWQS		42000	420	4200	210
GCL		0	0	0	0
UST900-MW08	7/25/2005	BQL	BQL	BQL	191.50
UST900-MW08	10/19/2005	BQL	BQL	BQL	31.70
UST900-MW08	1/10/2006	BQL	BQL	BQL	BQL
UST900-MW08	4/17/2006	BQL	BQL	BQL	BQL
UST900-MW09	7/25/2005	BQL	190.00	BQL	22.00
UST900-MW09	10/19/2005	272.00	**480.00**	215.00	22.00
UST900-MW09	1/10/2006	BQL	**470.00**	130.00	BQL
UST900-MW09	4/17/2006	BQL	340.00	BQL	BQL
UST900-MW10	7/25/2005	BQL	BQL	BQL	BQL
UST900-MW10	10/19/2005	196.00	BQL	BQL	BQL
UST900-MW10	1/10/2006	BQL	BQL	100.00	BQL
UST900-MW10	4/17/2006	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM



LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Free Product
- Free Product Detected
- No Measurable Product
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. Free Product was not detected at this site in any of the wells gauged during this monitoring event.

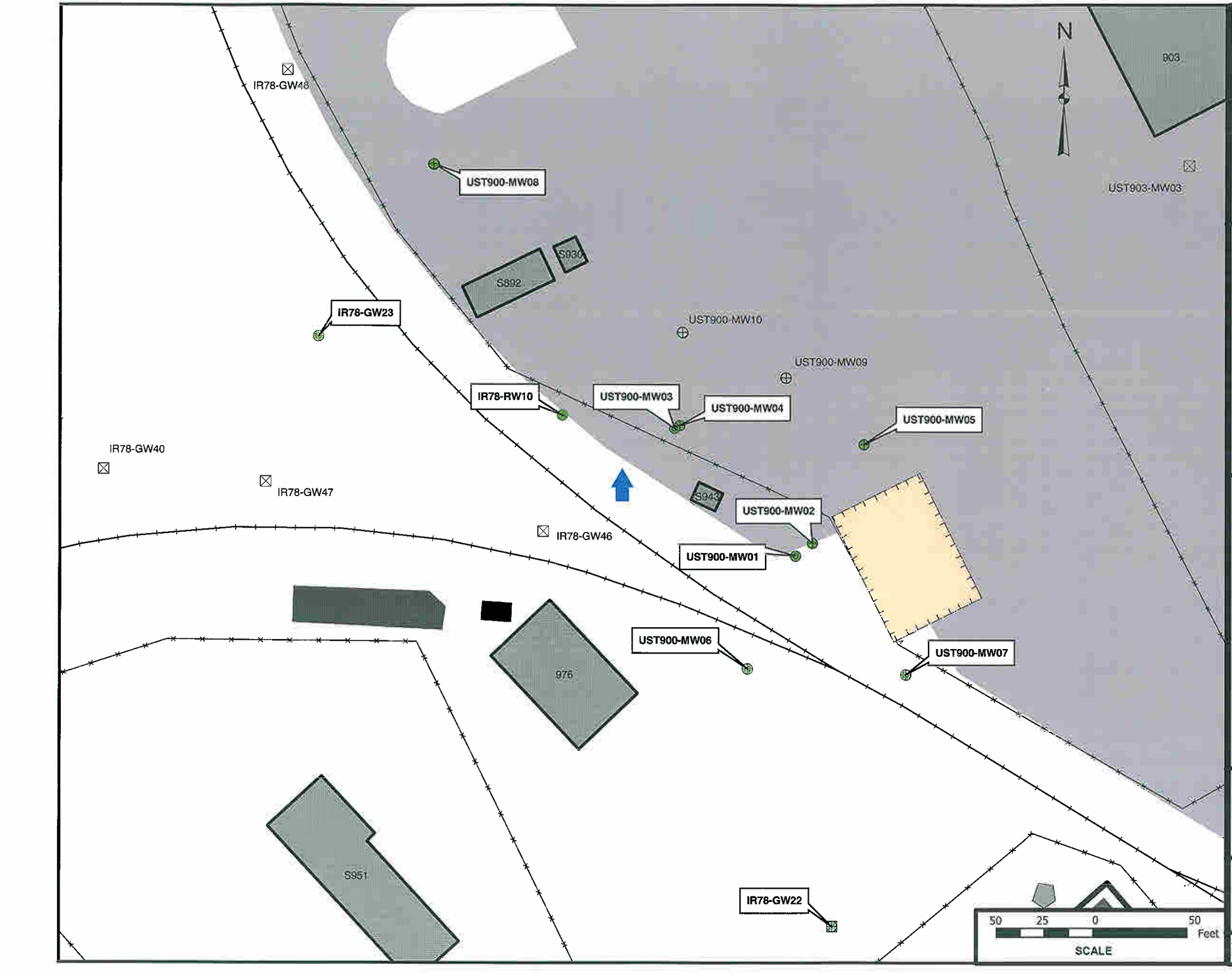
CATLIN ENGINEERS and SCIENTISTS

SITE 900
FREE PRODUCT PLUME MAP
THIRD QUARTER 2005

FIGURE **10.1A**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM



LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Free Product
- Free Product Detected
- No Measurable Product
- Buildings and Structiures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. Free Product was not detected at this site in any of the wells gauged during this monitoring event.

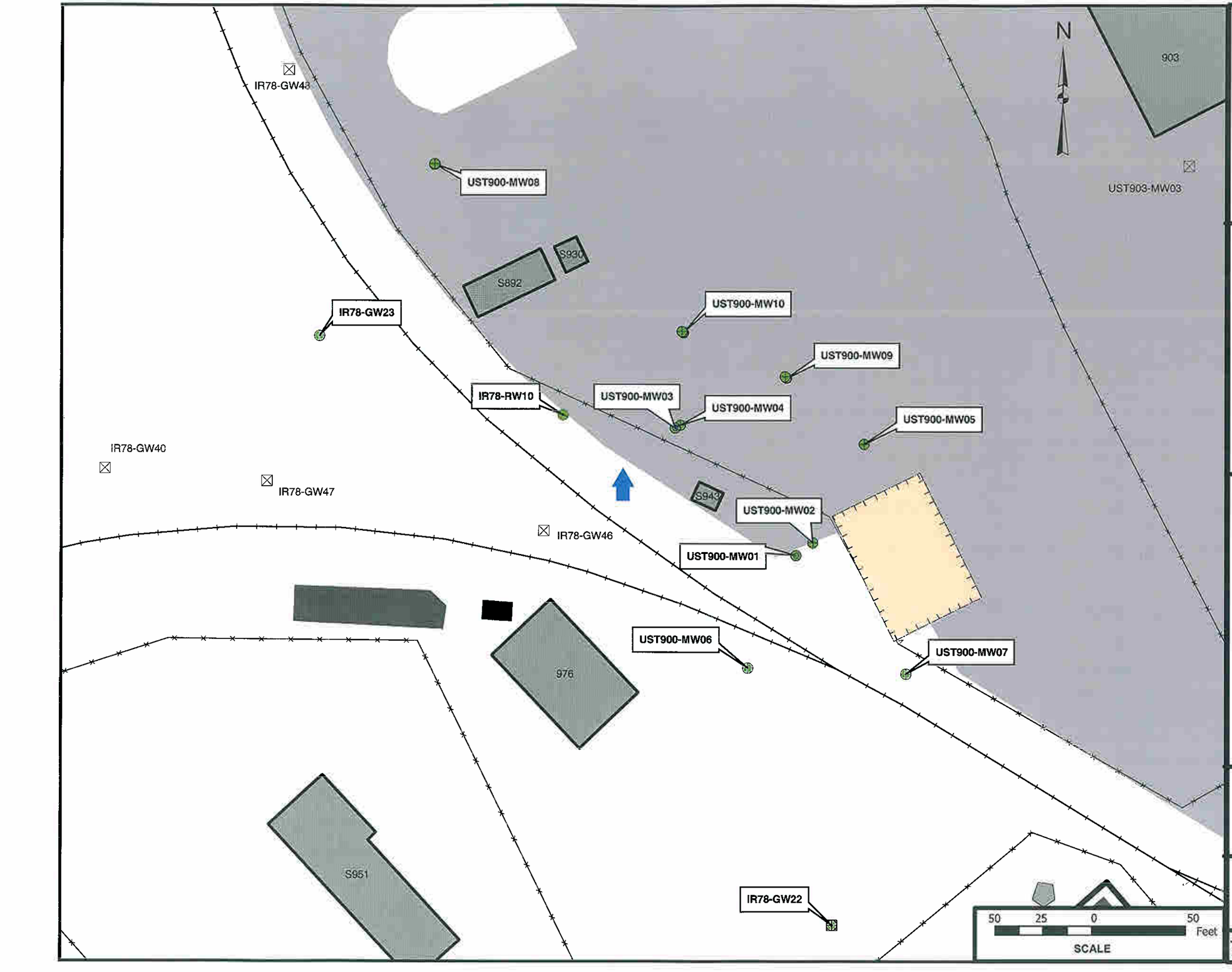
CATLIN ENGINEERS and SCIENTISTS

SITE 900
FREE PRODUCT PLUME MAP
FOURTH QUARTER 2005

FIGURE **10.1B**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM



LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Free Product
- Free Product Detected
- No Measurable Product
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. Free Product was not detected at this site in any of the wells gauged during this monitoring event.

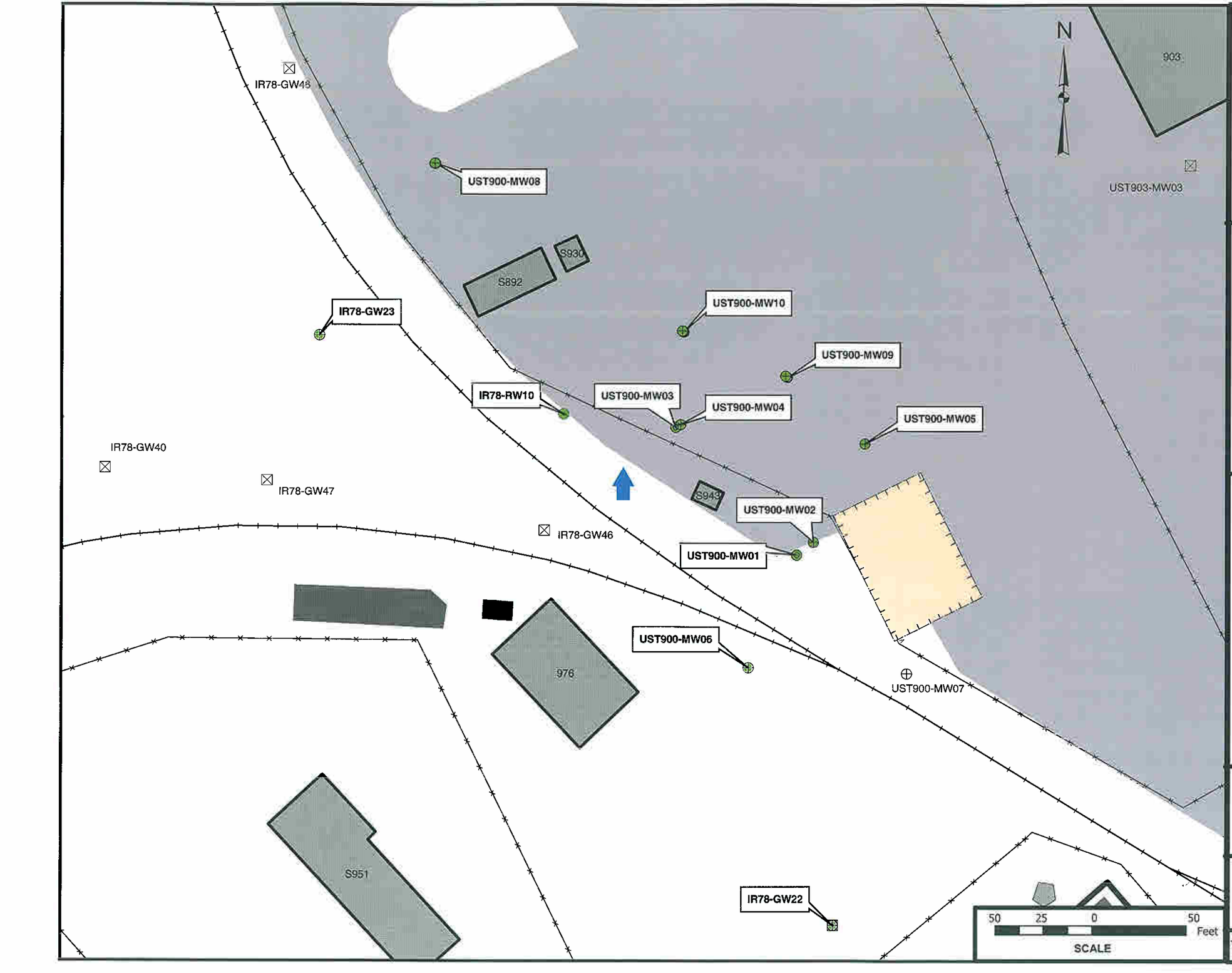
CATLIN ENGINEERS and SCIENTISTS

SITE 900
FREE PRODUCT PLUME MAP
FIRST QUARTER 2006

FIGURE **10.1C**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM



LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Free Product
- Free Product Detected
- No Measurable Product
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. Free Product was not detected at this site in any of the wells gauged during this monitoring event.

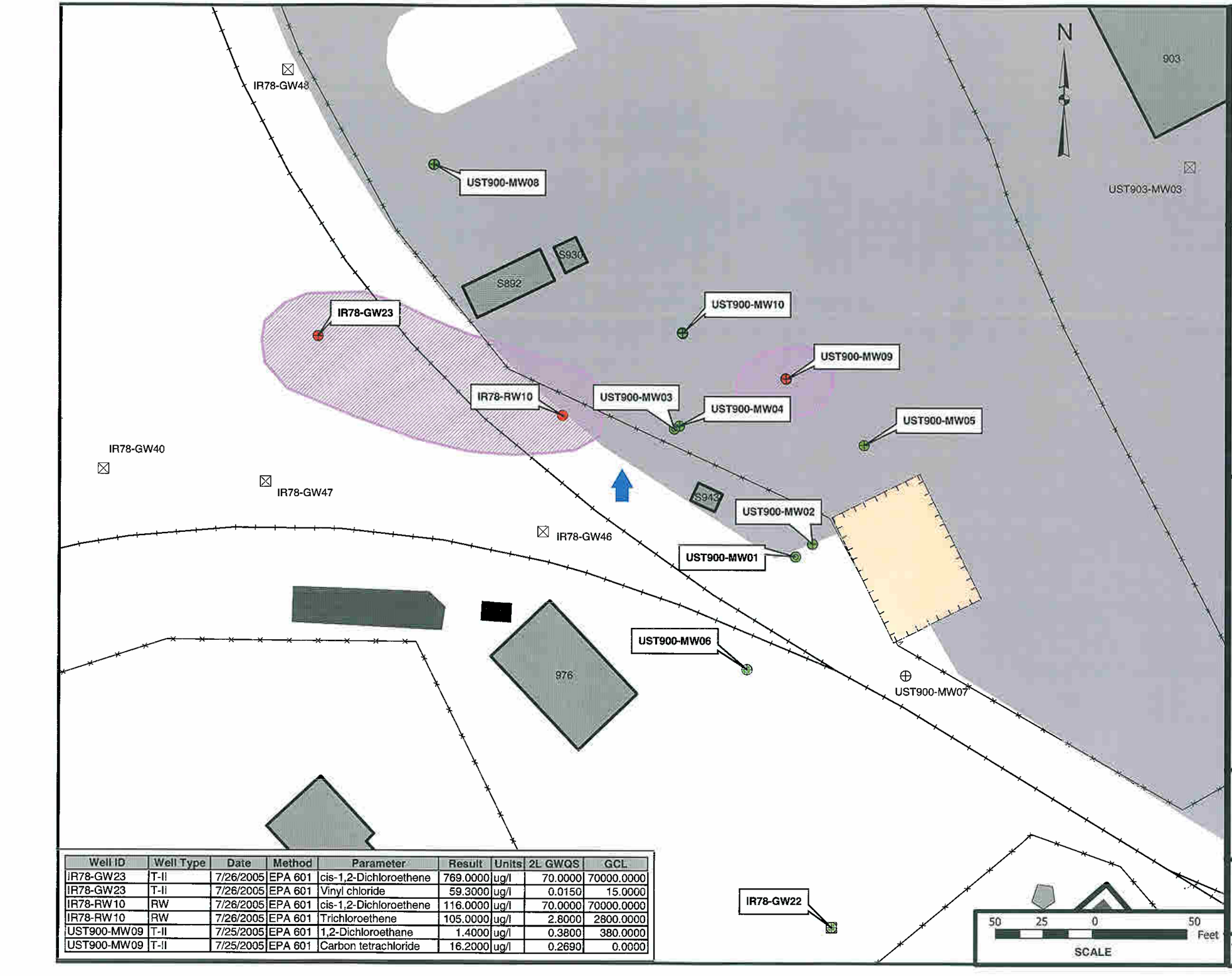
CATLIN ENGINEERS and SCIENTISTS

SITE 900
FREE PRODUCT PLUME MAP
SECOND QUARTER 2006

FIGURE **10.1D**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM



LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Analytical Results
- 601 2L Non-Compliant
- 601 2L Compliant
- EPA 601 Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. 2L Standard refers to North Carolina Groundwater Quality Standard 15A NCAC 2L.0202.
2. GCL refers to Gross Contaminant Level as defined in Table 7 of "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Ground Water", Volume II, dated January 2, 1998.
3. A 2L Standard of "0.00" implies a standard has not yet been established. According to NCAC T15:02L, any compound found above laboratory detection limits is considered noncompliant unless otherwise specified by the NCDENR.

Well ID	Well Type	Date	Method	Parameter	Result	Units	2L GWQS	GCL
IR78-GW23	T-II	7/26/2005	EPA 601	cis-1,2-Dichloroethene	769.0000	ug/l	70.0000	70000.0000
IR78-GW23	T-II	7/26/2005	EPA 601	Vinyl chloride	59.3000	ug/l	0.0150	15.0000
IR78-RW10	RW	7/26/2005	EPA 601	cis-1,2-Dichloroethene	116.0000	ug/l	70.0000	70000.0000
IR78-RW10	RW	7/26/2005	EPA 601	Trichloroethene	105.0000	ug/l	2.8000	2800.0000
UST900-MW09	T-II	7/25/2005	EPA 601	1,2-Dichloroethane	1.4000	ug/l	0.3800	380.0000
UST900-MW09	T-II	7/25/2005	EPA 601	Carbon tetrachloride	16.2000	ug/l	0.2690	0.0000

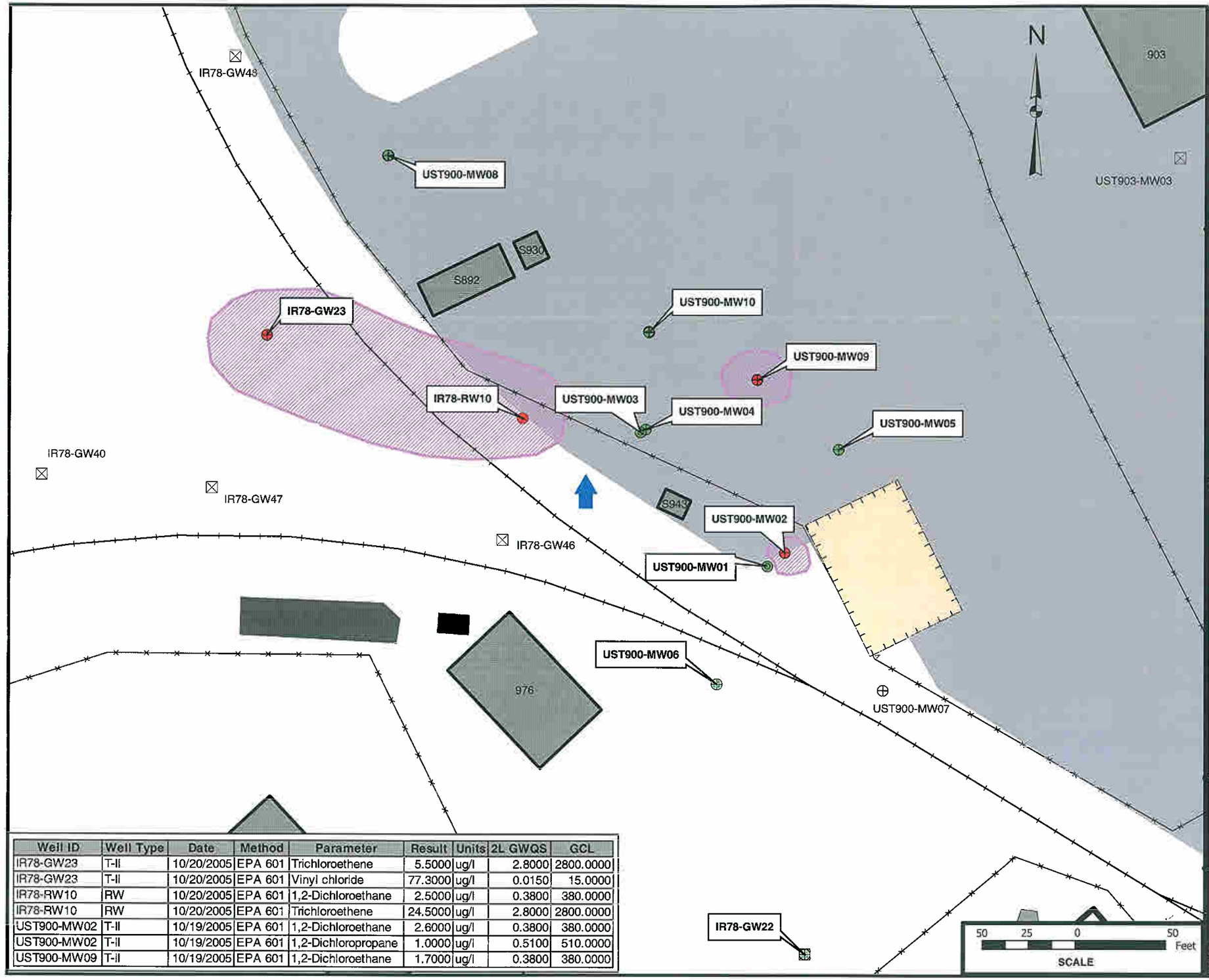
CATLIN ENGINEERS and SCIENTISTS

SITE 900
EPA METHOD 601 COLORIMETRY AND PLUME IN EXCESS OF 2L THIRD QUARTER 2005

FIGURE **10.2A**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM



LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Analytical Results
- 601 2L Non-Compliant
- 601 2L Compliant
- EPA 601 Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. 2L Standard refers to North Carolina Groundwater Quality Standard 15A NCAC 2L.0202.
2. GCL refers to Gross Contaminant Level as defined in Table 7 of "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Ground Water", Volume II, dated January 2, 1998.
3. A 2L Standard of "0.00" implies a standard has not yet been established. According to NCAC T15:02L, any compound found above laboratory detection limits is considered noncompliant unless otherwise specified by the NCDENR.

Well ID	Well Type	Date	Method	Parameter	Result	Units	2L GWQS	GCL
IR78-GW23	T-II	10/20/2005	EPA 601	Trichloroethene	5.5000	ug/l	2.8000	2800.0000
IR78-GW23	T-II	10/20/2005	EPA 601	Vinyl chloride	77.3000	ug/l	0.0150	15.0000
IR78-RW10	RW	10/20/2005	EPA 601	1,2-Dichloroethane	2.5000	ug/l	0.3800	380.0000
IR78-RW10	RW	10/20/2005	EPA 601	Trichloroethene	24.5000	ug/l	2.8000	2800.0000
UST900-MW02	T-II	10/19/2005	EPA 601	1,2-Dichloroethane	2.6000	ug/l	0.3800	380.0000
UST900-MW02	T-II	10/19/2005	EPA 601	1,2-Dichloropropane	1.0000	ug/l	0.5100	510.0000
UST900-MW09	T-II	10/19/2005	EPA 601	1,2-Dichloroethane	1.7000	ug/l	0.3800	380.0000

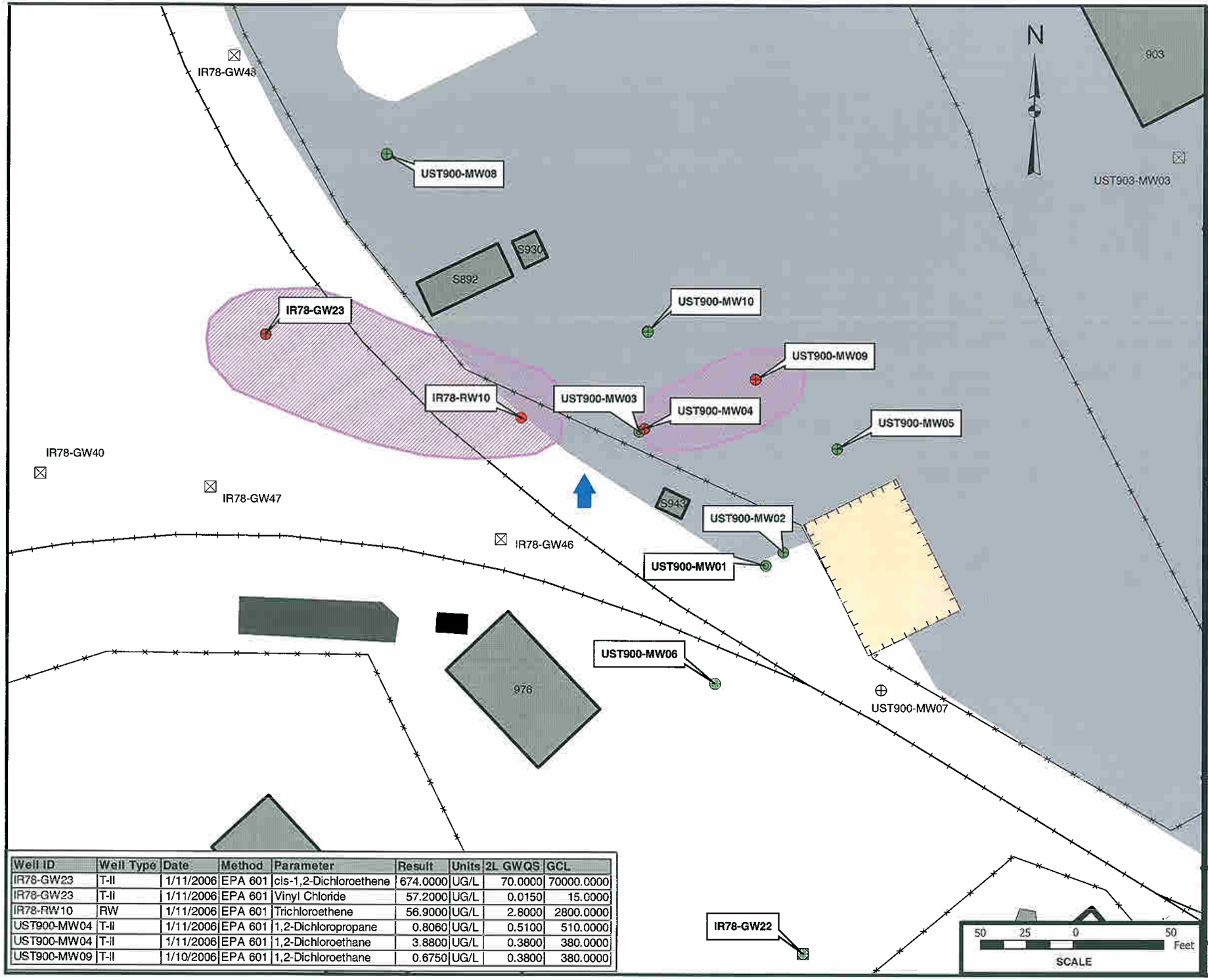
CATLIN ENGINEERS and SCIENTISTS

SITE 900
EPA METHOD 601 COLORIMETRY AND PLUME IN EXCESS OF 2L
FOURTH QUARTER 2005

FIGURE **10.2B**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM



LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Analytical Results
- 601 2L Non-Compliant
- 601 2L Compliant
- EPA 601 Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. 2L Standard refers to North Carolina Groundwater Quality Standard 15A NCAC 2L.0202.
2. GCL refers to Gross Contaminant Level as defined in Table 7 of "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Ground Water", Volume II, dated January 2, 1998.
3. A 2L Standard of "0.00" implies a standard has not yet been established. According to NCAC T15:02L, any compound found above laboratory detection limits is considered noncompliant unless otherwise specified by the NCDENR.

Well ID	Well Type	Date	Method	Parameter	Result	Units	2L GWQS	GCL
IR78-GW23	T-II	1/11/2006	EPA 601	cis-1,2-Dichloroethene	674.0000	UG/L	70.0000	70000.0000
IR78-GW23	T-II	1/11/2006	EPA 601	Vinyl Chloride	57.2000	UG/L	0.0150	15.0000
IR78-RW10	RW	1/11/2006	EPA 601	Trichloroethene	56.9000	UG/L	2.8000	2800.0000
UST900-MW04	T-II	1/11/2006	EPA 601	1,2-Dichloropropane	0.8060	UG/L	0.5100	510.0000
UST900-MW04	T-II	1/11/2006	EPA 601	1,2-Dichloroethane	3.8800	UG/L	0.3800	380.0000
UST900-MW09	T-II	1/10/2006	EPA 601	1,2-Dichloroethane	0.6750	UG/L	0.3800	380.0000

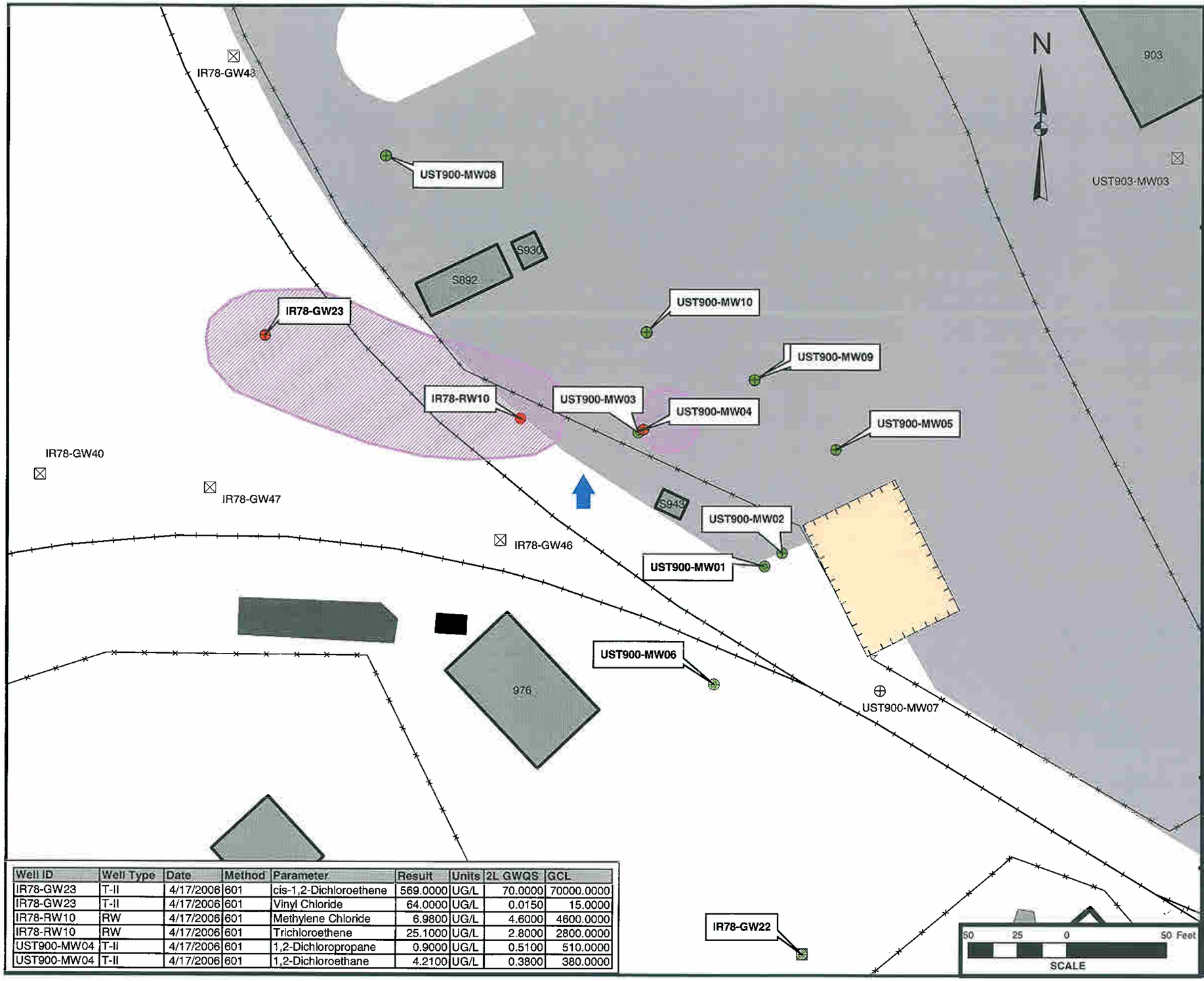
CATLIN ENGINEERS and SCIENTISTS

SITE 900
EPA METHOD 601 COLORIMETRY AND PLUME IN EXCESS OF 2L FIRST QUARTER 2006

FIGURE **10.2C**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM



LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Analytical Results
- 601 2L Non-Compliant
- 601 2L Compliant
- EPA 601 Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. 2L Standard refers to North Carolina Groundwater Quality Standard 15A NCAC 2L.0202.
2. GCL refers to Gross Contaminant Level as defined in Table 7 of "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Ground Water", Volume II, dated January 2, 1998.
3. A 2L Standard of "0.00" implies a standard has not yet been established. According to NCAC T15:02L, any compound found above laboratory detection limits is considered noncompliant unless otherwise specified by the NCDENR.

Well ID	Well Type	Date	Method	Parameter	Result	Units	2L GWQS	GCL
IR78-GW23	T-II	4/17/2006	601	cis-1,2-Dichloroethene	569.0000	UG/L	70.0000	70000.0000
IR78-GW23	T-II	4/17/2006	601	Vinyl Chloride	64.0000	UG/L	0.0150	15.0000
IR78-RW10	RW	4/17/2006	601	Methylene Chloride	6.9800	UG/L	4.6000	4600.0000
IR78-RW10	RW	4/17/2006	601	Trichloroethene	25.1000	UG/L	2.8000	2800.0000
UST900-MW04	T-II	4/17/2006	601	1,2-Dichloropropane	0.9000	UG/L	0.5100	510.0000
UST900-MW04	T-II	4/17/2006	601	1,2-Dichloroethane	4.2100	UG/L	0.3800	380.0000

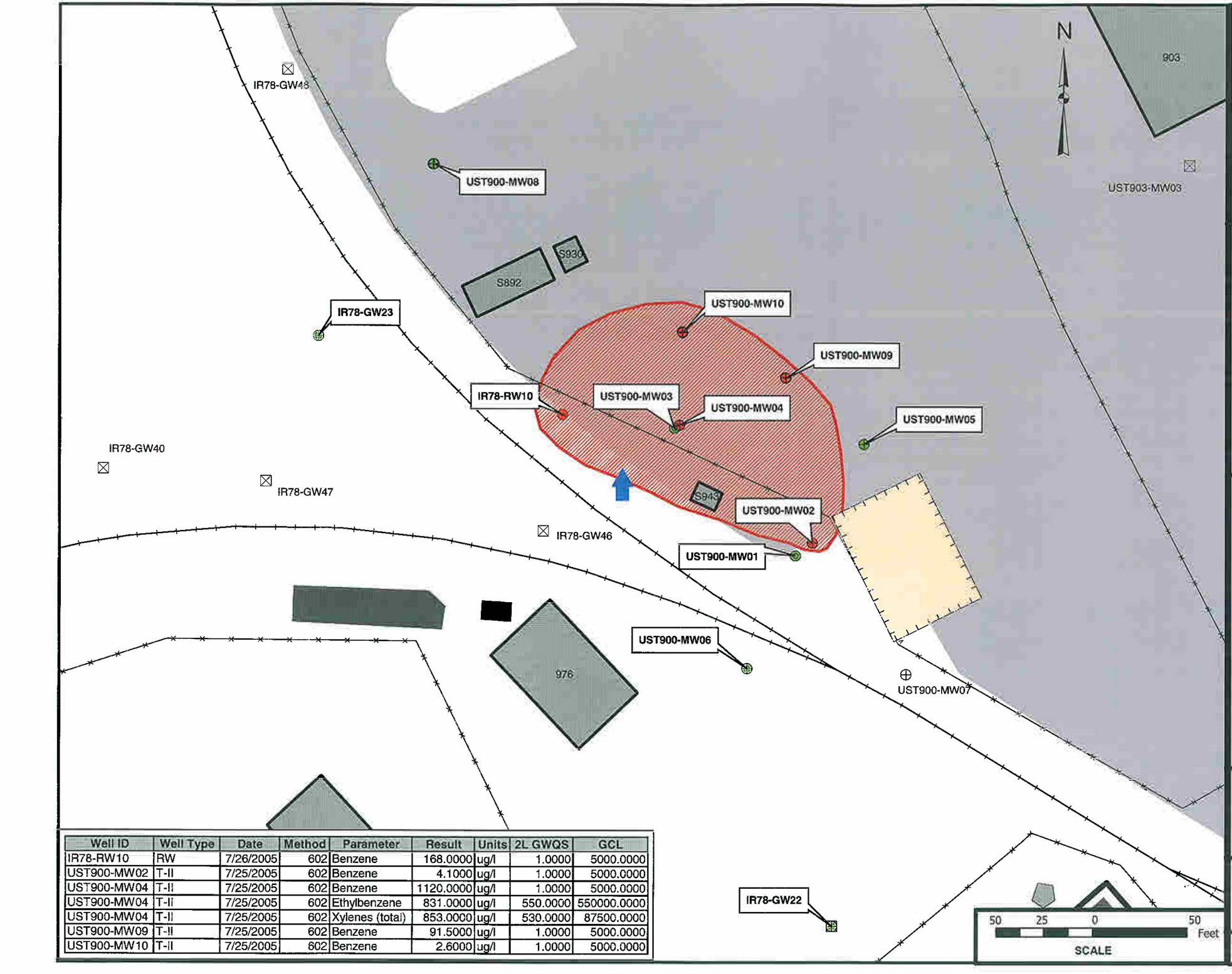
CATLIN ENGINEERS and SCIENTISTS

SITE 900
EPA METHOD 601 COLORIMETRY AND PLUME IN EXCESS OF 2L SECOND QUARTER 2006

FIGURE **10.2D**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM



Well ID	Well Type	Date	Method	Parameter	Result	Units	2L GWQS	GCL
IR78-RW10	RW	7/26/2005	602	Benzene	168.0000	ug/l	1.0000	5000.0000
UST900-MW02	T-II	7/25/2005	602	Benzene	4.1000	ug/l	1.0000	5000.0000
UST900-MW04	T-II	7/25/2005	602	Benzene	1120.0000	ug/l	1.0000	5000.0000
UST900-MW04	T-II	7/25/2005	602	Ethylbenzene	831.0000	ug/l	550.0000	550000.0000
UST900-MW04	T-II	7/25/2005	602	Xylenes (total)	853.0000	ug/l	530.0000	87500.0000
UST900-MW09	T-II	7/25/2005	602	Benzene	91.5000	ug/l	1.0000	5000.0000
UST900-MW10	T-II	7/25/2005	602	Benzene	2.6000	ug/l	1.0000	5000.0000

LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Analytical Results
- 602 2L Non-Compliant
- 602 2L Compliant
- EPA 602 Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. 2L Standard refers to North Carolina Groundwater Quality Standard 15A NCAC 2L.0202.
2. GCL refers to Gross Contaminant Level as defined in Table 7 of "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Ground Water", Volume II, dated January 2, 1998.
3. A 2L Standard of "0.00" implies a standard has not yet been established. According to NCAC T15:02L, any compound found above laboratory detection limits is considered noncompliant unless otherwise specified by the NCDENR.

CATLIN ENGINEERS and SCIENTISTS

SITE 900
EPA METHOD 602 COLORIMETRY AND PLUME IN EXCESS OF 2L THIRD QUARTER 2005

FIGURE **10.3A**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM



LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Analytical Results
- 602 2L Non-Compliant
- 602 2L Compliant
- EPA 602 Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. 2L Standard refers to North Carolina Groundwater Quality Standard 15A NCAC 2L.0202.
2. GCL refers to Gross Contaminant Level as defined in Table 7 of "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Ground Water", Volume II, dated January 2, 1998.
3. A 2L Standard of "0.00" implies a standard has not yet been established. According to NCAC T15:02L, any compound found above laboratory detection limits is considered noncompliant unless otherwise specified by the NCDENR.

Well ID	Well Type	Date	Method	Parameter	Result	Units	2L GWQS	GCL
IR78-GW23	T-II	10/20/2005	EPA 602	Benzene	4.9000	ug/l	1.0000	5000.0000
IR78-RW10	RW	10/20/2005	EPA 602	Benzene	114.0000	ug/l	1.0000	5000.0000
UST900-MW02	T-II	10/19/2005	EPA 602	Benzene	129.0000	ug/l	1.0000	5000.0000
UST900-MW04	T-II	10/19/2005	EPA 602	Benzene	1040.0000	ug/l	1.0000	5000.0000
UST900-MW04	T-II	10/19/2005	EPA 602	Ethylbenzene	742.0000	ug/l	550.0000	550000.0000
UST900-MW04	T-II	10/19/2005	EPA 602	Xylenes (total)	650.0000	ug/l	530.0000	87500.0000
UST900-MW09	T-II	10/19/2005	EPA 602	Benzene	98.5000	ug/l	1.0000	5000.0000
UST900-MW10	T-II	10/19/2005	EPA 602	Benzene	2.6000	ug/l	1.0000	5000.0000

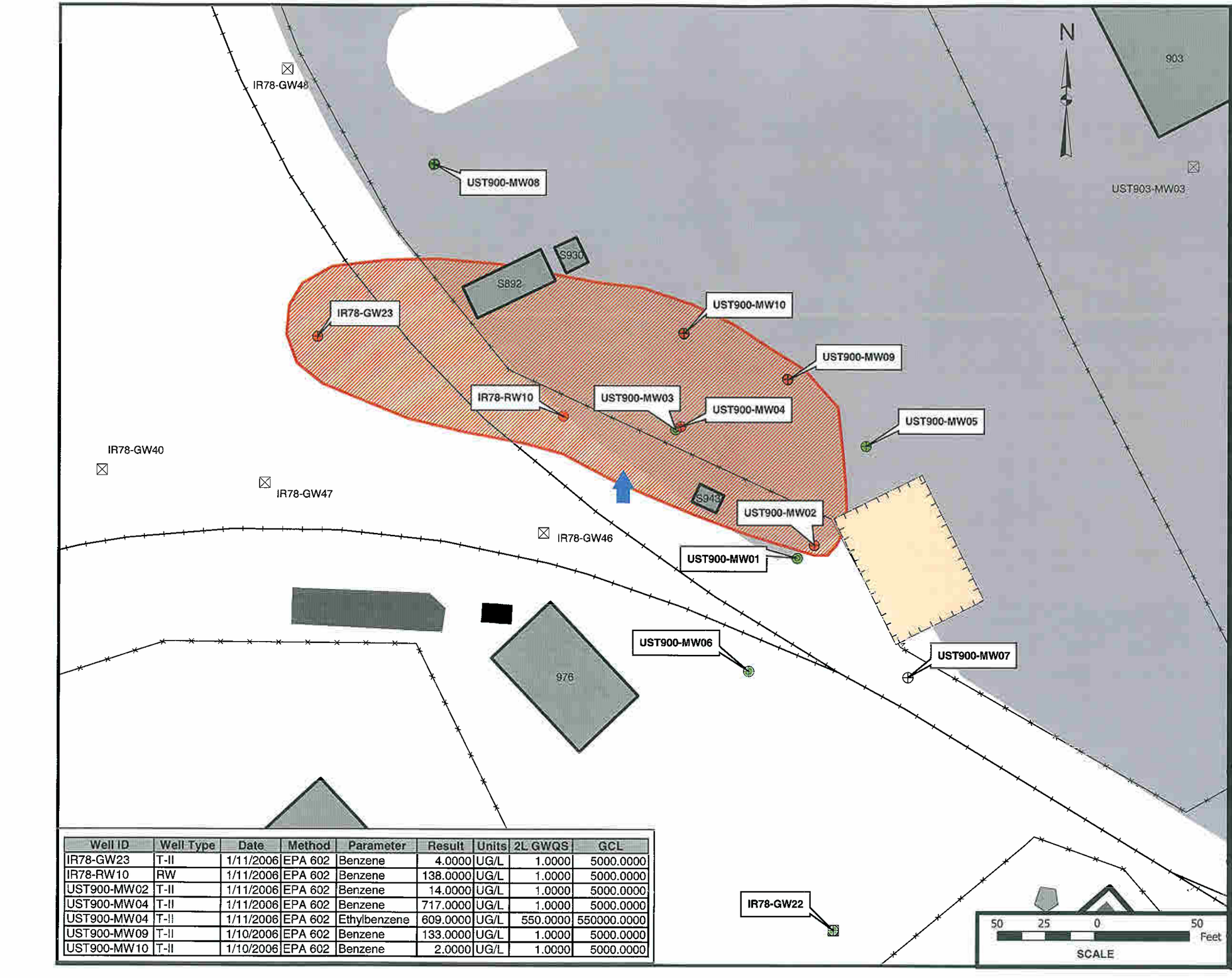
CATLIN ENGINEERS and SCIENTISTS

SITE 900
EPA METHOD 602 COLORIMETRY AND PLUME IN EXCESS OF 2L FOURTH QUARTER 2005

FIGURE **10.3B**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM



LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Analytical Results
- 602 2L Non-Compliant
- 602 2L Compliant
- EPA 602 Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. 2L Standard refers to North Carolina Groundwater Quality Standard 15A NCAC 2L.0202.
2. GCL refers to Gross Contaminant Level as defined in Table 7 of "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Ground Water", Volume II, dated January 2, 1998.
3. A 2L Standard of "0.00" implies a standard has not yet been established. According to NCAC T15:02L, any compound found above laboratory detection limits is considered noncompliant unless otherwise specified by the NCDENR.

Well ID	Well Type	Date	Method	Parameter	Result	Units	2L GWQS	GCL
IR78-GW23	T-II	1/11/2006	EPA 602	Benzene	4.0000	UG/L	1.0000	5000.0000
IR78-RW10	RW	1/11/2006	EPA 602	Benzene	138.0000	UG/L	1.0000	5000.0000
UST900-MW02	T-II	1/11/2006	EPA 602	Benzene	14.0000	UG/L	1.0000	5000.0000
UST900-MW04	T-II	1/11/2006	EPA 602	Benzene	717.0000	UG/L	1.0000	5000.0000
UST900-MW04	T-II	1/11/2006	EPA 602	Ethylbenzene	609.0000	UG/L	550.0000	550000.0000
UST900-MW09	T-II	1/10/2006	EPA 602	Benzene	133.0000	UG/L	1.0000	5000.0000
UST900-MW10	T-II	1/10/2006	EPA 602	Benzene	2.0000	UG/L	1.0000	5000.0000

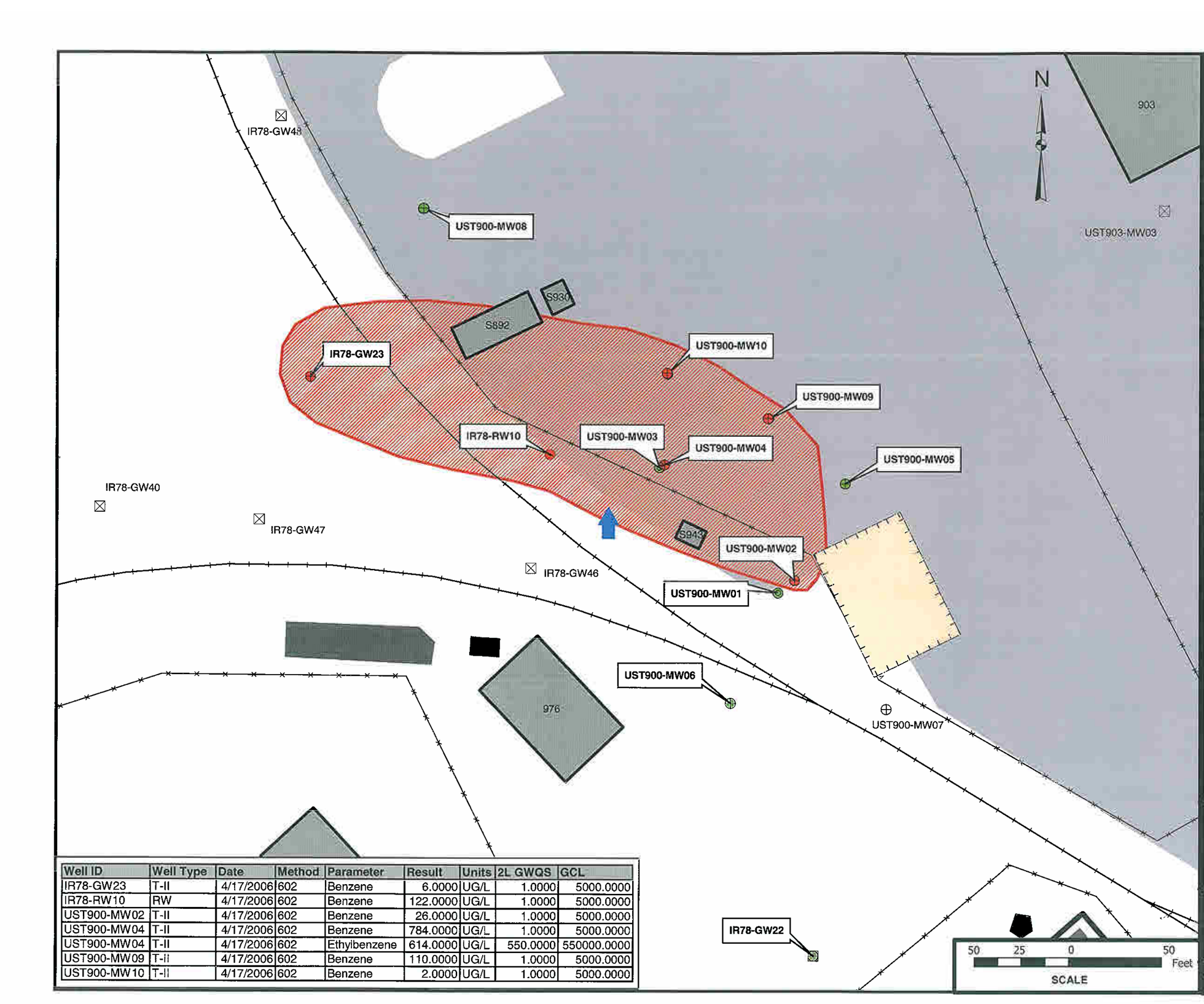
CATLIN ENGINEERS and SCIENTISTS

SITE 900
EPA METHOD 602 COLORIMETRY AND PLUME IN EXCESS OF 2L FIRST QUARTER 2006

FIGURE **10.3C**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM



LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Analytical Results
- 602 2L Non-Compliant
- 602 2L Compliant
- EPA 602 Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. 2L Standard refers to North Carolina Groundwater Quality Standard 15A NCAC 2L.0202.
2. GCL refers to Gross Contaminant Level as defined in Table 7 of "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Ground Water", Volume II, dated January 2, 1998.
3. A 2L Standard of "0.00" implies a standard has not yet been established. According to NCAC T15:02L, any compound found above laboratory detection limits is considered noncompliant unless otherwise specified by the NCDENR.

Well ID	Well Type	Date	Method	Parameter	Result	Units	2L GWQS	GCL
IR78-GW23	T-II	4/17/2006	602	Benzene	6.0000	UG/L	1.0000	5000.0000
IR78-RW10	RW	4/17/2006	602	Benzene	122.0000	UG/L	1.0000	5000.0000
UST900-MW02	T-II	4/17/2006	602	Benzene	26.0000	UG/L	1.0000	5000.0000
UST900-MW04	T-II	4/17/2006	602	Benzene	784.0000	UG/L	1.0000	5000.0000
UST900-MW04	T-II	4/17/2006	602	Ethylbenzene	614.0000	UG/L	550.0000	550000.0000
UST900-MW09	T-II	4/17/2006	602	Benzene	110.0000	UG/L	1.0000	5000.0000
UST900-MW10	T-II	4/17/2006	602	Benzene	2.0000	UG/L	1.0000	5000.0000

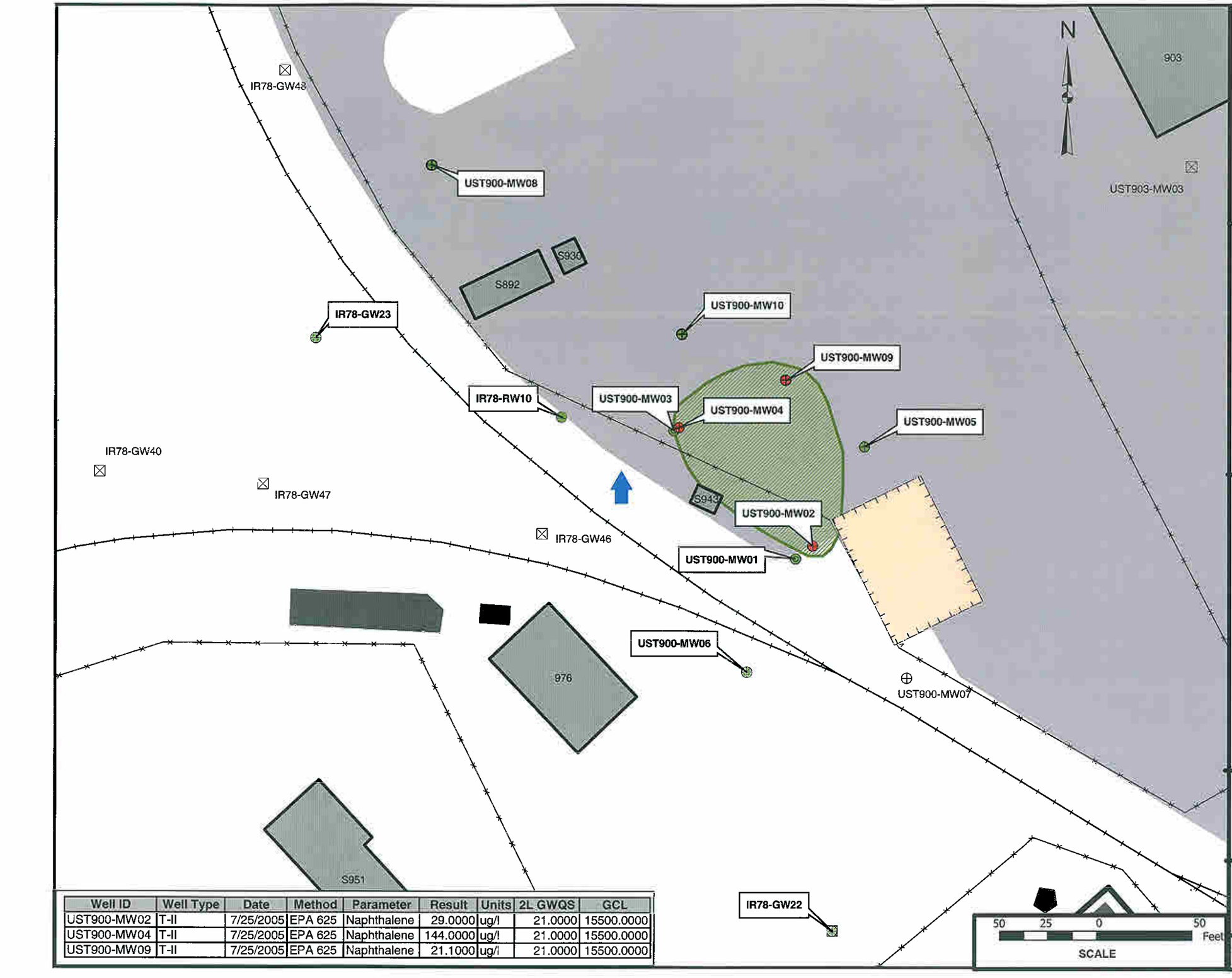
CATLIN ENGINEERS and SCIENTISTS

SITE 900
EPA METHOD 602 COLORIMETRY AND PLUME IN EXCESS OF 2L SECOND QUARTER 2006

FIGURE **10.3D**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM



LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Analytical Results
- 625 2L Non-Compliant
- 625 2L Compliant
- EPA 625 Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. 2L Standard refers to North Carolina Groundwater Quality Standard 15A NCAC 2L.0202.
2. GCL refers to Gross Contaminant Level as defined in Table 7 of "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Ground Water", Volume II, dated January 2, 1998.
3. A 2L Standard of "0.00" implies a standard has not yet been established. According to NCAC T15:02L, any compound found above laboratory detection limits is considered noncompliant unless otherwise specified by the NCDENR.

Well ID	Well Type	Date	Method	Parameter	Result	Units	2L GWQS	GCL
UST900-MW02	T-II	7/25/2005	EPA 625	Naphthalene	29.0000	ug/l	21.0000	15500.0000
UST900-MW04	T-II	7/25/2005	EPA 625	Naphthalene	144.0000	ug/l	21.0000	15500.0000
UST900-MW09	T-II	7/25/2005	EPA 625	Naphthalene	21.1000	ug/l	21.0000	15500.0000

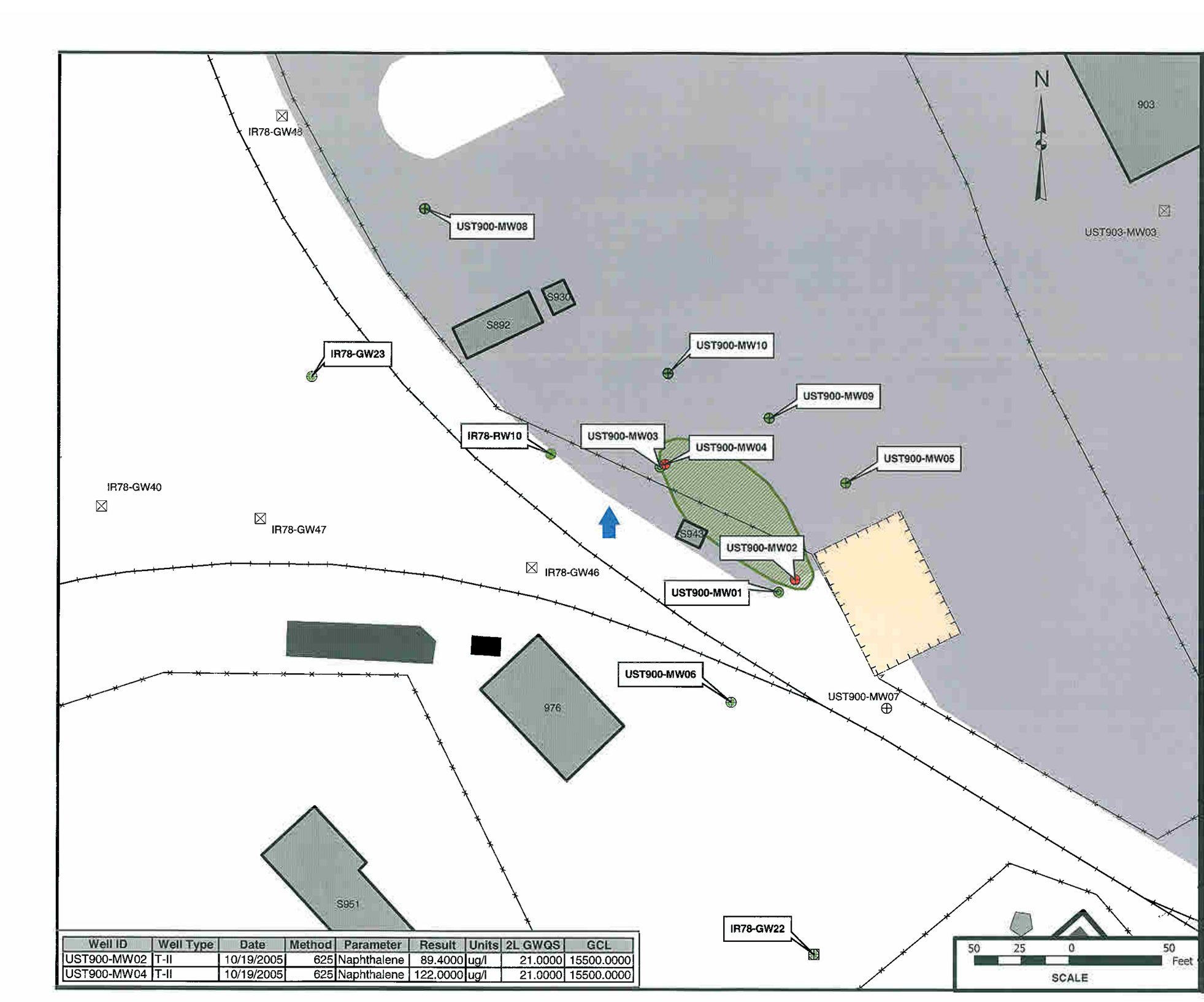
CATLIN ENGINEERS and SCIENTISTS

SITE 900
EPA METHOD 625 COLORIMETRY AND PLUME IN EXCESS OF 2L
THIRD QUARTER 2005

FIGURE **10.4A**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM



Well ID	Well Type	Date	Method	Parameter	Result	Units	2L GWQS	GCL
UST900-MW02	T-II	10/19/2005	625	Naphthalene	89.4000	ug/l	21.0000	15500.0000
UST900-MW04	T-II	10/19/2005	625	Naphthalene	122.0000	ug/l	21.0000	15500.0000

LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Analytical Results
- 625 2L Non-Compliant
- 625 2L Compliant
- EPA 602 Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. 2L Standard refers to North Carolina Groundwater Quality Standard 15A NCAC 2L.0202.
2. GCL refers to Gross Contaminant Level as defined in Table 7 of "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Ground Water", Volume II, dated January 2, 1998.
3. A 2L Standard of "0.00" implies a standard has not yet been established. According to NCAC T15:02L, any compound found above laboratory detection limits is considered noncompliant unless otherwise specified by the NCDENR.

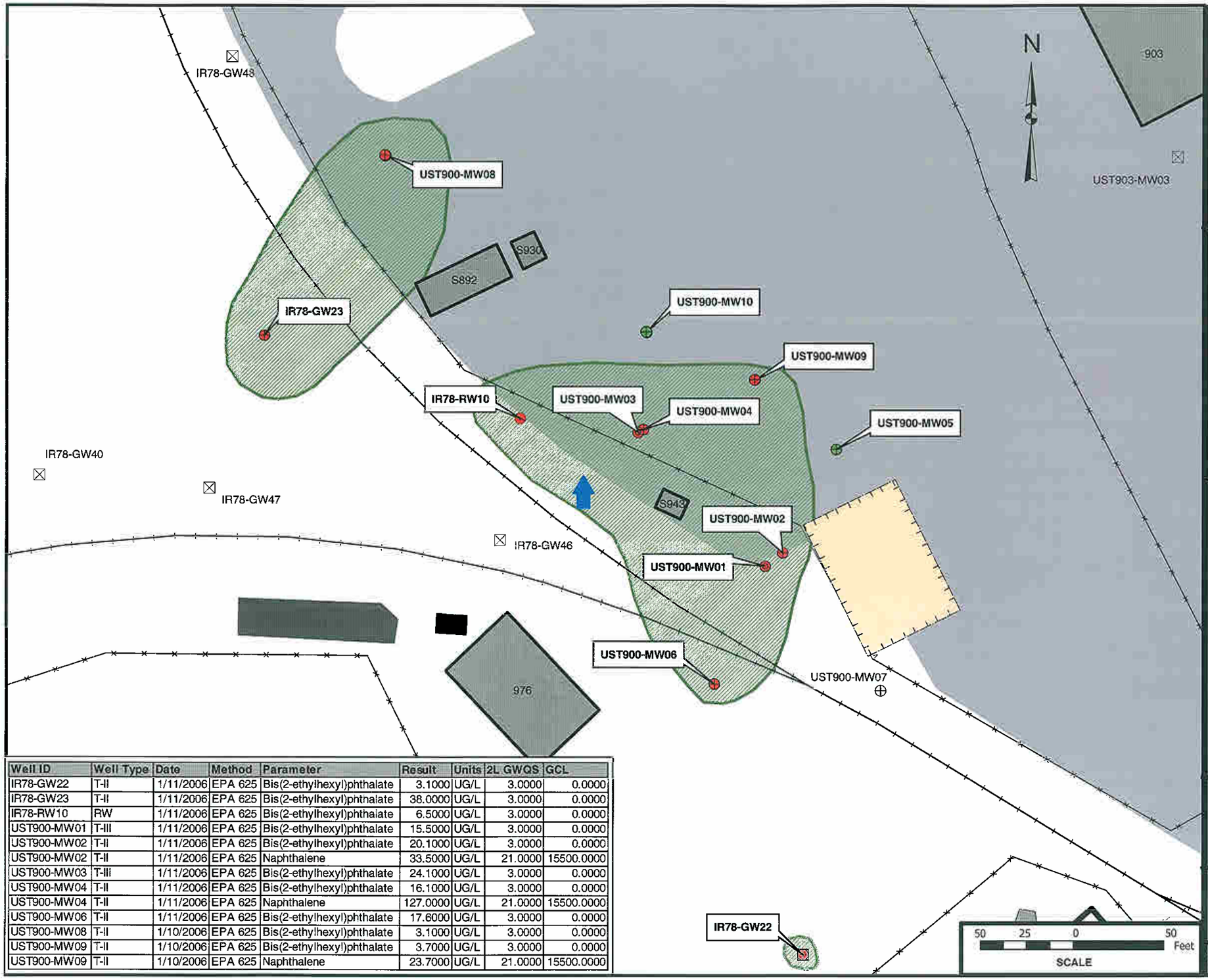
CATLIN ENGINEERS and SCIENTISTS

SITE 900
EPA METHOD 625 COLORIMETRY AND PLUME IN EXCESS OF 2L FOURTH QUARTER 2005

FIGURE **10.4B**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM



LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Analytical Results
- 625 2L Non-Compliant
- 625 2L Compliant
- EPA 625 Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. 2L Standard refers to North Carolina Groundwater Quality Standard 15A NCAC 2L.0202.
2. GCL refers to Gross Contaminant Level as defined in Table 7 of "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Ground Water", Volume II, dated January 2, 1998.
3. A 2L Standard of "0.00" implies a standard has not yet been established. According to NCAC T15:02L, any compound found above laboratory detection limits is considered noncompliant unless otherwise specified by the NCDENR.

Well ID	Well Type	Date	Method	Parameter	Result	Units	2L GWQS	GCL
IR78-GW22	T-II	1/11/2006	EPA 625	Bis(2-ethylhexyl)phthalate	3.1000	UG/L	3.0000	0.0000
IR78-GW23	T-II	1/11/2006	EPA 625	Bis(2-ethylhexyl)phtnalate	38.0000	UG/L	3.0000	0.0000
IR78-RW10	RW	1/11/2006	EPA 625	Bis(2-ethylhexyl)phthalate	6.5000	UG/L	3.0000	0.0000
UST900-MW01	T-III	1/11/2006	EPA 625	Bis(2-ethylhexyl)phthalate	15.5000	UG/L	3.0000	0.0000
UST900-MW02	T-II	1/11/2006	EPA 625	Bis(2-ethylhexyl)phthalate	20.1000	UG/L	3.0000	0.0000
UST900-MW02	T-II	1/11/2006	EPA 625	Naphthalene	33.5000	UG/L	21.0000	15500.0000
UST900-MW03	T-III	1/11/2006	EPA 625	Bis(2-ethylhexyl)phthalate	24.1000	UG/L	3.0000	0.0000
UST900-MW04	T-II	1/11/2006	EPA 625	Bis(2-ethylhexyl)phthalate	16.1000	UG/L	3.0000	0.0000
UST900-MW04	T-II	1/11/2006	EPA 625	Naphthalene	127.0000	UG/L	21.0000	15500.0000
UST900-MW06	T-II	1/11/2006	EPA 625	Bis(2-ethylhexyl)phthalate	17.6000	UG/L	3.0000	0.0000
UST900-MW08	T-II	1/10/2006	EPA 625	Bis(2-ethylhexyl)phthalate	3.1000	UG/L	3.0000	0.0000
UST900-MW09	T-II	1/10/2006	EPA 625	Bis(2-ethylhexyl)phthalate	3.7000	UG/L	3.0000	0.0000
UST900-MW09	T-II	1/10/2006	EPA 625	Naphthalene	23.7000	UG/L	21.0000	15500.0000

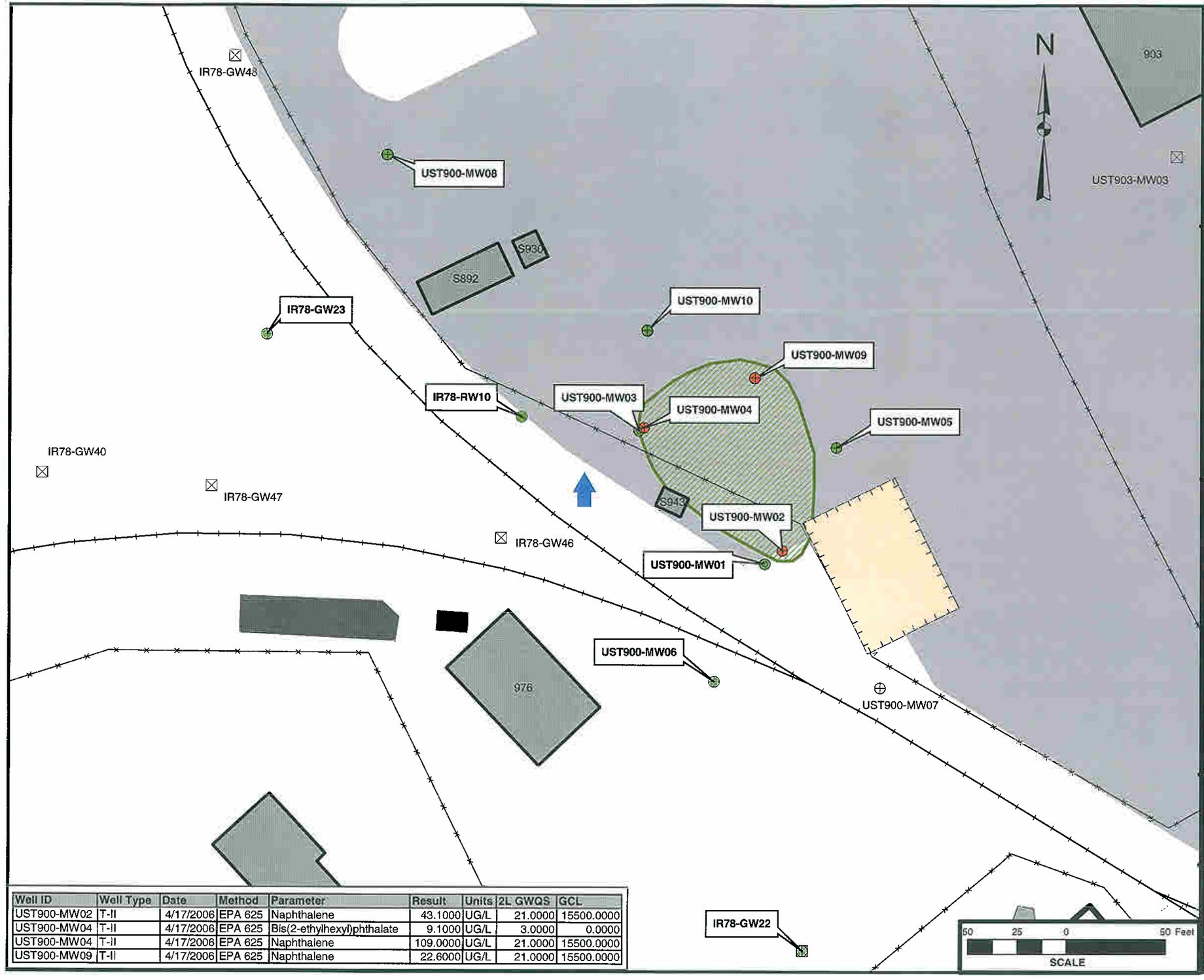
CATLIN ENGINEERS and SCIENTISTS

SITE 900
EPA METHOD 625 COLORIMETRY AND PLUME IN EXCESS OF 2L FIRST QUARTER 2006

FIGURE **10.4C**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM



LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Analytical Results
- 625 2L Non-Compliant
- 625 2L Compliant
- EPA 625 Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. 2L Standard refers to North Carolina Groundwater Quality Standard 15A NCAC 2L.0202.
2. GCL refers to Gross Contaminant Level as defined in Table 7 of "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Ground Water", Volume II, dated January 2, 1998.
3. A 2L Standard of "0.00" implies a standard has not yet been established. According to NCAC T15:02L, any compound found above laboratory detection limits is considered noncompliant unless otherwise specified by the NCDENR.

Well ID	Well Type	Date	Method	Parameter	Result	Units	2L GWQS	GCL
UST900-MW02	T-II	4/17/2006	EPA 625	Naphthalene	43.1000	UG/L	21.0000	15500.0000
UST900-MW04	T-II	4/17/2006	EPA 625	Bis(2-ethylhexyl)phthalate	9.1000	UG/L	3.0000	0.0000
UST900-MW04	T-II	4/17/2006	EPA 625	Naphthalene	109.0000	UG/L	21.0000	15500.0000
UST900-MW09	T-II	4/17/2006	EPA 625	Naphthalene	22.6000	UG/L	21.0000	15500.0000

CATLIN ENGINEERS and SCIENTISTS

SITE 900
EPA METHOD 625 COLORIMETRY AND PLUME IN EXCESS OF 2L SECOND QUARTER 2006

FIGURE **10.4D**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM



LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Analytical Results
- 6010B 2L Non-Compliant
- 6010B 2L Compliant
- EPA 6010B Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. No EPA Method 6010B Compounds were detected above the 2L GWQS for any wells sampled during this monitoring event.

CATLIN ENGINEERS and SCIENTISTS

SITE 900
EPA METHOD 6010B COLORIMETRY AND PLUME IN EXCESS OF 2L
THIRD QUARTER 2005

FIGURE **10.5A**

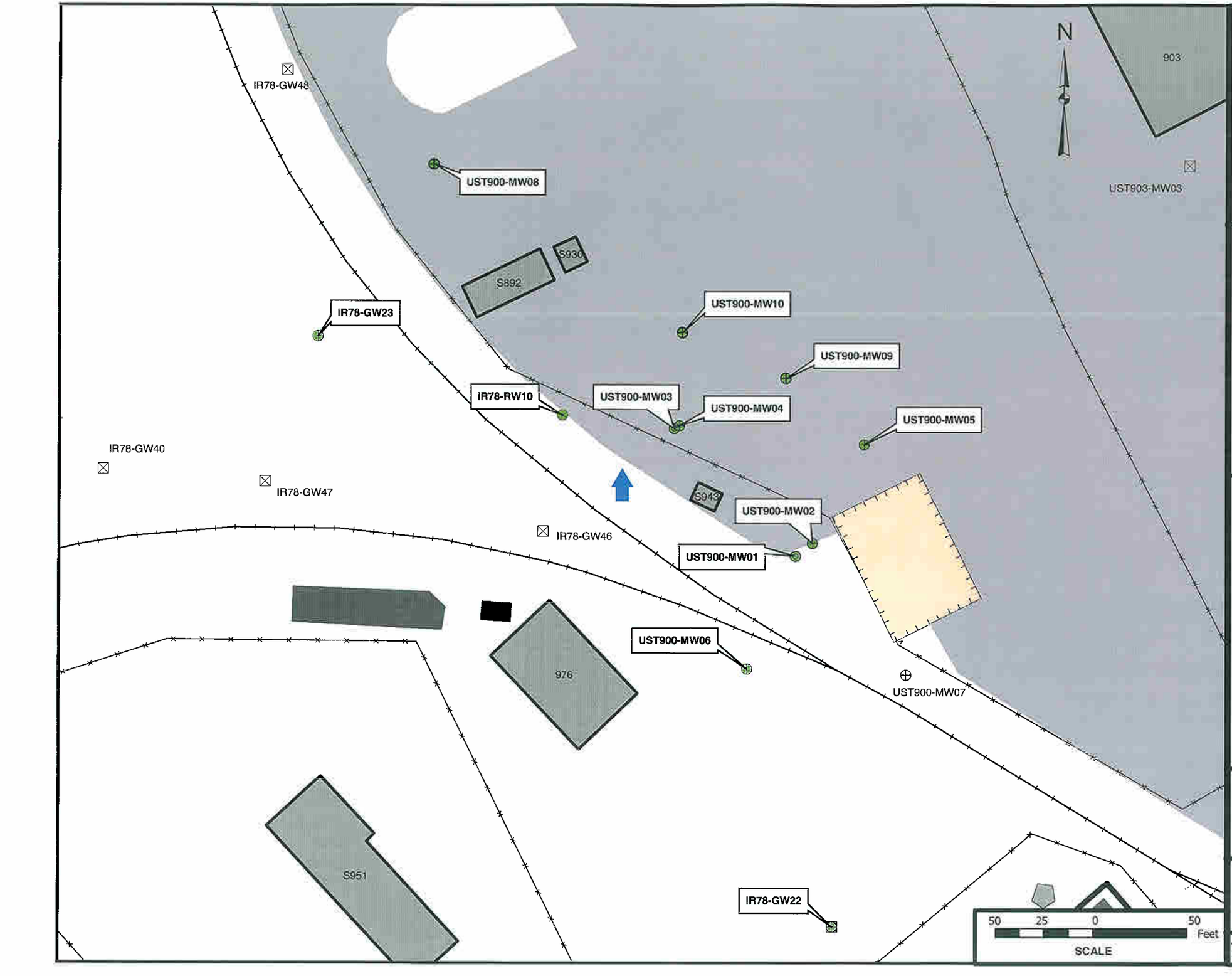
Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

N

50 25 0 50 Feet
SCALE

IR78-GW48
UST900-MW08
S930
S892
IR78-GW23
UST900-MW10
UST900-MW09
IR78-RW10
UST900-MW03
UST900-MW04
UST900-MW05
903
UST903-MW03
IR78-GW40
IR78-GW47
S943
UST900-MW02
IR78-GW46
UST900-MW01
UST900-MW06
976
UST900-MW07
S951
IR78-GW22

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM



LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Analytical Results
- 6010B 2L Non-Compliant
- 6010B 2L Compliant
- EPA 6010B Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. No EPA Method 6010B Compounds were detected above the 2L GWQS for any wells sampled during this monitoring event.

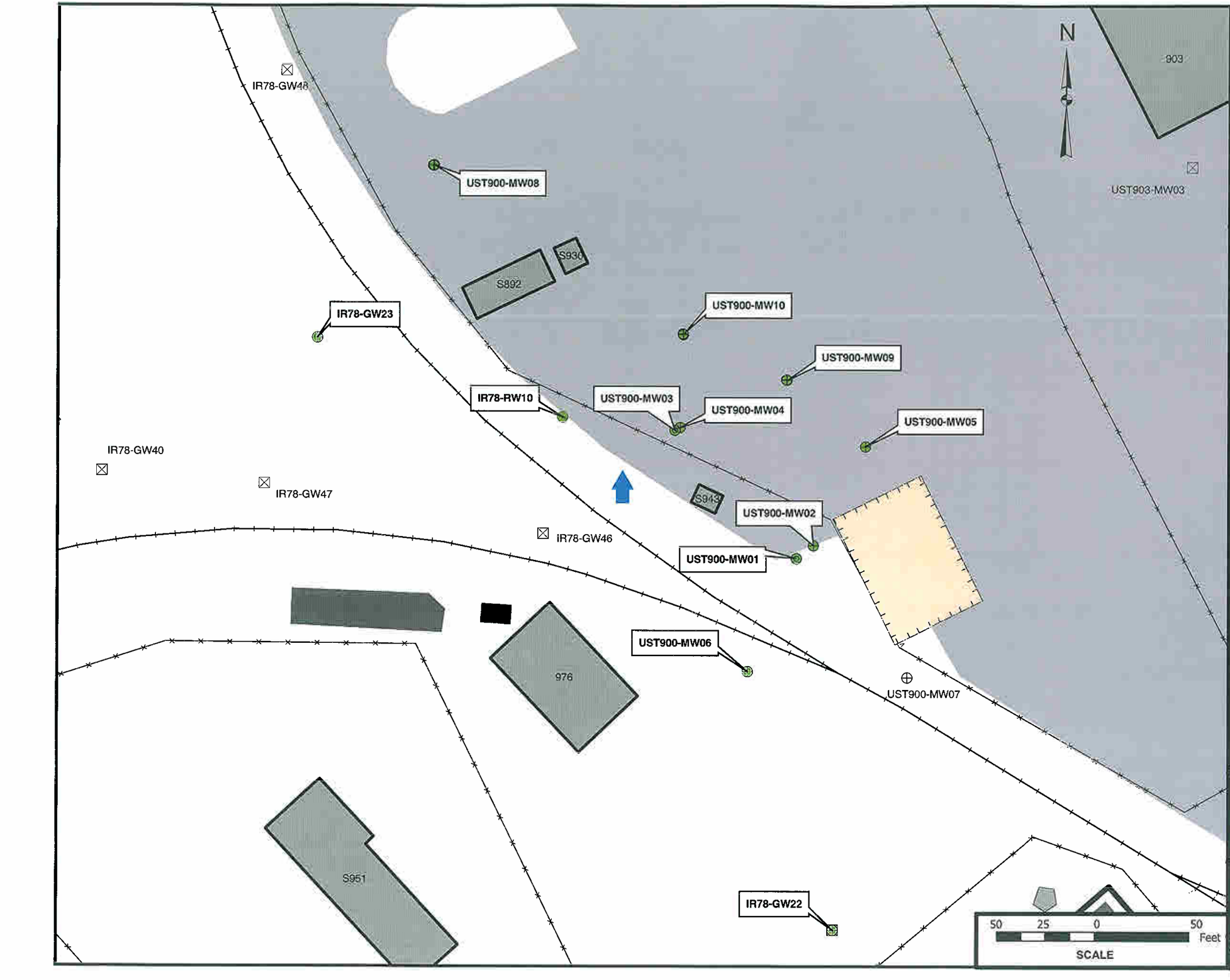
CATLIN ENGINEERS and SCIENTISTS

SITE 900
EPA METHOD 6010B COLORIMETRY AND PLUME IN EXCESS OF 2L FOURTH QUARTER 2005

FIGURE **10.5B**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM



LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Analytical Results
- 6020 2L Non-Compliant
- 6020 2L Compliant
- EPA 6020 Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. No EPA Method 6020 Compounds were detected above the 2L GWQS for any wells sampled during this monitoring event.

CATLIN ENGINEERS and SCIENTISTS

SITE 900
EPA METHOD 6020 COLORIMETRY AND PLUME IN EXCESS OF 2L FIRST QUARTER 2006

FIGURE **10.6A**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM



LEGEND

Monitoring Wells
- Type I
- Type Ii
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Analytical Results
- 6020 2L Non-Compliant
- 6020 2L Compliant
- EPA 6020 Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. No EPA Method 6020 Compounds were detected above the 2L GWQS for any wells sampled during this monitoring event.

CATLIN ENGINEERS and SCIENTISTS

SITE 900
EPA METHOD 6020 COLORIMETRY AND PLUME IN EXCESS OF 2L SECOND QUARTER 2006

FIGURE **10.6B**

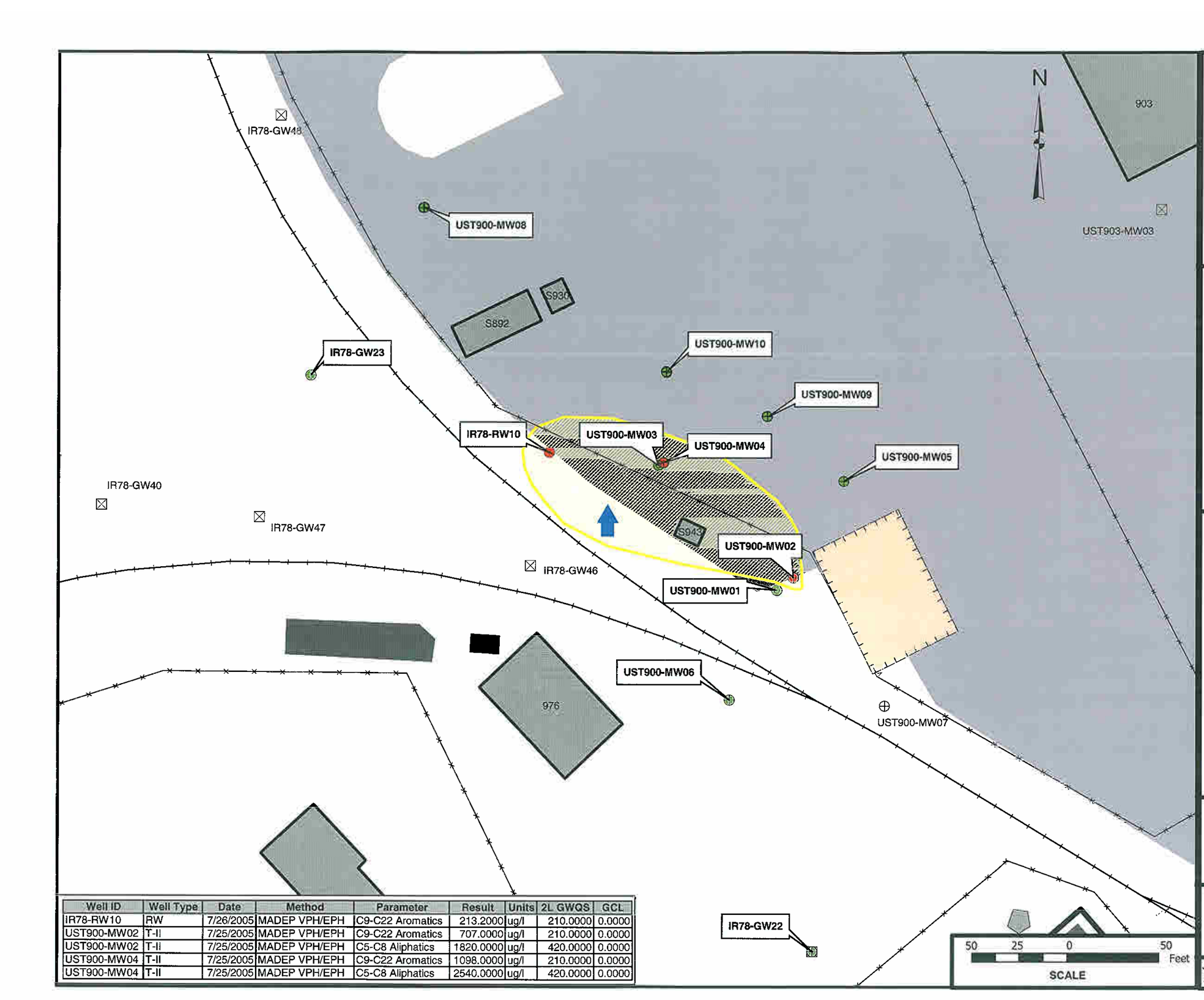
Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

N

50 25 0 50 Feet
SCALE

IR78-GW48
UST900-MW08
S930
S892
IR78-GW23
UST900-MW10
UST900-MW09
IR78-RW10
UST900-MW03
UST900-MW04
UST900-MW05
903
UST903-MW03
IR78-GW40
IR78-GW47
S943
UST900-MW02
IR78-GW46
UST900-MW01
UST900-MW06
976
UST900-MW07
S951
IR78-GW22

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM



LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Analytical Results
- MADEP 2L Non-Compliant
- MADEP 2L Compliant
- MADEP Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. 2L Standard refers to North Carolina Groundwater Quality Standard 15A NCAC 2L.0202.
2. GCL refers to Gross Contaminant Level as defined in Table 7 of "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Ground Water", Volume II, dated January 2, 1998.
3. A 2L Standard of "0.00" implies a standard has not yet been established. According to NCAC T15:02L, any compound found above laboratory detection limits is considered noncompliant unless otherwise specified by the NCDENR.

Well ID	Well Type	Date	Method	Parameter	Result	Units	2L GWQS	GCL
IR78-RW10	RW	7/26/2005	MADEP VPH/EPH	C9-C22 Aromatics	213.2000	ug/l	210.0000	0.0000
UST900-MW02	T-II	7/25/2005	MADEP VPH/EPH	C9-C22 Aromatics	707.0000	ug/l	210.0000	0.0000
UST900-MW02	T-II	7/25/2005	MADEP VPH/EPH	C5-C8 Aliphatics	1820.0000	ug/l	420.0000	0.0000
UST900-MW04	T-II	7/25/2005	MADEP VPH/EPH	C9-C22 Aromatics	1098.0000	ug/l	210.0000	0.0000
UST900-MW04	T-II	7/25/2005	MADEP VPH/EPH	C5-C8 Aliphatics	2540.0000	ug/l	420.0000	0.0000

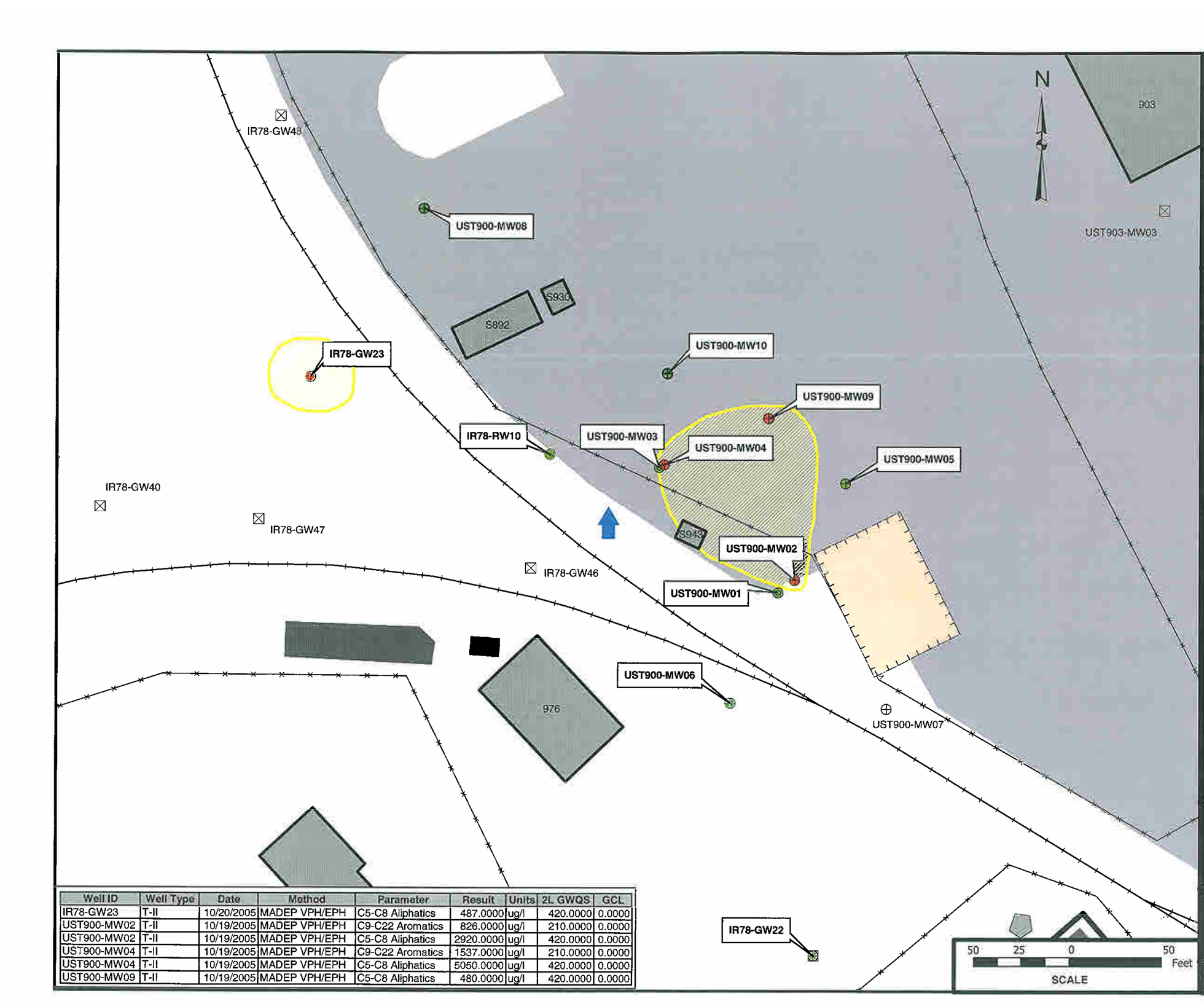
CATLIN ENGINEERS and SCIENTISTS

SITE 900
MADEP VPH/EPH COLORIMETRY AND PLUME IN EXCESS OF 2L
THIRD QUARTER 2005

FIGURE **10.7A**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM



LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Analytical Results
- MADEP 2L Non-Compliant
- MADEP 2L Compliant
- MADEP Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. 2L Standard refers to North Carolina Groundwater Quality Standard 15A NCAC 2L.0202.
2. GCL refers to Gross Contaminant Level as defined in Table 7 of "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Ground Water", Volume II, dated January 2, 1998.
3. A 2L Standard of "0.00" implies a standard has not yet been established. According to NCAC T15:02L, any compound found above laboratory detection limits is considered noncompliant unless otherwise specified by the NCDENR.

Well ID	Well Type	Date	Method	Parameter	Result	Units	2L GWQS	GCL
IR78-GW23	T-II	10/20/2005	MADEP VPH/EPH	C5-C8 Aliphatics	487.0000	ug/l	420.0000	0.0000
UST900-MW02	T-II	10/19/2005	MADEP VPH/EPH	C9-C22 Aromatics	826.0000	ug/l	210.0000	0.0000
UST900-MW02	T-II	10/19/2005	MADEP VPH/EPH	C5-C8 Aliphatics	2920.0000	ug/l	420.0000	0.0000
UST900-MW04	T-II	10/19/2005	MADEP VPH/EPH	C9-C22 Aromatics	1537.0000	ug/l	210.0000	0.0000
UST900-MW04	T-II	10/19/2005	MADEP VPH/EPH	C5-C8 Aliphatics	5050.0000	ug/l	420.0000	0.0000
UST900-MW09	T-II	10/19/2005	MADEP VPH/EPH	C5-C8 Aliphatics	480.0000	ug/l	420.0000	0.0000

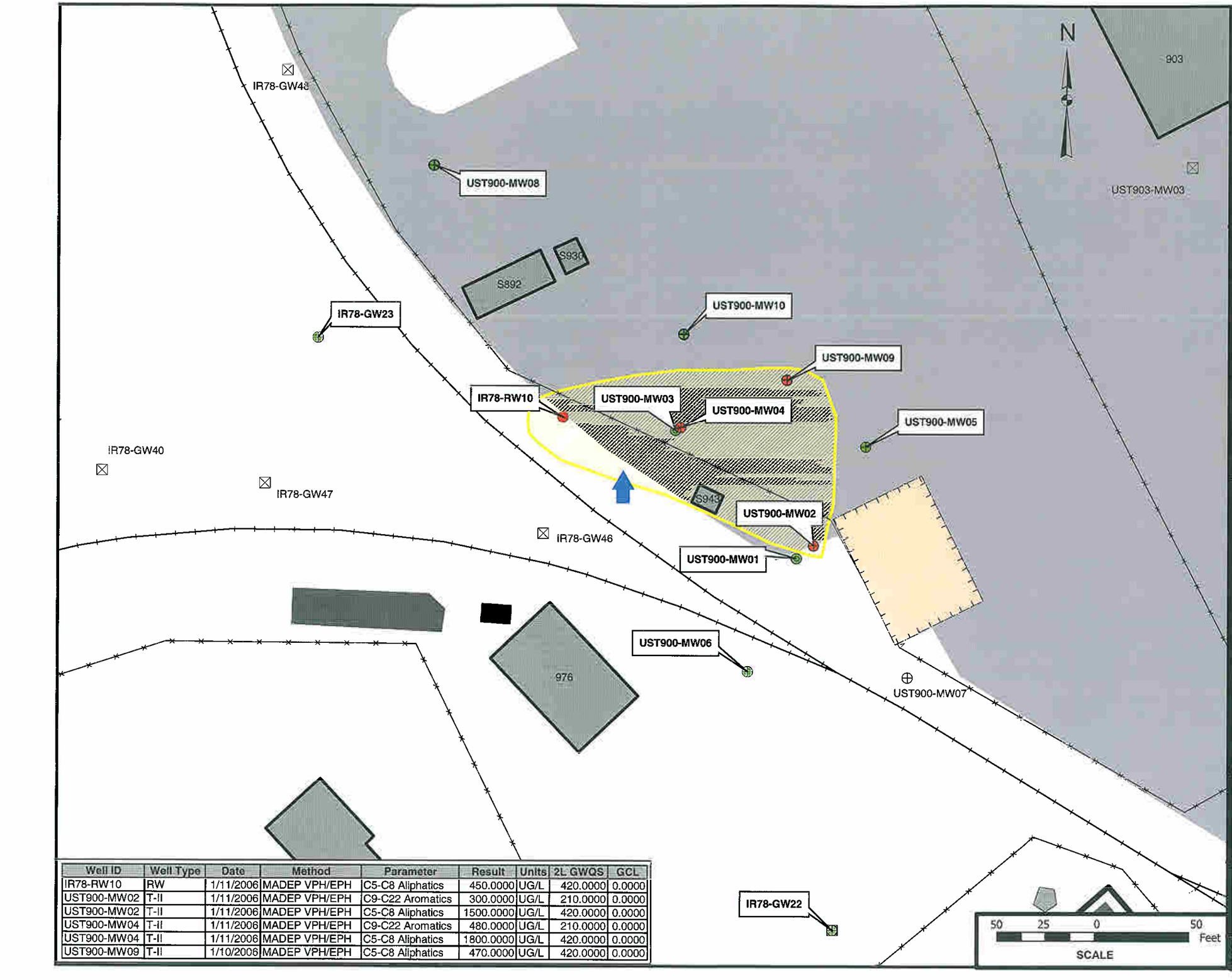
CATLIN ENGINEERS and SCIENTISTS

SITE 900
MADEP VPH/EPH COLORIMETRY AND PLUME IN EXCESS OF 2L FOURTH QUARTER 2005

FIGURE **10.7B**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM



LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Analytical Results
- MADEP 2L Non-Compliant
- MADEP 2L Compliant
- MADEP Plume

Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. 2L Standard refers to North Carolina Groundwater Quality Standard 15A NCAC 2L.0202.
2. GCL refers to Gross Contaminant Level as defined in Table 7 of "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Ground Water", Volume II, dated January 2, 1998.
3. A 2L Standard of "0.00" implies a standard has not yet been established. According to NCAC T15:02L, any compound found above laboratory detection limits is considered noncompliant unless otherwise specified by the NCDENR.

Well ID	Well Type	Date	Method	Parameter	Result	Units	2L GWQS	GCL
IR78-RW10	RW	1/11/2006	MADEP VPH/EPH	C5-C8 Aliphatics	450.0000	UG/L	420.0000	0.0000
UST900-MW02	T-II	1/11/2006	MADEP VPH/EPH	C9-C22 Aromatics	300.0000	UG/L	210.0000	0.0000
UST900-MW02	T-II	1/11/2006	MADEP VPH/EPH	C5-C8 Aliphatics	1500.0000	UG/L	420.0000	0.0000
UST900-MW04	T-II	1/11/2006	MADEP VPH/EPH	C9-C22 Aromatics	480.0000	UG/L	210.0000	0.0000
UST900-MW04	T-II	1/11/2006	MADEP VPH/EPH	C5-C8 Aliphatics	1800.0000	UG/L	420.0000	0.0000
UST900-MW09	T-II	1/10/2006	MADEP VPH/EPH	C5-C8 Aliphatics	470.0000	UG/L	420.0000	0.0000

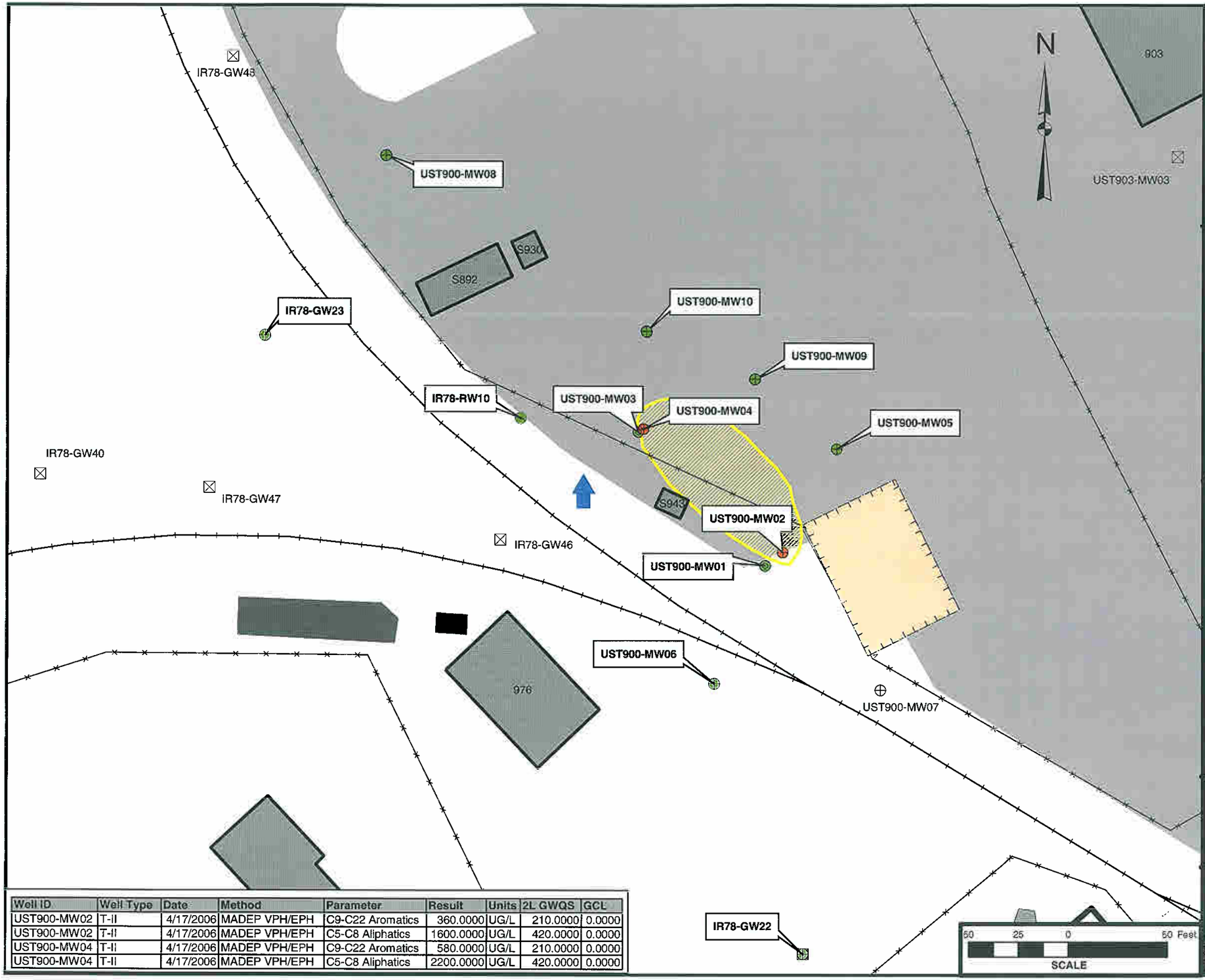
CATLIN ENGINEERS and SCIENTISTS

SITE 900
MADEP VPH/EPH COLORIMETRY AND PLUME IN EXCESS OF 2L FIRST QUARTER 2006

FIGURE **10.7C**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM



LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Analytical Results
- MADEP 2L Non-Compliant
- MADEP 2L Compliant
- MADEP Plume

- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. 2L Standard refers to North Carolina Groundwater Quality Standard 15A NCAC 2L.0202.
2. GCL refers to Gross Contaminant Level as defined in Table 7 of "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Ground Water", Volume II, dated January 2, 1998.
3. A 2L Standard of "0.00" implies a standard has not yet been established. According to NCAC T15:02L, any compound found above laboratory detection limits is considered noncompliant unless otherwise specified by the NCDENR.

Well ID	Well Type	Date	Method	Parameter	Result	Units	2L GWQS	GCL
UST900-MW02	T-II	4/17/2006	MADEP VPH/EPH	C9-C22 Aromatics	360.0000	UG/L	210.0000	0.0000
UST900-MW02	T-II	4/17/2006	MADEP VPH/EPH	C5-C8 Aliphatics	1600.0000	UG/L	420.0000	0.0000
UST900-MW04	T-II	4/17/2006	MADEP VPH/EPH	C9-C22 Aromatics	580.0000	UG/L	210.0000	0.0000
UST900-MW04	T-II	4/17/2006	MADEP VPH/EPH	C5-C8 Aliphatics	2200.0000	UG/L	420.0000	0.0000

CATLIN ENGINEERS and SCIENTISTS

SITE 900
MADEP VPH/EPH COLORIMETRY AND PLUME IN EXCESS OF 2L SECOND QUARTER 2006

FIGURE **10.7D**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

SECTION 11.0

OF THE

ANNUAL MANAGEMENT REPORT
MCB CAMP LEJEUNE UST MANAGEMENT PROGRAM

MONITORING EVENT:

SECOND SEMESTER 2005/FIRST SEMESTER 2006
(JULY 2005 THROUGH JUNE 2006)

SITE-SPECIFIC MONITORING REPORT
FOR

SITE BB-190

NCDENR INCIDENT NO. 22793



11.0 EXECUTIVE SUMMARY
SITE BB-190

11.1 Site Information

11.1.1 Site Location: MCB Camp Lejeune, Courthouse Bay
11.1.2 Incident Number(s): 22793
11.1.3 UTM Coordinates (WGS84) (Meters): 283234.85 Easting, 3829175.10 Northing
11.1.4 Risk Classification: High
11.1.5 Land Use Classification: Residential
11.1.6 Source Type(s): Former 500-gallon diesel UST

11.2 Monitoring Event Information

11.2.1 Sampling Performed By: Sovereign
11.2.2 Date(s) of This Monitoring Event: May 2006
11.2.3 Date(s) of Previous Monitoring Event: July 2005
11.2.4 Reason(s) for This Monitoring Event: Track migration and attenuation of dissolved-phase plume.
11.2.5 Site Monitoring Status at Time of This Event: Annual sampling and reporting

11.3 Groundwater Hydraulics

11.3.1 Hydraulic Conductivity: 17.3 feet/day
11.3.2 Effective Porosity: 0.25
11.3.3 Hydraulic Gradient: 0.0062 to 0.017
11.3.4 Average Linear Groundwater Flow Velocity: 0.16 feet/day
11.3.5 Groundwater Flow Direction(s): west-southwest
11.3.6 Range of Measured Water Table Elevations: Information not available at the time of this report.
11.3.7 Significant Changes from Previously Reported Data: Not Applicable. This is the first Management Report prepared by CATLIN.

11.4 Free Product Plume

11.4.1 Free Product Present?: No
11.4.2 Free Product Thickness Measured: None
11.4.3 Plume Size and Location: None
11.4.4 Free Product Removed from Site This Period: None
11.4.5 Significant Changes from Previously Reported Data: Not Applicable. This is the first Management Report prepared by CATLIN.

11.5 Dissolved-Phase Plume

11.5.1 Plume Concentrations: Information not available at the time of this report.
11.5.2 Plume Size and Location: Information not available at the time of this report.
11.5.3 Significant Changes from Previously Reported Data: Not Applicable. This is the first Management Report prepared by CATLIN.

11.6 Potential Receptors

11.6.1 Contaminated Water Supply Well(s)?: None
11.6.2 Potable Water Supply Well Within 1,000 Feet of Source Area?: Yes, PSW-BB47
11.6.3 Any Water Supply Well Within 250 Feet of Source Area?: Yes, PSW-BB47
11.6.4 Surface Water Body Within 500 Feet?: No
11.6.5 Past Evidence of Vapors?: No
11.6.6 Significant Changes from Previously Reported Data?: Not Applicable. This is the first Management Report prepared by CATLIN.

11.7 Remediation

11.7.1 Status: Shutdown
11.7.2 Type: SVE and biosparge
11.7.3 Progress: Complete
11.7.4 Construction Contractor: J.A. Jones
11.7.5 Operating Contractor: Sovereign

11.8 Observations and Comments

May 2006 sampling data not available at time of report preparation. Sovereign is currently working on the annual monitoring report which will include the May 2006 sampling results.

SECTION 12.0

OF THE

ANNUAL MANAGEMENT REPORT
MCB CAMP LEJEUNE UST MANAGEMENT PROGRAM

MONITORING EVENT:

SECOND SEMESTER 2005/FIRST SEMESTER 2006
(JULY 2005 THROUGH JUNE 2006)

SITE-SPECIFIC MONITORING REPORT
FOR

SITE BB-293

NCDENR INCIDENT NO. 32049



12.0 EXECUTIVE SUMMARY
SITE BB-293

12.1 Site Information

12.1.1 Site Location: MCB Camp Lejeune
12.1.2 Incident Number(s): 32049
12.1.3 UTM Coordinates (WGS84) (Meters): 283347.81 Easting, 3828853.69 Northing
12.1.4 Risk Classification: High
12.1.5 Land Use Classification: Industrial/Commercial
12.1.6 Source Type(s): Waste Oil

12.2 Monitoring Event Information

12.2.1 Sampling Performed By: EEI
12.2.2 Date(s) of This Monitoring Event: 10/18/2005
12.2.3 Date(s) of Previous Monitoring Event: June, September, and December 2004 and March 2005
12.2.4 Reason(s) for This Monitoring Event: Track migration and attenuation of dissolved-phase plume
12.2.5 Site Monitoring Status at Time of This Event: Annual sampling of six wells in October 2005

12.3 Groundwater Hydraulics

12.3.1 Hydraulic Conductivity: 29.3 ft/day
12.3.2 Effective Porosity: 0.20
12.3.3 Hydraulic Gradient: 0.0020 to 0.023
12.3.4 Average Linear Groundwater Flow Velocity: 0.29 to 3.4 ft/day
12.3.5 Groundwater Flow Direction(s): Generally northeast
12.3.6 Range of Measured Water Table Elevations: See Table 12.1A
12.3.7 Significant Changes from Previously Reported Data: Not Applicable. This is the first Management Report prepared by CATLIN.

12.4 Free Product Plume

12.4.1 Free Product Present?: No
12.4.2 Free Product Thickness Measured: None, see Table 12.1A
12.4.3 Plume Size and Location: None, see Figure 12.1A
12.4.4 Free Product Removed from Site This Period: None
12.4.5 Significant Changes from Previously Reported Data: Not Applicable. This is the first Management Report prepared by CATLIN.

12.5 Dissolved-Phase Plume

12.5.1 Plume Concentrations: See Tables 12.2A through 12.5B
12.5.2 Plume Size and Location: See Figures 12.2A through 12.5A
12.5.3 Significant Changes from Previously Reported Data: Not Applicable. This is the first Management Report prepared by CATLIN. Groundwater sample analytical results compared to the 2L GWQS are discussed as follows:

EPA METHOD 6210D

The groundwater sample collected from USTBB293-MW04 revealed 4-Isopropyltoluene concentrations above the 2L GWQS. All other EPA Method 6210D compounds were either detected at concentrations below the 2L GWQS or below the laboratory quantitation limits.

EPA METHOD 625

No EPA Method 625 compounds were detected above the corresponding 2L GWQS.

EPA METHOD 6020

No EPA Method 6020 compounds were detected above the corresponding 2L GWQS.

MADEP VPH/EPH

No MADEP VPH/EPH compounds were detected above the corresponding 2L GWQS.

12.6 Potential Receptors

12.6.1 Contaminated Water Supply Well(s)?: None
12.6.2 Potable Water Supply Well Within 1,000 Feet of Source Area?: No
12.6.3 Any Water Supply Well Within 250 Feet of Source Area?: Yes, on-site approximately 120 feet from former UST basin.
12.6.4 Surface Water Body Within 500 Feet?: No
12.6.5 Past Evidence of Vapors?: No
12.6.6 Significant Changes from Previously Reported Data?: Not Applicable. This is the first Management Report prepared by CATLIN.

12.7 Remediation

12.7.1 Status: On-going
12.7.2 Type: Natural Attenuation
12.7.3 Progress: On-going
12.7.4 Construction Contractor: Not Applicable
12.7.5 Operating Contractor: Sovereign (Sampling Contractor)

12.8 Observations and Comments

The High Risk classification will remain for this site as long as the on-site supply well remains in use. Therefore, continued annual monitoring is recommended per the previous analytical methods. CATLIN recommends the samples collected per EPA Method 6020 be obtained using a modified low-flow sampling procedure as to help eliminate false-positives due to turbidity. Monitoring well USTBB293-MW05 was not sampled in October 2005 due to sediment build up in the well, according to EEI this well has since been abandoned and replaced. This replacement well should be included in the next annual sampling event (October 2006). CATLIN further recommends, if no compounds are detected in excess of the 2L GWQS in October 2006 evaluate the site for closure.

Monitoring data for the second quarter 2006 is not included in this report as the data was not available at the time of report preparation.

TABLE 12.1A
SITE BB-293
FIELD MEASUREMENTS - FOURTH QUARTER 2005

Date Measured: 10/18/2005

Well No.	Type	TOC	Stick up	DTW	Product Thickness	DTW BGS	GW Elevation
USTBB293-MW01	T-III	9.52		3.90	0.00		5.62
USTBB293-MW02	T-II	8.87		2.05	0.00		6.82
USTBB293-MW03	T-II	9.44		2.93	0.00		6.51
USTBB293-MW04	T-II	9.28		2.43	0.00		6.85
USTBB293-MW06	T-II	9.53		2.89	0.00		6.64

Notes:
1. TII = Type II monitoring well
   TIII = Type III monitoring well
   RW = Recovery well
2. TOC = Top of well casing elevation.
3. STICK UP = Height of well casing above land surface in feet.
4. DTW = Depth to water (in feet) from top of well casing.
5. Product thickness is measured in feet.
6. DTW BGS = Depth to water below ground surface in feet.
7. GW Elevation = Ground water elevation (not adjusted for free product)
8. A zero ("0.00") in the product thickness column indicates no measureable thickness.
9. Top of casing elevations are measured in feet relative to Mean Sea Level (NAD83).
10. Stick up values were not available for wells with no values in the STICK UP and DTW BGS columns.

TABLE 12.2A

SITE BB-293

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 6210D

Contaminant of Concern →		1,2,4-Trimethylbenzene	4-Isopropyltoluene	Chloroform	Toluene	Xylenes (total)
Well ID	**Date**					
2L GWQS		350	0	70	1000	530
GCL		28500	0	70000	257500	87500
USTBB293-MW01	10/18/2005	0.25	BQL	BQL	0.42	0.76
USTBB293-MW02	10/18/2005	BQL	BQL	BQL	0.31	0.40
USTBB293-MW03	10/18/2005	BQL	BQL	3.65	0.23	BQL
USTBB293-MW04	10/18/2005	BQL	0.23	BQL	0.24	BQL
USTBB293-MW06	10/18/2005	BQL	BQL	0.20	0.21	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 12.2B

SITE BB-293

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINING JULY 2005

EPA METHOD 6210D

Contaminant of Concern →		1,2,4-Trimethylbenzene	4-Isopropyltoluene	Chloroform	Toluene	Xylenes (total)
Well ID	**Date**					
2L GWQS		350	0	70	1000	530
GCL		28500	0	70000	257500	87500
USTBB293-MW01	10/18/2005	0.25	BQL	BQL	0.42	0.76
USTBB293-MW02	10/18/2005	BQL	BQL	BQL	0.31	0.40
USTBB293-MW03	10/18/2005	BQL	BQL	3.65	0.23	BQL
USTBB293-MW04	10/18/2005	BQL	0.23	BQL	0.24	BQL
USTBB293-MW06	10/18/2005	BQL	BQL	0.20	0.21	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 12.3A

SITE BB-293

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 625

Contaminant of Concern →		
Well ID	**Date**	
2L GWQS		
GCL		
USTBB293-MW01	10/18/2005	
USTBB293-MW02	10/18/2005	
USTBB293-MW03	10/18/2005	
USTBB293-MW04	10/18/2005	
USTBB293-MW06	10/18/2005	

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 12.3B

SITE BB-293

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINING JULY 2005

EPA METHOD 625

Contaminant of Concern →		
Well ID	**Date**	
2L GWQS		
GCL		
USTBB293-MW01	10/18/2005	
USTBB293-MW02	10/18/2005	
USTBB293-MW03	10/18/2005	
USTBB293-MW04	10/18/2005	
USTBB293-MW06	10/18/2005	

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 12.4A

SITE BB-293

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 6020

Contaminant of Concern →		
Well ID	**Date**	
	2L GWQS	
	GCL	
USTBB293-MW01	10/18/2005	
USTBB293-MW02	10/18/2005	
USTBB293-MW03	10/18/2005	
USTBB293-MW04	10/18/2005	
USTBB293-MW06	10/18/2005	

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 12.4B

SITE BB-293

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 6020

Contaminant of Concern →		
Well ID	**Date**	
2L GWQS		
GCL		
USTBB293-MW01	10/18/2005	
USTBB293-MW02	10/18/2005	
USTBB293-MW03	10/18/2005	
USTBB293-MW04	10/18/2005	
USTBB293-MW06	10/18/2005	

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 12.5A

SITE BB-293

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

MADEP VPH/EPH

Contaminant of Concern →		
Well ID	**Date**	
	2L GWQS	
	GCL	
USTBB293-MW01	10/18/2005	
USTBB293-MW02	10/18/2005	
USTBB293-MW03	10/18/2005	
USTBB293-MW04	10/18/2005	
USTBB293-MW06	10/18/2005	

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 12.5B

SITE BB-293

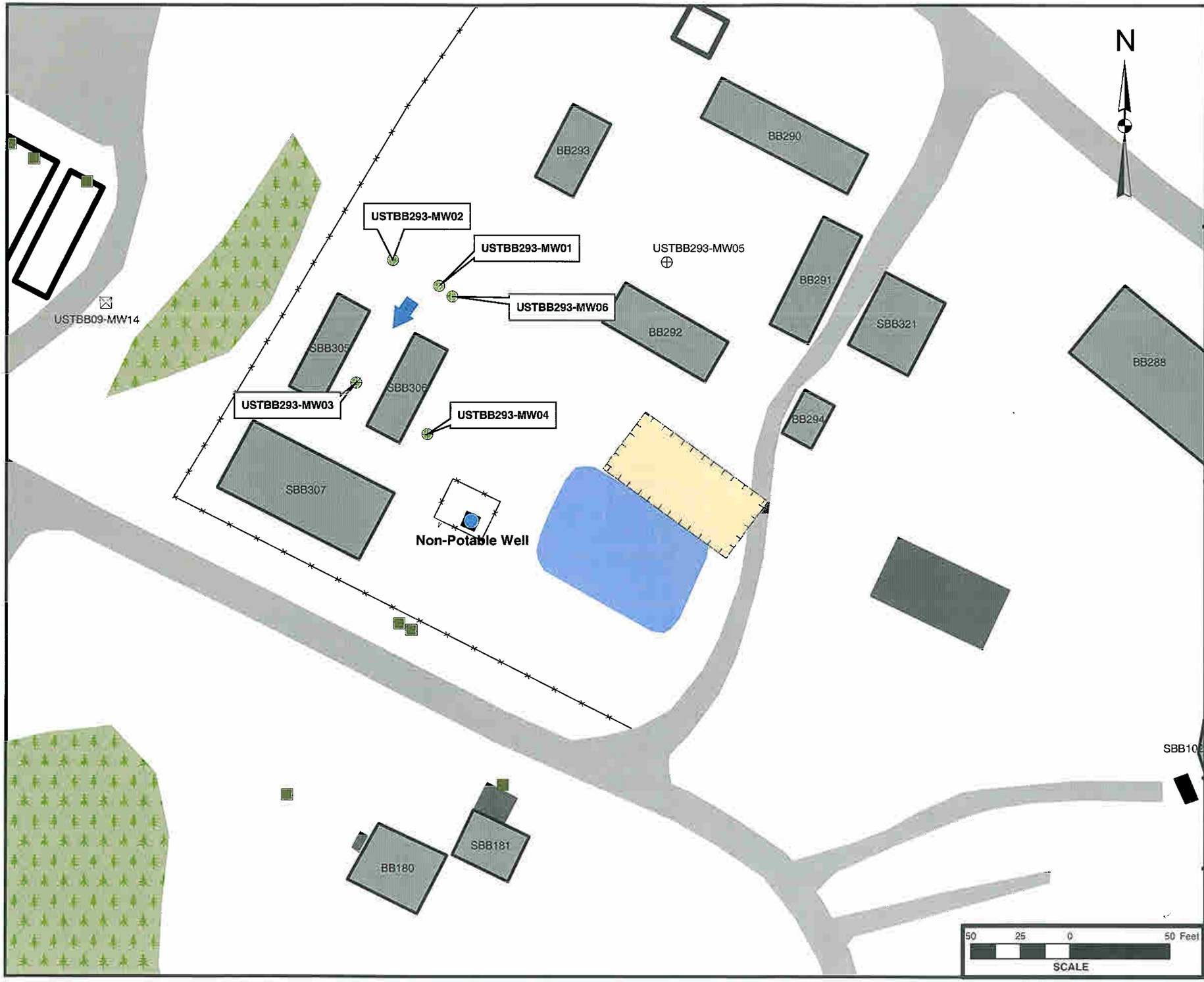
HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

MADEP VPH/EPH

Contaminant of Concern →		
Well ID	**Date**	
	2L GWQS	
	GCL	
USTBB293-MW01	10/18/2005	
USTBB293-MW02	10/18/2005	
USTBB293-MW03	10/18/2005	
USTBB293-MW04	10/18/2005	
USTBB293-MW06	10/18/2005	

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM



LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Free Product
- Free Product Detected
- No Measurable Thickness
- Free Product Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. Free Product was not detected at this site in any of the wells gauged during this monitoring event.

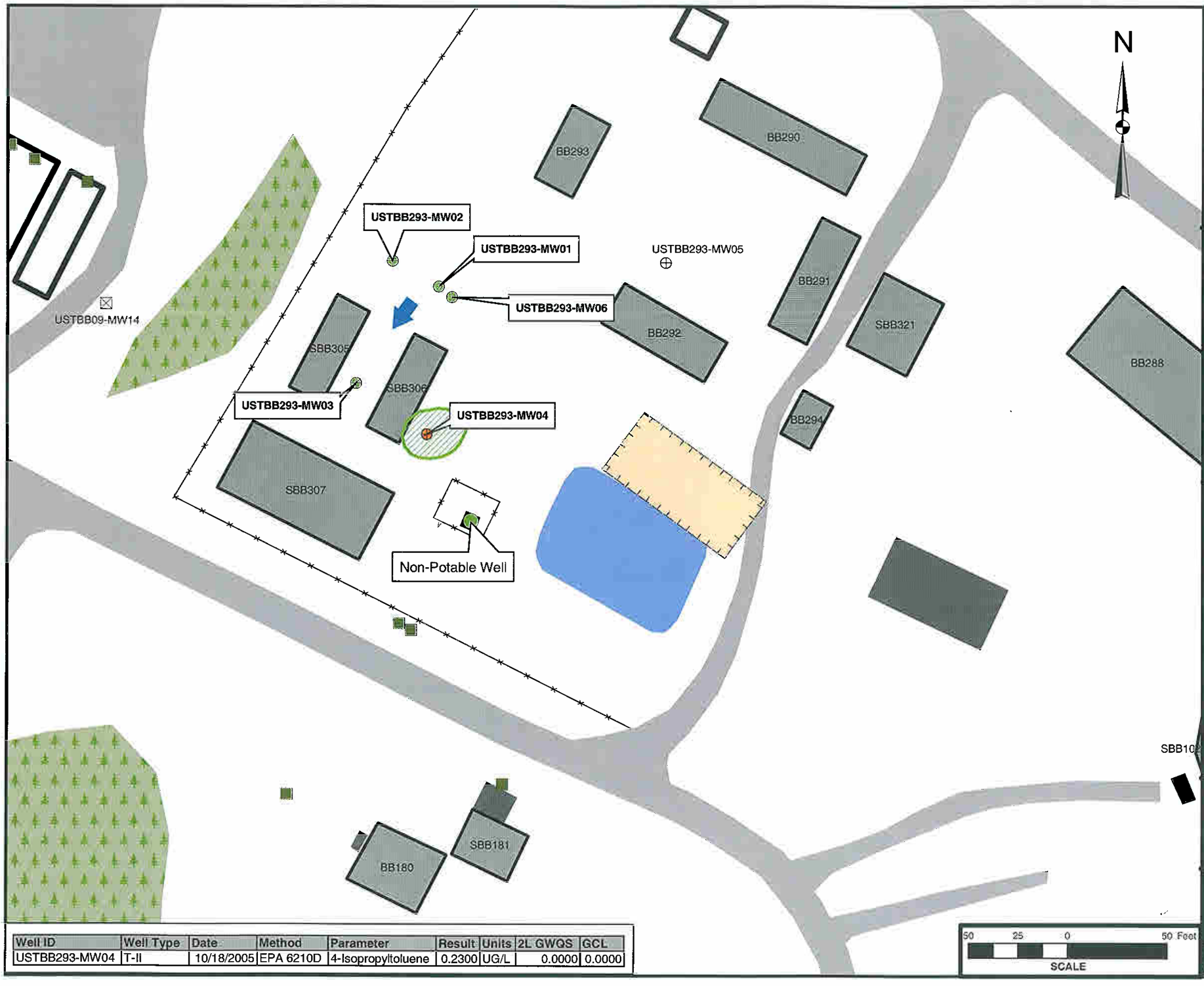
CATLIN ENGINEERS and SCIENTISTS

SITE BB-293
FREE PRODUCT PLUME MAP
FOURTH QUARTER 2005

FIGURE **12.1A**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM



LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Analytical Results
- 2L Non-Compliant
- 2L Compliant
- EPA 6210D Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. 2L Standard refers to North Carolina Groundwater Quality Standard 15A NCAC 2L.0202.
2. GCL refers to Gross Contaminant Level as defined in Table 7 of "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Ground Water", Volume II, dated January 2, 1998.
3. A 2L Standard of "0.00" implies a standard has not yet been established. According to NCAC T15:02L, any compound found above laboratory detection limits is considered noncompliant unless otherwise specified by the NCDENR.

Well ID	Well Type	Date	Method	Parameter	Result	Units	2L GWQS	GCL
USTBB293-MW04	T-II	10/18/2005	EPA 6210D	4-Isopropyltoluene	0.2300	UG/L	0.0000	0.0000

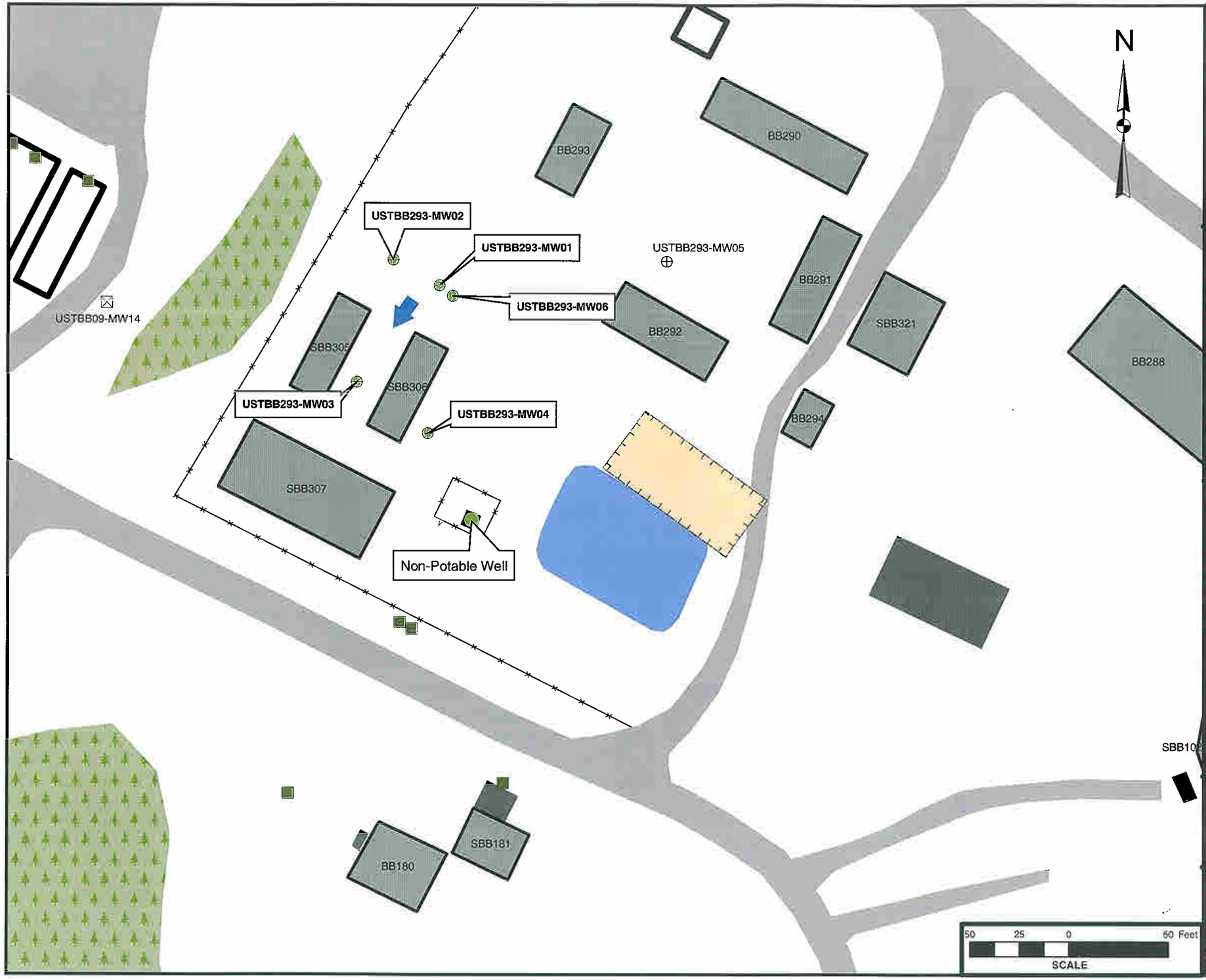
50 25 0 50 Feet
SCALE

CATLIN ENGINEERS and SCIENTISTS

SITE BB-293
EPA METHOD 6210D COLORIMETRY AND PLUME IN EXCESS OF 2L FOURTH QUARTER 2005

FIGURE **12.2A**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM



MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM

LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Analytical Results
- 2L Non-Compliant
- 2L Compliant
- EPA 625 Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

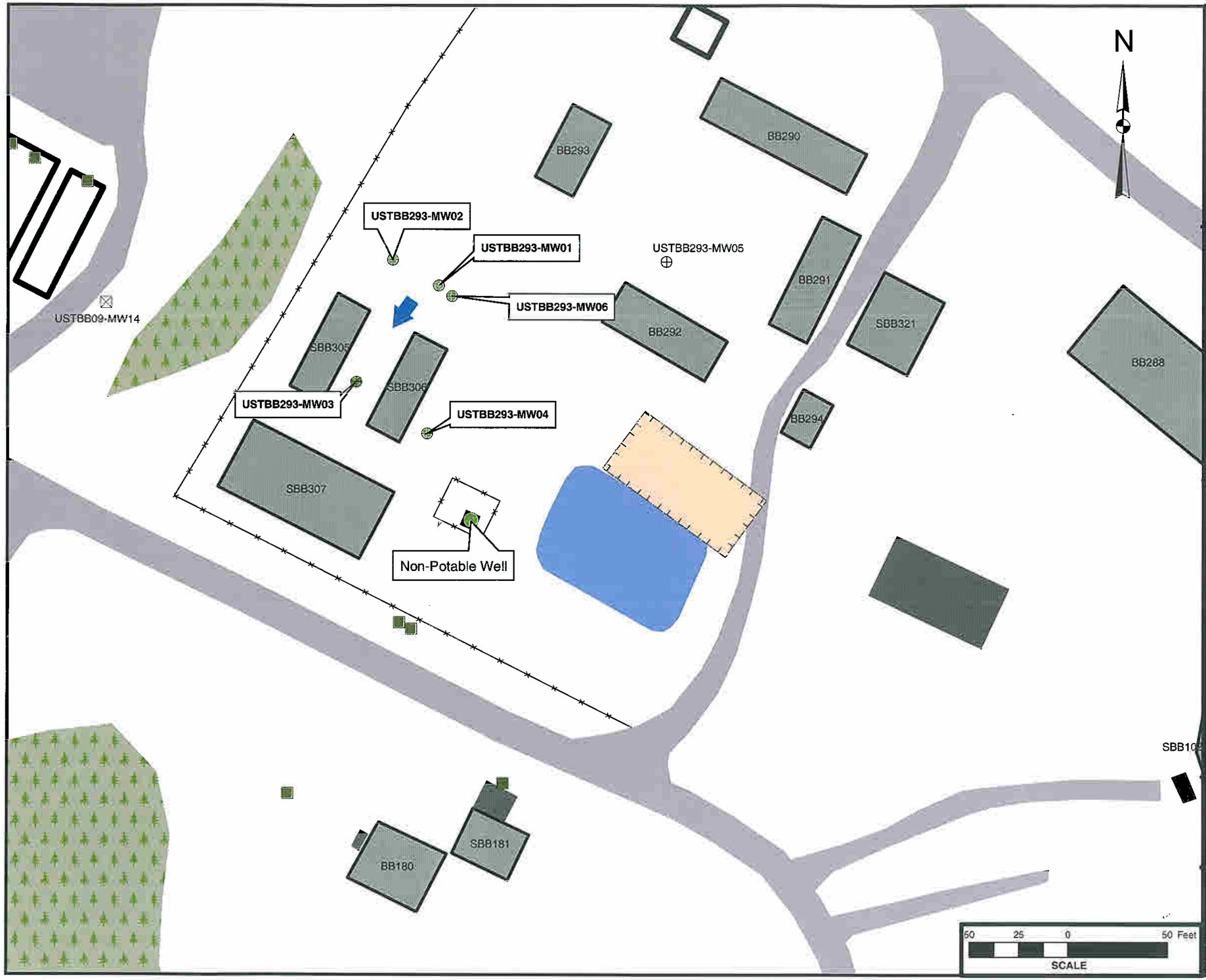
1. No EPA Method 625 Compounds were detected above the 2L GWQS for any wells sampled during this monitoring event.

CATLIN ENGINEERS and SCIENTISTS

SITE BB-293
EPA METHOD 625 COLORIMETRY AND PLUME IN EXCESS OF 2L FOURTH QUARTER 2005

FIGURE 12.3A

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM



MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM

LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Analytical Results
- 2L Non-Compliant
- 2L Compliant
- EPA 6020 Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

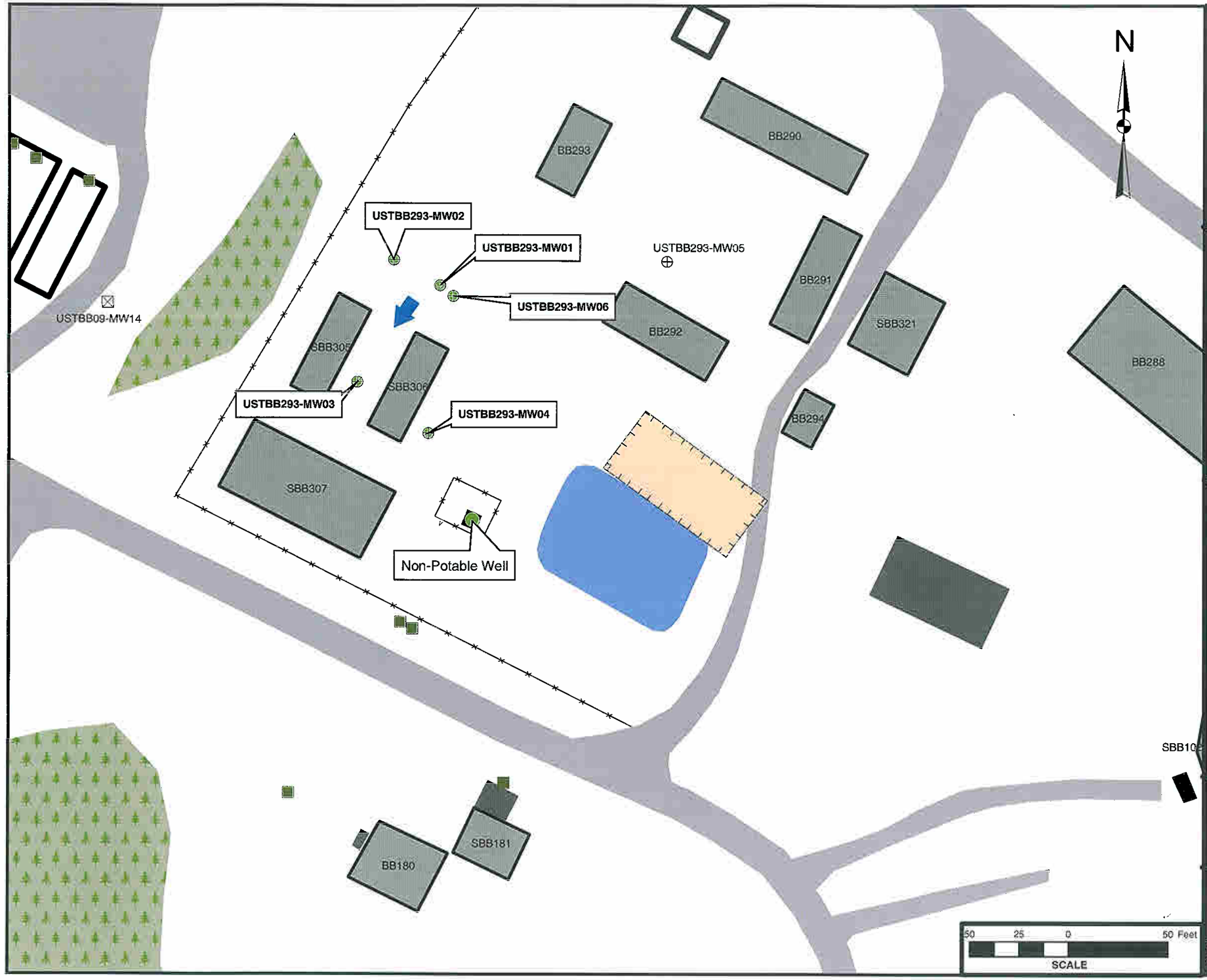
1. No EPA Method 6020 Compounds were detected above the 2L GWQS for any wells sampled during this monitoring event.

CATLIN ENGINEERS and SCIENTISTS

SITE BB-293
EPA METHOD 6020 COLORIMETRY AND PLUME IN EXCESS OF 2L
FOURTH QUARTER 2005

FIGURE **12.4A**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
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MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM

LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Analytical Results
- 2L Non-Compliant
- 2L Compliant
- MADEP Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. No MADEP VPH/EPH Compounds were detected above the 2L GWQS for any wells sampled during this monitoring event.

CATLIN ENGINEERS and SCIENTISTS

SITE BB-293
MADEP VPH/EPH COLORIMETRY AND PLUME IN EXCESS OF 2L
FOURTH QUARTER 2005

FIGURE **12.5A**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
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SECTION 13.0

OF THE

ANNUAL MANAGEMENT REPORT
MCB CAMP LEJEUNE UST MANAGEMENT PROGRAM

MONITORING EVENT:

SECOND SEMESTER 2005/FIRST SEMESTER 2006
(JULY 2005 THROUGH JUNE 2006)

SITE-SPECIFIC MONITORING REPORT
FOR

SITE H-28

NCDENR INCIDENT NO. 23333



13.0 EXECUTIVE SUMMARY
SITE H-28

13.1 Site Information

13.1.1 Site Location: MCB Camp Lejeune
13.1.2 Incident Number(s): 23333
13.1.3 UTM Coordinates (WGS84) (Meters): 283001.95 Easting, 3839812.16 Northing
13.1.4 Risk Classification: Intermediate
13.1.5 Land Use Classification: Residential
13.1.6 Source Type(s): Fuel Oil

13.2 Monitoring Event Information

13.2.1 Sampling Performed By: EEI
13.2.2 Date(s) of This Monitoring Event: 12/13/05
13.2.3 Date(s) of Previous Monitoring Event: June 2005 (Gauging and Sampling) and September 2005 (Gauging Only)
13.2.4 Reason(s) for This Monitoring Event: Track migration and attenuation of dissolved-phase plume
13.2.5 Site Monitoring Status at Time of This Event: Quarterly gauging of 10 monitoring wells, Semi-annual sampling of four monitoring wells

13.3 Groundwater Hydraulics

13.3.1 Hydraulic Conductivity: 2.24 ft/day
13.3.2 Effective Porosity: 0.30
13.3.3 Hydraulic Gradient: 0.0011 to 0.0035
13.3.4 Average Linear Groundwater Flow Velocity: 3 to 11 ft/year
13.3.5 Groundwater Flow Direction(s): Variable over time, most recent indicates flow to northwest
13.3.6 Range of Measured Water Table Elevations: See Table 13.1
13.3.7 Significant Changes from Previously Reported Data: Not Applicable. This is the first Management Report prepared by CATLIN.

13.4 Free Product Plume

13.4.1 Free Product Present?: Yes, detected in monitoring well USTH28-MW07
13.4.2 Free Product Thickness Measured: See Table 13.1
13.4.3 Plume Size and Location: See Figure 13.1
13.4.4 Free Product Removed from Site This Period: None
13.4.5 Significant Changes from Previously Reported Data: Not Applicable. This is the first Management Report prepared by CATLIN.

13.5 Dissolved-Phase Plume

13.5.1 Plume Concentrations: See Tables 13.2A through 13.4B
13.5.2 Plume Size and Location: See Figures 13.2 through 13.4
13.5.3 Significant Changes from Previously Reported Data: Not Applicable. This is the first Management Report prepared by CATLIN. Groundwater sample analytical results compared to the 2L GWQS are discussed as follows:

EPA METHOD 602

No EPA Method 602 compounds were detected above the corresponding 2L GWQS.

EPA METHOD 625

The groundwater sample collected from USTH28-MW11 revealed Naphthalene concentrations above the 2L GWQS. All other EPA Method 625 compounds were either detected at concentrations below the 2L GWQS or below the laboratory quantitation limits.

MADEP VPH/EPH

The groundwater sample collected from USTH28-MW11 revealed C_9-C_{22} Aromatics concentrations above the 2L GWQS. All other MADEP VPH/EPH compounds were either detected at concentrations below the 2L GWQS or below the laboratory quantitation limits.

13.6 Potential Receptors

13.6.1 Contaminated Water Supply Well(s)?: None
13.6.2 Potable Water Supply Well Within 1,000 Feet of Source Area?: No
13.6.3 Any Water Supply Well Within 250 Feet of Source Area?: No
13.6.4 Surface Water Body Within 500 Feet?: Yes, Wallace Creek is approximately 200 feet north of the site.
13.6.5 Past Evidence of Vapors?: No
13.6.6 Significant Changes from Previously Reported Data?: Not Applicable. This is the first Management Report prepared by CATLIN.

13.7 Remediation

13.7.1 Status: Ongoing
13.7.2 Type: Natural Attenuation
13.7.3 Progress: Ongoing
13.7.4 Construction Contractor: Not Applicable
13.7.5 Operating Contractor: Sovereign (Sampling Contractor)

13.8 Observations and Comments

Monitoring well USTH28-MW07 contained minor (0.01') levels of free product during the December 2005 gauging event. Quarterly gauging should be continued at all on-site monitoring wells, if free product persists at USTH28-MW07 the need for active recovery event should be

evaluated. CATLIN recommends the sampling frequency be reduced from semi-annual to annual. CATLIN also recommends removing monitoring well USTH28-MW06 from the sampling schedule and adding monitoring wells USTH28-MW04 and USTH28-MW07 (if no measurable free product is detected).

TABLE 13.1
SITE H-28
FIELD MEASUREMENTS - FOURTH QUARTER 2005

Date Measured: 12/13/2005

Well No.	Type	TOC	Stick up	DTW	Product Thickness	DTW BGS	GW Elevation
USTH28-MW01	T-II	11.72	-0.10	8.80	0.00	8.90	2.92
USTH28-MW02	T-II	12.00		8.96	0.00		3.04
USTH28-MW03	T-II	12.18	-2.00	9.15	0.00	11.15	3.03
USTH28-MW05	T-II	12.31	0.01	9.34	0.00	9.33	2.97
USTH28-MW06	T-II	11.96	-0.25	9.03	0.00	9.28	2.93
USTH28-MW07	T-II	11.62	-0.19	8.73	0.01	8.92	2.89
USTH28-MW08	T-II	12.07		9.11	0.00		2.96
USTH28-MW09	T-II	12.20		9.22	0.00		2.98
USTH28-MW10	T-II	11.57		8.61	0.00		2.96
USTH28-MW11	T-II	12.21		9.15	0.00		3.06

Notes:
1. TII = Type II monitoring well
   TIII = Type III monitoring well
   RW = Recovery well
2. TOC = Top of well casing elevation.
3. STICK UP = Height of well casing above land surface in feet.
4. DTW = Depth to water (in feet) from top of well casing.
5. Product thickness is measured in feet.
6. DTW BGS = Depth to water below ground surface in feet.
7. GW Elevation = Ground water elevation (not adjusted for free product)
8. A zero ("0.00") in the product thickness column indicates no measureable thickness.
9. Top of casing elevations are measured in feet relative to Mean Sea Level (NAD83).
10. Stick up values were not available for wells with no values in the STICK UP and DTW BGS columns.

TABLE 13.2A

SITE H-28

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 602

Contaminant of Concern →				
Well ID	**Date**	**Ethylbenzene**	**Toluene**	**Xylenes (total)**
2L GWQS		550	1000	530
GCL		550000	257500	87500
USTH28-MW06	12/13/2005	BQL	BQL	BQL
USTH28-MW08	12/13/2005	BQL	BQL	BQL
USTH28-MW09	12/13/2005	3.13	1.37	3.66
USTH28-MW11	12/13/2005	35.40	2.00	165.70

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 13.2B

SITE H-28

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINING JULY 2005

EPA METHOD 602

Contaminant of Concern →		Ethylbenzene	Toluene	Xylenes (total)
Well ID	Date			
2L GWQS		550	1000	530
GCL		550000	257500	87500
USTH28-MW06	12/13/2005	BQL	BQL	BQL
USTH28-MW08	12/13/2005	BQL	BQL	BQL
USTH28-MW09	12/13/2005	3.13	1.37	3.66
USTH28-MW11	12/13/2005	35.40	2.00	165.70

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 13.3A

SITE H-28

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 625

Contaminant of Concern →					
Well ID	**Date**	Acenaphthene	Fluorene	Naphthalene	Phenanthrene
2L GWQS		80	280	21	210
GCL		2120	950	15500	410
USTH28-MW06	12/13/2005	BQL	BQL	BQL	BQL
USTH28-MW08	12/13/2005	BQL	1.40	BQL	BQL
USTH28-MW09	12/13/2005	BQL	BQL	BQL	BQL
USTH28-MW11	12/13/2005	5.90	8.60	**142.00**	7.40

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 13.3B

SITE H-28

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINING JULY 2005

EPA METHOD 625

Contaminant of Concern →		Acenaphthene	Fluorene	Naphthalene	Phenanthrene
Well ID	**Date**				
2L GWQS		80	280	21	210
GCL		2120	950	15500	410
USTH28-MW06	12/13/2005	BQL	BQL	BQL	BQL
USTH28-MW08	12/13/2005	BQL	1.40	BQL	BQL
USTH28-MW09	12/13/2005	BQL	BQL	BQL	BQL
USTH28-MW11	12/13/2005	5.90	8.60	142.00	7.40

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 13.4A

SITE H-28

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

MADEP VPH/EPH

Contaminant of Concern →		C19-C36 Aliphatics	C9-C18 Aliphatics	C9-C22 Aromatics
Well ID	**Date**			
2L GWQS		42000	4200	210
GCL		0	0	0
USTH28-MW06	12/13/2005	BQL	BQL	BQL
USTH28-MW08	12/13/2005	330.00	970.00	BQL
USTH28-MW09	12/13/2005	BQL	BQL	BQL
USTH28-MW11	12/13/2005	BQL	840.00	1310.00

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 13.4B

SITE H-28

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

MADEP VPH/EPH

Contaminant of Concern →		C19-C36 Aliphatics	C9-C18 Aliphatics	C9-C22 Aromatics
Well ID	**Date**			
2L GWQS		42000	4200	210
GCL		0	0	0
USTH28-MW06	12/13/2005	BQL	BQL	BQL
USTH28-MW08	12/13/2005	330.00	970.00	BQL
USTH28-MW09	12/13/2005	BQL	BQL	BQL
USTH28-MW11	12/13/2005	BQL	840.00	1310.00

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM

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H68

USTH28-MW01

USTH28-MW07

USTH28-MW10

H28

USTH28-MW08

USTH28-MW06

USTH28-MW02

USTH28-MW09

USTH28-MW11

USTH28-MW03

USTH28-MW05

USTH28-MW04

H21

CUTLER STREET

50 25 0 50 Feet

SCALE

LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Free Product
- Free Product Detected
- No Measurable Product
- Free Product Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

Well ID	Well Type	Date	Product Thickness	Units	Measured By
USTH28-MW07	T-II	12/13/2005	0.01000	ft	EEI

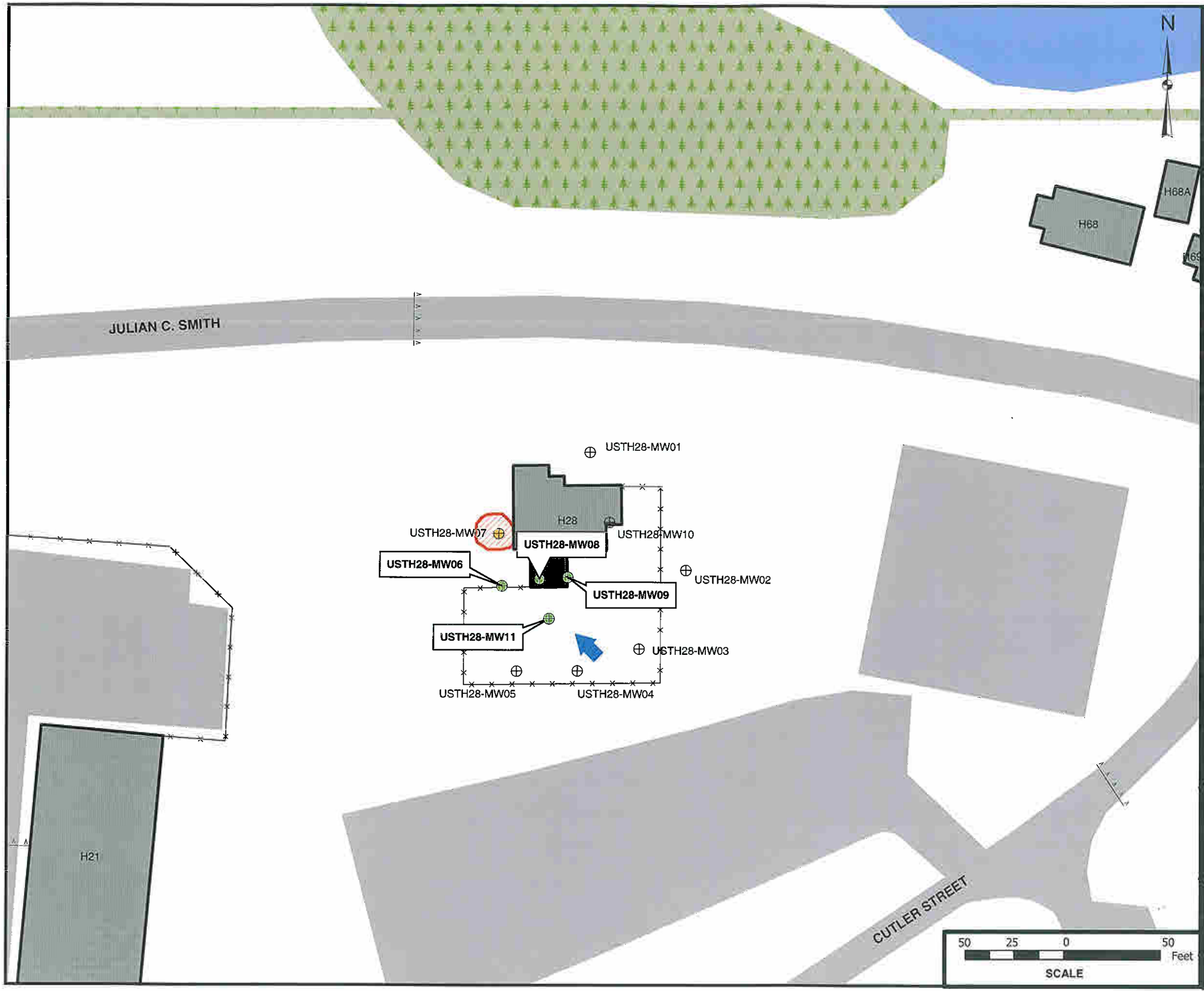
CATLIN ENGINEERS and SCIENTISTS

SITE H-28
FREE PRODUCT PLUME MAP
FOURTH QUARTER 2005

FIGURE 13.1

Job No.:	Date:	Scale:	Drawn By:	Checked By:
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MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM



LEGEND

Monitoring Wells
- Type I
- Type Ii
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Analytical Results
- 2L Non-Compliant
- 2L Compliant
- Free Product Detected
- EPA 602 Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. **No EPA Method 602 compounds were detected above 2L Standards for any wells sampled during this monitoring event.**
2. **Contaminant plume geometry based on the presence of free product.**

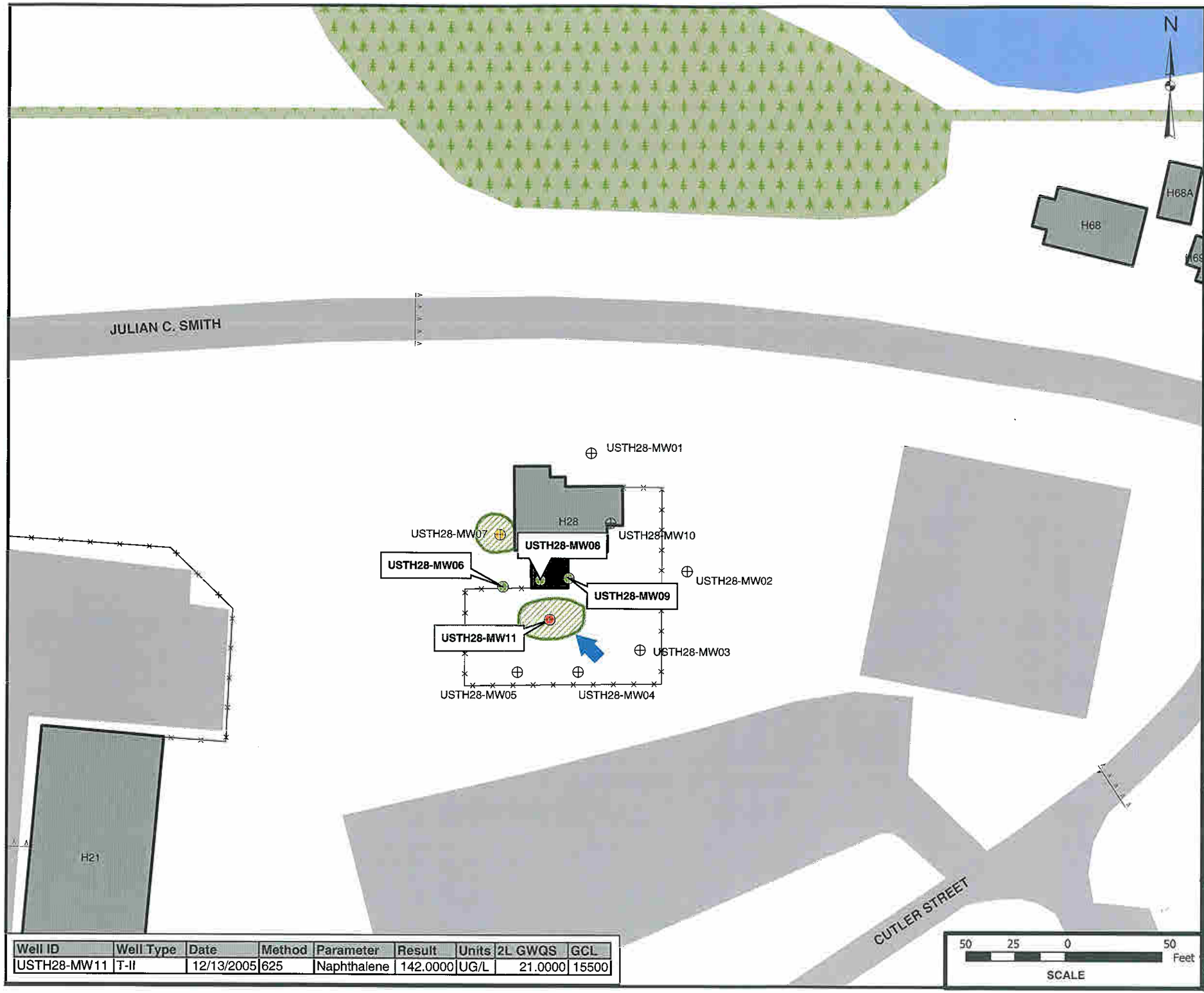
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SITE H-28
EPA METHOD 602 COLORIMETRY AND PLUME IN EXCESS OF 2L
FOURTH QUARTER 2005

FIGURE 13.2

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM



Well ID	Well Type	Date	Method	Parameter	Result	Units	2L GWQS	GCL
USTH28-MW11	T-II	12/13/2005	625	Naphthalene	142.0000	UG/L	21.0000	15500

LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Analytical Results
- 2L Non-Compliant
- 2L Compliant
- Free Product Detected
- EPA 625 Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
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- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. 2L Standard refers to North Carolina Groundwater Quality Standard 15A NCAC 2L.0202.
2. GCL refers to Gross Contaminant Level as defined in Table 7 of "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Ground Water", Volume II, dated January 2, 1998.
3. A 2L Standard of "0.00" implies a standard has not yet been established. According to NCAC T15:02L, any compound found above laboratory detection limits is considered noncompliant unless otherwise specified by the NCDENR.

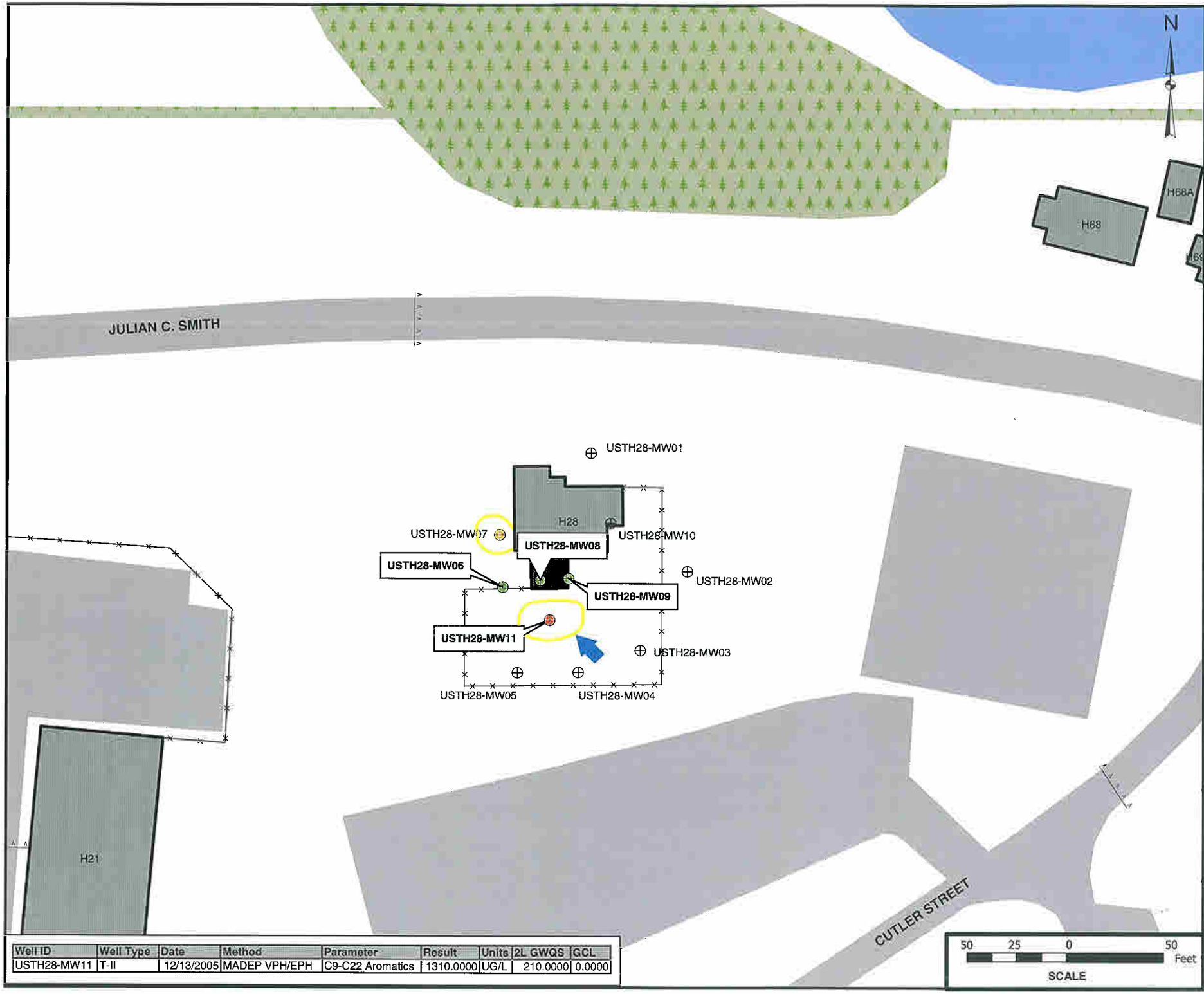
CATLIN ENGINEERS and SCIENTISTS

SITE H-28
EPA METHOD 625 COLORIMETRY
AND PLUME IN EXCESS OF 2L
FOURTH QUARTER 2005

FIGURE **13.3**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
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MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM



LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Analytical Results
- 2L Non-Compliant
- 2L Compliant
- Free Product Detected
- MADEP Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
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Vegetation Cover
- Forestland
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- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. 2L Standard refers to North Carolina Groundwater Quality Standard 15A NCAC 2L.0202.
2. GCL refers to Gross Contaminant Level as defined in Table 7 of "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Ground Water", Volume II, dated January 2, 1998.
3. A 2L Standard of "0.00" implies a standard has not yet been established. According to NCAC T15:02L, any compound found above laboratory detection limits is considered noncompliant unless otherwise specified by the NCDENR.

Well ID	Well Type	Date	Method	Parameter	Result	Units	2L GWQS	GCL
USTH28-MW11	T-II	12/13/2005	MADEP VPH/EPH	C9-C22 Aromatics	1310.0000	UG/L	210.0000	0.0000

CATLIN ENGINEERS and SCIENTISTS

SITE H-28
MADEP VPH/EPH COLORIMETRY AND PLUME IN EXCESS OF 2L
FOURTH QUARTER 2005

FIGURE **13.4**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

SECTION 14.0

OF THE

ANNUAL MANAGEMENT REPORT
MCB CAMP LEJEUNE UST MANAGEMENT PROGRAM

MONITORING EVENT:

SECOND SEMESTER 2005/FIRST SEMESTER 2006
(JULY 2005 THROUGH JUNE 2006)

SITE-SPECIFIC MONITORING REPORT
FOR

SITE LCH-4015

NCDENR INCIDENT NO. 85352



14.0 EXECUTIVE SUMMARY
SITE LCH-4015

14.1 Site Information

14.1.1 Site Location: MCB Camp Lejeune, Midway Park
14.1.2 Incident Number(s): 85352
14.1.3 UTM Coordinates (WGS84) (Meters): 285730.61 Easting, 3845185.59 Northing
14.1.4 Risk Classification: Not Applicable
14.1.5 Land Use Classification: Not Applicable
14.1.6 Source Type(s): Gasoline, Diesel Fuel, No. 2 Fuel Oil

14.2 Monitoring Event Information

14.2.1 Sampling Performed By: EEI and Sovereign
14.2.2 Date(s) of This Monitoring Event: December 2005, January and April 2006
14.2.3 Date(s) of Previous Monitoring Event: March, May, and November 2005
14.2.4 Reason(s) for This Monitoring Event: Track migration and attenuation of dissolved-phase plume.
14.2.5 Site Monitoring Status at Time of This Event: 17 Type II wells and six Type III wells are sampled semi-annually for EPA 610 and 602 components. The results are summarized in Annual Monitoring Reports.

14.3 Groundwater Hydraulics

14.3.1 Hydraulic Conductivity: Unknown
14.3.2 Effective Porosity: Unknown
14.3.3 Hydraulic Gradient: Unknown
14.3.4 Average Linear Groundwater Flow Velocity: Unknown
14.3.5 Groundwater Flow Direction(s): Predominantly to the North with flow components to the West and Southwest.
14.3.6 Range of Measured Water Table Elevations: 25.5 to 28.5 feet MSL
14.3.7 Significant Changes from Previously Reported Data: Not Applicable. This is the first Management Report prepared by CATLIN.

14.4 Free Product Plume

14.4.1 Free Product Present?: No.
14.4.2 Free Product Thickness Measured: None, see Tables 14.1B, C, and D.
14.4.3 Plume Size and Location: Not Applicable, see Figures 14.1B, C, and D.
14.4.4 Free Product Removed from Site This Period: None
14.4.5 Significant Changes from Previously Reported Data: Not Applicable. This is the first Management Report prepared by CATLIN.

14.5 Dissolved-Phase Plume

14.5.1 Plume Concentrations: See Tables 14.2A and B, 14.3A and B, 14.4A and B, and 14.5A and B.

14.5.2 Plume Size and Location: See Figures 14.2B and C, 14.3B and C, 14.4B, and 14.5A.

14.5.3 Significant Changes from Previously Reported Data: Not Applicable. This is the first Management Report prepared by CATLIN. Groundwater sample analytical results compared to the 2L GWQS are discussed as follows:

EPA Method 602

Benzene concentrations were detected above the 2L GWQS in the USTLCH4015-MW01, USTLCH4015-MW02, USTLCH4015-MW21, USTLCH4015-MW23, and USTLCH4015–MW24 groundwater samples.

EPA Method 625

Bis(2-ethylhexyl)phthalate and Naphthalene concentrations were detected above the 2L GWQS in the USLCH4015-MW01 groundwater samples. Bis(2-ethylhexyl)phthalate was also detected above the 2L GWQS in the most recent (January 2006) USTLCH4015-MW23 groundwater sample. The USTLCH4015-MW-21 groundwater sample revealed Naphthalene concentrations above the 2L GWQS.

EPA Method 6010B

Lead concentrations were detected above the 2L GWQS in the USTLCH4015-MW21 groundwater sample.

14.5.4 Contaminated Water Supply Well(s)?: None

14.5.5 Potable Water Supply Well Within 1,000 Feet of Source Area?: No

14.5.6 Any Water Supply Well Within 250 Feet of Source Area?: No

14.5.7 Surface Water Body Within 500 Feet?: No

14.5.8 Past Evidence of Vapors?: No

14.5.9 Significant Changes from Previously Reported Data?: Not Applicable. This is the first Management Report prepared by CATLIN.

14.6 Remediation

14.6.1 Status: 35 vertical biosparge wells and five horizontal SVE wells in continuous operation, with the exception of maintenance downtime) since November 1998.

14.6.2 Type: Biosparge/SVE

14.6.3 Progress: System appears to be effective

14.6.4 Construction Contractor: J.A. Jones

14.6.5 Operating Contractor: Sovereign

14.7 Observations and Comments

Sampling frequency should be reduced from quarterly to semi-annual. Free product gauging should be conducted concurrent with semi-annual sampling. Groundwater sampling should continue until all contaminants are below the 2L GWQS.

Monitoring data for the second quarter 2006 is not included in this report as the data was not available at the time of report preparation.

TABLE 14.1B
SITE LCH-4015
FIELD MEASUREMENTS - FOURTH QUARTER 2005

Date Measured: 12/16/2005

Well No.	Type	TOC	Stick up	DTW	Product Thickness	DTW BGS	GW Elevation
USTLCH4015-MW01	T-II	33.20	-0.33	3.37	0.00	3.70	29.83
USTLCH4015-MW02	T-II	32.64	-0.17	1.30	0.00	1.47	31.34
USTLCH4015-MW03	T-II	35.43	2.49	4.80	0.00	2.31	30.63
USTLCH4015-MW04	T-II	33.10	-2.99	4.20	0.00	7.19	28.90
USTLCH4015-MW05	T-II	32.81	-0.23	2.28	0.00	2.51	30.53
USTLCH4015-MW06	T-II	32.58	-0.23	1.63	0.00	1.86	30.95
USTLCH4015-MW07	T-II	33.04	-0.33	1.70	0.00	2.03	31.34
USTLCH4015-MW08	T-II	32.18	-0.20	0.70	0.00	0.90	31.48
USTLCH4015-MW09	T-II	32.12	0.10	0.15	0.00	0.05	31.97
USTLCH4015-MW10	T-II	31.73	-0.32	0.40	0.00	0.72	31.33
USTLCH4015-MW11	T-II	32.64	-0.37	2.99	0.00	3.36	29.65
USTLCH4015-MW12	T-II	32.74	-0.40	4.15	0.00	4.55	28.59
USTLCH4015-MW13	T-III	32.78	-0.36	22.22	0.00	22.58	10.56
USTLCH4015-MW14	T-II	32.97	-0.30	4.42	0.00	4.72	28.55
USTLCH4015-MW15	T-II	32.61	-0.33	3.42	0.00	3.75	29.19
USTLCH4015-MW16	T-II	32.97	-0.43	0.33	0.00	0.76	32.64
USTLCH4015-MW17	T-II	33.10	-0.36	1.43	0.00	1.79	31.67
USTLCH4015-MW18	T-II	33.20	-0.43	1.25	0.00	1.68	31.95
USTLCH4015-MW19	T-III	33.33	-0.33	22.95	0.00	23.28	10.38
USTLCH4015-MW20	T-III	32.58	-0.29	22.20	0.00	22.49	10.38
USTLCH4015-MW21	T-III	29.85	-0.50	22.84	0.00	23.34	7.01
USTLCH4015-MW22	T-III	29.14	-0.50	22.18	0.00	22.68	6.96
USTLCH4015-MW23	T-III	29.86	-0.50	22.80	0.00	23.30	7.06

Notes:
1. TII = Type II monitoring well
   TIII = Type III monitoring well
   RW = Recovery well
2. TOC = Top of well casing elevation.
3. STICK UP = Height of well casing above land surface in feet.
4. DTW = Depth to water (in feet) from top of well casing.
5. Product thickness is measured in feet.
6. DTW BGS = Depth to water below ground surface in feet.
7. GW Elevation = Ground water elevation (not adjusted for free product)
8. A zero ("0.00") in the product thickness column indicates no measureable thickness.
9. Top of casing elevations are measured in feet relative to Mean Sea Level (NAD83).
10. Stick up values were not available for wells with no values in the STICK UP and DTW BGS columns.

TABLE 14.1C
SITE LCH-4015
FIELD MEASUREMENTS - FIRST QUARTER 2006

Date Measured: 1/17/2006

Well No.	Type	TOC	Stick up	DTW	Product Thickness	DTW BGS	GW Elevation
USTLCH4015-MW01	T-II	33.20	-0.33	2.74	0.00	3.07	30.46
USTLCH4015-MW02	T-II	32.64	-0.17	1.11	0.00	1.28	31.53
USTLCH4015-MW03	T-II	35.43	2.49	4.61	0.00	2.12	30.82
USTLCH4015-MW04	T-II	33.10	-2.99	4.49	0.00	7.48	28.61
USTLCH4015-MW05	T-II	32.81	-0.23	1.90	0.00	2.13	30.91
USTLCH4015-MW06	T-II	32.58	-0.23	2.57	0.00	2.80	30.01
USTLCH4015-MW07	T-II	33.04	-0.33	2.06	0.00	2.39	30.98
USTLCH4015-MW08	T-II	32.18	-0.20	1.28	0.00	1.48	30.90
USTLCH4015-MW09	T-II	32.12	0.10	0.85	0.00	0.75	31.27
USTLCH4015-MW10	T-II	31.73	-0.32	0.79	0.00	1.11	30.94
USTLCH4015-MW11	T-II	32.64	-0.37	3.30	0.00	3.67	29.34
USTLCH4015-MW12	T-II	32.74	-0.40	3.95	0.00	4.35	28.79
USTLCH4015-MW13	T-III	32.78	-0.36	20.93	0.00	21.29	11.85
USTLCH4015-MW14	T-II	32.97	-0.30	4.15	0.00	4.45	28.82
USTLCH4015-MW15	T-II	32.61	-0.33	3.54	0.00	3.87	29.07
USTLCH4015-MW16	T-II	32.97	-0.43	1.20	0.00	1.63	31.77
USTLCH4015-MW18	T-II	33.20	-0.43	2.05	0.00	2.48	31.15
USTLCH4015-MW19	T-III	33.33	-0.33	21.56	0.00	21.89	11.77
USTLCH4015-MW20	T-III	32.58	-0.29	20.80	0.00	21.09	11.78
USTLCH4015-MW21	T-III	29.85	-0.50	24.46	0.00	24.96	5.39
USTLCH4015-MW22	T-III	29.14	-0.50	20.76	0.00	21.26	8.38
USTLCH4015-MW23	T-III	29.86	-0.50	21.30	0.00	21.80	8.56

Notes:
1. TII = Type II monitoring well
   TIII = Type III monitoring well
   RW = Recovery well
2. TOC = Top of well casing elevation.
3. STICK UP = Height of well casing above land surface in feet.
4. DTW = Depth to water (in feet) from top of well casing.
5. Product thickness is measured in feet.
6. DTW BGS = Depth to water below ground surface in feet.
7. GW Elevation = Ground water elevation (not adjusted for free product)
8. A zero ("0.00") in the product thickness column indicates no measureable thickness.
9. Top of casing elevations are measured in feet relative to Mean Sea Level (NAD83).
10. Stick up values were not available for wells with no values in the STICK UP and DTW BGS columns.

TABLE 14.1D
SITE LCH-4015
FIELD MEASUREMENTS - SECOND QUARTER 2006

Date Measured: 4/14/2006

Well No.	Type	TOC	Stick up	DTW	Product Thickness	DTW BGS	GW Elevation
USTLCH4015-MW01	T-II	33.20	-0.33	3.43	0.00	3.76	29.77
USTLCH4015-MW02	T-II	32.64	-0.17	1.84	0.00	2.01	30.80
USTLCH4015-MW03	T-II	35.43	2.49	2.14	0.00	-0.35	33.29
USTLCH4015-MW04	T-II	33.10	-2.99	6.53	0.00	9.52	26.57
USTLCH4015-MW05	T-II	32.81	-0.23	2.48	0.00	2.71	30.33
USTLCH4015-MW06	T-II	32.58	-0.23	2.85	0.00	3.08	29.73
USTLCH4015-MW07	T-II	33.04	-0.33	2.56	0.00	2.89	30.48
USTLCH4015-MW08	T-II	32.18	-0.20	2.87	0.00	3.07	29.31
USTLCH4015-MW09	T-II	32.12	0.10	2.14	0.00	2.04	29.98
USTLCH4015-MW10	T-II	31.73	-0.32	1.95	0.00	2.27	29.78
USTLCH4015-MW11	T-II	32.64	-0.37	3.98	0.00	4.35	28.66
USTLCH4015-MW12	T-II	32.74	-0.40	4.41	0.00	4.81	28.33
USTLCH4015-MW13	T-III	32.78	-0.36	22.37	0.00	22.73	10.41
USTLCH4015-MW14	T-II	32.97	-0.30	4.50	0.00	4.80	28.47
USTLCH4015-MW15	T-II	32.61	-0.33	3.83	0.00	4.16	28.78
USTLCH4015-MW16	T-II	32.97	-0.43	2.38	0.00	2.81	30.59
USTLCH4015-MW18	T-II	33.20	-0.43	2.42	0.00	2.85	30.78
USTLCH4015-MW19	T-III	33.33	-0.33	23.03	0.00	23.36	10.30
USTLCH4015-MW20	T-III	32.58	-0.29	22.32	0.00	22.61	10.26
USTLCH4015-MW21	T-III	29.85	-0.50	23.07	0.00	23.57	6.78
USTLCH4015-MW22	T-III	29.14	-0.50	22.20	0.00	22.70	6.94
USTLCH4015-MW23	T-III	29.86	-0.50	22.98	0.00	23.48	6.88

Notes:
1. TII = Type II monitoring well
   TIII = Type III monitoring well
   RW = Recovery well
2. TOC = Top of well casing elevation.
3. STICK UP = Height of well casing above land surface in feet.
4. DTW = Depth to water (in feet) from top of well casing.
5. Product thickness is measured in feet.
6. DTW BGS = Depth to water below ground surface in feet.
7. GW Elevation = Ground water elevation (not adjusted for free product)
8. A zero ("0.00") in the product thickness column indicates no measureable thickness.
9. Top of casing elevations are measured in feet relative to Mean Sea Level (NAD83).
10. Stick up values were not available for wells with no values in the STICK UP and DTW BGS columns.

TABLE 14.2A

SITE LCH-4015

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 602

Contaminant of Concern →		Benzene	Chlorobenzene	Diisopropyl ether (DIPE)	Ethylbenzene	Methyl Tert Butyl Ether	Methyl-tert butyl ether	Toluene	Xylenes (total)
Well ID	Date								
2L GWQS		1	50	70	550	200	200	1000	530
GCL		5000	0	70000	550000	200000	200000	257500	87500
USTLCH4015-MW01	11/14/2005	48.10	2.10	BQL	143.00	7.20	BQL	4.90	268.00
USTLCH4015-MW01	1/19/2006	45.50	BQL	BQL	179.00	BQL	4.98	10.10	370.50
USTLCH4015-MW02	11/14/2005	1.50	BQL	BQL	2.00	49.60	BQL	BQL	5.60
USTLCH4015-MW02	1/19/2006	3.63	BQL	BQL	6.10	BQL	16.70	BQL	BQL
USTLCH4015-MW03	11/15/2005	BQL	BQL	BQL	BQL	1.10	BQL	BQL	BQL
USTLCH4015-MW03	1/19/2006	BQL	BQL	0.65	BQL	BQL	0.94	BQL	BQL
USTLCH4015-MW13	11/15/2005	BQL	BQL	BQL	BQL	BQL	BQL	0.54	BQL
USTLCH4015-MW13	1/19/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTLCH4015-MW18	11/15/2005	BQL	BQL	BQL	BQL	BQL	BQL	0.59	BQL
USTLCH4015-MW19	11/15/2005	BQL	BQL	BQL	BQL	BQL	BQL	0.63	BQL
USTLCH4015-MW19	1/19/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 14.2A

SITE LCH-4015

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 602

Contaminant of Concern →		Benzene	Chlorobenzene	Diisopropyl ether (DIPE)	Ethylbenzene	Methyl Tert Butyl Ether	Methyl-tert butyl ether	Toluene	Xylenes (total)
Well ID	Date								
2L GWQS		1	50	70	550	200	200	1000	530
GCL		5000	0	70000	550000	200000	200000	257500	87500
USTLCH4015-MW20	11/14/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTLCH4015-MW20	1/19/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTLCH4015-MW21	11/15/2005	10.90	BQL	BQL	1.90	26.10	BQL	0.66	1.30
USTLCH4015-MW21	1/19/2006	20.20	BQL	0.67	3.05	BQL	15.40	BQL	0.63
USTLCH4015-MW22	11/15/2005	BQL	BQL	BQL	BQL	1.90	BQL	0.89	BQL
USTLCH4015-MW22	1/19/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTLCH4015-MW23	11/14/2005	4.20	BQL	BQL	0.66	17.90	BQL	0.71	1.30
USTLCH4015-MW23	1/19/2006	25.90	BQL	1.81	0.40	BQL	15.00	BQL	BQL
USTLCH4015-MW24	11/15/2005	1.80	BQL	BQL	BQL	1.70	BQL	0.57	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 14.2B

SITE LCH-4015

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 602

Contaminant of Concern →		Benzene	Chlorobenzene	Diisopropyl ether (DIPE)	Ethylbenzene	Methyl Tert Butyl Ether	Methyl-tert butyl ether	Toluene	Xylenes (total)
Well ID	**Date**								
2L GWQS		1	50	70	550	200	200	1000	530
GCL		5000	0	70000	550000	200000	200000	257500	87500
USTLCH4015-MW01	11/14/2005	48.10	2.10	BQL	143.00	7.20	BQL	4.90	268.00
USTLCH4015-MW01	1/19/2006	45.50	BQL	BQL	179.00	BQL	4.98	10.10	370.50
USTLCH4015-MW02	11/14/2005	1.50	BQL	BQL	2.00	49.60	BQL	BQL	5.60
USTLCH4015-MW02	1/19/2006	3.63	BQL	BQL	6.10	BQL	16.70	BQL	BQL
USTLCH4015-MW03	11/15/2005	BQL	BQL	BQL	BQL	1.10	BQL	BQL	BQL
USTLCH4015-MW03	1/19/2006	BQL	BQL	0.65	BQL	BQL	0.94	BQL	BQL
USTLCH4015-MW13	11/15/2005	BQL	BQL	BQL	BQL	BQL	BQL	0.54	BQL
USTLCH4015-MW13	1/19/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTLCH4015-MW18	11/15/2005	BQL	BQL	BQL	BQL	BQL	BQL	0.59	BQL
USTLCH4015-MW19	11/15/2005	BQL	BQL	BQL	BQL	BQL	BQL	0.63	BQL
USTLCH4015-MW19	1/19/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 14.2B

SITE LCH-4015

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 602

Contaminant of Concern →		Benzene	Chlorobenzene	Diisopropyl ether (DIPE)	Ethylbenzene	Methyl Tert Butyl Ether	Methyl-tert butyl ether	Toluene	Xylenes (total)
Well ID	**Date**								
2L GWQS		1	50	70	550	200	200	1000	530
GCL		5000	0	70000	550000	200000	200000	257500	87500
USTLCH4015-MW20	11/14/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTLCH4015-MW20	1/19/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTLCH4015-MW21	11/15/2005	10.90	BQL	BQL	1.90	26.10	BQL	0.66	1.30
USTLCH4015-MW21	1/19/2006	20.20	BQL	0.67	3.05	BQL	15.40	BQL	0.63
USTLCH4015-MW22	11/15/2005	BQL	BQL	BQL	BQL	1.90	BQL	0.89	BQL
USTLCH4015-MW22	1/19/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTLCH4015-MW23	11/14/2005	4.20	BQL	BQL	0.66	17.90	BQL	0.71	1.30
USTLCH4015-MW23	1/19/2006	25.90	BQL	1.81	0.40	BQL	15.00	BQL	BQL
USTLCH4015-MW24	11/15/2005	1.80	BQL	BQL	BQL	1.70	BQL	0.57	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 14.3A

SITE LCH-4015

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 625

Contaminant of Concern →		Acenaphthene	Bis(2-ethylhexyl)phthalate	Fluorene	Naphthalene
Well ID	Date				
2L GWQS		80	3	280	21
GCL		2120	0	950	15500
USTLCH4015-MW01	11/14/2005	BQL	**4.60**	BQL	**105.00**
USTLCH4015-MW01	1/19/2006	BQL	**8.70**	BQL	**111.00**
USTLCH4015-MW02	11/14/2005	BQL	BQL	BQL	2.30
USTLCH4015-MW02	1/19/2006	BQL	BQL	BQL	2.10
USTLCH4015-MW03	11/15/2005	1.60	BQL	1.60	BQL
USTLCH4015-MW03	1/19/2006	BQL	BQL	BQL	BQL
USTLCH4015-MW13	11/15/2005	BQL	BQL	BQL	BQL
USTLCH4015-MW13	1/19/2006	BQL	BQL	BQL	BQL
USTLCH4015-MW18	11/15/2005	3.00	BQL	4.30	BQL
USTLCH4015-MW19	11/15/2005	2.40	BQL	BQL	BQL
USTLCH4015-MW19	1/19/2006	BQL	2.80	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 14.3A

SITE LCH-4015

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 625

Contaminant of Concern →		Acenaphthene	Bis(2-ethylhexyl)phthalate	Fluorene	Naphthalene
Well ID	Date				
2L GWQS		80	3	280	21
GCL		2120	0	950	15500
USTLCH4015-MW20	11/14/2005	BQL	BQL	BQL	9.20
USTLCH4015-MW20	1/19/2006	BQL	BQL	BQL	BQL
USTLCH4015-MW21	11/15/2005	BQL	BQL	BQL	**32.30**
USTLCH4015-MW21	1/19/2006	BQL	BQL	BQL	**31.70**
USTLCH4015-MW22	11/15/2005	BQL	BQL	BQL	BQL
USTLCH4015-MW22	1/19/2006	BQL	BQL	BQL	BQL
USTLCH4015-MW23	11/14/2005	BQL	BQL	BQL	BQL
USTLCH4015-MW23	1/19/2006	BQL	**4.90**	BQL	BQL
USTLCH4015-MW24	11/15/2005	1.90	BQL	2.10	4.40

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 14.3B

SITE LCH-4015

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINING JULY 2005

EPA METHOD 625

Contaminant of Concern →		Acenaphthene	Bis(2-ethylhexyl)phthalate	Fluorene	Naphthalene
Well ID	Date				
2L GWQS		80	3	280	21
GCL		2120	0	950	15500
USTLCH4015-MW01	11/14/2005	BQL	**4.60**	BQL	**105.00**
USTLCH4015-MW01	1/19/2006	BQL	**8.70**	BQL	**111.00**
USTLCH4015-MW02	11/14/2005	BQL	BQL	BQL	2.30
USTLCH4015-MW02	1/19/2006	BQL	BQL	BQL	2.10
USTLCH4015-MW03	11/15/2005	1.60	BQL	1.60	BQL
USTLCH4015-MW03	1/19/2006	BQL	BQL	BQL	BQL
USTLCH4015-MW13	11/15/2005	BQL	BQL	BQL	BQL
USTLCH4015-MW13	1/19/2006	BQL	BQL	BQL	BQL
USTLCH4015-MW18	11/15/2005	3.00	BQL	4.30	BQL
USTLCH4015-MW19	11/15/2005	2.40	BQL	BQL	BQL
USTLCH4015-MW19	1/19/2006	BQL	2.80	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 14.3B

SITE LCH-4015

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINING JULY 2005

EPA METHOD 625

Contaminant of Concern →		Acenaphthene	Bis(2-ethylhexyl)phthalate	Fluorene	Naphthalene
Well ID	Date				
2L GWQS		80	3	280	21
GCL		2120	0	950	15500
USTLCH4015-MW20	11/14/2005	BQL	BQL	BQL	9.20
USTLCH4015-MW20	1/19/2006	BQL	BQL	BQL	BQL
USTLCH4015-MW21	11/15/2005	BQL	BQL	BQL	**32.30**
USTLCH4015-MW21	1/19/2006	BQL	BQL	BQL	**31.70**
USTLCH4015-MW22	11/15/2005	BQL	BQL	BQL	BQL
USTLCH4015-MW22	1/19/2006	BQL	BQL	BQL	BQL
USTLCH4015-MW23	11/14/2005	BQL	BQL	BQL	BQL
USTLCH4015-MW23	1/19/2006	BQL	**4.90**	BQL	BQL
USTLCH4015-MW24	11/15/2005	1.90	BQL	2.10	4.40

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 14.4A

SITE LCH-4015

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 6010B

Contaminant of Concern →		
Well ID	**Date**	**Lead**
2L GWQS		15
GCL		15000
USTLCH4015-MW01	11/14/2005	BQL
USTLCH4015-MW02	11/14/2005	BQL
USTLCH4015-MW03	11/15/2005	BQL
USTLCH4015-MW13	11/15/2005	BQL
USTLCH4015-MW18	11/15/2005	BQL
USTLCH4015-MW19	11/15/2005	BQL
USTLCH4015-MW20	11/14/2005	BQL
USTLCH4015-MW21	11/15/2005	18.80
USTLCH4015-MW22	11/15/2005	BQL
USTLCH4015-MW23	11/14/2005	10.10

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 14.4A

SITE LCH-4015

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 6010B

Contaminant of Concern →		
Well ID	**Date**	**Lead**
2L GWQS		15
GCL		15000
USTLCH4015-MW24	11/15/2005	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 14.4B

SITE LCH-4015

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 6010B

Contaminant of Concern →		
Well ID	**Date**	**Lead**
2L GWQS		15
GCL		15000
USTLCH4015-MW01	11/14/2005	BQL
USTLCH4015-MW02	11/14/2005	BQL
USTLCH4015-MW03	11/15/2005	BQL
USTLCH4015-MW13	11/15/2005	BQL
USTLCH4015-MW18	11/15/2005	BQL
USTLCH4015-MW19	11/15/2005	BQL
USTLCH4015-MW20	11/14/2005	BQL
USTLCH4015-MW21	11/15/2005	18.80
USTLCH4015-MW22	11/15/2005	BQL
USTLCH4015-MW23	11/14/2005	10.10

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 14.4B

SITE LCH-4015

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 6010B

Contaminant of Concern →		
Well ID	**Date**	**Lead**
2L GWQS		15
GCL		15000
USTLCH4015-MW24	11/15/2005	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 14.5A

SITE LCH-4015

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 6020

Contaminant of Concern →		
Well ID	**Date**	**Lead**
2L GWQS		15
GCL		15000
USTLCH4015-MW01	1/19/2006	0.60
USTLCH4015-MW02	1/19/2006	BQL
USTLCH4015-MW03	1/19/2006	BQL
USTLCH4015-MW13	1/19/2006	BQL
USTLCH4015-MW19	1/19/2006	0.67
USTLCH4015-MW20	1/19/2006	2.28
USTLCH4015-MW21	1/19/2006	BQL
USTLCH4015-MW22	1/19/2006	BQL
USTLCH4015-MW23	1/19/2006	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 14.5B

SITE LCH-4015

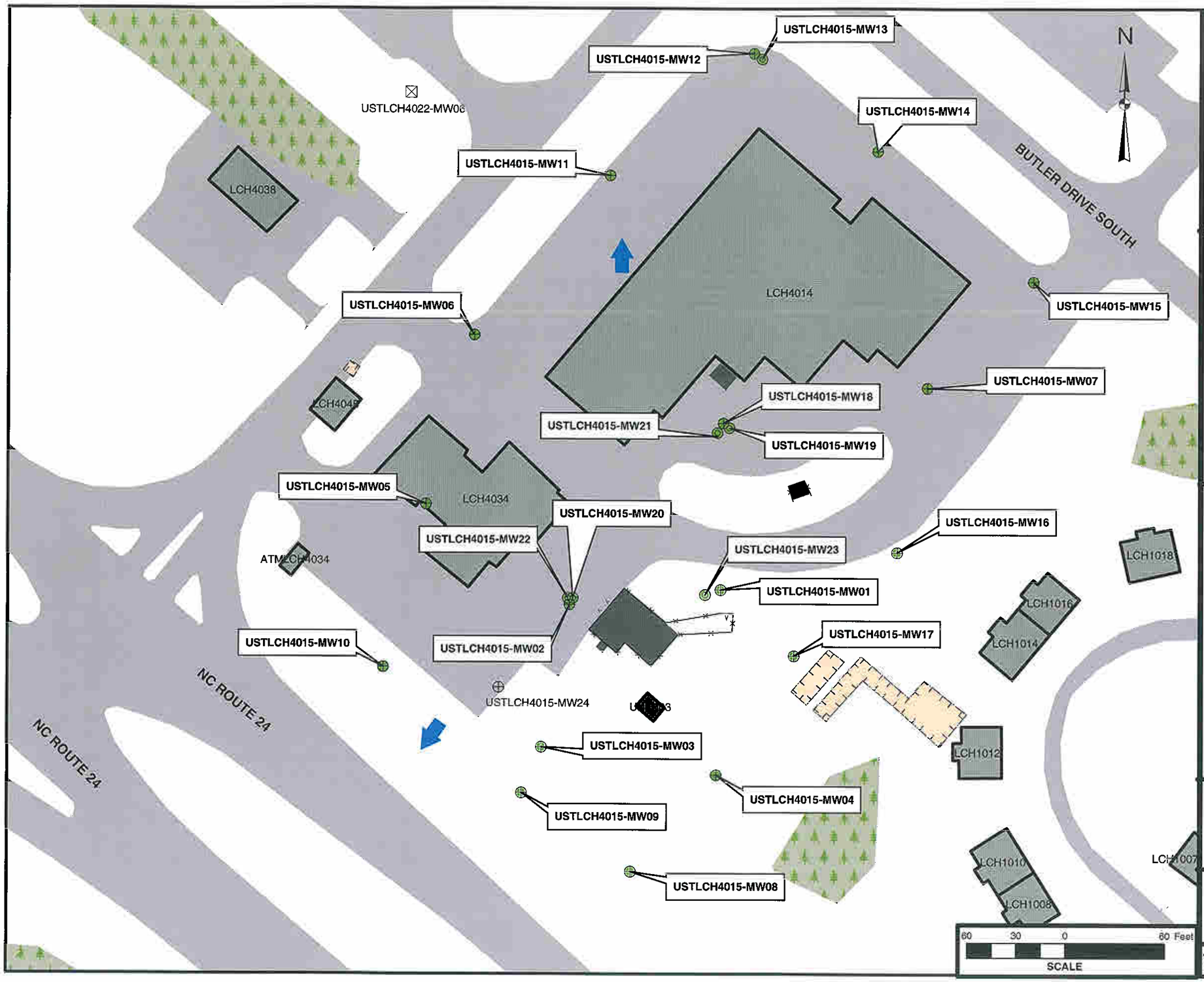
HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 6020

Contaminant of Concern →		
Well ID	**Date**	**Lead**
2L GWQS		15
GCL		15000
USTLCH4015-MW01	1/19/2006	0.60
USTLCH4015-MW02	1/19/2006	BQL
USTLCH4015-MW03	1/19/2006	BQL
USTLCH4015-MW13	1/19/2006	BQL
USTLCH4015-MW19	1/19/2006	0.67
USTLCH4015-MW20	1/19/2006	2.28
USTLCH4015-MW21	1/19/2006	BQL
USTLCH4015-MW22	1/19/2006	BQL
USTLCH4015-MW23	1/19/2006	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM



LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Free Product
- Free Product Detected
- No Measurable Thickness
- Free Product Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. Free Product was not detected at this site in any of the wells gauged during this monitoring event.

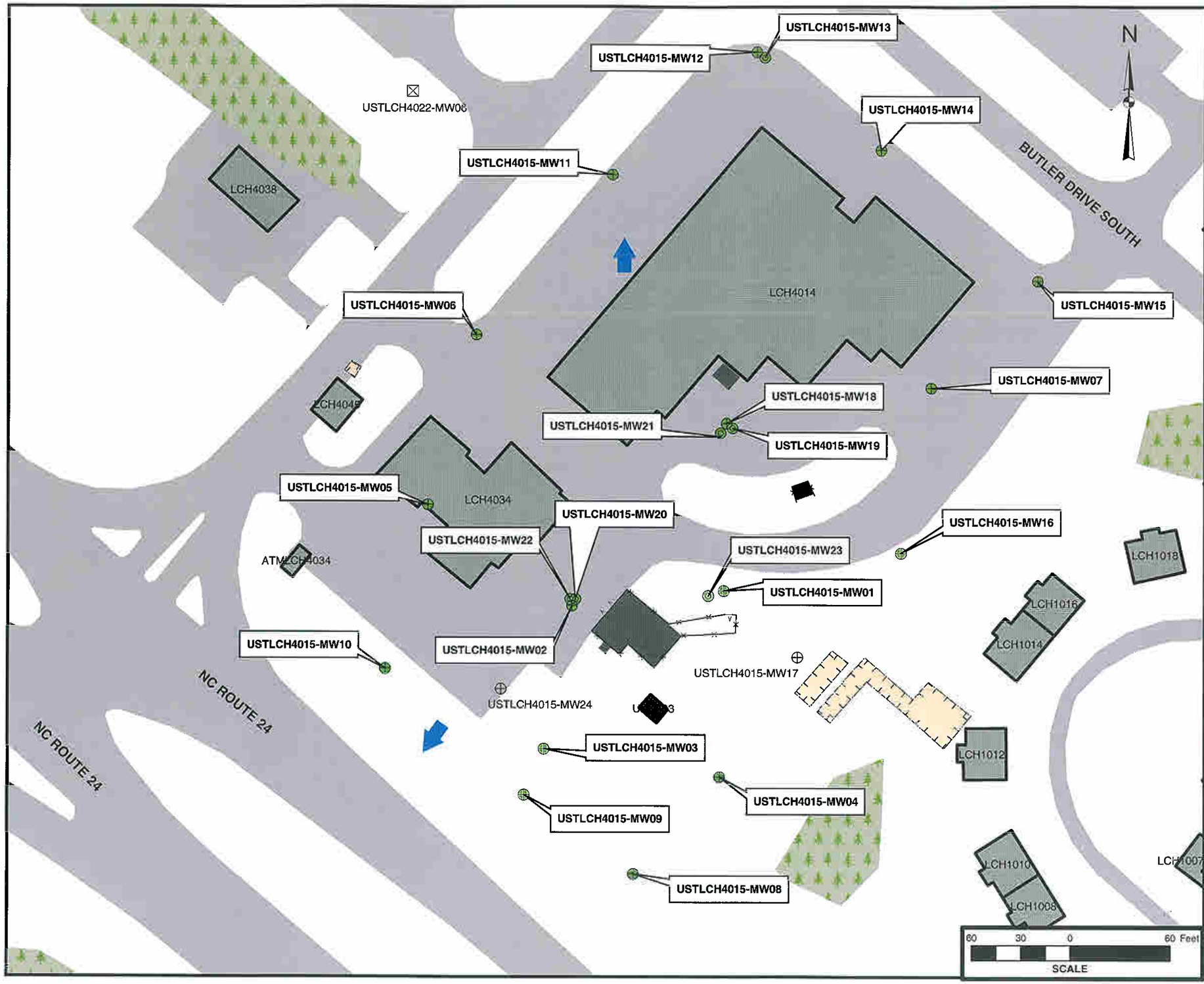
CATLIN ENGINEERS and SCIENTISTS

SITE LCH-4015
FREE PRODUCT PLUME MAP
FOURTH QUARTER 2005

FIGURE **14.1B**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM



LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Free Product
- Free Product Detected
- No Measurable Thickness
- Free Product Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. Free Product was not detected at this site in any of the wells gauged during this monitoring event.

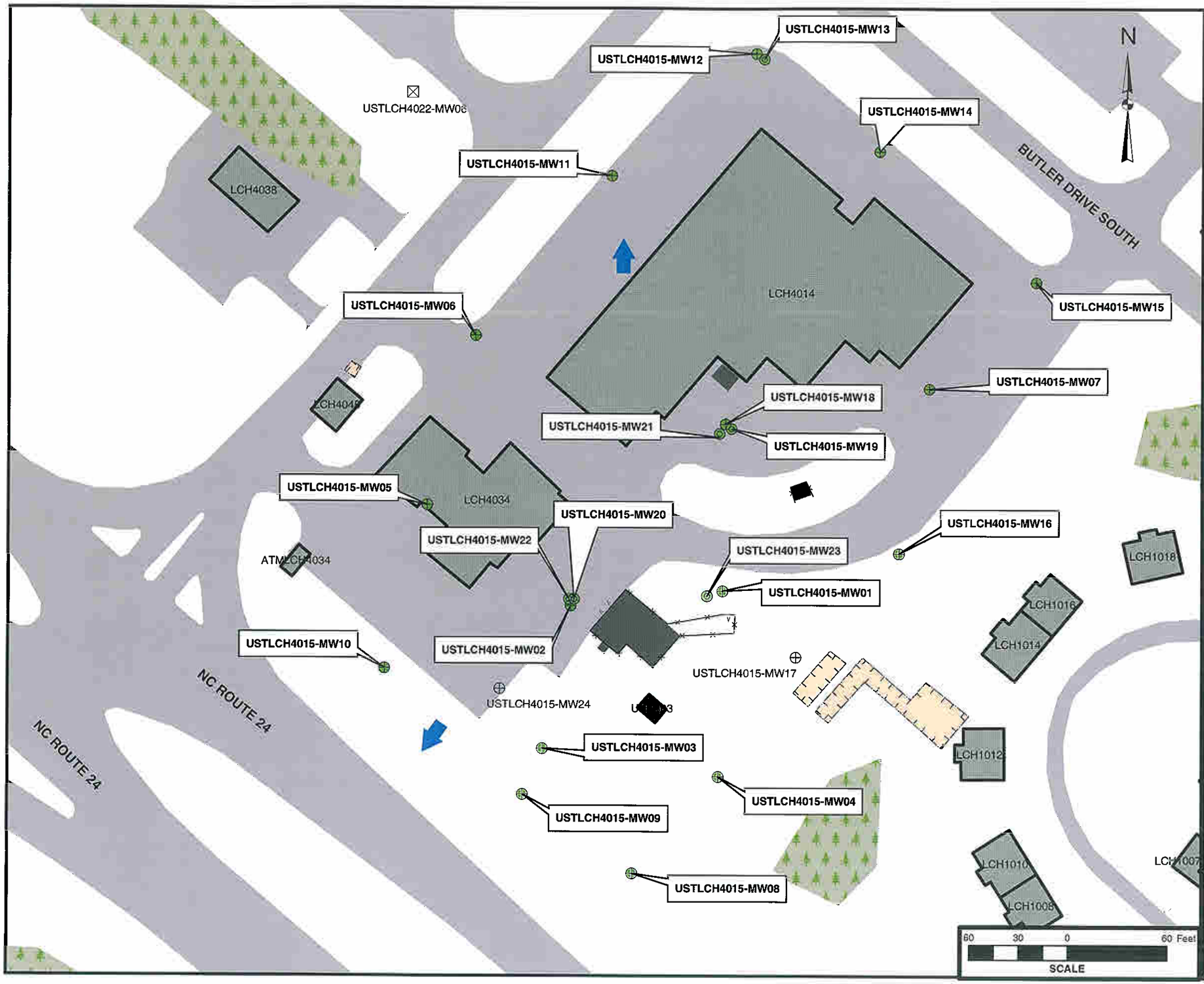
CATLIN ENGINEERS and SCIENTISTS

SITE LCH-4015
FREE PRODUCT PLUME MAP
FIRST QUARTER 2006

FIGURE **14.1C**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM



LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Free Product
- Free Product Detected
- No Measurable Thickness
- Free Product Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. Free Product was not detected at this site in any of the wells gauged during this monitoring event.

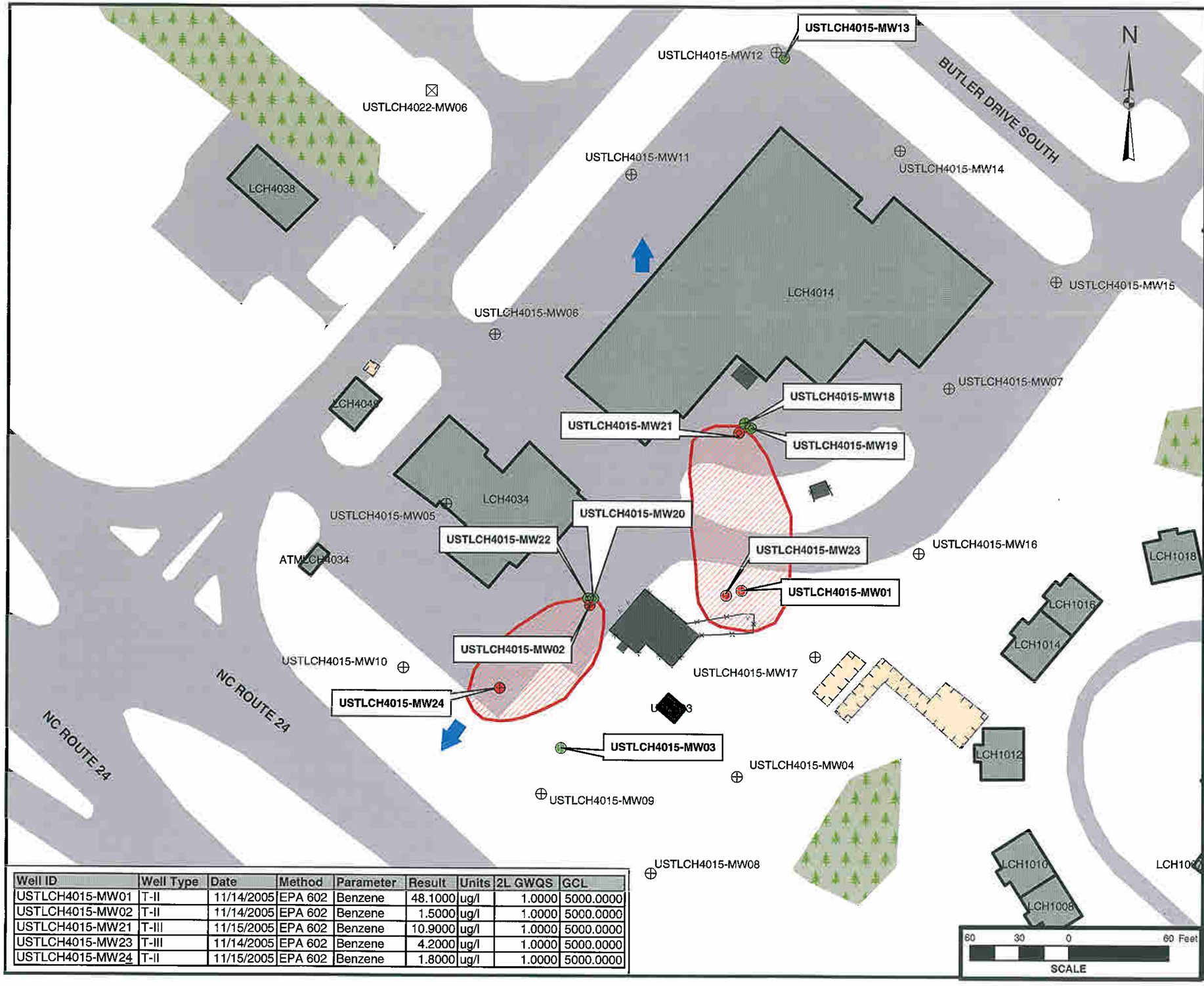
CATLIN ENGINEERS and SCIENTISTS

SITE LCH-4015
FREE PRODUCT PLUME MAP
SECOND QUARTER 2006

FIGURE **14.1D**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM



LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Analytical Results
- 2L Non-Compliant
- 2L Compliant
- EPA 602 Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. 2L Standard refers to North Carolina Groundwater Quality Standard 15A NCAC 2L.0202.
2. GCL refers to Gross Contaminant Level as defined in Table 7 of "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Ground Water", Volume II, dated January 2, 1998.
3. A 2L Standard of "0.00" implies a standard has not yet been established. According to NCAC T15:02L, any compound found above laboratory detection limits is considered noncompliant unless otherwise specified by the NCDENR.

Well ID	Well Type	Date	Method	Parameter	Result	Units	2L GWQS	GCL
USTLCH4015-MW01	T-II	11/14/2005	EPA 602	Benzene	48.1000	ug/l	1.0000	5000.0000
USTLCH4015-MW02	T-II	11/14/2005	EPA 602	Benzene	1.5000	ug/l	1.0000	5000.0000
USTLCH4015-MW21	T-III	11/15/2005	EPA 602	Benzene	10.9000	ug/l	1.0000	5000.0000
USTLCH4015-MW23	T-III	11/14/2005	EPA 602	Benzene	4.2000	ug/l	1.0000	5000.0000
USTLCH4015-MW24	T-II	11/15/2005	EPA 602	Benzene	1.8000	ug/l	1.0000	5000.0000

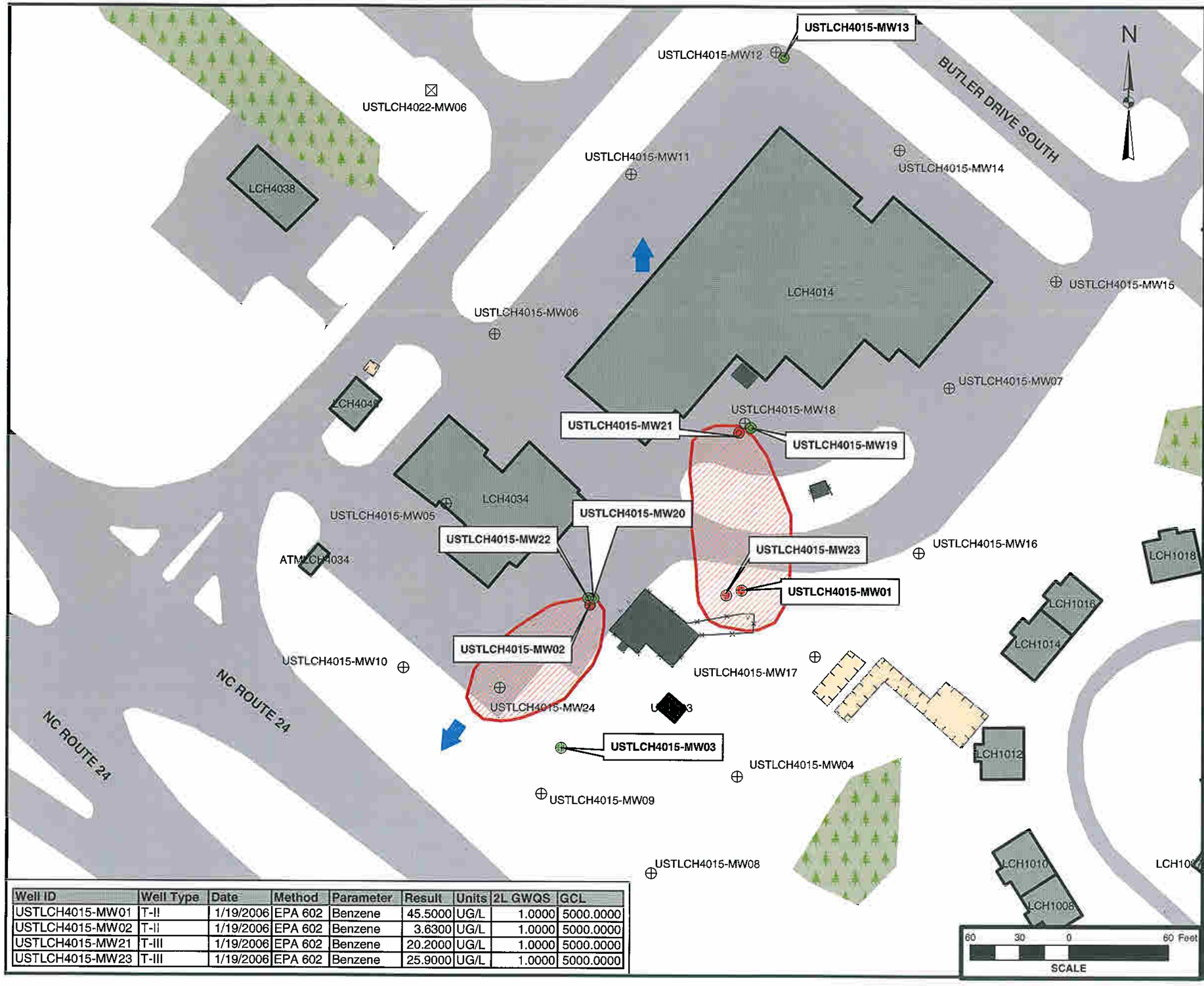
CATLIN ENGINEERS and SCIENTISTS

SITE LCH-4015
EPA METHOD 602 COLORIMETRY AND PLUME IN EXCESS OF 2L FOURTH QUARTER 2005

FIGURE **14.2B**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM



LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Analytical Results
- 2L Non-Compliant
- 2L Compliant
- EPA 602 Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. 2L Standard refers to North Carolina Groundwater Quality Standard 15A NCAC 2L.0202.
2. GCL refers to Gross Contaminant Level as defined in Table 7 of "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Ground Water", Volume II, dated January 2, 1998.
3. A 2L Standard of "0.00" implies a standard has not yet been established. According to NCAC T15:02L, any compound found above laboratory detection limits is considered noncompliant unless otherwise specified by the NCDENR.

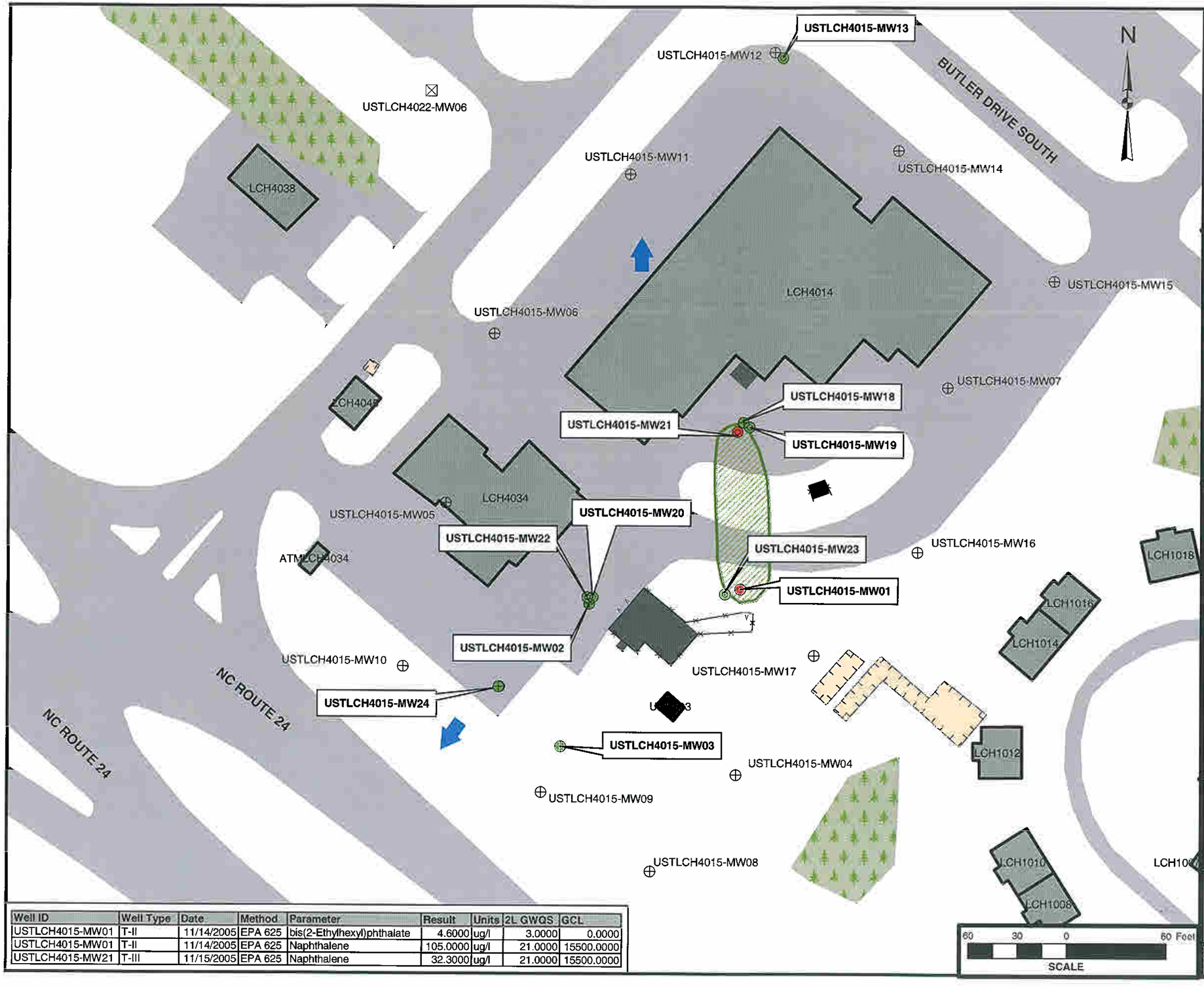
Well ID	Well Type	Date	Method	Parameter	Result	Units	2L GWQS	GCL
USTLCH4015-MW01	T-II	1/19/2006	EPA 602	Benzene	45.5000	UG/L	1.0000	5000.0000
USTLCH4015-MW02	T-II	1/19/2006	EPA 602	Benzene	3.6300	UG/L	1.0000	5000.0000
USTLCH4015-MW21	T-III	1/19/2006	EPA 602	Benzene	20.2000	UG/L	1.0000	5000.0000
USTLCH4015-MW23	T-III	1/19/2006	EPA 602	Benzene	25.9000	UG/L	1.0000	5000.0000

CATLIN ENGINEERS and SCIENTISTS

SITE LCH-4015
EPA METHOD 602 COLORIMETRY AND PLUME IN EXCESS OF 2L
FIRST QUARTER 2006

FIGURE **14.2C**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM



Well ID	Well Type	Date	Method	Parameter	Result	Units	2L GWQS	GCL
USTLCH4015-MW01	T-II	11/14/2005	EPA 625	bis(2-Ethylhexyl)phthalate	4.6000	ug/l	3.0000	0.0000
USTLCH4015-MW01	T-II	11/14/2005	EPA 625	Naphthalene	105.0000	ug/l	21.0000	15500.0000
USTLCH4015-MW21	T-III	11/15/2005	EPA 625	Naphthalene	32.3000	ug/l	21.0000	15500.0000

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM

LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Analytical Results
- 2L Non-Compliant
- 2L Compliant
- EPA 625 Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

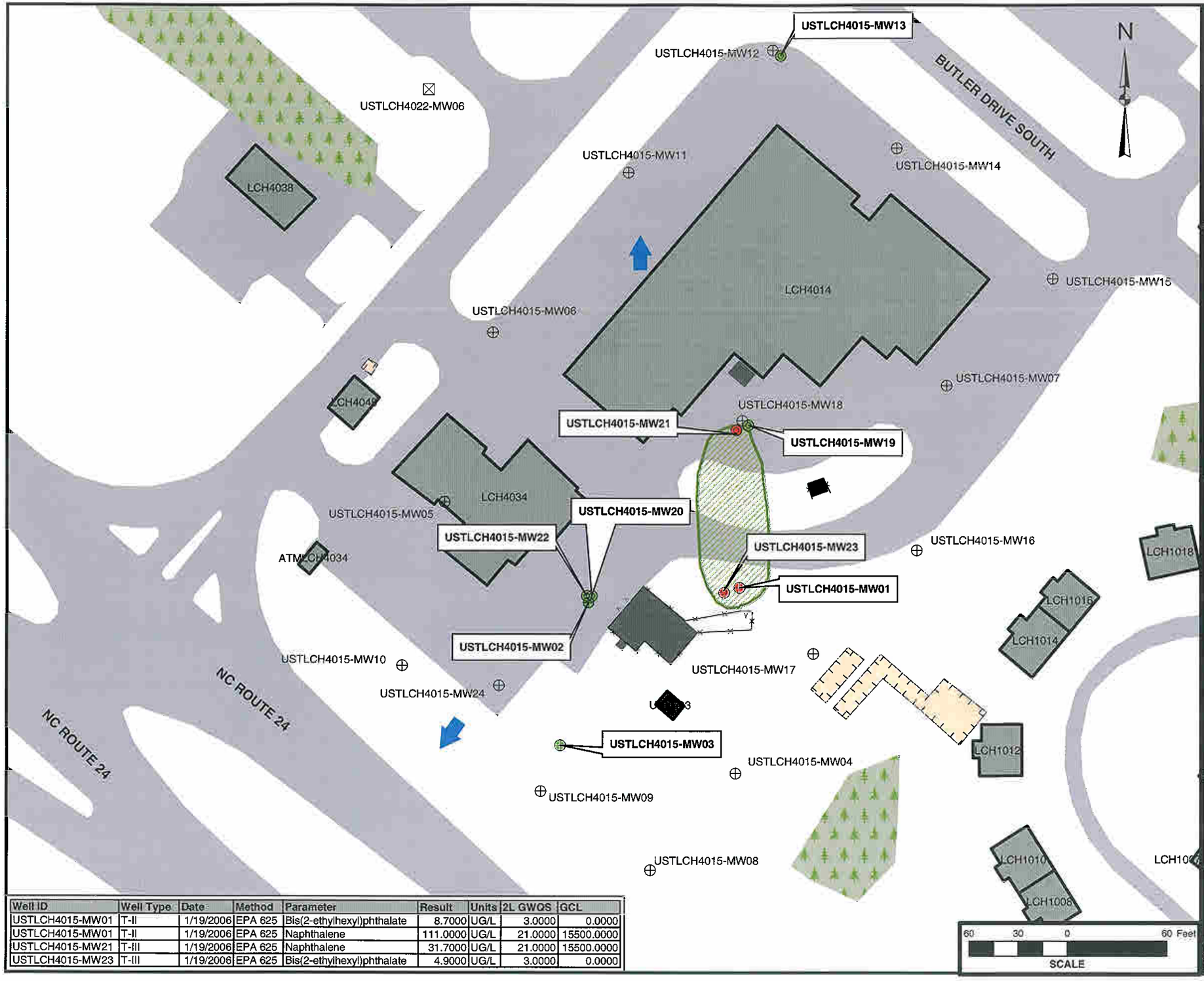
1. 2L Standard refers to North Carolina Groundwater Quality Standard 15A NCAC 2L.0202.
2. GCL refers to Gross Contaminant Level as defined in Table 7 of "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Ground Water", Volume II, dated January 2, 1998.
3. A 2L Standard of "0.00" implies a standard has not yet been established. According to NCAC T15:02L, any compound found above laboratory detection limits is considered noncompliant unless otherwise specified by the NCDENR.

CATLIN ENGINEERS and SCIENTISTS

SITE LCH-4015
EPA METHOD 625 COLORIMETRY AND PLUME IN EXCESS OF 2L FOURTH QUARTER 2005

FIGURE **14.3B**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM



Well ID	Well Type	Date	Method	Parameter	Result	Units	2L GWQS	GCL
USTLCH4015-MW01	T-II	1/19/2006	EPA 625	Bis(2-ethylhexyl)phthalate	8.7000	UG/L	3.0000	0.0000
USTLCH4015-MW01	T-II	1/19/2006	EPA 625	Naphthalene	111.0000	UG/L	21.0000	15500.0000
USTLCH4015-MW21	T-III	1/19/2006	EPA 625	Naphthalene	31.7000	UG/L	21.0000	15500.0000
USTLCH4015-MW23	T-III	1/19/2006	EPA 625	Bis(2-ethylhexyl)phthalate	4.9000	UG/L	3.0000	0.0000

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM

LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Analytical Results
- 2L Non-Compliant
- 2L Compliant
- EPA 625 Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. 2L Standard refers to North Carolina Groundwater Quality Standard 15A NCAC 2L.0202.
2. GCL refers to Gross Contaminant Level as defined in Table 7 of "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Ground Water", Volume II, dated January 2, 1998.
3. A 2L Standard of "0.00" implies a standard has not yet been established. According to NCAC T15:02L, any compound found above laboratory detection limits is considered noncompliant unless otherwise specified by the NCDENR.

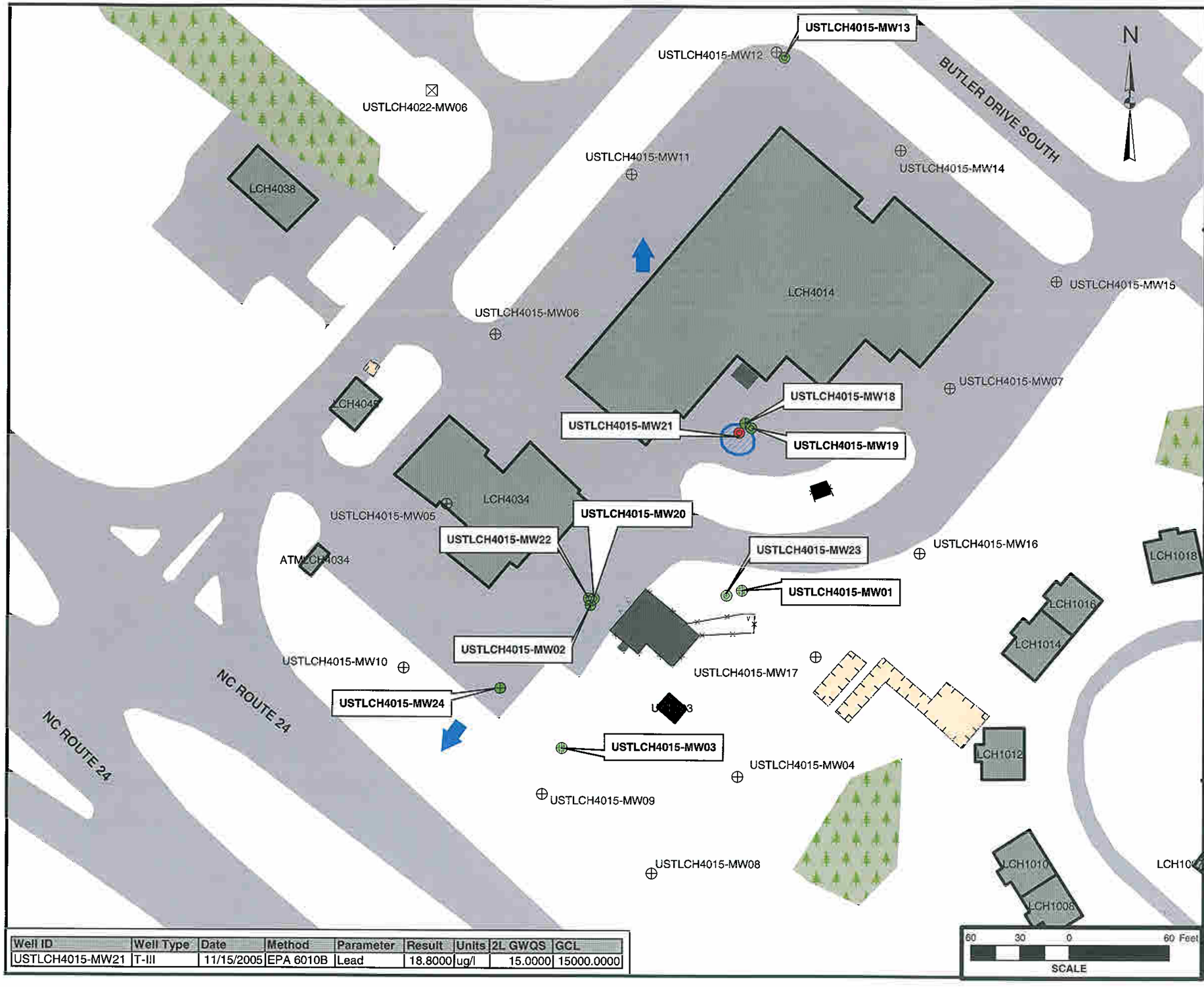
CATLIN ENGINEERS and SCIENTISTS

SITE LCH-4015
EPA METHOD 625 COLORIMETRY AND PLUME IN EXCESS OF 2L FIRST QUARTER 2006

FIGURE **14.3C**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM



LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Analytical Results
- 2L Non-Compliant
- 2L Compliant
- EPA 6010B Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. 2L Standard refers to North Carolina Groundwater Quality Standard 15A NCAC 2L.0202.
2. GCL refers to Gross Contaminant Level as defined in Table 7 of "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Ground Water", Volume II, dated January 2, 1998.
3. A 2L Standard of "0.00" implies a standard has not yet been established. According to NCAC T15:02L, any compound found above laboratory detection limits is considered noncompliant unless otherwise specified by the NCDENR.

Well ID	Well Type	Date	Method	Parameter	Result	Units	2L GWQS	GCL
USTLCH4015-MW21	T-III	11/15/2005	EPA 6010B	Lead	18.8000	ug/l	15.0000	15000.0000

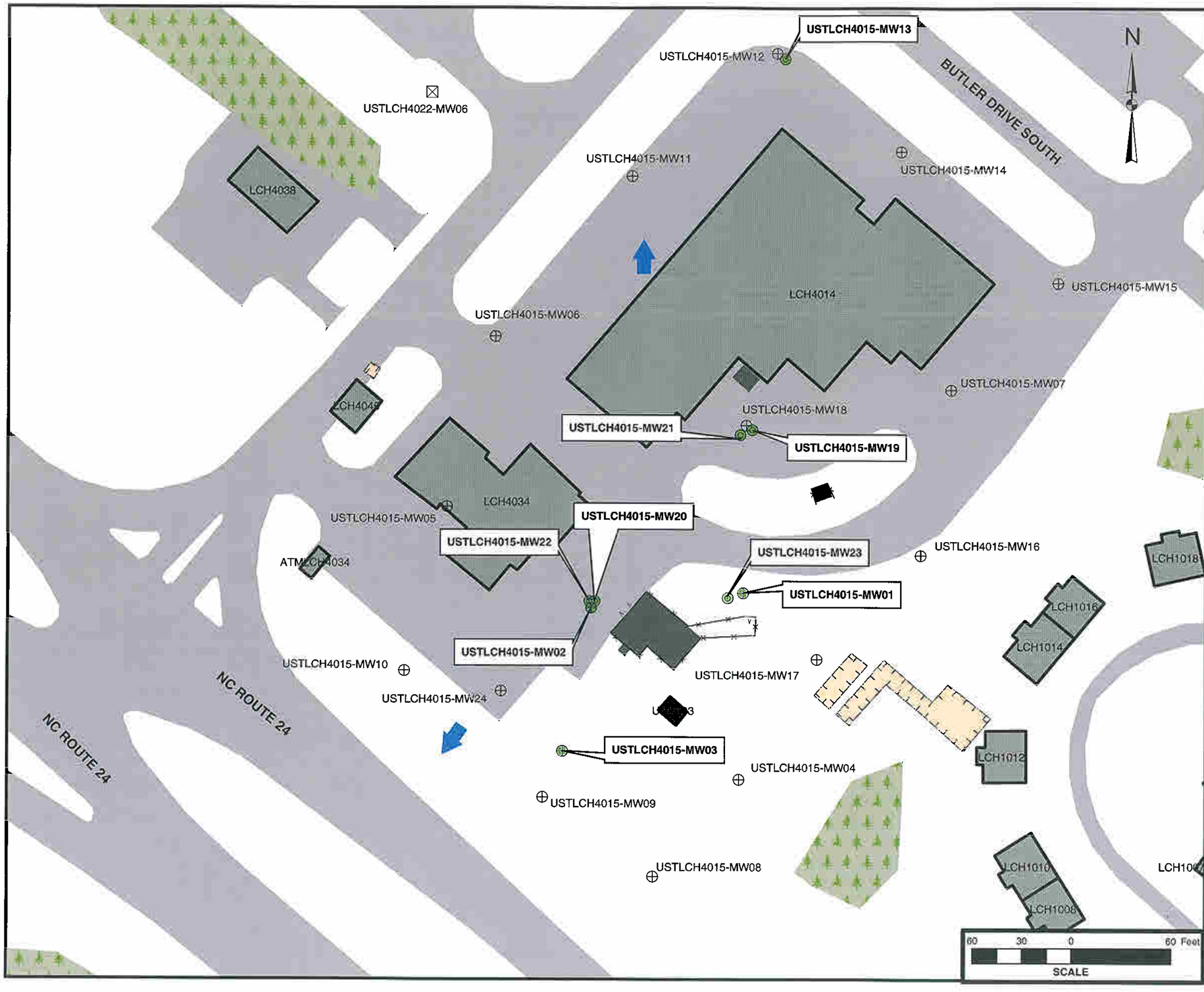
CATLIN ENGINEERS and SCIENTISTS

SITE LCH-4015
EPA METHOD 6010B COLORIMETRY AND PLUME IN EXCESS OF 2L
FOURTH QUARTER 2005

FIGURE **14.4B**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM



LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Analytical Results
- 2L Non-Compliant
- 2L Compliant
- EPA 6020 Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. No EPA Method 6020 Compounds were detected above the 2L GWQS for any wells sampling during this monitoring event.

CATLIN ENGINEERS and SCIENTISTS

SITE LCH-4015
EPA METHOD 6020 COLORIMETRY AND PLUME IN EXCESS OF 2L FIRST QUARTER 2006

FIGURE **14.5A**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

SECTION 15.0

OF THE

ANNUAL MANAGEMENT REPORT
MCB CAMP LEJEUNE UST MANAGEMENT PROGRAM

MONITORING EVENT:

SECOND SEMESTER 2005/FIRST SEMESTER 2006
(JULY 2005 THROUGH JUNE 2006)

SITE-SPECIFIC MONITORING REPORT
FOR

SITE M-230

NCDENR INCIDENT NO. 12677



15.0 EXECUTIVE SUMMARY
SITE M-230

15.1 Site Information

15.1.1 Site Location: MCB Camp Lejeune (Camp Johnson Area)
15.1.2 Incident Number(s): 12677
15.1.3 UTM Coordinates (WGS84) (Meters): 279074.44 Easting, 3845140.71 Northing
15.1.4 Risk Classification: Low
15.1.5 Land Use Classification: Industrial/Commercial
15.1.6 Source Type(s): Fuel Oil (15000 gallon capacity tank)

15.2 Monitoring Event Information

15.2.1 Sampling Performed By: Sovereign
15.2.2 Date(s) of This Monitoring Event: Groundwater sampling December 2005 and gauging January 2006
15.2.3 Date(s) of Previous Monitoring Event: 6/19/02 (gw), 6/17/02 and 3/24/03 (soil)
15.2.4 Reason(s) for This Monitoring Event: Track dissolved phase plume attenuation
15.2.5 Site Monitoring Status at Time of This Event: Pending closure

15.3 Groundwater Hydraulics

15.3.1 Hydraulic Conductivity: Unknown
15.3.2 Effective Porosity: Unknown
15.3.3 Hydraulic Gradient: Unknown
15.3.4 Average Linear Groundwater Flow Velocity: Unknown
15.3.5 Groundwater Flow Direction: Southeast (Estimated direction from LSA, 2002)
15.3.6 Range of Measured Water Table Elevations: Approximately 4 feet
15.3.7 Significant Changes from Previously Reported Data: Not Applicable. This is the first Management Report prepared by CATLIN.

15.4 Free Product Plume

15.4.1 Free Product Present?: No.
15.4.2 Free Product Thickness Measured: None. See Table 15.1
15.4.3 Plume Size and Location: None. See Figure 15.1
15.4.4 Free Product/Contaminants Removed from Site This Period: None.
15.4.5 Significant Changes from Previously Reported Data: Not Applicable. This is the first Management Report prepared by CATLIN.

15.5 Dissolved-Phase Plume

15.5.1 Plume Concentrations: See Tables 15.2A and B, 15.2B, 15.3A and B, 15.4A and B, and 15.5A and B.

15.5.2 Plume Size and Location: See Figures 15.2, 15.3, 15.4, and 15.5

15.5.3 Significant Changes from Previously Reported Data: Not Applicable. This is the first Management Report prepared by CATLIN. Groundwater sample analytical results compared to the 2L GWQS are discussed as follows:

EPA Methods 602, 625, and 6010B, and MADEP VPH/EPH

No EPA Methods 602, 625, and 6010B compounds were detected above the 2L GWQS. No MADEP VPH or EPH hydrocarbon fractions were detected above the 2L GWQS.

15.6 Potential Receptors

15.6.1 Contaminated Water Supply Well(s)?: No

15.6.2 Potable Water Supply Well Within 1,000 Feet of Source Area?: No

15.6.3 Any Water Supply Well Within 250 Feet of Source Area?: No

15.6.4 Surface Water Body Within 500 Feet?: No

15.6.5 Past Evidence of Vapors?: No

15.6.6 Significant Changes from Previously Reported Data?: Not Applicable. This is the first Management Report prepared by CATLIN.

15.7 Remediation

15.7.1 Status: Complete

15.7.2 Type: Excavation and Natural Attenuation

15.7.3 Progress: Complete

15.7.4 Construction Contractor: Not Applicable

15.7.5 Operating Contractor: Not Applicable

15.8 Observations and Comments

"No Further Action" notice was given in March 2006 and public notification is complete.

TABLE 15.1
SITE M-230
FIELD MEASUREMENTS - FIRST QUARTER 2006

Date Measured: 1/9/2006

Well No.	Type	TOC	Stick up	DTW	Product Thickness	DTW BGS	GW Elevation
USTM230-MW01	T-II	17.00	0.00	13.25	0.00	13.25	3.75

Notes:
1. TII = Type II monitoring well
   TIII = Type III monitoring well
   RW = Recovery well
2. TOC = Top of well casing elevation.
3. STICK UP = Height of well casing above land surface in feet.
4. DTW = Depth to water (in feet) from top of well casing.
5. Product thickness is measured in feet.
6. DTW BGS = Depth to water below ground surface in feet.
7. GW Elevation = Ground water elevation (not adjusted for free product)
8. A zero ("0.00") in the product thickness column indicates no measureable thickness.
9. Top of casing elevations are measured in feet relative to Mean Sea Level (NAD83).
10. Stick up values were not available for wells with no values in the STICK UP and DTW BGS columns.

TABLE 15.2A

SITE M-230

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 602

Contaminant of Concern →		
Well ID	**Date**	
2L GWQS		
GCL		
USTM230-MW01	12/9/2005	

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 15.2B

SITE M-230

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 602

Contaminant of Concern →		
Well ID	**Date**	
2L GWQS		
GCL		
USTM230-MW01	12/9/2005	

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 15.3A

SITE M-230

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 625

Contaminant of Concern →		
Well ID	**Date**	
2L GWQS		
GCL		
USTM230-MW01	12/9/2005	

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 15.3B

SITE M-230

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 625

Contaminant of Concern →		
Well ID	**Date**	
2L GWQS		
GCL		
USTM230-MW01	12/9/2005	

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 15.4A

SITE M-230

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 6010B

Contaminant of Concern →		
Well ID	**Date**	**Manganese**
2L GWQS		50
GCL		0
USTM230-MW01	12/9/2005	10.00

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 15.4B

SITE M-230

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 6010B

Contaminant of Concern →		
Well ID	**Date**	**Manganese**
2L GWQS		50
GCL		0
USTM230-MW01	12/9/2005	10.00

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 15.5A

SITE M-230

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

MADEP VPH/EPH

Contaminant of Concern →		
Well ID	**Date**	
2L GWQS		
GCL		
USTM230-MW01	12/9/2005	

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 15.5B

SITE M-230

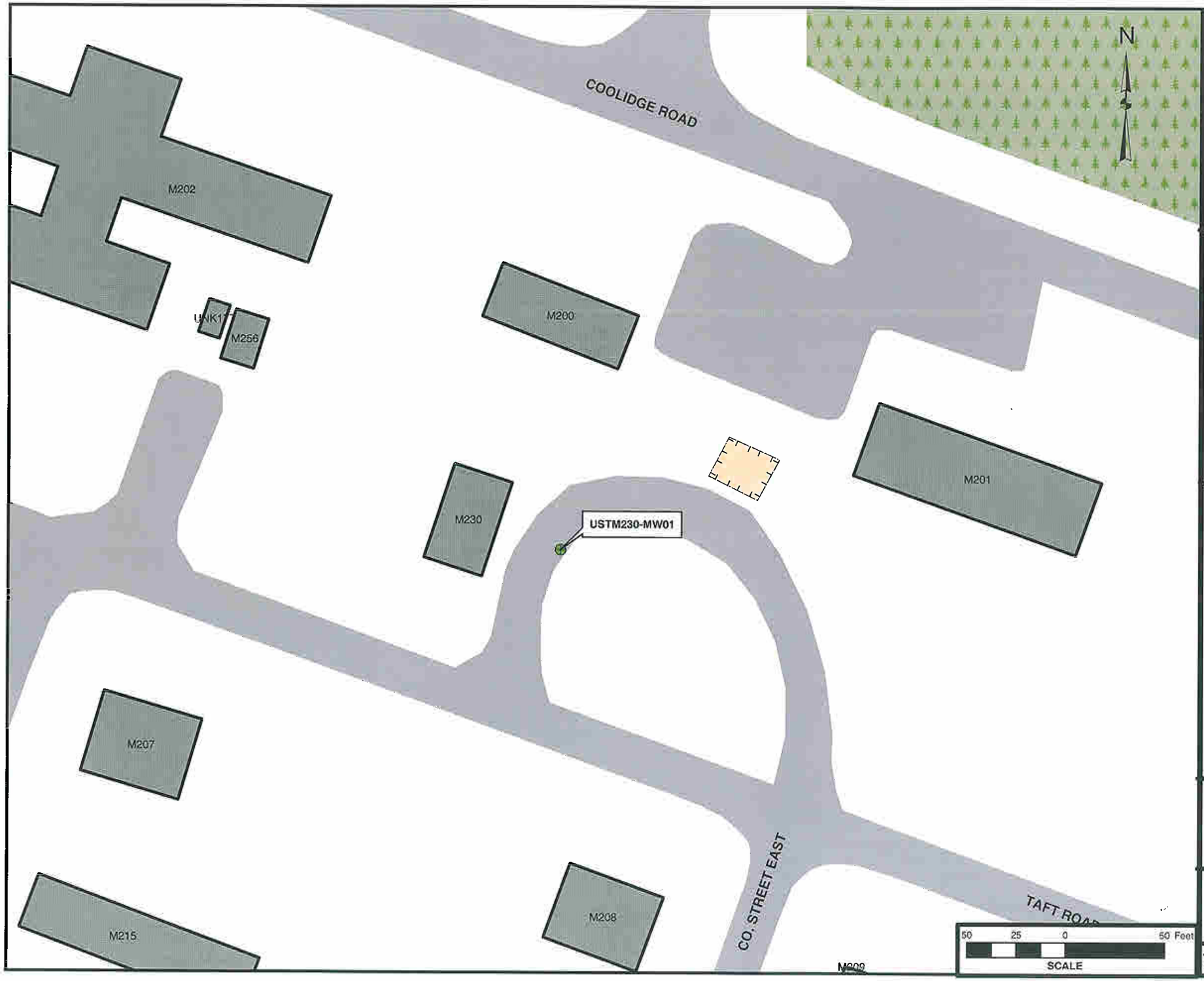
HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

MADEP VPH/EPH

Contaminant of Concern →		
Well ID	**Date**	
2L GWQS		
GCL		
USTM230-MW01	12/9/2005	

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM



LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Free Product
- Free Product Detected
- No Measurable Thickness
- Free Product Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. Free Product was not detected at this site in any of the wells gauged during this monitoring event.

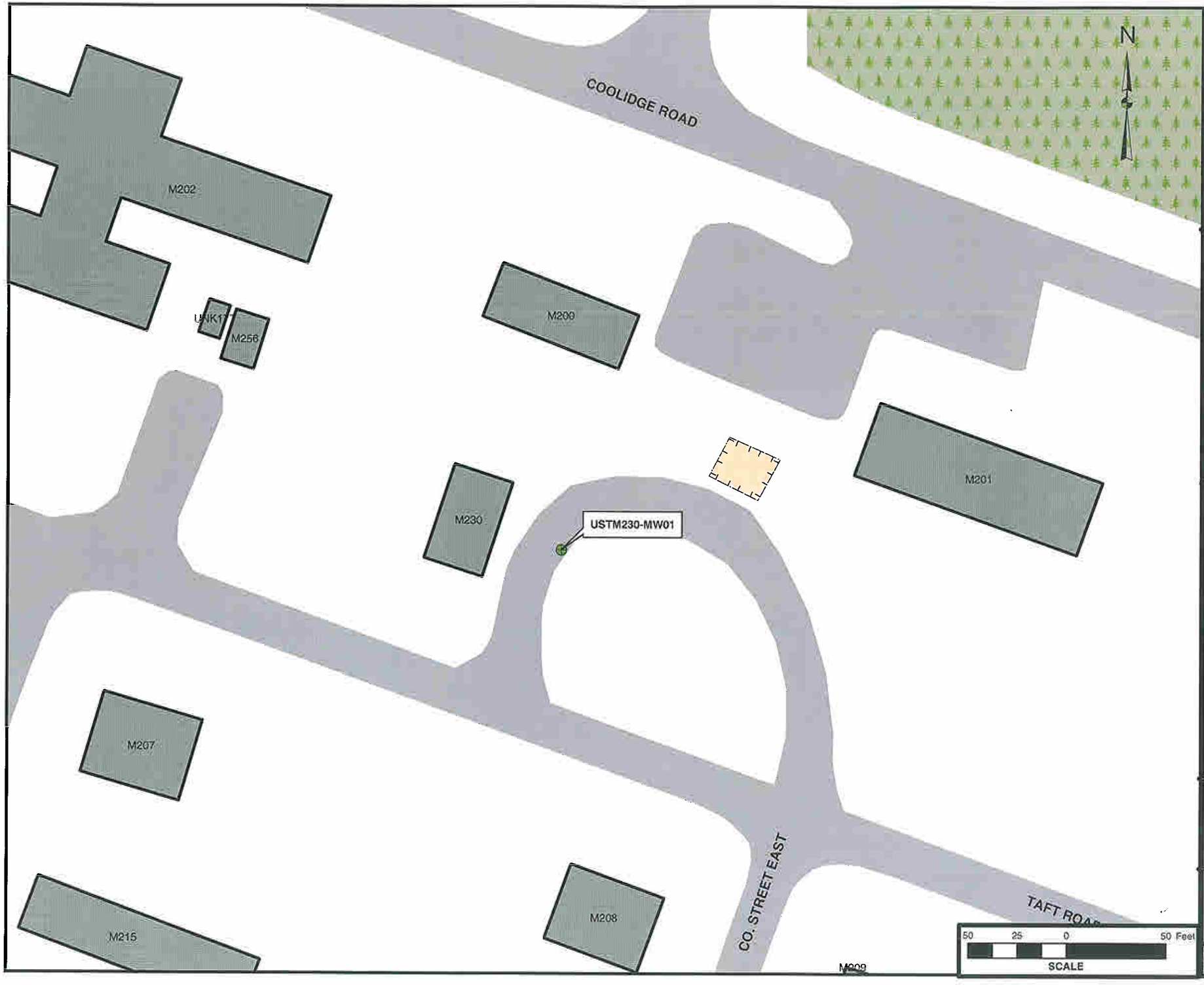
CATLIN ENGINEERS and SCIENTISTS

SITE M-230
FREE PRODUCT PLUME MAP
FIRST QUARTER 2006

FIGURE 15.1

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM



LEGEND

Monitoring Wells
- Type I
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- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Analytical Results
- 2L Non-Compliant
- 2L Compliant
- EPA 602 Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. No EPA Method 602 Compounds were detected above the 2L GWQS in any wells sampled during this monitoring event.

CATLIN ENGINEERS and SCIENTISTS

SITE M-230
EPA METHOD 602 COLORIMETRY AND PLUME IN EXCESS OF 2L
FOURTH QUARTER 2005

FIGURE 15.2

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM



LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
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- Water Supply Wells
- Above Ground Storage Tank
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Analytical Results
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- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. No EPA Method 625 Compounds were detected above the 2L GWQS in any wells sampled during this monitoring event.

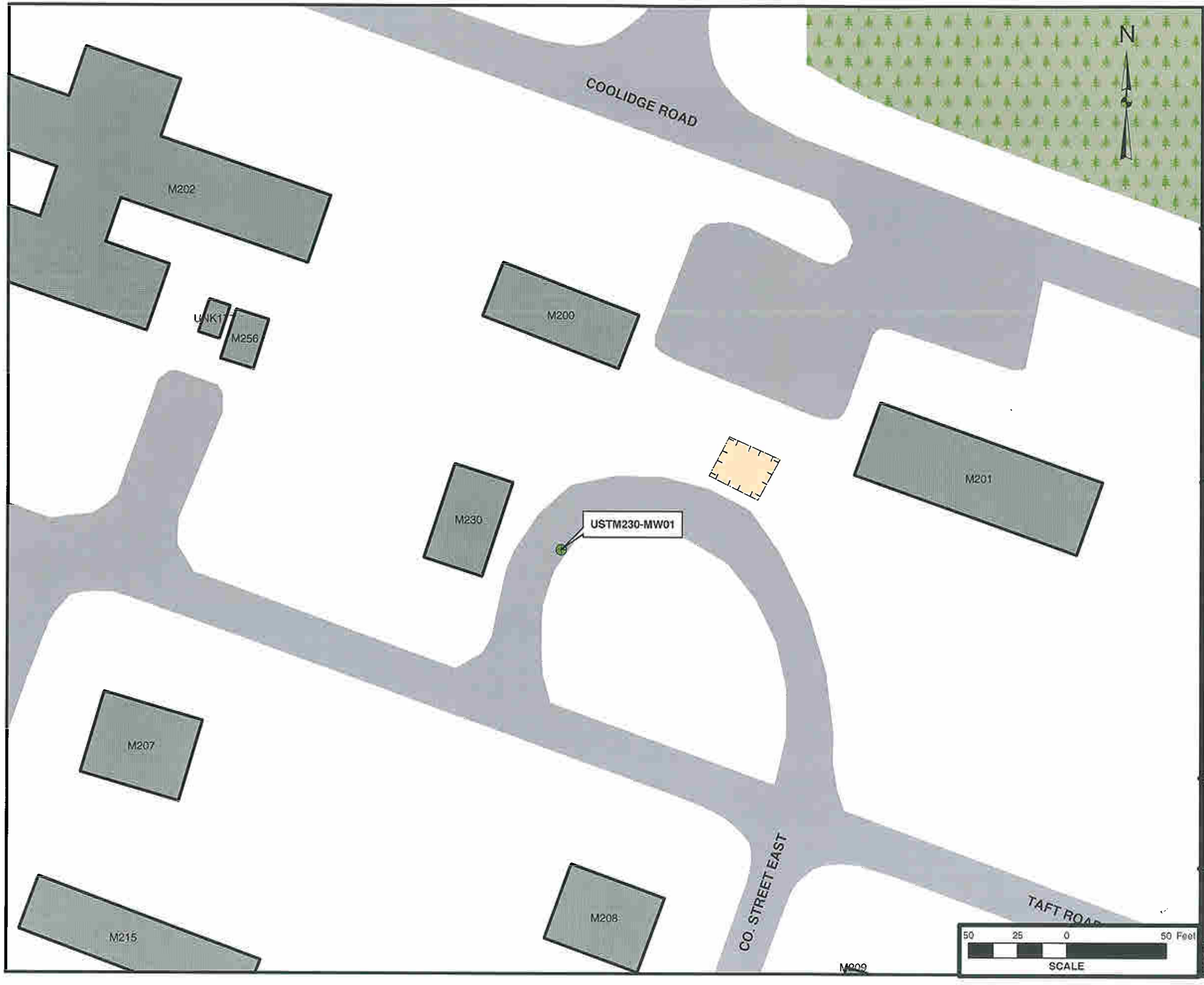
CATLIN ENGINEERS and SCIENTISTS

SITE M-230
EPA METHOD 625 COLORIMETRY AND PLUME IN EXCESS OF 2L
FOURTH QUARTER 2005

FIGURE 15.3

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM



LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Analytical Results
- 2L Non-Compliant
- 2L Compliant
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- Buildings and Structures
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- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. No EPA Method 6010B Compounds were detected above the 2L GWQS in any wells sampled during this monitoring event.

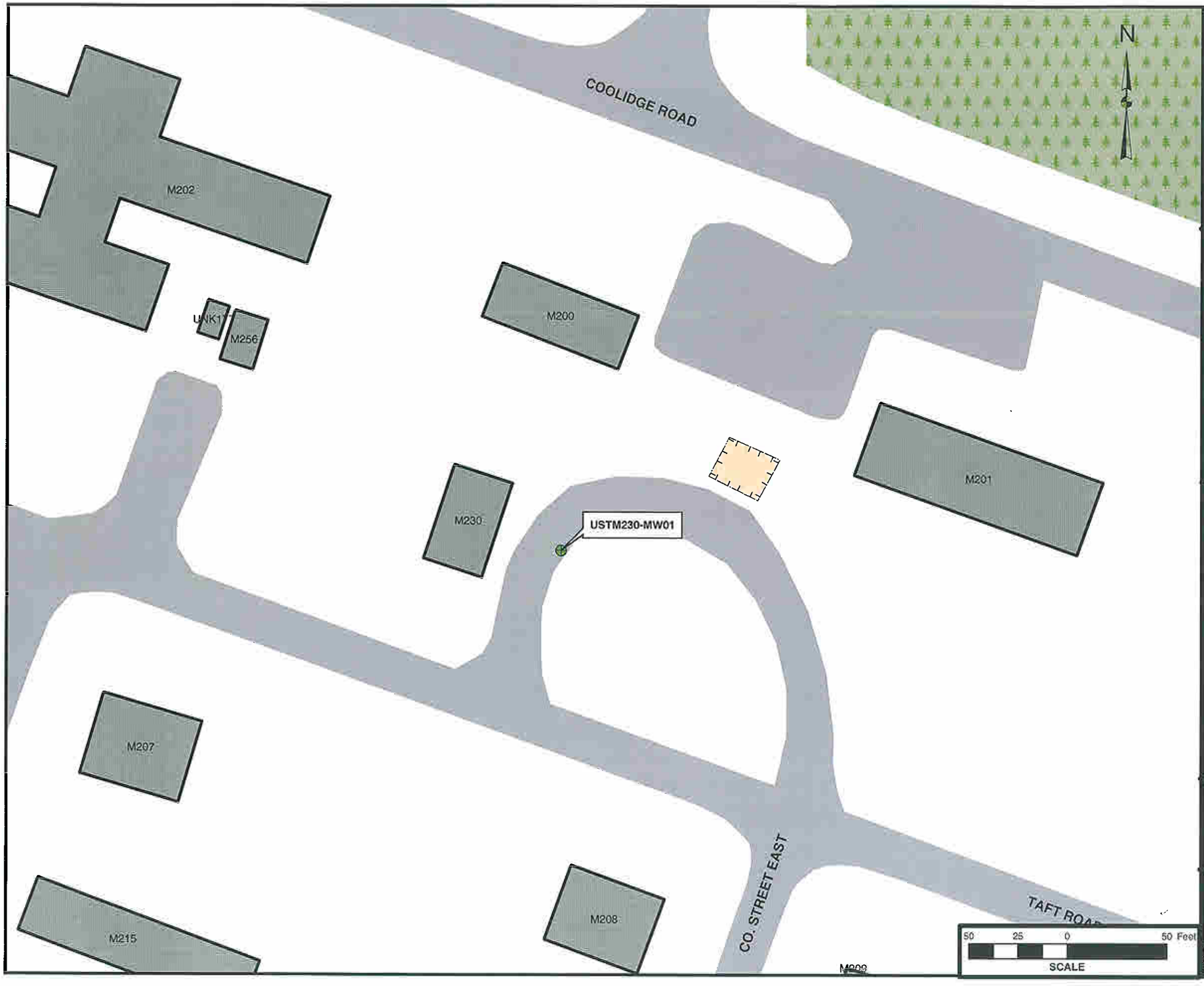
CATLIN ENGINEERS and SCIENTISTS

SITE M-230
EPA METHOD 6010B COLORIMETRY AND PLUME IN EXCESS OF 2L
FOURTH QUARTER 2005

FIGURE 15.4

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM



LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Analytical Results
- 2L Non-Compliant
- 2L Compliant
- MADEP Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. No MADEP VPH/EPH Compounds were detected above the 2L GWQS in any wells sampled during this monitoring event.

CATLIN ENGINEERS and SCIENTISTS

SITE M-230
MADEP VPH/EPH COLORIMETRY AND PLUME IN EXCESS OF 2L
FOURTH QUARTER 2005

FIGURE 15.5

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

SECTION 16.0

OF THE

ANNUAL MANAGEMENT REPORT
MCB CAMP LEJEUNE UST MANAGEMENT PROGRAM

MONITORING EVENT:

SECOND SEMESTER 2005/FIRST SEMESTER 2006
(JULY 2005 THROUGH JUNE 2006)

SITE-SPECIFIC MONITORING REPORT
FOR

SITE M-232-236

NCDENR INCIDENT NO. 9593



16.0 EXECUTIVE SUMMARY
SITE M-232-236

16.1 Site Information

16.1.1 Site Location: MCB Camp Lejeune (Camp Johnson Area)
16.1.2 Incident Number(s): 9593
16.1.3 UTM Coordinates (WGS84) (Meters): 278925.12 Easting, 3844763.57 Northing
16.1.4 Risk Classification: Intermediate
16.1.5 Land Use Classification: Residential
16.1.6 Source Type(s): Heating oil UST

16.2 Monitoring Event Information

16.2.1 Sampling Performed By: EEI
16.2.2 Date(s) of This Monitoring Event: 12/12/05
16.2.3 Date(s) of Previous Monitoring Event: 6/16/05
16.2.4 Reason(s) for This Monitoring Event: Track dissolved phase plume attenuation
16.2.5 Site Monitoring Status at Time of This Event: Semi annual groundwater sampling of seven wells and annual reporting.

16.3 Groundwater Hydraulics

16.3.1 Hydraulic Conductivity: Shallow: 1.47 feet/day - Intermediate: 2.67 feet/day
16.3.2 Effective Porosity: Shallow: 0.40 – Intermediate: 0.35
16.3.3 Hydraulic Gradient: 0.0005 to 0.0061
16.3.4 Average Linear Groundwater Flow Velocity: Shallow: 0.7 to 5 feet/year – Intermediate: 6.2 to 17 feet/year
16.3.5 Groundwater Flow Direction: Shallow: Towards the east-southeast
16.3.6 Range of Measured Water Table Elevations: 1.99 to 6.14 feet MSL
16.3.7 Significant Changes from Previously Reported Data: Not Applicable. This is the first Management Report prepared by CATLIN.

16.4 Free Product Plume

16.4.1 Free Product Present?: Yes.
16.4.2 Free Product Thickness Measured: See Table 16.1A
16.4.3 Plume Size and Location: See Figure 16.1A
16.4.4 Free Product/Contaminants Removed from Site This Period: None.
16.4.5 Significant Changes from Previously Reported Data: Not Applicable. This is the first Management Report prepared by CATLIN.

16.5 Dissolved-Phase Plume

16.5.1 Plume Concentrations: See Tables 16.2A and B, 16.3A and B, and 16.4A and B

16.5.2 Plume Size and Location: See Figures 16.2A, 16.3A, and 16.4A

16.5.3 Significant Changes from Previously Reported Data: Not Applicable. This is the first Management Report prepared by CATLIN. Groundwater sample analytical results compared to the 2L GWQS are discussed as follows:

EPA Methods 602 and 625
No EPA Method 602 or 625 compounds were detected above the 2L GWQS.

MADEP VPH/EPH
The C9-C22 Aromatics detected in the USTM232-236-MW18, USTM232-236-MW21, and USTM232-236-MW22 groundwater samples were above the 2L GWQS.

16.6 Potential Receptors

16.6.1 Contaminated Water Supply Well(s)?: No

16.6.2 Potable Water Supply Well Within 1,000 Feet of Source Area?: No

16.6.3 Any Water Supply Well Within 250 Feet of Source Area?: No

16.6.4 Surface Water Body Within 500 Feet?: No

16.6.5 Past Evidence of Vapors?: No

16.6.6 Significant Changes from Previously Reported Data?: Not Applicable. This is the first Management Report prepared by CATLIN.

16.7 Remediation

16.7.1 Status: Complete

16.7.2 Type: Soil excavation

16.7.3 Progress: Complete

16.7.4 Construction Contractor: Unknown

16.7.5 Operating Contractor: Not Applicable

16.8 Observations and Comments

CATLIN recommends continuing the current monitoring schedule which is quarterly gauging and semi-annual sampling.

Monitoring data for the second quarter 2006 is not included in this report as the data was not available at the time of report preparation.

TABLE 16.1A
SITE M-232-236
FIELD MEASUREMENTS - FOURTH QUARTER 2005

Date Measured: 12/12/2005

Well No.	Type	TOC	Stick up	DTW	Product Thickness	DTW BGS	GW Elevation
USTM232-236-MW01	T-II	14.20	3.64	9.41	0.00	5.77	4.79
USTM232-236-MW02	T-I	13.96	3.46	10.92	0.00	7.46	3.04
USTM232-236-MW03	T-II	16.33	3.63	12.73	0.00	9.10	3.60
USTM232-236-MW04	T-I	16.48	3.78	13.45	0.00	9.67	3.03
USTM232-236-MW05	T-II	12.80	3.25	7.67	0.00	4.42	5.13
USTM232-236-MW06	T-I	13.07	3.49	10.15	0.00	6.66	2.92
USTM232-236-MW07	T-II	12.90	3.84	6.94	0.00	3.10	5.96
USTM232-236-MW08	T-I	12.91	3.76	10.24	0.00	6.48	2.67
USTM232-236-MW09	T-II	13.88	3.35	11.89	0.00	8.54	1.99
USTM232-236-MW10	T-I	14.43	3.93	11.07	0.00	7.14	3.36
USTM232-236-MW11	T-II	10.87	3.16	4.73	0.00	1.57	6.14
USTM232-236-MW12	T-I	10.89	3.18	8.74	0.00	5.56	2.15
USTM232-236-MW13	T-II	16.10	3.67	12.21	0.00	8.54	3.89
USTM232-236-MW14	T-I	15.97	3.57	12.67	0.00	9.10	3.30
USTM232-236-MW15	T-II	15.28		11.73	0.00		3.55
USTM232-236-MW16	T-II	15.14		12.11	0.00		3.03
USTM232-236-MW17	T-II	14.52		8.73	0.00		5.79
USTM232-236-MW18	T-II	11.34		8.44	0.00		2.90
USTM232-236-MW19	T-II	11.45		8.17	0.02		3.28
USTM232-236-MW20	T-II	11.39		8.20	0.00		3.19
USTM232-236-MW21	T-II	11.75		8.02	0.00		3.73
USTM232-236-MW22	T-II	11.73		7.93	0.00		3.80

Notes:
1. TII = Type II monitoring well
   TIII = Type III monitoring well
   RW = Recovery well
2. TOC = Top of well casing elevation.
3. STICK UP = Height of well casing above land surface in feet.
4. DTW = Depth to water (in feet) from top of well casing.
5. Product thickness is measured in feet.
6. DTW BGS = Depth to water below ground surface in feet.
7. GW Elevation = Ground water elevation (not adjusted for free product)
8. A zero ("0.00") in the product thickness column indicates no measureable thickness.
9. Top of casing elevations are measured in feet relative to Mean Sea Level (NAD83).
10. Stick up values were not available for wells with no values in the STICK UP and DTW BGS columns.

TABLE 16.2A

SITE M-232-236

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 602

Contaminant of Concern →		Ethylbenzene	Toluene
Well ID	**Date**		
2L GWQS		550	1000
GCL		550000	257500
USTM232-236-MW05	12/12/2005	BQL	1.13
USTM232-236-MW07	12/12/2005	BQL	BQL
USTM232-236-MW18	12/12/2005	BQL	1.43
USTM232-236-MW20	12/12/2005	BQL	1.01
USTM232-236-MW21	12/12/2005	1.62	1.64
USTM232-236-MW22	12/12/2005	BQL	1.20

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 16.2B

SITE M-232-236

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 602

Contaminant of Concern →		Ethylbenzene	Toluene
Well ID	**Date**		
2L GWQS		550	1000
GCL		550000	257500
USTM232-236-MW05	12/12/2005	BQL	1.13
USTM232-236-MW07	12/12/2005	BQL	BQL
USTM232-236-MW18	12/12/2005	BQL	1.43
USTM232-236-MW20	12/12/2005	BQL	1.01
USTM232-236-MW21	12/12/2005	1.62	1.64
USTM232-236-MW22	12/12/2005	BQL	1.20

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 16.3A

SITE M-232-236

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 625

Contaminant of Concern →		Acenaphthene	Fluorene	Naphthalene	Phenanthrene
Well ID	**Date**				
2L GWQS		80	280	21	210
GCL		2120	950	15500	410
USTM232-236-MW05	12/12/2005	BQL	BQL	BQL	BQL
USTM232-236-MW07	12/12/2005	BQL	BQL	BQL	BQL
USTM232-236-MW18	12/12/2005	5.50	7.40	BQL	7.00
USTM232-236-MW20	12/12/2005	BQL	1.40	BQL	BQL
USTM232-236-MW21	12/12/2005	3.20	5.70	5.50	3.60
USTM232-236-MW22	12/12/2005	2.20	3.30	4.90	3.00

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 16.3B

SITE M-232-236

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 625

Contaminant of Concern →		Acenaphthene	Fluorene	Naphthalene	Phenanthrene
Well ID	**Date**				
2L GWQS		80	280	21	210
GCL		2120	950	15500	410
USTM232-236-MW05	12/12/2005	BQL	BQL	BQL	BQL
USTM232-236-MW07	12/12/2005	BQL	BQL	BQL	BQL
USTM232-236-MW18	12/12/2005	5.50	7.40	BQL	7.00
USTM232-236-MW20	12/12/2005	BQL	1.40	BQL	BQL
USTM232-236-MW21	12/12/2005	3.20	5.70	5.50	3.60
USTM232-236-MW22	12/12/2005	2.20	3.30	4.90	3.00

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 16.4A

SITE M-232-236

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

MADEP VPH/EPH

Contaminant of Concern →		C9-C18 Aliphatics	C9-C22 Aromatics
Well ID	**Date**		
2L GWQS		4200	210
GCL		0	0
USTM232-236-MW05	12/12/2005	BQL	BQL
USTM232-236-MW07	12/12/2005	BQL	BQL
USTM232-236-MW18	12/12/2005	130.00	**420.00**
USTM232-236-MW20	12/12/2005	BQL	BQL
USTM232-236-MW21	12/12/2005	100.00	**300.00**
USTM232-236-MW22	12/12/2005	BQL	**250.00**

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 16.4B

SITE M-232-236

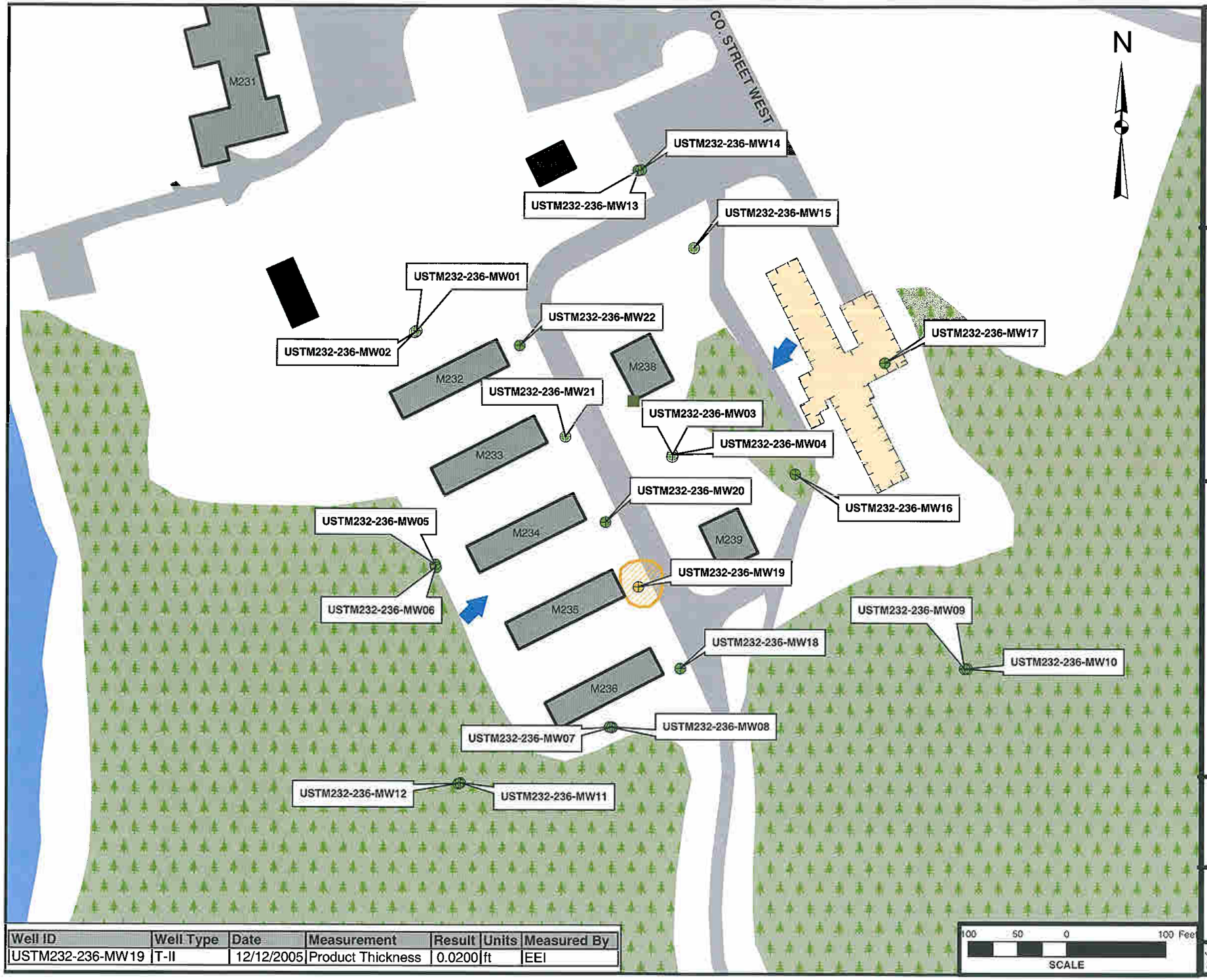
HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

MADEP VPH/EPH

Contaminant of Concern →		C9-C18 Aliphatics	C9-C22 Aromatics
Well ID	**Date**		
2L GWQS		4200	210
GCL		0	0
USTM232-236-MW05	12/12/2005	BQL	BQL
USTM232-236-MW07	12/12/2005	BQL	BQL
USTM232-236-MW18	12/12/2005	130.00	**420.00**
USTM232-236-MW20	12/12/2005	BQL	BQL
USTM232-236-MW21	12/12/2005	100.00	**300.00**
USTM232-236-MW22	12/12/2005	BQL	**250.00**

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM



LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Free Product
- Free Product Detected
- No Measurable Thickness
- Free Product Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

Well ID	Well Type	Date	Measurement	Result	Units	Measured By
USTM232-236-MW19	T-II	12/12/2005	Product Thickness	0.0200	ft	EEI

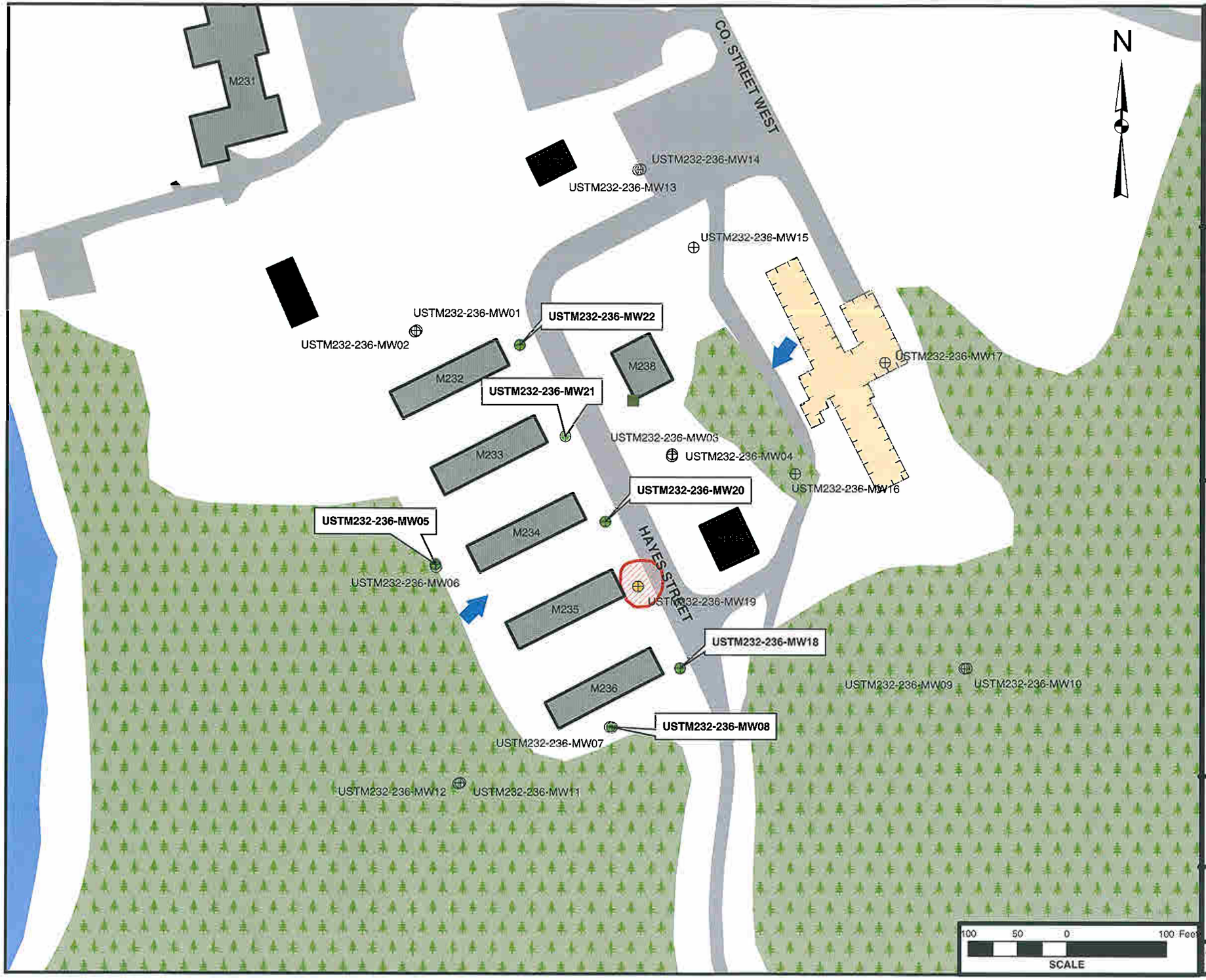
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SITE M-232-236
FREE PRODUCT PLUME MAP
FOURTH QUARTER 2005

FIGURE **16.1A**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
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MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM



LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Analytical Results
- Free Product Detected
- 2L Non-Compliant
- 2L Compliant
- EPA 602 Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. No EPA Method 602 Compounds were detected above the 2L GWQS in any wells sampled during this monitoring event.

2. EPA Method 602 Plume geometry based on the presence of free product.

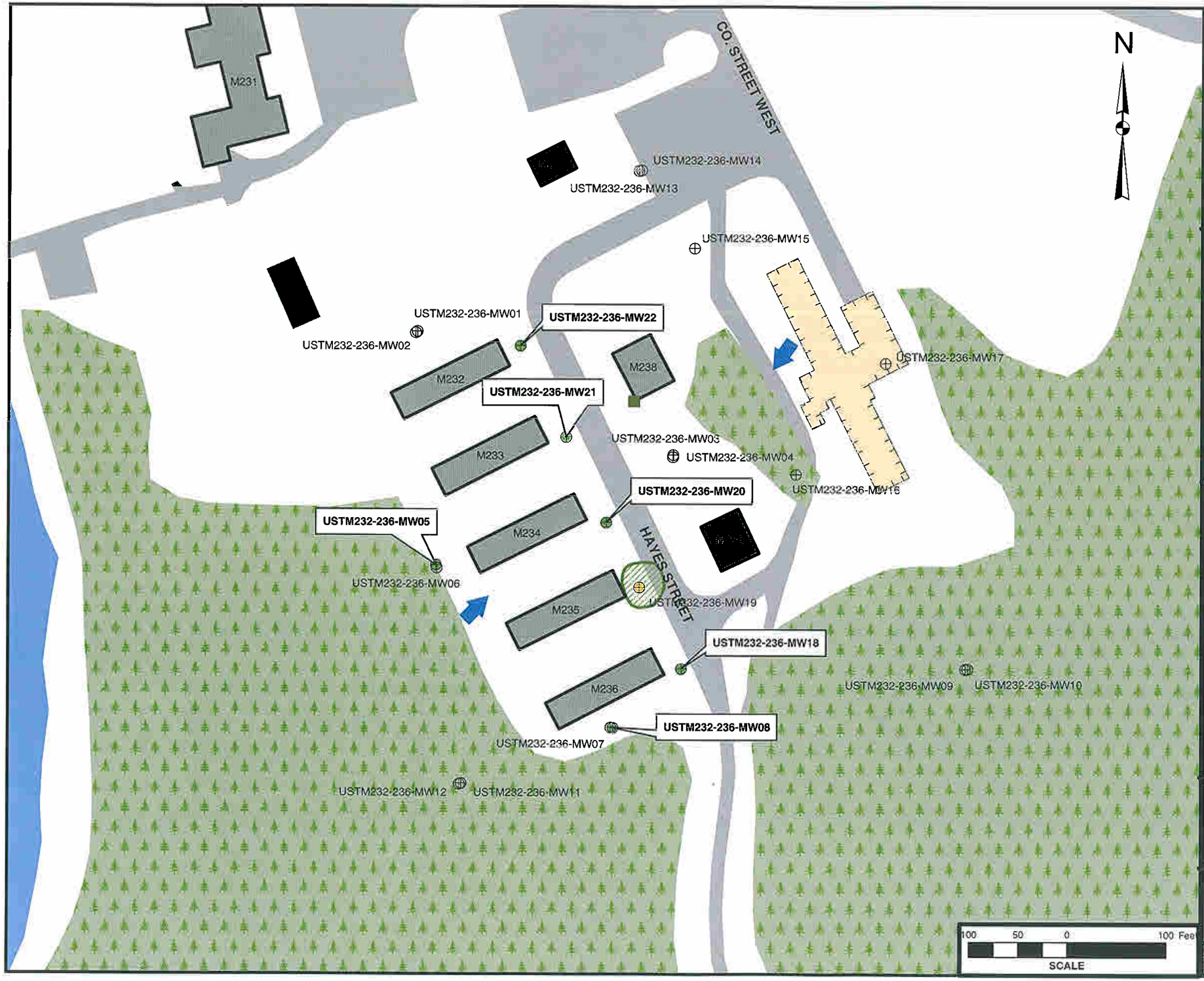
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SITE M-232-236
EPA METHOD 602 COLORIMETRY AND PLUME IN EXCESS OF 2L
FOURTH QUARTER 2005

FIGURE **16.2A**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM



LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Analytical Results
- Free Product Detected
- 2L Non-Compliant
- 2L Compliant
- EPA 625 Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. No EPA Method 625 Compounds were detected above the 2L GWQS in any wells sampled during this monitoring event.

2. EPA Method 625 Plume geometry based on the presence of free product.

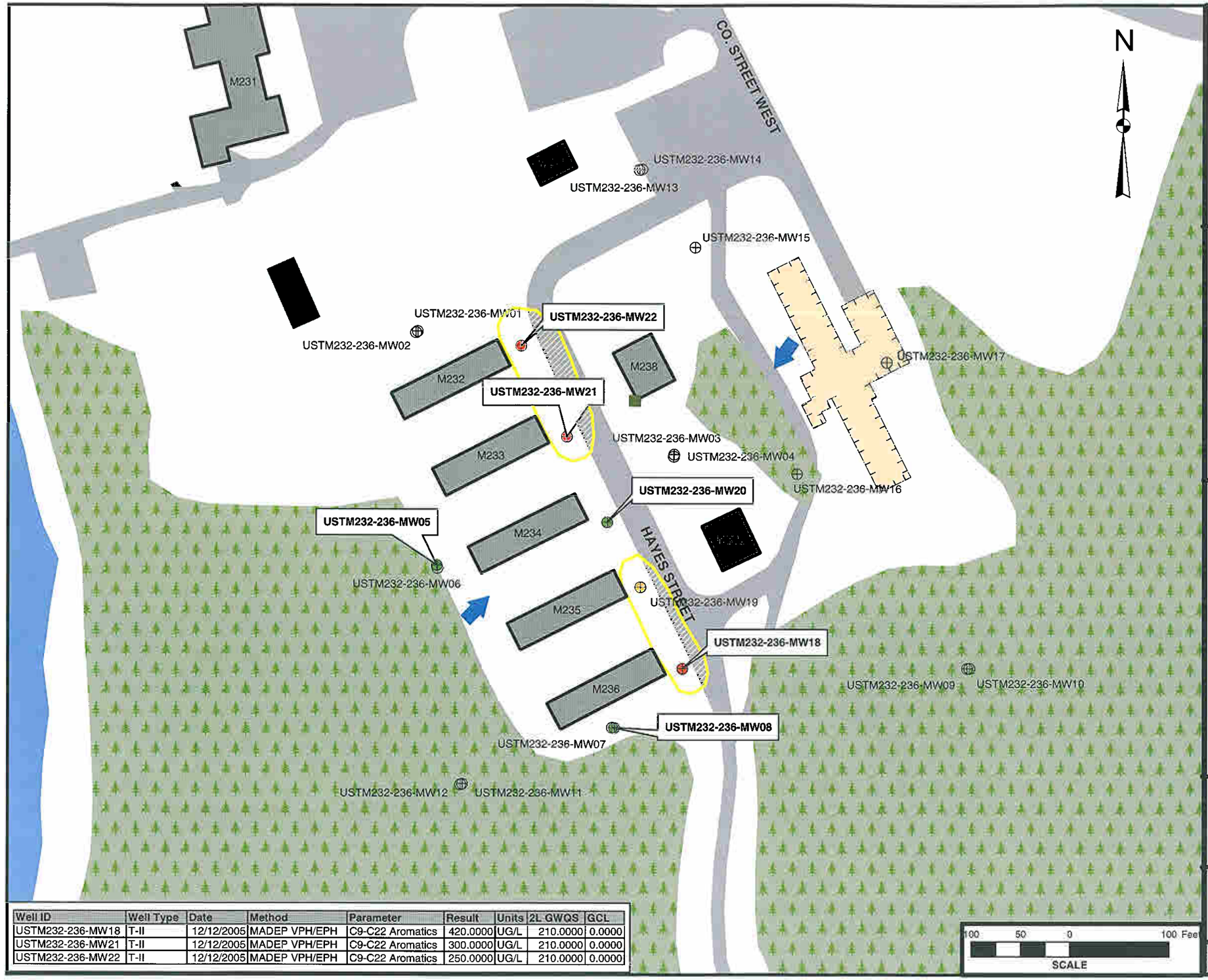
CATLIN ENGINEERS and SCIENTISTS

SITE M-232-236
EPA METHOD 625 COLORIMETRY AND PLUME IN EXCESS OF 2L
FOURTH QUARTER 2005

FIGURE **16.3A**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM



LEGEND

Monitoring Wells
- Type I
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- Pumping Well
- Unknown Well Type
- Water Supply Wells
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Walls and Fences
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Analytical Results
- Free Product Detected
- 2L Non-Compliant
- 2L Compliant
- MADEP Plume
- Buildings and Structures
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- Groundwater Flow Direction

Vegetation Cover
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- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. 2L Standard refers to North Carolina Groundwater Quality Standard 15A NCAC 2L.0202.
2. GCL refers to Gross Contaminant Level as defined in Table 7 of "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Ground Water", Volume II, dated January 2, 1998.
3. A 2L Standard of "0.00" implies a standard has not yet been established. According to NCAC T15:02L, any compound found above laboratory detection limits is considered noncompliant unless otherwise specified by the NCDENR.

Well ID	Well Type	Date	Method	Parameter	Result	Units	2L GWQS	GCL
USTM232-236-MW18	T-II	12/12/2005	MADEP VPH/EPH	C9-C22 Aromatics	420.0000	UG/L	210.0000	0.0000
USTM232-236-MW21	T-II	12/12/2005	MADEP VPH/EPH	C9-C22 Aromatics	300.0000	UG/L	210.0000	0.0000
USTM232-236-MW22	T-II	12/12/2005	MADEP VPH/EPH	C9-C22 Aromatics	250.0000	UG/L	210.0000	0.0000

CATLIN ENGINEERS and SCIENTISTS

SITE M-232-236
MADEP VPH/EPH COLORIMETRY AND PLUME IN EXCESS OF 2L
FOURTH QUARTER 2005

FIGURE **16.4A**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

SECTION 17.0

OF THE

ANNUAL MANAGEMENT REPORT
MCB CAMP LEJEUNE UST MANAGEMENT PROGRAM

MONITORING EVENT:

SECOND SEMESTER 2005/FIRST SEMESTER 2006
(JULY 2005 THROUGH JUNE 2006)

SITE-SPECIFIC MONITORING REPORT
FOR

SITE PP-3326

NCDENR INCIDENT NO. 24009



17.0 EXECUTIVE SUMMARY
SITE PP-3326

17.1 Site Information

17.1.1 Site Location: MCB Camp Lejeune (Paradise Point Housing Area, 3326 Onslow Drive)
17.1.2 Incident Number(s): 24009
17.1.3 UTM Coordinates (NAD83) (Meters): 283202.91 Easting, 3840534.19 Northing
17.1.4 Risk Classification: Low
17.1.5 Land Use Classification: Residential
17.1.6 Source Type(s): One 285 gallon capacity heating oil UST

17.2 Monitoring Event Information

17.2.1 Sampling Performed By: Not Applicable
17.2.2 Date(s) of This Monitoring Event: Not Applicable
17.2.3 Date(s) of Previous Monitoring Event: Last groundwater sampling conducted in July 2002
17.2.4 Reason(s) for This Monitoring Event: Not Applicable
17.2.5 Site Monitoring Status at Time of This Event: Not Applicable

17.3 Groundwater Hydraulics

17.3.1 Hydraulic Conductivity: Unknown
17.3.2 Effective Porosity: Unknown
17.3.3 Hydraulic Gradient: Unknown
17.3.4 Average Linear Groundwater Flow Velocity: Unknown
17.3.5 Groundwater Flow Direction: Unknown
17.3.6 Range of Measured Water Table Elevations: Previously measured at 8.56 feet BLS (temporary well)
17.3.7 Significant Changes from Previously Reported Data: Not Applicable. This is the first Management Report prepared by CATLIN.

17.4 Free Product Plume

17.4.1 Free Product Present?: No
17.4.2 Free Product Thickness Measured: Not Applicable
17.4.3 Plume Size and Location: Not Applicable
17.4.4 Free Product Removed from Site This Period: Not Applicable
17.4.5 Significant Changes from Previously Reported Data: Not Applicable. This is the first Management Report prepared by CATLIN.

17.5 Dissolved-Phase Plume

17.5.1 Plume Concentrations: Not Applicable
17.5.2 Plume Size and Location: Not Applicable
17.5.3 Significant Changes from Previously Reported Data: Not Applicable. This is the first Management Report prepared by CATLIN.

17.6 Potential Receptors

17.6.1 Contaminated Water Supply Well(s)?: No
17.6.2 Potable Water Supply Well Within 1,000 Feet of Source Area?: No
17.6.3 Any Water Supply Well Within 250 Feet of Source Area?: No
17.6.4 Surface Water Body Within 500 Feet?: Yes. New River is approximately 500 feet to the West.
17.6.5 Past Evidence of Vapors?: No
17.6.6 Significant Changes from Previously Reported Data?: Not Applicable. This is the first Management Report prepared by CATLIN.

17.7 Remediation

17.7.1 Status: No additional remediation planned
17.7.2 Type: Soil excavation
17.7.3 Progress: Soil excavation complete
17.7.4 Construction Contractor: Shaw
17.7.5 Operating Contractor: Not Applicable

17.8 Observations and Comments

A Soil Cleanup Report with Site Closure Request was submitted to the NCDENR on March 1, 2006. On March 7, 2006 the NCDENR indicated this site would qualify for incident closure upon approval of the NRP/LUCAP documentation, which is currently in negotiation between the USMC and NCDENR.

Groundwater sampling was not conducted during the current monitoring period. However, groundwater samples collected from one temporary well in July 2002 indicated Naphthalene and C_9-C_{22} Aromatics at concentrations above the 2L GWQS. However, as the levels of these two contaminants were below the established GCLs and ten times their 2B Surface Water Standards, a Low Risk Classification is applicable at this site. Therefore, further remediation or investigation of groundwater is not necessary unless removal of the NRP/LUCAP is desired, at which time a groundwater sample should be collected to determine if concentrations of the above-stated contaminants are below the 2L GWQS.

SECTION 18.0

OF THE

ANNUAL MANAGEMENT REPORT
MCB CAMP LEJEUNE UST MANAGEMENT PROGRAM

MONITORING EVENT:

SECOND SEMESTER 2005/FIRST SEMESTER 2006
(JULY 2005 THROUGH JUNE 2006)

SITE-SPECIFIC MONITORING REPORT
FOR

SITE PP-3330

NCDENR INCIDENT NO. 24010



18.0 EXECUTIVE SUMMARY
SITE PP-3330

18.1 Site Information

18.1.1 Site Location: MCB Camp Lejeune (Paradise Point Housing Area, 3330 Onslow Drive)
18.1.2 Incident Number(s): 24010
18.1.3 UTM Coordinates (WGS84) (Meters): 283139.48 Easting, 3840536.53 Northing
18.1.4 Risk Classification: Low
18.1.5 Source Type(s): One 285 gallon heating oil UST.

18.2 Monitoring Event Information

18.2.1 Sampling Performed By: Not Applicable
18.2.2 Date(s) of This Monitoring Event: Not Applicable
18.2.3 Date(s) of Previous Monitoring Event: Not Applicable
18.2.4 Reason(s) for This Monitoring Event: Not Applicable
18.2.5 Site Monitoring Status at Time of This Event: Not Applicable

18.3 Groundwater Hydraulics

18.3.1 Hydraulic Conductivity: Not known
18.3.2 Effective Porosity: Not known
18.3.3 Hydraulic Gradient: Not known
18.3.4 Average Linear Groundwater Flow Velocity: Not known
18.3.5 Groundwater Flow Direction: Not known
18.3.6 Range of Measured Water Table Elevations: Previously measured at 5.27 feet BLS (temporary well)
18.3.7 Significant Changes from Previously Reported Data: Not Applicable. This is the first Management Report prepared by CATLIN.

18.4 Free Product Plume

18.4.1 Free Product Present?: No
18.4.2 Free Product Thickness Measured: Not Applicable
18.4.3 Plume Size and Location: Not Applicable
18.4.4 Free Product Removed from Site This Period: Not Applicable
18.4.5 Significant Changes from Previously Reported Data: Not Applicable. This is the first Management Report prepared by CATLIN.

18.5 Dissolved-Phase Plume

18.5.1 Plume Concentrations: Not Applicable
18.5.2 Plume Size and Location: Not Applicable
18.5.3 Significant Changes from Previously Reported Data: Not Applicable. This is the first Management Report prepared by CATLIN.

18.6 Potential Receptors

18.6.1 Contaminated Water Supply Well(s)?: No
18.6.2 Potable Water Supply Well Within 1,000 Feet of Source Area?: No
18.6.3 Any Water Supply Well Within 250 Feet of Source Area?: No
18.6.4 Surface Water Body Within 500 Feet?: Yes. The New River is approximately 250 feet to the west.
18.6.5 Past Evidence of Vapors?: No
18.6.6 Significant Changes from Previously Reported Data?: Not Applicable. This is the first Management Report prepared by CATLIN.

18.7 Remediation

18.7.1 Status: No additional remediation planned
18.7.2 Type: Soil excavation
18.7.3 Progress: Soil excavation complete
18.7.4 Construction Contractor: Shaw
18.7.5 Operating Contractor: Not Applicable

18.8 Observations and Comments

A Soil Cleanup Report with Site Closure Request was submitted to the NCDENR on March 1, 2006. On March 7, 2006 the NCDENR indicated this site would qualify for incident closure upon approval of the NRP/LUCAP documentation, which is currently in negotiation between the USMC and NCDENR.

Groundwater sampling was not conducted during the current monitoring period. However, groundwater samples collected from one temporary well in July 2002 indicated Naphthalene, C_9-C_{18} Aliphatics and C_9-C_{22} Aromatics at concentrations above the 2L GWQS. However, as the levels of these three contaminants were below the established GCLs and ten times their 2B Surface Water Standards, a Low Risk Classification is applicable at this site. Therefore, further remediation or investigation of groundwater is not necessary unless removal of the NRP/LUCAP is desired, at which time a groundwater sample should be collected to determine if concentrations of the above-stated contaminants are below the 2L GWQS.

SECTION 19.0

OF THE

ANNUAL MANAGEMENT REPORT
MCB CAMP LEJEUNE UST MANAGEMENT PROGRAM

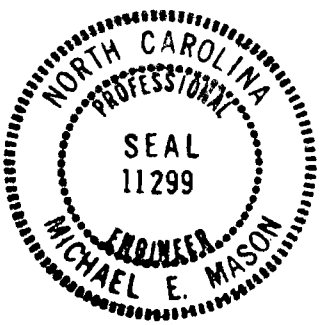
MONITORING EVENT:

SECOND SEMESTER 2005/FIRST SEMESTER 2006
(JULY 2005 THROUGH JUNE 2006)

SITE-SPECIFIC MONITORING REPORT
FOR

SITE PP-3332

NCDENR INCIDENT NO. 24011



19.0 EXECUTIVE SUMMARY
SITE PP-3332

19.1 Site Information

19.1.1 Site Location: MCB Camp Lejeune (Paradise Point Housing Area, 3332 Onslow Drive)
19.1.2 Incident Number(s): 24011
19.1.3 UTM Coordinates (WGS84) (Meters): 283117.00 Easting, 3840563.75 Northing
19.1.4 Risk Classification: Low
19.1.5 Land Use Classification: Residential
19.1.6 Source Type(s): One 285 gallon capacity fuel oil UST.

19.2 Monitoring Event Information

19.2.1 Sampling Performed By: Not Applicable
19.2.2 Date(s) of This Monitoring Event: Not Applicable
19.2.3 Date(s) of Previous Monitoring Event: Not Applicable
19.2.4 Reason(s) for This Monitoring Event: Not Applicable
19.2.5 Site Monitoring Status at Time of This Event: Not Applicable

19.3 Groundwater Hydraulics

19.3.1 Hydraulic Conductivity: Unknown
19.3.2 Effective Porosity: Unknown
19.3.3 Hydraulic Gradient: Unknown
19.3.4 Average Linear Groundwater Flow Velocity: Unknown
19.3.5 Groundwater Flow Direction: Unknown
19.3.6 Range of Measured Water Table Elevations: Previously measured at 5.8 feet BLS (temporary well).
19.3.7 Significant Changes from Previously Reported Data: Not Applicable. This is the first Management Report prepared by CATLIN.

19.4 Free Product Plume

19.4.1 Free Product Present?: No
19.4.2 Free Product Thickness Measured: Not Applicable
19.4.3 Free Product Removed from Site This Period: Not Applicable
19.4.4 Significant Changes from Previously Reported Data: Not Applicable. This is the first Management Report prepared by CATLIN.

19.5 Dissolved-Phase Plume

19.5.1 Plume Concentrations: Not Applicable
19.5.2 Plume Size and Location: Not Applicable
19.5.3 Significant Changes from Previously Reported Data: Not Applicable. This is the first Management Report prepared by CATLIN.

19.6 Potential Receptors

19.6.1 Contaminated Water Supply Well(s)?: None
19.6.2 Potable Water Supply Well Within 1,000 Feet of Source Area?: No
19.6.3 Any Water Supply Well Within 250 Feet of Source Area?: No
19.6.4 Surface Water Body Within 500 Feet?: Yes. The New River is approximately 150 feet to the west.
19.6.5 Past Evidence of Vapors?: No
19.6.6 Significant Changes from Previously Reported Data?: Not Applicable. This is the first Management Report prepared by CATLIN.

19.7 Remediation

19.7.1 Status: No additional remediation planned
19.7.2 Type: Soil excavation
19.7.3 Progress: Soil excavation complete
19.7.4 Construction Contractor: Shaw
19.7.5 Operating Contractor: Not Applicable

19.8 Observations and Comments

A Soil Cleanup Report with Site Closure Request was submitted to the NCDENR on March 1, 2006. On March 7, 2006 the NCDENR indicated this site would qualify for incident closure upon approval of the NRP/LUCAP documentation, which is currently in negotiation between the USMC and NCDENR.

Groundwater sampling was not conducted during the current monitoring period. However, groundwater samples collected from one temporary well in July 2002 C_9-C_{22} Aromatics at concentrations above the 2L GWQS. However, as the levels of this contaminant was below ten times its 2B Surface Water Standards, a Low Risk Classification is applicable at this site. Therefore, further remediation or investigation of groundwater is not necessary unless removal of the NRP/LUCAP is desired, at which time a groundwater sample should be collected to determine if concentrations of the above-stated contaminant is below the 2L GWQS.

SECTION 20.0

OF THE

ANNUAL MANAGEMENT REPORT
MCB CAMP LEJEUNE UST MANAGEMENT PROGRAM

MONITORING EVENT:

SECOND SEMESTER 2005/FIRST SEMESTER 2006
(JULY 2005 THROUGH JUNE 2006)

SITE-SPECIFIC MONITORING REPORT
FOR

SITE PP-3350

NCDENR INCIDENT NO. 24015



20.0 EXECUTIVE SUMMARY
SITE PP-3350

20.1 Site Information

20.1.1 Site Location: MCB Camp Lejeune (Paradise Point Housing Area, 3350 Jones Street)
20.1.2 Incident Number(s): 24015
20.1.3 UTM Coordinates (WGS84) (Meters): 283165.95 Easting, 3840664.02 Northing
20.1.4 Risk Classification: Low
20.1.5 Land Use Classification: Residential
2.1.6 Source Type(s): One 285 gallon capacity heating oil tank UST.

20.2 Monitoring Event Information

20.2.1 Sampling Performed By: Not Applicable
20.2.2 Date(s) of This Monitoring Event: Not Applicable
20.2.3 Date(s) of Previous Monitoring Event: Not Applicable
20.2.4 Reason(s) for This Monitoring Event: Not Applicable
20.2.5 Site Monitoring Status at Time of This Event: Not Applicable

20.3 Groundwater Hydraulics

20.3.1 Hydraulic Conductivity: Not known
20.3.2 Effective Porosity: Not known
20.3.3 Hydraulic Gradient: Not known
20.3.4 Average Linear Groundwater Flow Velocity: Not known
20.3.5 Groundwater Flow Direction: Not known
20.3.6 Range of Measured Water Table Elevations: Previously measured at 5.3 feet BLS (temporary well)
20.3.7 Significant Changes from Previously Reported Data: Not Applicable. This is the first Management Report prepared by CATLIN.

20.4 Free Product Plume

20.4.1 Free Product Present?: No
20.4.2 Free Product Thickness Measured: Not Applicable
20.4.3 Plume Size and Location: Not Applicable
20.4.4 Free Product Removed from Site This Period: Not Applicable
20.4.5 Significant Changes from Previously Reported Data: Not Applicable. This is the first Management Report prepared by CATLIN.

20.5 Dissolved-Phase Plume

20.5.1 Plume Concentrations: Not Applicable
20.5.2 Plume Size and Location: Not Applicable
20.5.3 Significant Changes from Previously Reported Data: Not Applicable. This is the first Management Report prepared by CATLIN.

20.6 Potential Receptors

20.6.1 Contaminated Water Supply Well(s)?: No
20.6.2 Potable Water Supply Well Within 1,000 Feet of Source Area?: No
20.6.3 Any Water Supply Well Within 250 Feet of Source Area?: No
20.6.4 Surface Water Body Within 500 Feet?: Yes.
New River is approximately 300 feet to the west.
20.6.5 Past Evidence of Vapors?: No
20.6.6 Significant Changes from Previously Reported Data?: Not Applicable. This is the first Management Report prepared by CATLIN.

20.7 Remediation

20.7.1 Status: No additional remediation planned
20.7.2 Type: Soil Excavation
20.7.3 Progress: Soil excavation complete
20.7.4 Construction Contractor: Shaw
20.7.5 Operating Contractor: Not Applicable

20.8 Observations and Comments

A Soil Cleanup Report with Site Closure Request was submitted to the NCDENR on March 1, 2006. On March 7, 2006 the NCDENR indicated this site would qualify for incident closure upon approval of the NRP/LUCAP documentation, which is currently in negotiation between the USMC and NCDENR.

Groundwater sampling was not conducted during the current monitoring period. However, groundwater samples collected from one temporary well in July 2002 indicated Naphthalene and C_9-C_{22} Aromatics at concentrations above the 2L GWQS. However, as the levels of these two contaminants were below the established GCLs and ten times their 2B Surface Water Standards, a Low Risk Classification is applicable at this site. Therefore, further remediation or investigation of groundwater is not necessary unless removal of the NRP/LUCAP is desired, at which time a groundwater sample should be collected to determine if concentrations of the above-stated contaminants are below the 2L GWQS.

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SECTION 21.0

OF THE

ANNUAL MANAGEMENT REPORT
MCB CAMP LEJEUNE UST MANAGEMENT PROGRAM

MONITORING EVENT:

SECOND SEMESTER 2005/FIRST SEMESTER 2006
(JULY 2005 THROUGH JUNE 2006)

SITE-SPECIFIC MONITORING REPORT
FOR

SITE S-2633

NCDENR INCIDENT NO. 20385



21.0 EXECUTIVE SUMMARY
SITE S-2633

21.1 Site Information

21.1.1 Site Location: MCB Camp Lejeune
21.1.2 Incident Number(s): 20385
21.1.3 UTM Coordinates (WGS84) (Meters): 282279.23 Easting, 3842887.46 Northing
21.1.4 Risk Classification: Low (If no product)
21.1.5 Land Use Classification: Industrial/Commercial
21.1.6 Source Type(s): 150 gallon capacity gasoline tank (Installed in 1942 and removed 1996)

21.2 Monitoring Event Information

21.2.1 Sampling Performed By: Sovereign
21.2.2 Date(s) of This Monitoring Event: January 2006
21.2.3 Date(s) of Previous Monitoring Event: February, May, August, and November 2005
21.2.4 Reason(s) for This Monitoring Event: To determine the presence of free product and/or quantify dissolved phase contaminant concentrations
21.2.5 Site Monitoring Status at Time of This Event: Bi-annual.

21.3 Groundwater Hydraulics

21.3.1 Hydraulic Conductivity: 0.678 (from CSA, 1998)
21.3.2 Effective Porosity: Unknown
21.3.3 Hydraulic Gradient: 0.087 (from CSA, 1998)
21.3.4 Average Linear Groundwater Flow Velocity: 0.678 feet/day (from CSA, 1998)
21.3.5 Groundwater Flow Direction: West (from CSA, 1998)
21.3.6 Range of Measure Water Table Elevations: 0.61 to 5.61 feet BLS (CSA, 1998)
21.3.7 Significant Changes from Previously Reported Data: Not Applicable. This is the first Management Report prepared by CATLIN.

21.4 Free Product Plume

21.4.1 Free Product Present?: No
21.4.2 Free Product Thickness Measured: None, see Table 21.1
21.4.3 Plume Size and Location: None, see Figure 21.1
21.4.4 Free Product Removed from Site This Period: None
21.4.5 Significant Changes from Previously Reported Data: Not Applicable. This is the first Management Report prepared by CATLIN.

21.5 Dissolved-Phase Plume

21.5.1 Plume Concentrations: See Tables 21.2A and B, 21.3A and B, and 21.4A and B.

21.5.2 Plume Size and Location: See Figures 21.2, 21.3, and 21.4.

21.5.3 Significant Changes from Previously Reported Data: Not Applicable. This is the first Management Report prepared by CATLIN. Groundwater sample analytical results compared to the 2L GWQS are discussed as follows:

EPA Method 602
Benzene, Toluene, and Total Xylenes concentrations were detected above the 2L GWQS in the USTS2633-MW01 groundwater sample.

EPA Method 625
Naphthalene concentrations were detected above the 2L GWQS in the USTS2633-MW01 groundwater sample.

MADEP VPH/EPH
C5-C8 Aliphatics, C9-C18 Aliphatics, and C9-C22 Aromatics concentrations were detected above the 2L GWQS in the USTS2633-MW01 groundwater sample.

21.6 Potential Receptors

21.6.1 Contaminated Water Supply Well(s)?: None

21.6.2 Potable Water Supply Well Within 1,000 Feet of Source Area?: No (CSA, 1998)

21.6.3 Any Water Supply Well Within 250 Feet of Source Area?: No (CSA, 1998)

21.6.4 Surface Water Body Within 500 Feet?: No (Morgan Bay is approximately 1000 feet Southwest of the site)

21.6.5 Past Evidence of Vapors?: No

21.6.6 Significant Changes from Previously Reported Data: Not Applicable. This is the first Management Report prepared by CATLIN.

21.7 Remediation

21.7.1 Status: Complete

21.7.2 Type: AFVR

21.7.3 Progress: Complete

21.7.4 Construction Contractor: Not Applicable

21.7.5 Operating Contractor: Not Applicable

21.8 Observation and Comments

No contaminants were detected above any of the established GCLs. Bi-annual sampling and reporting is recommended with the next event scheduled for January 2008.

TABLE 21.1
SITE S-2633
FIELD MEASUREMENTS - FIRST QUARTER 2006

Date Measured: 1/19/2006

Well No.	Type	TOC	Stick up	DTW	Product Thickness	DTW BGS	GW Elevation
USTS2633-MW01				2.70	0.00		

Notes:
1. TII = Type II monitoring well
   TIII = Type III monitoring well
   RW = Recovery well
2. TOC = Top of well casing elevation.
3. STICK UP = Height of well casing above land surface in feet.
4. DTW = Depth to water (in feet) from top of well casing.
5. Product thickness is measured in feet.
6. DTW BGS = Depth to water below ground surface in feet.
7. GW Elevation = Ground water elevation (not adjusted for free product)
8. A zero ("0.00") in the product thickness column indicates no measureable thickness.
9. Top of casing elevations are measured in feet relative to Mean Sea Level (NAD83).
10. Stick up values were not available for wells with no values in the STICK UP and DTW BGS columns.

TABLE 21.2A

SITE S-2633

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 602

Contaminant of Concern →					
Well ID	**Date**	**Benzene**	**Ethylbenzene**	**Toluene**	**Xylenes (total)**
2L GWQS		1	550	1000	530
GCL		5000	550000	257500	87500
USTS2633-MW01	1/19/2006	**2850.00**	374.00	**2380.00**	**3560.00**

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 21.2B

SITE S-2633

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 602

Contaminant of Concern →					
Well ID	**Date**	**Benzene**	**Ethylbenzene**	**Toluene**	**Xylenes (total)**
2L GWQS		1	550	1000	530
GCL		5000	550000	257500	87500
USTS2633-MW01	1/19/2006	**2850.00**	374.00	**2380.00**	**3560.00**

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 21.3A

SITE S-2633

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 625

Contaminant of Concern →		2,4-Dimethylphenol	Bis(2-ethylhexyl)phthalate	Naphthalene	Phenol
Well ID	**Date**				
2L GWQS		140	3	21	300
GCL		140000	0	15500	335000
USTS2633-MW01	1/19/2006	32.20	2.70	**117.00**	64.20

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 21.3B

SITE S-2633

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 625

Contaminant of Concern →		2,4-Dimethylphenol	Bis(2-ethylhexyl)phthalate	Naphthalene	Phenol
Well ID	Date				
2L GWQS		140	3	21	300
GCL		140000	0	15500	335000
USTS2633-MW01	1/19/2006	32.20	2.70	**117.00**	64.20

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 21.4A

SITE S-2633

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

MADEP VPH/EPH

Contaminant of Concern →		C5-C8 Aliphatics	C9-C18 Aliphatics	C9-C22 Aromatics
Well ID	Date			
2L GWQS		420	4200	210
GCL		0	0	0
USTS2633-MW01	1/19/2006	**17000.00**	**7190.00**	**2530.00**

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 21.4B

SITE S-2633

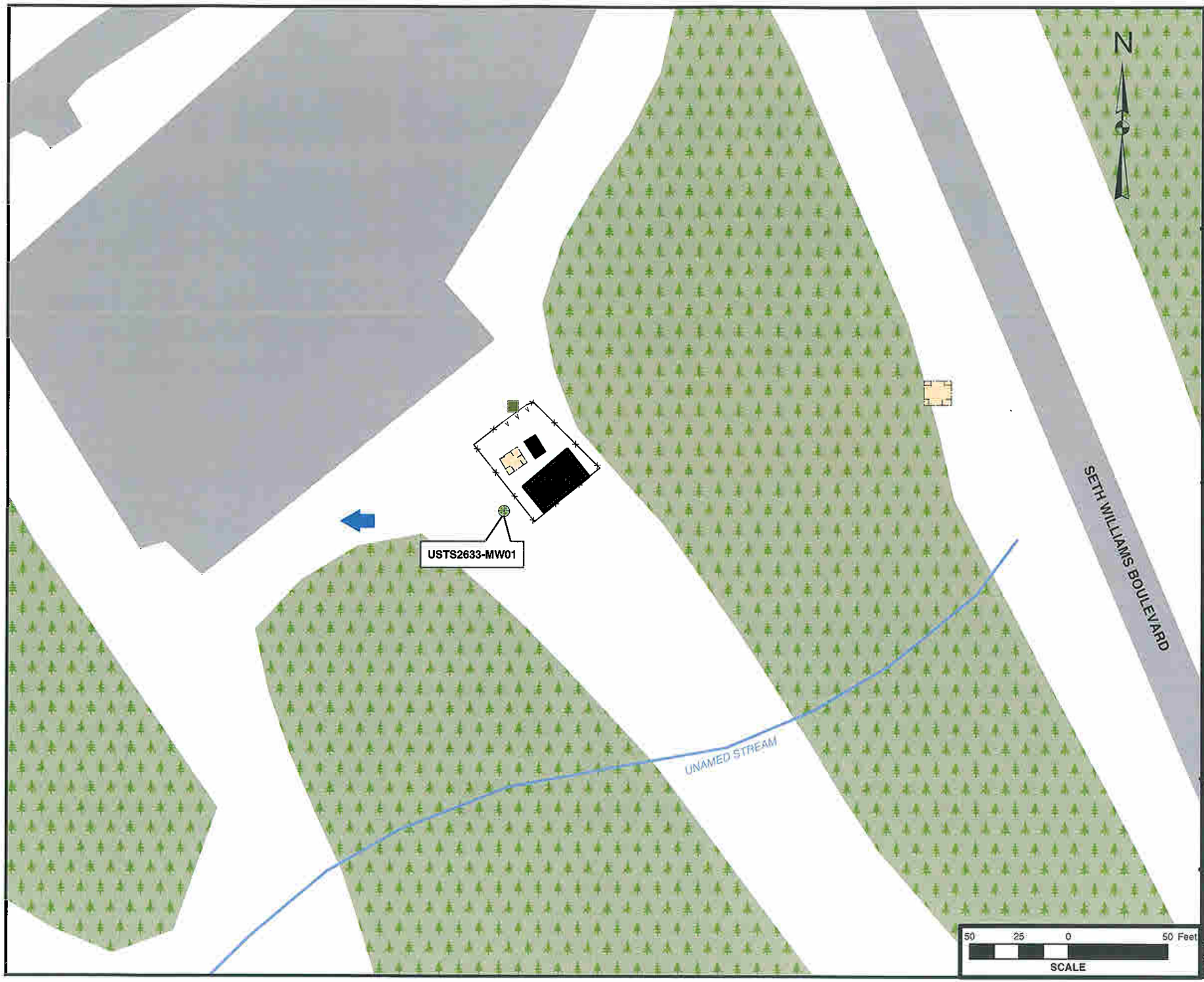
HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

MADEP VPH/EPH

Contaminant of Concern →		C5-C8 Aliphatics	C9-C18 Aliphatics	C9-C22 Aromatics
Well ID	Date			
2L GWQS		420	4200	210
GCL		0	0	0
USTS2633-MW01	1/19/2006	**17000.00**	**7190.00**	**2530.00**

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM



LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Free Product
- Free Product Detected
- No Measurable Thickness
- Free Product Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. Free Product was not detected at this site in any of the wells gauged during this monitoring event.

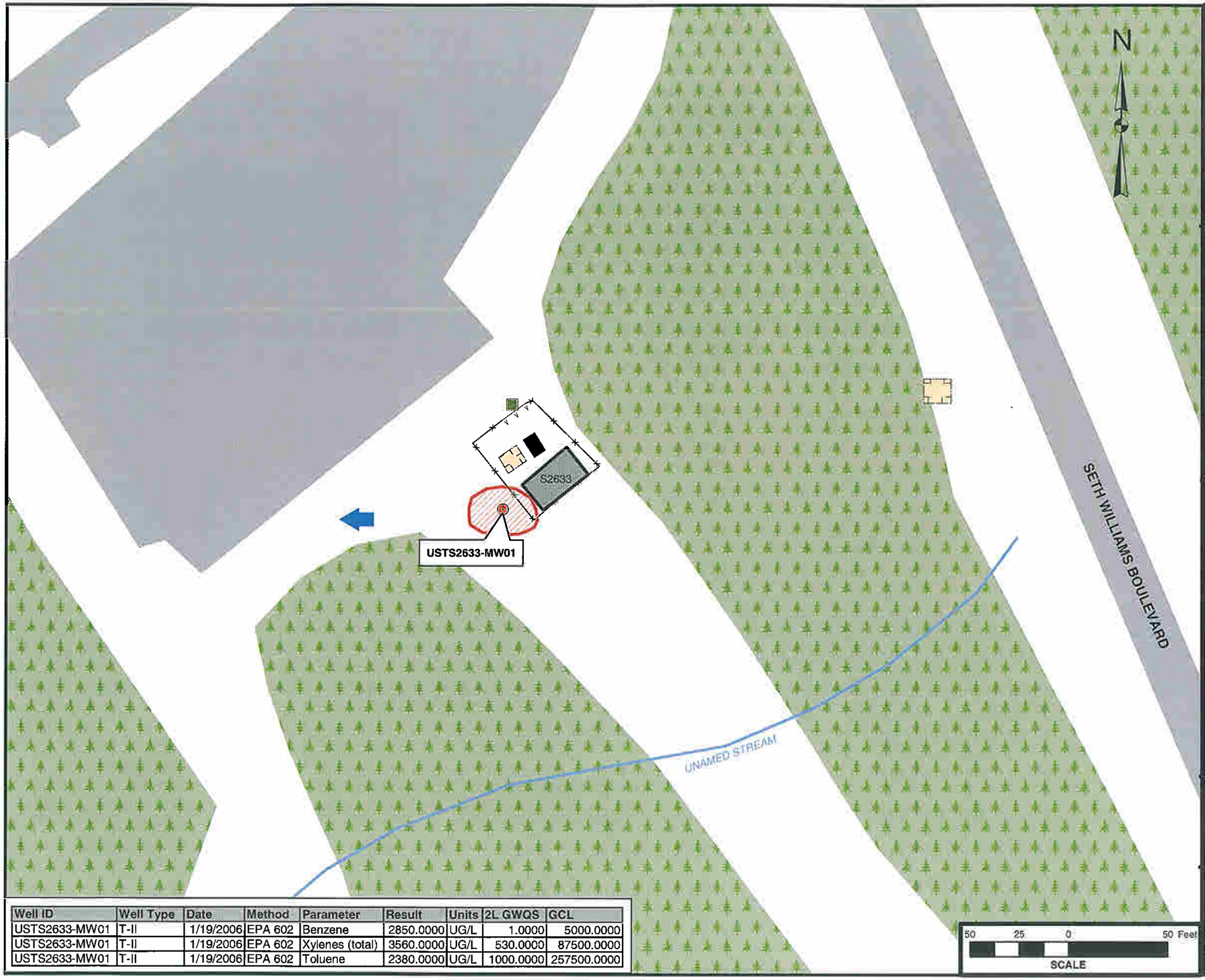
CATLIN
ENGINEERS and SCIENTISTS

SITE S-2633
FREE PRODUCT PLUME MAP
FIRST QUARTER 2006

FIGURE 21.1

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM



Well ID	Well Type	Date	Method	Parameter	Result	Units	2L GWQS	GCL
USTS2633-MW01	T-II	1/19/2006	EPA 602	Benzene	2850.0000	UG/L	1.0000	5000.0000
USTS2633-MW01	T-II	1/19/2006	EPA 602	Xylenes (total)	3560.0000	UG/L	530.0000	87500.0000
USTS2633-MW01	T-II	1/19/2006	EPA 602	Toluene	2380.0000	UG/L	1000.0000	257500.0000

LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Analytical Results
- 2L Non-Compliant
- 2L Compliant
- EPA 602 Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

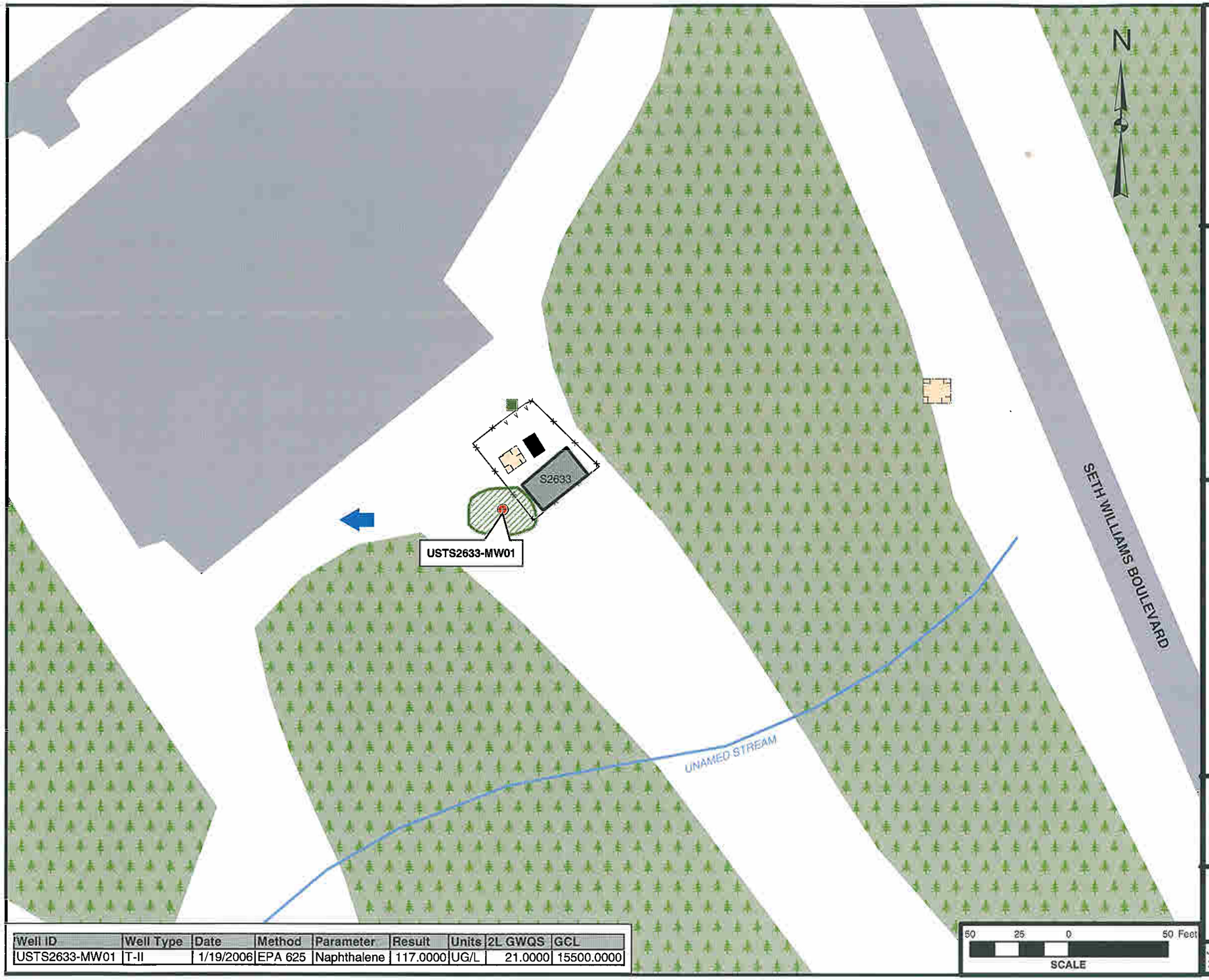
1. 2L Standard refers to North Carolina Groundwater Quality Standard 15A NCAC 2L.0202.
2. GCL refers to Gross Contaminant Level as defined in Table 7 of "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Ground Water", Volume II, dated January 2, 1998.
3. A 2L Standard of "0.00" implies a standard has not yet been established. According to NCAC T15:02L, any compound found above laboratory detection limits is considered noncompliant unless otherwise specified by the NCDENR.

CATLIN ENGINEERS and SCIENTISTS

SITE S-2633
EPA METHOD 602 COLORIMETRY AND PLUME IN EXCESS OF 2L FIRST QUARTER 2006

FIGURE **21.2**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM



Well ID	Well Type	Date	Method	Parameter	Result	Units	2L GWQS	GCL
USTS2633-MW01	T-II	1/19/2006	EPA 625	Naphthalene	117.0000	UG/L	21.0000	15500.0000

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM

LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Analytical Results
- 2L Non-Compliant
- 2L Compliant
- EPA 625 Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

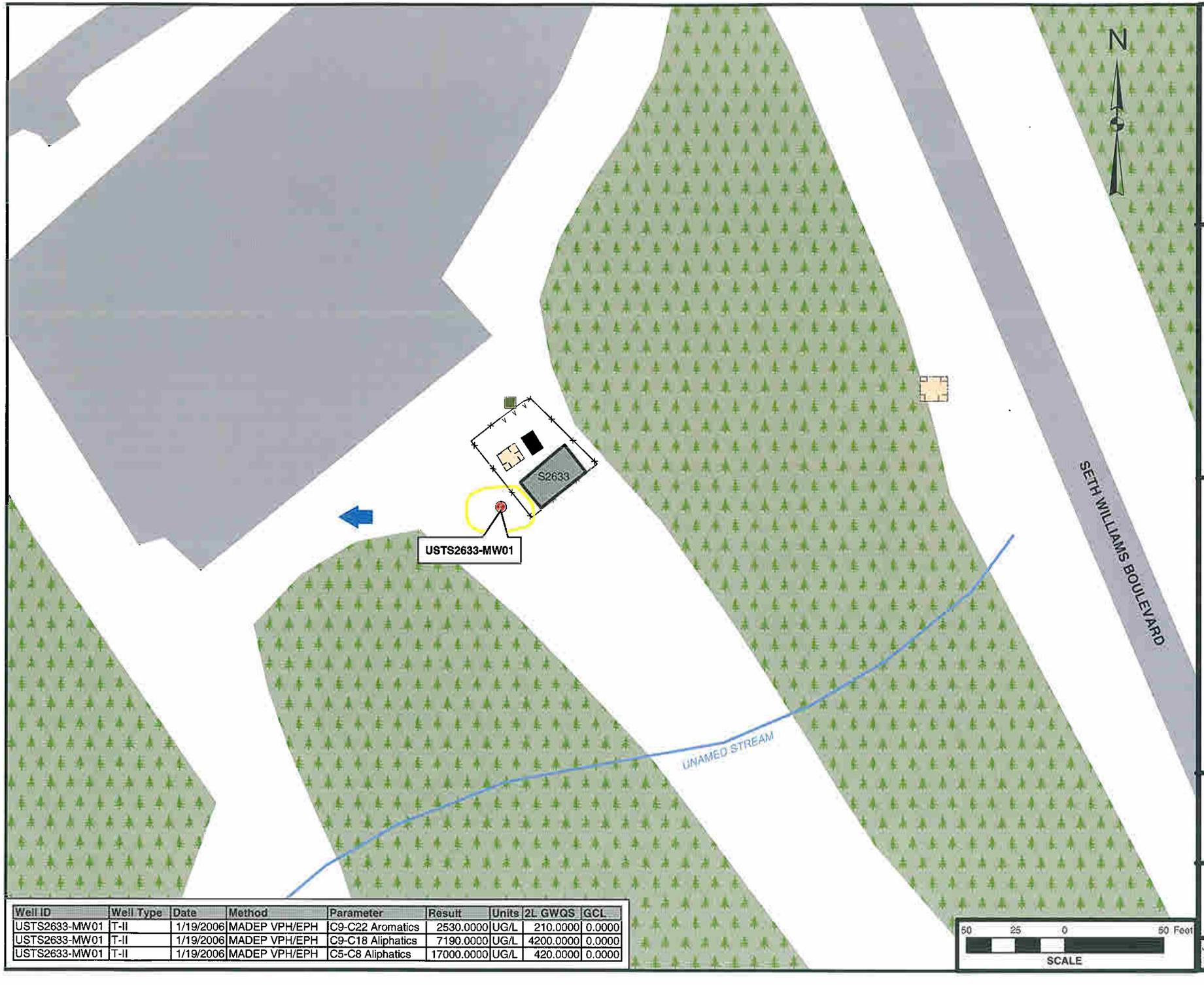
1. 2L Standard refers to North Caroiina Groundwater Quality Standard 15A NCAC 2L.0202.
2. GCL refers to Gross Contaminant Level as defined in Table 7 of "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Ground Water", Volume II, dated January 2, 1998.
3. A 2L Standard of "0.00" implies a standard has not yet been established. According to NCAC T15:02L, any compound found above laboratory detection limits is considered noncompliant unless otherwise specified by the NCDENR.

CATLIN ENGINEERS and SCIENTISTS

SITE S-2633
EPA METHOD 625 COLORIMETRY AND PLUME IN EXCESS OF 2L FIRST QUARTER 2006

FIGURE 21.3

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM



MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM

LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Analytical Results
- 2L Non-Compliant
- 2L Compliant
- MADEP Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. 2L Standard refers to North Carolina Groundwater Quality Standard 15A NCAC 2L.0202.
2. GCL refers to Gross Contaminant Level as defined in Table 7 of "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Ground Water", Volume II, dated January 2, 1998.
3. A 2L Standard of "0.00" implies a standard has not yet been established. According to NCAC T15:02L, any compound found above laboratory detection limits is considered noncompliant unless otherwise specified by the NCDENR.

Well ID	Well Type	Date	Method	Parameter	Result	Units	2L GWQS	GCL
USTS2633-MW01	T-II	1/19/2006	MADEP VPH/EPH	C9-C22 Aromatics	2530.0000	UG/L	210.0000	0.0000
USTS2633-MW01	T-II	1/19/2006	MADEP VPH/EPH	C9-C18 Aliphatics	7190.0000	UG/L	4200.0000	0.0000
USTS2633-MW01	T-II	1/19/2006	MADEP VPH/EPH	C5-C8 Aliphatics	17000.0000	UG/L	420.0000	0.0000

50 25 0 50 Feet
SCALE

CATLIN ENGINEERS and SCIENTISTS

SITE S-2633
MADEP VPH/EPH COLORIMETRY AND PLUME IN EXCESS OF 2L
FIRST QUARTER 2006

FIGURE
21.4

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

SECTION 22.0

OF THE

ANNUAL MANAGEMENT REPORT
MCB CAMP LEJEUNE UST MANAGEMENT PROGRAM

MONITORING EVENT:

SECOND SEMESTER 2005/FIRST SEMESTER 2006
(JULY 2005 THROUGH JUNE 2006)

SITE-SPECIFIC MONITORING REPORT
FOR

SITE BUILDING TT2477-78

NCDENR INCIDENT NO. 7176



22.0 EXECUTIVE SUMMARY
SITE BUILDING TT2477-78

22.1 Site Information

22.1.1 Site Location: MCB Camp Lejeune, Tarawa Terrace Housing Area.
22.1.2 Incident Number(s): 7176
22.1.3 UTM Coordinates (WGS84) (Meters):

Building TT-2477	3845952 N, 282735 E
Building TT-2478	3846023 N, 282735 E
Building TT-2453	3845815 N, 282730 E (former location)

22.1.4 Risk Classification: Low
22.1.5 Land Use Classification: Residential
22.1.6 Source Type(s): Building TT-2477 included one 10000 gallon capacity gasoline UST which was abandoned in place and one 500 gallon hydraulic fluid/gear oil UST, which was removed from the site in December 1992. A 500 gallon heating oil UST was additionally removed from the site in 1992.

At Building TT-2478, four USTs were formerly located north of the pump island. The USTs were reportedly 10000 gallon capacity and used to store unleaded gasoline (three USTs) and diesel (one UST). Engineering and Environmental Science Company (EESC) removed the USTs and associated piping in August and September of 1995.

Building TT-2453 was demolished in 2001. During demolition activities, two hydraulic lifts, one waste oil UST, one fuel oil AST, and the former UST dispenser island and associated piping were removed. Six additional USTs were reportedly removed from the site in June 1987, including tanks: TT-2453-1 and TT-2453-2 (each was 6000 gallon capacity containing gasoline), TT-2453-3 and TT-2453-4 (each was 3000 gallon with unknown contents), and TT-2453-5 and TT-2453-6 (heating oil tanks).

22.2 Monitoring Event Information

22.2.1 Sampling Performed By: Shaw (August 2005) and Sovereign (April 2006)
22.2.2 Date(s) of This Monitoring Event: August 2005 and April 2006
22.2.3 Date(s) of Previous Monitoring Event: Quarterly in 2004 and 1st semester 2005
22.2.4 Reason(s) for This Monitoring Event: Track dissolved phase plume migration and attenuation
22.2.5 Site Monitoring Status at Time of This Event: Semi-annual sampling and reporting

22.3 Groundwater Hydraulics

22.3.1 Hydraulic Conductivity: Unknown
22.3.2 Effective Porosity: Unknown
22.3.3 Hydraulic Gradient: Unknown
22.3.4 Average Linear Groundwater Flow Velocity: Unknown
22.3.5 Groundwater Flow Direction: South
22.3.6 Range of Measured Water Table Elevations: See Tables 22.1A and 22.1B
22.3.7 Significant Changes from Previously Reported Data: Not Applicable. This is the first Management Report prepared by CATLIN.

22.4 Free Product Plume

22.4.1 Free Product Present?: No
22.4.2 Free Product Thickness Measured: None, see Tables 22.1A and 22.1B
22.4.3 Plume Size and Location: None, see Figures 22.1A and 22.1B
22.4.4 Free Product Removed from Site This Period: None
22.4.5 Significant Changes from Previously Reported Data: Not Applicable. This is the first Management Report prepared by CATLIN.

22.5 Dissolved-Phase Plume

22.5.1 Plume Concentrations: See Tables 22.2A and B, 22.3A and B, and 22.4A and B
22.5.2 Plume Size and Location: See Figures 22.2A and B, 22.3A and B, and 22.4.
22.5.3 Significant Changes from Previously Reported Data: Not Applicable. This is the first Management Report prepared by CATLIN. Groundwater sample analytical results compared to the 2L GWQS are discussed as follows:

EPA Method 602

Benzene concentrations were detected above the 2L GWQS in the USTTT2477-MWOB10 (April 06, not August 05), USTTT2477-PVC101, and USTTT2478-MW18 (April 06, not August 05) groundwater samples. Ethylbenzene concentrations were detected above the 2L GWQS in the USTTT2477-MWOB01 (August 05, not April 06) and USTTT2477-PVC101 groundwater samples. The August 2005 USTTT2477-MW11 groundwater sample revealed Tetrachloroethene concentrations above the 2L GWQS (but not in the April 2006 sample). Toluene concentrations were detected above the 2L GWQS in the August 2005 USTTT2477-MWOB01 groundwater sample but not in the April 2006 sample. Total Xylene concentrations were detected above the 2L GWQS in the USTTT2477-MWOB01 and USTTT2477-PVC101 groundwater samples.

EPA Method 625

2-Methylnaphthalene concentrations were detected above the 2L GWQS in the USTTT2477-MWOB01 and USTTT2477-MWPVC101 groundwater samples collected in August 2005 but not in the April 2006 samples. Bis(2-Chloroethoxy)methane concentrations were detected in the August 2005 USTTT2477-MWPVC101 groundwater but not in the April 2006 sample. There is no established Bis(2-Chloroethoxy)methane 2L GWQS. Bis(2-ethylhexyl)phthalate concentrations were detected above the 2L GWQS in the USTTT2477-MW01, USTT2477-MW02, USTTT2477-MW06 (August 05, not April 06), USTTT2477-MW11 (August 05, not

April 06), and USTTT24-MWOB01 (April 06, not August 05) groundwater samples. Naphthalene concentrations were detected above the 2L GWQS in the USTTT24-MWOB01 and USTTT2477-MWPVC101 groundwater samples. The August 2005 USTTT2477-MW11 groundwater sample revealed Nitrobenzene concentrations, however, there is not an established 2L GWQS and the April 2006 sample did not reveal detectable concentrations.

MADEP VPH/EPH

C5-C8 Aliphatics, C9-C18 Aliphatics, and C9-C22 Aromatics concentrations were detected above the 2L GWQS in the USTT2477-MWPVC1010 groundwater sample. The USTTT2477-MWOB01 and USTTT2488-MW20 groundwater samples revealed C5-C8 Aliphatics and C9-C22 Aromatics concentrations above the 2L GWQS.

22.6 Potential Receptors

22.6.1 Contaminated Water Supply Well(s)?: No
22.6.2 Potable Water Supply Well Within 1,000 Feet of Source Area?: No
22.6.3 Any Water Supply Well Within 250 Feet of Source Area?: No
22.6.4 Surface Water Body Within 500 Feet?: No
22.6.5 Past Evidence of Vapors?: No
22.6.6 Significant Changes from Previously Reported Data?: Not Applicable. This is the first Management Report prepared by CATLIN.

22.7 Remediation

22.7.1 Status: Shutdown
22.7.2 Type: Initially, 32 air sparge wells were installed to an approximate depth of 50 feet BLS, and 32 soil vapor extraction wells were installed to an approximate depth of 10 feet BLS. System operation began in October 1997. In April 2001, the system was extended by OHM Remediation Services an additional 80 feet south along Iwo Jima Boulevard and 150 feet west along Tarawa Boulevard through the addition of six AS/SVE well pairs constructed to the same details as the initial 32 well pairs.
22.7.3 Progress: Shutdown
22.7.4 Construction Contractor: Shaw (OHM Remediation Services)
22.7.5 Operating Contractor: Sovereign

22.8 Observations and Comments

No contaminants were detected above any of the established GCLs. The detections of Bis(2-ethylhexyl)phthalate is likely sampling and/or laboratory artifact as this compound is found in plastics used in the sampling and analysis procedures. Also, the detections of Tetrachloroethene and Bis(2-Chloroethoxy)methane are not believed to be attributable to petroleum releases at the site.

Bi-annual sampling of selected on-site monitoring wells is recommended with the next event scheduled for April 2008.

TABLE 22.1A
SITE TT-2477-78
FIELD MEASUREMENTS - THIRD QUARTER 2005

Date Measured: 8/17/2005

Well No.	Type	TOC	Stick up	DTW	Product Thickness	DTW BGS	GW Elevation
USTTT2477-MW01	T-II	24.85	-0.25	13.53	0.00	13.78	11.32
USTTT2477-MW02	T-II	24.73	-0.27	13.41	0.00	13.68	11.32
USTTT2477-MW03	T-II	24.51	-0.23	12.91	0.00	13.14	11.60
USTTT2477-MW04	T-II	24.64	-0.20	13.05	0.00	13.25	11.59
USTTT2477-MW05	T-II	24.38	-0.29	12.80	0.00	13.09	11.58
USTTT2477-MW06	T-II	24.27	-0.40	13.64	0.00	14.04	10.63
USTTT2477-MW07	T-III	24.43	-0.27	13.54	0.00	13.81	10.89
USTTT2477-MW09	T-II	25.11	-0.22	13.69	0.00	13.91	11.42
USTTT2477-MW10	T-II			16.35	0.00		
USTTT2477-MW11	T-III			17.39	0.00		
USTTT2477-OB1				19.80	0.00		
USTTT2478-MW03	T-II	23.59	-0.75	10.65	0.00	11.40	12.94
USTTT2478-MW06	T-II	23.94	-0.34	11.10	0.00	11.44	12.84
USTTT2478-MW09	T-II			9.30	0.00		
USTTT2478-MW10	T-II			10.87	0.00		
USTTT2478-MW13	T-II	23.94	-0.37	11.90	0.00	12.27	12.04
USTTT2478-MW14	T-II	23.26	-0.53	10.92	0.00	11.45	12.34
USTTT2478-MW14D	T-III			11.02	0.00		
USTTT2478-MW15	T-II	23.62	-0.40	10.75	0.00	11.15	12.87
USTTT2478-MW16	T-II	22.37	-0.43	11.99	0.00	12.42	10.38
USTTT2478-MW17	T-II	24.78	-0.45	14.85	0.00	15.30	9.93
USTTT2478-MW17D	T-III			15.00	0.00		
USTTT2478-MW18	T-II	25.22	-0.30	15.05	0.00	15.35	10.17
USTTT2478-MW19	T-II	24.54	-0.39	13.60	0.00	13.99	10.94
USTTT2478-MW20	T-II			18.50	0.00		
USTTT2478-MW25	T-II			17.57	0.00		
USTTT2478-MWPVC101	T-II			19.76	0.00		
USTTT2478-MWSS100				19.02	0.00		
USTTT2478-PW01				10.36	0.00		

Notes:
1. TII = Type II monitoring well
   TIII = Type III monitoring well
   RW = Recovery well
2. TOC = Top of well casing elevation.
3. STICK UP = Height of well casing above land surface in feet.
4. DTW = Depth to water (in feet) from top of well casing.
5. Product thickness is measured in feet.
6. DTW BGS = Depth to water below ground surface in feet.
7. GW Elevation = Ground water elevation (not adjusted for free product)
8. A zero ("0.00") in the product thickness column indicates no measureable thickness.
9. Top of casing elevations are measured in feet relative to Mean Sea Level (NAD83).
10. Stick up values were not available for wells with no values in the STICK UP and DTW BGS columns.

TABLE 22.1B
SITE TT-2477-78
FIELD MEASUREMENTS - SECOND QUARTER 2006

Date Measured: 4/13/2006

Well No.	Type	TOC	Stick up	DTW	Product Thickness	DTW BGS	GW Elevation
USTTT2477-MW01	T-II	24.85	-0.25	12.76	0.00	13.01	12.09
USTTT2477-MW03	T-II	24.51	-0.23	12.05	0.00	12.28	12.46
USTTT2477-MW04	T-II	24.64	-0.20	12.21	0.00	12.41	12.43
USTTT2477-MW05	T-II	24.38	-0.29	11.91	0.00	12.20	12.47
USTTT2477-MW06	T-II	24.27	-0.40	12.33	0.00	12.73	11.94
USTTT2477-MW07	T-III	24.43	-0.27	12.48	0.00	12.75	11.95
USTTT2477-MW08	T-II	24.19	-0.25	12.13	0.00	12.38	12.06
USTTT2477-MW09	T-II	25.11	-0.22	13.42	0.00	13.64	11.69
USTTT2477-MW10	T-II			15.32	0.00		
USTTT2477-MW11	T-III			21.90	0.00		
USTTT2478-MW01	T-II	23.11	-1.00	9.38	0.00	10.38	13.73
USTTT2478-MW03	T-II	23.59	-0.75	9.79	0.00	10.54	13.80
USTTT2478-MW06	T-II	23.94	-0.34	10.19	0.00	10.53	13.75
USTTT2478-MW09	T-II			8.58	0.00		
USTTT2478-MW10	T-II			10.21	0.00		
USTTT2478-MW13	T-II	23.94	-0.37	10.40	0.00	10.77	13.54
USTTT2478-MW14	T-II	23.26	-0.53	10.05	0.00	10.58	13.21
USTTT2478-MW14D	T-III			9.65	0.00		
USTTT2478-MW15	T-II	23.62	-0.40	9.81	0.00	10.21	13.81
USTTT2478-MW16	T-II	22.37	-0.43	10.75	0.00	11.18	11.62
USTTT2478-MW17	T-II	24.78	-0.45	14.01	0.00	14.46	10.77
USTTT2478-MW17D	T-III			13.82	0.00		
USTTT2478-MW18	T-II	25.22	-0.30	13.76	0.00	14.06	11.46
USTTT2478-MW19	T-II	24.54	-0.39	12.53	0.00	12.92	12.01
USTTT2478-MW24	T-II			16.23	0.00		
USTTT2478-MW25	T-II			16.91	0.00		
USTTT2478-MWPVC101	T-II			19.19	0.00		
USTTT2478-MWSS100				18.39	0.00		
USTTT2478-PW01				9.36	0.00		

Notes:
1. TII = Type II monitoring well
   TIII = Type III monitoring well
   RW = Recovery well
2. TOC = Top of well casing elevation.
3. STICK UP = Height of well casing above land surface in feet.
4. DTW = Depth to water (in feet) from top of well casing.
5. Product thickness is measured in feet.
6. DTW BGS = Depth to water below ground surface in feet.
7. GW Elevation = Ground water elevation (not adjusted for free product)
8. A zero ("0.00") in the product thickness column indicates no measureable thickness.
9. Top of casing elevations are measured in feet relative to Mean Sea Level (NAD83).
10. Stick up values were not available for wells with no values in the STICK UP and DTW BGS columns.

TABLE 22.2A

SITE TT-2477-78

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 602

Contaminant of Concern →		Benzene	Diisopropyl ether (DIPE)	Ethylbenzene	Methyl Tert Butyl Ether	Methyl-tert butyl ether (MTBE)	Tetrachloroethene	Toluene	Xylenes (total)
Well ID	Date								
2L GWQS		1	70	550	200	200	0.7	1000	530
GCL		5000	70000	550000	200000	200000	700	257500	87500
USTTT2477-MW01	8/17/2005	0.70	BQL	0.58	BQL	BQL	BQL	BQL	1.70
USTTT2477-MW01	4/12/2006	0.66	BQL	0.85	BQL	BQL	BQL	2.39	1.48
USTTT2477-MW02	8/17/2005	BQL	BQL	0.55	BQL	BQL	BQL	BQL	BQL
USTTT2477-MW02	4/12/2006	BQL	BQL	BQL	BQL	BQL	BQL	6.30	0.77
USTTT2477-MW03	8/11/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2477-MW04	8/11/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2477-MW05	8/11/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2477-MW06	8/11/2005	BQL	BQL	BQL	8.00	BQL	BQL	BQL	BQL
USTTT2477-MW06	8/17/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2477-MW06	4/12/2006	BQL	BQL	BQL	BQL	BQL	BQL	4.85	BQL
USTTT2477-MW07	8/11/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 22.2A

SITE TT-2477-78

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 602

Contaminant of Concern →		Benzene	Diisopropyl ether (DIPE)	Ethylbenzene	Methyl Tert Butyl Ether	Methyl-tert butyl ether (MTBE)	Tetrachloroethene	Toluene	Xylenes (total)
Well ID	**Date**								
2L GWQS		1	70	550	200	200	0.7	1000	530
GCL		5000	70000	550000	200000	200000	700	257500	87500
USTTT2477-MW09	8/11/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2477-MW11	8/15/2005	BQL	BQL	BQL	BQL	BQL	1.50	BQL	BQL
USTTT2477-MW11	4/12/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2477-MW14	4/11/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2477-MWOB01	8/15/2005	BQL	BQL	561.00	BQL	BQL	BQL	1930.00	2140.00
USTTT2477-MWOB01	4/12/2006	BQL	BQL	256.00	BQL	BQL	BQL	591.00	851.00
USTTT2477-MWOB10	8/15/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2477-MWOB10	4/11/2006	13.60	BQL	59.40	BQL	BQL	BQL	18.90	94.50
USTTT2477-MWPVC101	8/18/2005	1930.00	BQL	950.00	BQL	BQL	BQL	83.70	1870.00
USTTT2477-MWPVC101	4/11/2006	1450.00	BQL	1850.00	BQL	BQL	BQL	476.00	1790.00
USTTT2478-MW03	8/11/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 22.2A

SITE TT-2477-78

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 602

Contaminant of Concern →		Benzene	Diisopropyl ether (DIPE)	Ethylbenzene	Methyl Tert Butyl Ether	Methyl-tert butyl ether (MTBE)	Tetrachloroethene	Toluene	Xylenes (total)
Well ID	**Date**								
2L GWQS		1	70	550	200	200	0.7	1000	530
GCL		5000	70000	550000	200000	200000	700	257500	87500
USTTT2478-MW06	8/11/2005	0.87	BQL	BQL	3.40	BQL	BQL	BQL	BQL
USTTT2478-MW09	8/12/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2478-MW10	8/11/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2478-MW13	8/12/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2478-MW14	8/11/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2478-MW14D	8/11/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2478-MW15	8/11/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2478-MW16	8/12/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2478-MW17	8/12/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2478-MW17	4/11/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 22.2A

SITE TT-2477-78

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 602

Contaminant of Concern →		Benzene	Diisopropyl ether (DIPE)	Ethylbenzene	Methyl Tert Butyl Ether	Methyl-tert butyl ether (MTBE)	Tetrachloroethene	Toluene	Xylenes (total)
Well ID	**Date**								
2L GWQS		1	70	550	200	200	0.7	1000	530
GCL		5000	70000	550000	200000	200000	700	257500	87500
USTTT2478-MW17D	8/12/2005	BQL	BQL	BQL	0.58	BQL	BQL	BQL	BQL
USTTT2478-MW18	8/12/2005	BQL	BQL	3.30	BQL	BQL	BQL	BQL	2.40
USTTT2478-MW18	4/11/2006	1.05	BQL	BQL	BQL	BQL	BQL	1.17	BQL
USTTT2478-MW19	8/12/2005	BQL	BQL	3.20	BQL	BQL	BQL	BQL	1.20
USTTT2478-MW20	4/11/2006	BQL	2.06	80.60	BQL	3.84	BQL	90.40	310.00
USTTT2478-MW23	4/11/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2478-MW24	4/11/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2478-MW25	8/12/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2478-MWSS100	8/15/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2478-MWSS100	3/11/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 22.2B

SITE TT-2477-78

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 602

Contaminant of Concern →		Benzene	Diisopropyl ether (DIPE)	Ethylbenzene	Methyl Tert Butyl Ether	Methyl-tert butyl ether (MTBE)	Tetrachloroethene	Toluene	Xylenes (total)
Well ID	**Date**								
2L GWQS		1	70	550	200	200	0.7	1000	530
GCL		5000	70000	550000	200000	200000	700	257500	87500
USTTT2477-MW01	8/17/2005	0.70	BQL	0.58	BQL	BQL	BQL	BQL	1.70
USTTT2477-MW01	4/12/2006	0.66	BQL	0.85	BQL	BQL	BQL	2.39	1.48
USTTT2477-MW02	8/17/2005	BQL	BQL	0.55	BQL	BQL	BQL	BQL	BQL
USTTT2477-MW02	4/12/2006	BQL	BQL	BQL	BQL	BQL	BQL	6.30	0.77
USTTT2477-MW03	8/11/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2477-MW04	8/11/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2477-MW05	8/11/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2477-MW06	8/11/2005	BQL	BQL	BQL	8.00	BQL	BQL	BQL	BQL
USTTT2477-MW06	8/17/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2477-MW06	4/12/2006	BQL	BQL	BQL	BQL	BQL	BQL	4.85	BQL
USTTT2477-MW07	8/11/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 22.2B

SITE TT-2477-78

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 602

Contaminant of Concern →		Benzene	Diisopropyl ether (DIPE)	Ethylbenzene	Methyl Tert Butyl Ether	Methyl-tert butyl ether (MTBE)	Tetrachloroethene	Toluene	Xylenes (total)
Well ID	**Date**								
2L GWQS		1	70	550	200	200	0.7	1000	530
GCL		5000	70000	550000	200000	200000	700	257500	87500
USTTT2477-MW09	8/11/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2477-MW11	8/15/2005	BQL	BQL	BQL	BQL	BQL	1.50	BQL	BQL
USTTT2477-MW11	4/12/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2477-MW14	4/11/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2477-MWOB01	8/15/2005	BQL	BQL	561.00	BQL	BQL	BQL	1930.00	2140.00
USTTT2477-MWOB01	4/12/2006	BQL	BQL	256.00	BQL	BQL	BQL	591.00	851.00
USTTT2477-MWOB10	8/15/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2477-MWOB10	4/11/2006	13.60	BQL	59.40	BQL	BQL	BQL	18.90	94.50
USTTT2477-MWPVC101	8/18/2005	1930.00	BQL	950.00	BQL	BQL	BQL	83.70	1870.00
USTTT2477-MWPVC101	4/11/2006	1450.00	BQL	1850.00	BQL	BQL	BQL	476.00	1790.00
USTTT2478-MW03	8/11/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 22.2B

SITE TT-2477-78

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 602

Contaminant of Concern →		Benzene	Diisopropyl ether (DIPE)	Ethylbenzene	Methyl Tert Butyl Ether	Methyl-tert butyl ether (MTBE)	Tetrachloroethene	Toluene	Xylenes (total)
Well ID	**Date**								
2L GWQS		1	70	550	200	200	0.7	1000	530
GCL		5000	70000	550000	200000	200000	700	257500	87500
USTTT2478-MW06	8/11/2005	0.87	BQL	BQL	3.40	BQL	BQL	BQL	BQL
USTTT2478-MW09	8/12/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2478-MW10	8/11/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2478-MW13	8/12/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2478-MW14	8/11/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2478-MW14D	8/11/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2478-MW15	8/11/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2478-MW16	8/12/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2478-MW17	8/12/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2478-MW17	4/11/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 22.2B

SITE TT-2477-78

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 602

Contaminant of Concern →		Benzene	Diisopropyl ether (DIPE)	Ethylbenzene	Methyl Tert Butyl Ether	Methyl-tert butyl ether (MTBE)	Tetrachloroethene	Toluene	Xylenes (total)
Well ID	Date								
2L GWQS		1	70	550	200	200	0.7	1000	530
GCL		5000	70000	550000	200000	200000	700	257500	87500
USTTT2478-MW17D	8/12/2005	BQL	BQL	BQL	0.58	BQL	BQL	BQL	BQL
USTTT2478-MW18	8/12/2005	BQL	BQL	3.30	BQL	BQL	BQL	BQL	2.40
USTTT2478-MW18	4/11/2006	1.05	BQL	BQL	BQL	BQL	BQL	1.17	BQL
USTTT2478-MW19	8/12/2005	BQL	BQL	3.20	BQL	BQL	BQL	BQL	1.20
USTTT2478-MW20	4/11/2006	BQL	2.06	80.60	BQL	3.84	BQL	90.40	310.00
USTTT2478-MW23	4/11/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2478-MW24	4/11/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2478-MW25	8/12/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2478-MWSS100	8/15/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2478-MWSS100	3/11/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 22.3A

SITE TT-2477-78

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 625

Contaminant of Concern →		2,4-Dimethylphenol	2-Methylnaphthalene	3&4-Methylphenol	Acenaphthene	bis(2-Chloroethoxy)methane	Bis(2-ethylhexyl)phthalate	Diethylphthalate	Fluorene	Naphthalene	Nitrobenzene	Phenanthrene	Phenol
Well ID	**Date**												
2L GWQS		140	14		80	0	3	5000	280	21	0	210	300
GCL		140000	12500		2120	0	0	0	950	15500	0	410	335000
USTTT2477-MW01	8/17/2005	BQL	3.80	15.00	BQL	BQL	**273.00**	BQL	2.10	2.00	BQL	BQL	BQL
USTTT2477-MW01	4/12/2006	BQL	BQL	BQL	BQL	BQL	**10.60**	BQL	2.10	3.00	BQL	BQL	BQL
USTTT2477-MW02	8/17/2005	BQL	7.10	8.20	1.20	BQL	**71.00**	BQL	2.30	1.60	BQL	1.50	BQL
USTTT2477-MW02	4/12/2006	BQL	BQL	BQL	BQL	BQL	**5.40**	4.90	1.80	1.10	BQL	BQL	BQL
USTTT2477-MW03	8/11/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2477-MW04	8/11/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2477-MW05	8/11/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2477-MW06	8/11/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2477-MW06	8/17/2005	BQL	BQL	BQL	BQL	BQL	**233.00**	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2477-MW06	4/12/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2477-MW07	8/11/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 22.3A

SITE TT-2477-78

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 625

Contaminant of Concern →		2,4-Dimethylphenol	2-Methylnaphthalene	3&4-Methylphenol	Acenaphthene	bis(2-Chloroethoxy)methane	Bis(2-ethylhexyl)phthalate	Diethylphthalate	Fluorene	Naphthalene	Nitrobenzene	Phenanthrene	Phenol
Well ID	**Date**												
2L GWQS		140	14		80	0	3	5000	280	21	0	210	300
GCL		140000	12500		2120	0	0	0	950	15500	0	410	335000
USTTT2477-MW09	8/11/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2477-MW11	8/15/2005	BQL	BQL	BQL	BQL	BQL	7.60	BQL	BQL	BQL	2.20	BQL	BQL
USTTT2477-MW11	4/12/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2477-MW14	4/11/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2477-MWOB01	8/15/2005	BQL	44.90	3.90	BQL	BQL	BQL	BQL	BQL	87.90	BQL	BQL	BQL
USTTT2477-MWOB01	4/12/2006	BQL	BQL	BQL	BQL	BQL	7.10	BQL	BQL	68.40	BQL	BQL	BQL
USTTT2477-MWOB10	8/15/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2477-MWOB10	4/11/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	7.30	BQL	BQL	BQL
USTTT2477-MWPVC101	8/18/2005	4.10	113.00	BQL	BQL	1.50	BQL	BQL	BQL	405.00	BQL	BQL	4.50
USTTT2477-MWPVC101	4/11/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	311.00	BQL	BQL	11.10
USTTT2478-MW03	8/11/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 22.3A

SITE TT-2477-78

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 625

Contaminant of Concern →		2,4-Dimethylphenol	2-Methylnaphthalene	3&4-Methylphenol	Acenaphthene	bis(2-Chloroethoxy)methane	Bis(2-ethylhexyl)phthalate	Diethylphthalate	Fluorene	Naphthalene	Nitrobenzene	Phenanthrene	Phenol
Well ID	**Date**												
2L GWQS		140	14		80	0	3	5000	280	21	0	210	300
GCL		140000	12500		2120	0	0	0	950	15500	0	410	335000
USTTT2478-MW06	8/11/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2478-MW09	8/12/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2478-MW10	8/11/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2478-MW13	8/12/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2478-MW14	8/11/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2478-MW14D	8/11/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2478-MW15	8/11/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2478-MW16	8/12/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2478-MW17	8/12/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2478-MW17	4/11/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 22.3A

SITE TT-2477-78

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 625

Contaminant of Concern →		2,4-Dimethylphenol	2-Methylnaphthalene	3&4-Methylphenol	Acenaphthene	bis(2-Chloroethoxy)methane	Bis(2-ethylhexyl)phthalate	Diethylphthalate	Fluorene	Naphthalene	Nitrobenzene	Phenanthrene	Phenol
Well ID	**Date**												
2L GWQS		140	14		80	0	3	5000	280	21	0	210	300
GCL		140000	12500		2120	0	0	0	950	15500	0	410	335000
USTTT2478-MW17D	8/12/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2478-MW18	8/12/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2478-MW18	4/11/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2478-MW19	8/12/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2478-MW20	4/11/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	10.90	BQL	BQL	BQL
USTTT2478-MW23	4/11/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2478-MW24	4/11/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2478-MW25	8/12/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2478-MWSS100	8/15/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2478-MWSS100	3/11/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 22.3B

SITE TT-2477-78

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 625

Contaminant of Concern →		2,4-Dimethylphenol	2-Methylnaphthalene	3&4-Methylphenol	Acenaphthene	bis(2-Chloroethoxy)methane	Bis(2-ethylhexyl)phthalate	Diethylphthalate	Fluorene	Naphthalene	Nitrobenzene	Phenanthrene	Phenol
Well ID	**Date**												
2L GWQS		140	14		80	0	3	5000	280	21	0	210	300
GCL		140000	12500		2120	0	0	0	950	15500	0	410	335000
USTTT2477-MW01	8/17/2005	BQL	3.80	15.00	BQL	BQL	273.00	BQL	2.10	2.00	BQL	BQL	BQL
USTTT2477-MW01	4/12/2006	BQL	BQL	BQL	BQL	BQL	10.60	BQL	2.10	3.00	BQL	BQL	BQL
USTTT2477-MW02	8/17/2005	BQL	7.10	8.20	1.20	BQL	71.00	BQL	2.30	1.60	BQL	1.50	BQL
USTTT2477-MW02	4/12/2006	BQL	BQL	BQL	BQL	BQL	5.40	4.90	1.80	1.10	BQL	BQL	BQL
USTTT2477-MW03	8/11/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2477-MW04	8/11/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2477-MW05	8/11/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2477-MW06	8/11/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2477-MW06	8/17/2005	BQL	BQL	BQL	BQL	BQL	233.00	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2477-MW06	4/12/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2477-MW07	8/11/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 22.3B

SITE TT-2477-78

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 625

Contaminant of Concern →		2,4-Dimethylphenol	2-Methylnaphthalene	3&4-Methylphenol	Acenaphthene	bis(2-Chloroethoxy)methane	Bis(2-ethylhexyl)phthalate	Diethylphthalate	Fluorene	Naphthalene	Nitrobenzene	Phenanthrene	Phenol
Well ID	**Date**												
2L GWQS		140	14		80	0	3	5000	280	21	0	210	300
GCL		140000	12500		2120	0	0	0	950	15500	0	410	335000
USTTT2477-MW09	8/11/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2477-MW11	8/15/2005	BQL	BQL	BQL	BQL	BQL	7.60	BQL	BQL	BQL	2.20	BQL	BQL
USTTT2477-MW11	4/12/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2477-MW14	4/11/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2477-MWOB01	8/15/2005	BQL	44.90	3.90	BQL	BQL	BQL	BQL	BQL	87.90	BQL	BQL	BQL
USTTT2477-MWOB01	4/12/2006	BQL	BQL	BQL	BQL	BQL	7.10	BQL	BQL	68.40	BQL	BQL	BQL
USTTT2477-MWOB10	8/15/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2477-MWOB10	4/11/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	7.30	BQL	BQL	BQL
USTTT2477-MWPVC101	8/18/2005	4.10	113.00	BQL	BQL	1.50	BQL	BQL	BQL	405.00	BQL	BQL	4.50
USTTT2477-MWPVC101	4/11/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	311.00	BQL	BQL	11.10
USTTT2478-MW03	8/11/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 22.3B

SITE TT-2477-78

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 625

Contaminant of Concern →		2,4-Dimethylphenol	2-Methylnaphthalene	3&4-Methylphenol	Acenaphthene	bis(2-Chloroethoxy)methane	Bis(2-ethylhexyl)phthalate	Diethylphthalate	Fluorene	Naphthalene	Nitrobenzene	Phenanthrene	Phenol
Well ID	**Date**												
	2L GWQS	140	14		80	0	3	5000	280	21	0	210	300
	GCL	140000	12500		2120	0	0	0	950	15500	0	410	335000
USTTT2478-MW06	8/11/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2478-MW09	8/12/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2478-MW10	8/11/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2478-MW13	8/12/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2478-MW14	8/11/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2478-MW14D	8/11/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2478-MW15	8/11/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2478-MW16	8/12/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2478-MW17	8/12/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2478-MW17	4/11/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 22.3B

SITE TT-2477-78

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 625

Contaminant of Concern →		2,4-Dimethylphenol	2-Methylnaphthalene	3&4-Methylphenol	Acenaphthene	bis(2-Chloroethoxy)methane	Bis(2-ethylhexyl)phthalate	Diethylphthalate	Fluorene	Naphthalene	Nitrobenzene	Phenanthrene	Phenol
Well ID	**Date**												
2L GWQS		140	14		80	0	3	5000	280	21	0	210	300
GCL		140000	12500		2120	0	0	0	950	15500	0	410	335000
USTTT2478-MW17D	8/12/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2478-MW18	8/12/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2478-MW18	4/11/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2478-MW19	8/12/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2478-MW20	4/11/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	10.90	BQL	BQL	BQL
USTTT2478-MW23	4/11/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2478-MW24	4/11/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2478-MW25	8/12/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2478-MWSS100	8/15/2005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
USTTT2478-MWSS100	3/11/2006	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 22.4A

SITE TT-2477-78

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

MADEP VPH/EPH

Contaminant of Concern →		C5-C8 Aliphatics	C9-C18 Aliphatics	C9-C22 Aromatics
Well ID	Date			
2L GWQS		420	4200	210
GCL		0	0	0
USTTT2477-MW01	4/12/2006	BQL	BQL	130.00
USTTT2477-MW02	4/12/2006	BQL	100.00	190.00
USTTT2477-MW06	4/12/2006	BQL	BQL	BQL
USTTT2477-MW11	4/12/2006	BQL	BQL	BQL
USTTT2477-MW14	4/11/2006	BQL	BQL	BQL
USTTT2477-MWOB01	4/12/2006	1100.00	940.00	260.00
USTTT2477-MWOB10	4/11/2006	220.00	180.00	BQL
USTTT2477-MWPVC101	4/11/2006	4200.00	6000.00	2550.00
USTTT2478-MW17	4/11/2006	BQL	BQL	BQL
USTTT2478-MW18	4/11/2006	120.00	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 22.4A

SITE TT-2477-78

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

MADEP VPH/EPH

Contaminant of Concern →		C5-C8 Aliphatics	C9-C18 Aliphatics	C9-C22 Aromatics
Well ID	Date			
2L GWQS		420	4200	210
GCL		0	0	0
USTTT2478-MW20	4/11/2006	**650.00**	640.00	**340.00**
USTTT2478-MW23	4/11/2006	BQL	BQL	BQL
USTTT2478-MW24	4/11/2006	BQL	BQL	BQL
USTTT2478-MWSS100	3/11/2006	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 22.4B

SITE TT-2477-78

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

MADEP VPH/EPH

Contaminant of Concern →		C5-C8 Aliphatics	C9-C18 Aliphatics	C9-C22 Aromatics
Well ID	**Date**			
2L GWQS		420	4200	210
GCL		0	0	0
USTTT2477-MW01	4/12/2006	BQL	BQL	130.00
USTTT2477-MW02	4/12/2006	BQL	100.00	190.00
USTTT2477-MW06	4/12/2006	BQL	BQL	BQL
USTTT2477-MW11	4/12/2006	BQL	BQL	BQL
USTTT2477-MW14	4/11/2006	BQL	BQL	BQL
USTTT2477-MWOB01	4/12/2006	1100.00	940.00	260.00
USTTT2477-MWOB10	4/11/2006	220.00	180.00	BQL
USTTT2477-MWPVC101	4/11/2006	4200.00	6000.00	2550.00
USTTT2478-MW17	4/11/2006	BQL	BQL	BQL
USTTT2478-MW18	4/11/2006	120.00	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 22.4B

SITE TT-2477-78

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

MADEP VPH/EPH

Contaminant of Concern →		C5-C8 Aliphatics	C9-C18 Aliphatics	C9-C22 Aromatics
Well ID	**Date**			
2L GWQS		420	4200	210
GCL		0	0	0
USTTT2478-MW20	4/11/2006	**650.00**	640.00	**340.00**
USTTT2478-MW23	4/11/2006	BQL	BQL	BQL
USTTT2478-MW24	4/11/2006	BQL	BQL	BQL
USTTT2478-MWSS100	3/11/2006	BQL	BQL	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM

LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Free Product
- Free Product Detected
- No Measurable Thickness
- Free Product Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. Free Product was not detected at this site in any of the wells gauged during this monitoring event.
2. Monitoring wells USTTT2478-MW02, USTTT2478-MW04, USTTT2478-MW11, and USTTT2478-MW11D could not be located in the field and may be abandoned.

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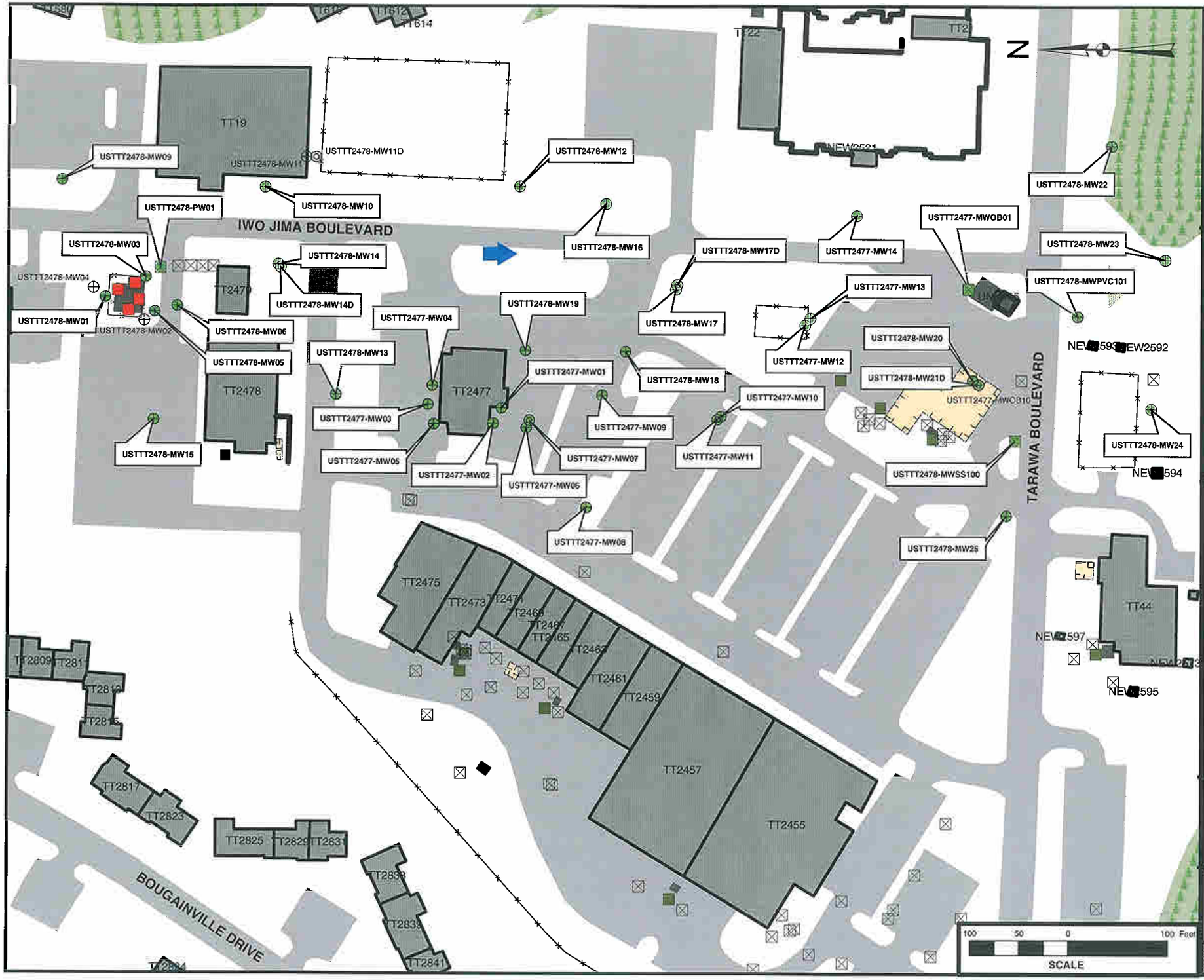
SITE TT-2477-78
FREE PRODUCT PLUME MAP
THIRD QUARTER 2005

FIGURE **22.1A**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

100 50 0 100 Feet
SCALE

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM



LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Free Product
- Free Product Detected
- No Measurable Thickness
- Free Product Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. Free Product was not detected at this site in any of the wells gauged during this monitoring event.
2. Monitoring wells USTTT2478-MW02, USTTT2478-MW04, USTTT2478-MW11, and USTTT2478-MW11D could not be located in the field and may be abandoned.

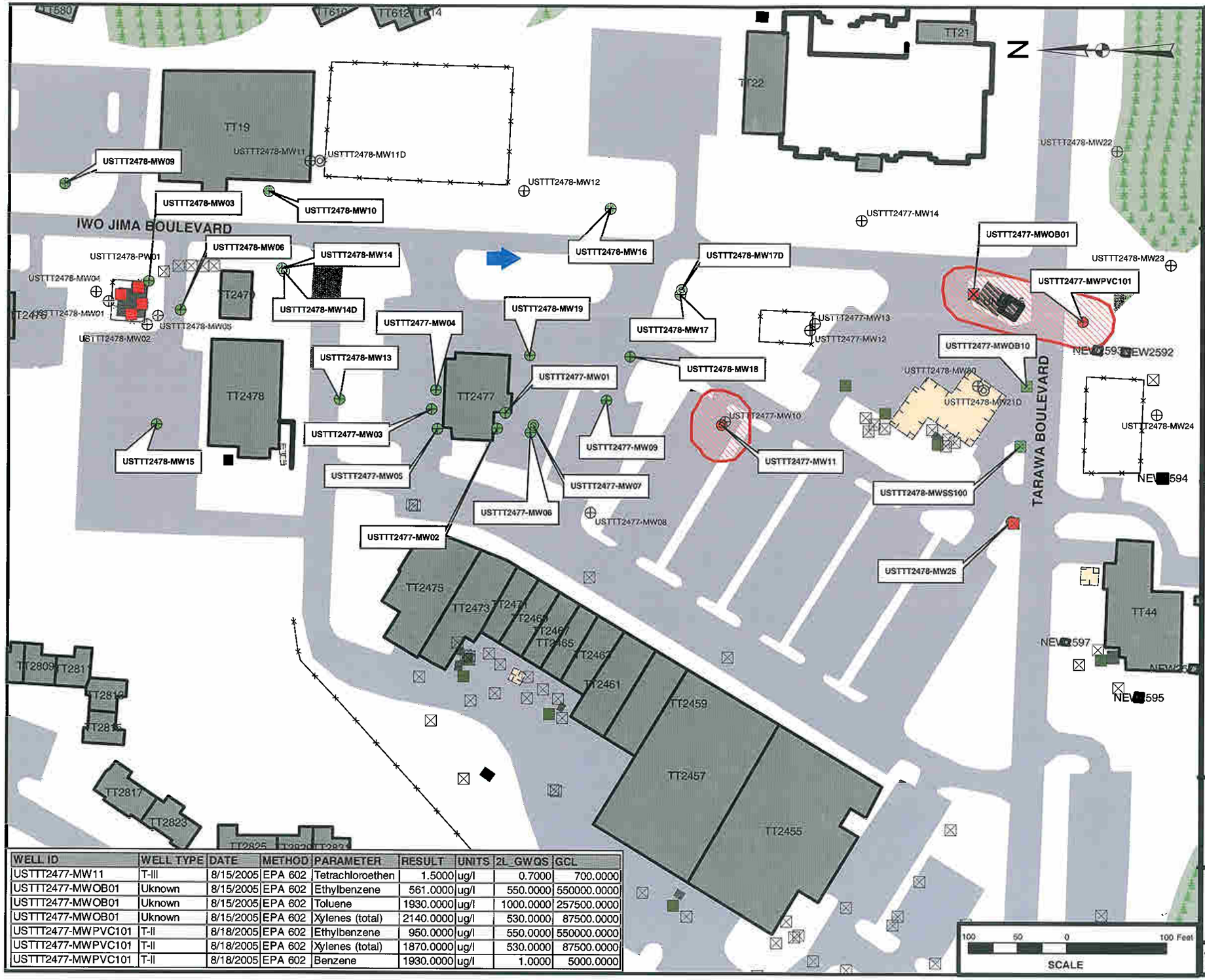
CATLIN ENGINEERS and SCIENTISTS

SITE TT-2477-78
FREE PRODUCT PLUME MAP
SECOND QUARTER 2006

FIGURE **22.1B**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM



LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Analytical Results
- 2L Non-Compliant
- 2L Compliant
- EPA 602 Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. 2L Standard refers to North Carolina Groundwater Quality Standard 15A NCAC 2L.0202.
2. GCL refers to Gross Contaminant Level as defined in Table 7 of "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Ground Water", Volume II, dated January 2, 1998.
3. A 2L Standard of "0.00" implies a standard has not yet been established. According to NCAC T15:02L, any compound found above laboratory detection limits is considered noncompliant unless otherwise specified by the NCDENR.
4. Monitoring wells USTTT2478-MW02, USTTT2478-MW04, USTTT2478-MW11, and USTTT2478-MW11D could not be located in the field and may be abandoned.

WELL ID	WELL TYPE	DATE	METHOD	PARAMETER	RESULT	UNITS	2L_GWQS	GCL
USTTT2477-MW11	T-III	8/15/2005	EPA 602	Tetrachloroethen	1.5000	ug/l	0.7000	700.0000
USTTT2477-MWOB01	Uknown	8/15/2005	EPA 602	Ethylbenzene	561.0000	ug/l	550.0000	550000.0000
USTTT2477-MWOB01	Uknown	8/15/2005	EPA 602	Toluene	1930.0000	ug/l	1000.0000	257500.0000
USTTT2477-MWOB01	Uknown	8/15/2005	EPA 602	Xylenes (total)	2140.0000	ug/l	530.0000	87500.0000
USTTT2477-MWPVC101	T-II	8/18/2005	EPA 602	Ethylbenzene	950.0000	ug/l	550.0000	550000.0000
USTTT2477-MWPVC101	T-II	8/18/2005	EPA 602	Xylenes (total)	1870.0000	ug/l	530.0000	87500.0000
USTTT2477-MWPVC101	T-II	8/18/2005	EPA 602	Benzene	1930.0000	ug/l	1.0000	5000.0000

CATLIN ENGINEERS and SCIENTISTS

SITE TT-2477-78
EPA METHOD 602 COLORMETRY
AND PLUME IN EXCESS OF 2L
THIRD QUARTER 2005

FIGURE **22.2A**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM

LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Analytical Results
- 2L Non-Compliant
- 2L Compliant
- EPA 602 Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. 2L Standard refers to North Carolina Groundwater Quality Standard 15A NCAC 2L.0202.
2. GCL refers to Gross Contaminant Level as defined in Table 7 of "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Ground Water", Volume II, dated January 2, 1998.
3. A 2L Standard of "0.00" implies a standard has not yet been established. According to NCAC T15:02L, any compound found above laboratory detection limits is considered noncompliant unless otherwise specified by the NCDENR.
4. Monitoring wells USTTT2478-MW02, USTTT2478-MW04, USTTT2478-MW11, and USTTT2478-MW11D could not be located in the field and may be abandoned.

WELL ID	WELL TYPE	DATE	METHOD	PARAMETER	RESULT	UNITS	2L_GWQS	GCL
USTTT2477-MWOB01	Unknown	4/12/2006	EPA 602	Xylenes (total)	851.0000	UG/L	530.0000	87500.0000
USTTT2477-MWOB10	Unknown	4/11/2006	EPA 602	Benzene	13.6000	UG/L	1.0000	5000.0000
USTTT2477-MWPVC101	T-II	4/11/2006	EPA 602	Benzene	1450.0000	UG/L	1.0000	5000.0000
USTTT2477-MWPVC101	T-II	4/11/2006	EPA 602	Ethylbenzene	1850.0000	UG/L	550.0000	550000.0000
USTTT2477-MWPVC101	T-II	4/11/2006	EPA 602	Xylenes (total)	1790.0000	UG/L	530.0000	87500.0000
USTTT2478-MW18	T-II	4/11/2006	EPA 602	Benzene	1.0500	UG/L	1.0000	5000.0000

CATLIN ENGINEERS and SCIENTISTS

SITE TT-2477-78
EPA METHOD 602 COLORMETRY
AND PLUME IN EXCESS OF 2L
SECOND QUARTER 2006

FIGURE **22.2B**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM

LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Analytical Results
- 2L Non-Compliant
- 2L Compliant
- EPA 625 Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. 2L Standard refers to North Carolina Groundwater Quality Standard 15A NCAC 2L.0202.
2. GCL refers to Gross Contaminant Level as defined in Table 7 of "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Ground Water", Volume II, dated January 2, 1998.
3. A 2L Standard of "0.00" implies a standard has not yet been established. According to NCAC T15:02L, any compound found above laboratory detection limits is considered noncompliant unless otherwise specified by the NCDENR.
4. Monitoring wells USTTT2478-MW02, USTTT2478-MW04, USTTT2478-MW11, and USTTT2478-MW11D could not be located in the field and may be abandoned.

Well ID	Well Type	Date	Method	Parameter	Result	Units	2L GWQS	GCL
USTTT2477-MW01	T-II	8/17/2005	EPA 625	bis(2-Ethylhexyl)phthalate	273.0000	ug/l	3.0000	0.0000
USTTT2477-MW02	T-II	8/17/2005	EPA 625	bis(2-Ethylhexyl)phthalate	71.0000	ug/l	3.0000	0.0000
USTTT2477-MW06	T-II	8/17/2005	EPA 625	bis(2-Ethylhexyl)phthalate	233.0000	ug/l	3.0000	0.0000
USTTT2477-MW11	T-III	8/15/2005	EPA 625	Nitrobenzene	2.2000	ug/l	0.0000	0.0000
USTTT2477-MW11	T-III	8/15/2005	EPA 625	bis(2-Ethylhexyl)phthalate	7.6000	ug/l	3.0000	0.0000
USTTT2477-MWOB01	Unknown	8/15/2005	EPA 625	Naphthalene	87.9000	ug/l	21.0000	15500.0000
USTTT2477-MWOB01	Unknown	8/15/2005	EPA 625	2-Methylnaphthalene	44.9000	ug/l	14.0000	12500.0000
USTTT2477-MWPVC101	T-II	8/18/2005	EPA 625	bis(2-Chloroethoxy)methane	1.5000	ug/l	0.0000	0.0000
USTTT2477-MWPVC101	T-II	8/18/2005	EPA 625	Naphthalene	405.0000	ug/l	21.0000	15500.0000
USTTT2477-MWPVC101	T-II	8/18/2005	EPA 625	2-Methylnaphthalene	113.0000	ug/l	14.0000	12500.0000

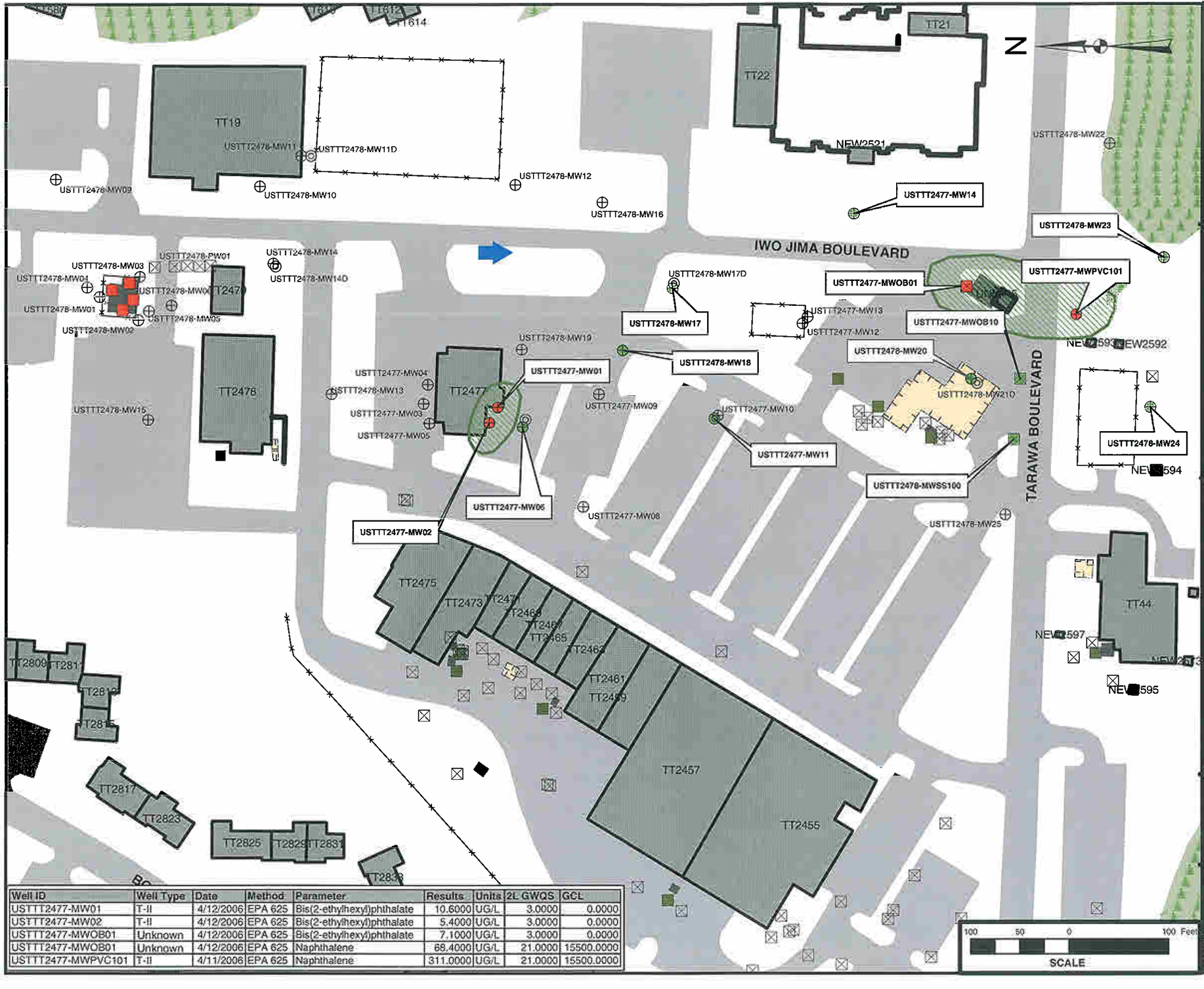
CATLIN ENGINEERS and SCIENTISTS

SITE TT-2477-78
EPA METHOD 625 COLORMETRY
AND PLUME IN EXCESS OF 2L
THIRD QUARTER 2005

FIGURE **22.3A**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM



LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Analytical Results
- 2L Non-Compliant
- 2L Compliant
- EPA 625 Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
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NOTES

1. 2L Standard refers to North Carolina Groundwater Quality Standard 15A NCAC 2L.0202.
2. GCL refers to Gross Contaminant Level as defined in Table 7 of "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Ground Water", Volume II, dated January 2, 1998.
3. A 2L Standard of "0.00" implies a standard has not yet been established. According to NCAC T15:02L, any compound found above laboratory detection limits is considered noncompliant unless otherwise specified by the NCDENR.
4. Monitoring wells USTTT2478-MW02, USTTT2478-MW04, USTTT2478-MW11, and USTTT2478-MW11D could not be located in the field and may be abandoned.

Well ID	Well Type	Date	Method	Parameter	Results	Units	2L GWQS	GCL
USTTT2477-MW01	T-II	4/12/2006	EPA 625	Bis(2-ethylhexyl)phthalate	10.6000	UG/L	3.0000	0.0000
USTTT2477-MW02	T-II	4/12/2006	EPA 625	Bis(2-ethylhexyl)phthalate	5.4000	UG/L	3.0000	0.0000
USTTT2477-MWOB01	Unknown	4/12/2006	EPA 625	Bis(2-ethylhexyl)phthalate	7.1000	UG/L	3.0000	0.0000
USTTT2477-MWOB01	Unknown	4/12/2006	EPA 625	Naphthalene	68.4000	UG/L	21.0000	15500.0000
USTTT2477-MWPVC101	T-II	4/11/2006	EPA 625	Naphthalene	311.0000	UG/L	21.0000	15500.0000

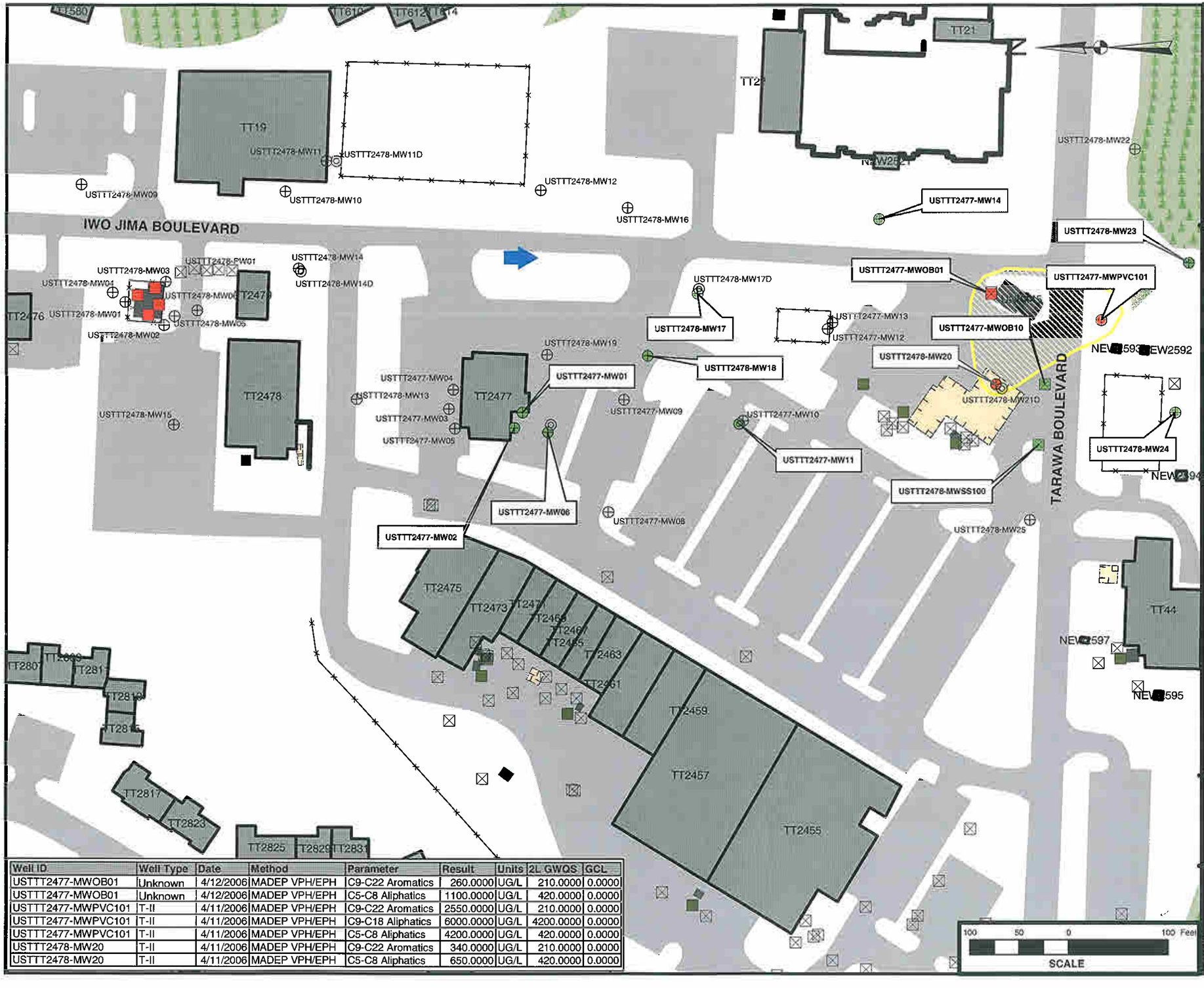
CATLIN ENGINEERS and SCIENTISTS

SITE TT-2477-78
EPA METHOD 625 COLORMETRY AND PLUME IN EXCESS OF 2L
SECOND QUARTER 2006

FIGURE **22.3B**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM



LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Analytical Results
- 2L Non-Compliant
- 2L Compliant
- MADEP VPH/EPH
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. 2L Standard refers to North Carolina Groundwater Quality Standard 15A NCAC 2L.0202.
2. GCL refers to Gross Contaminant Level as defined in Table 7 of "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Ground Water", Volume II, dated January 2, 1998.
3. A 2L Standard of "0.00" implies a standard has not yet been established. According to NCAC T15:02L, any compound found above laboratory detection limits is considered noncompliant unless otherwise specified by the NCDENR.
4. Monitoring wells USTTT2478-MW02, USTTT2478-MW04, USTTT2478-MW11, and USTTT2478-MW11D could not be located in the field and may be abandoned.

Well ID	Well Type	Date	Method	Parameter	Result	Units	2L GWQS	GCL
USTTT2477-MWOB01	Unknown	4/12/2006	MADEP VPH/EPH	C9-C22 Aromatics	260.0000	UG/L	210.0000	0.0000
USTTT2477-MWOB01	Unknown	4/12/2006	MADEP VPH/EPH	C5-C8 Aliphatics	1100.0000	UG/L	420.0000	0.0000
USTTT2477-MWPVC101	T-II	4/11/2006	MADEP VPH/EPH	C9-C22 Aromatics	2550.0000	UG/L	210.0000	0.0000
USTTT2477-MWPVC101	T-II	4/11/2006	MADEP VPH/EPH	C9-C18 Aliphatics	6000.0000	UG/L	4200.0000	0.0000
USTTT2477-MWPVC101	T-II	4/11/2006	MADEP VPH/EPH	C5-C8 Aliphatics	4200.0000	UG/L	420.0000	0.0000
USTTT2478-MW20	T-II	4/11/2006	MADEP VPH/EPH	C9-C22 Aromatics	340.0000	UG/L	210.0000	0.0000
USTTT2478-MW20	T-II	4/11/2006	MADEP VPH/EPH	C5-C8 Aliphatics	650.0000	UG/L	420.0000	0.0000

CATLIN ENGINEERS and SCIENTISTS

SITE TT-2477-78
MADEP VPH/EPH COLORMETRY AND PLUME IN EXCESS OF 2L
SECOND QUARTER 2006

FIGURE **22.4**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

SECTION 23.0

OF THE

ANNUAL MANAGEMENT REPORT
MCB CAMP LEJEUNE UST MANAGEMENT PROGRAM

MONITORING EVENT:

SECOND SEMESTER 2005/FIRST SEMESTER 2006
(JULY 2005 THROUGH JUNE 2006)

SITE-SPECIFIC MONITORING REPORT
FOR

SITE TT-3548

NCDENR INCIDENT NO. 23694



23.0 EXECUTIVE SUMMARY
SITE TT-3548

23.1 Site Information

23.1.1 Site Location: MCB Camp Lejeune, Terrawa Terrace II Housing Area
23.1.2 Incident Number(s): 23694
23.1.3 UTM Coordinates (WGS84) (Meters): 281791.41 Easting, 3846321.82 Northing
23.1.4 Risk Classification: Low
23.1.5 Land Use Classification: Residential
23.1.6 Source Type(s): No. 2 Fuel Oil from 550 gallon capacity UST for Building 3546/3548

23.2 Monitoring Event Information

23.2.1 Sampling Performed By: CATLIN
23.2.2 Date(s) of This Monitoring Event: January 2006
23.2.3 Date(s) of Previous Monitoring Event: 4/14/04 and 8/10/04 (soil), 8/25/04 (gw)
23.2.4 Reason(s) for This Monitoring Event: Track migration and attenuation of dissolved-phase plume.
23.2.5 Site Monitoring Status at Time of This Event: Annual sampling of one site monitoring well.

23.3 Groundwater Hydraulics

23.3.1 Hydraulic Conductivity: Not known
23.3.2 Effective Porosity: Not known
23.3.3 Hydraulic Gradient: Not known
23.3.4 Average Linear Groundwater Flow Velocity: Not known
23.3.5 Groundwater Flow Direction: Not known
23.3.6 Range of Measured Water Table Elevations: Approximately 13 feet BLS
23.3.7 Significant Changes from Previously Reported Data: Not Applicable. This is the first Management Report prepared by CATLIN.

23.4 Free Product Plume

23.4.1 Free Product Present?: No
23.4.2 Free Product Thickness Measured: None, see Table 23.1B
23.4.3 Plume Size and Location: None, see Figure 23.1B
23.4.4 Free Product/Contaminants Removed from Site This Period: None
23.4.5 Significant Changes from Previously Reported Data: Not Applicable. This is the first Management Report prepared by CATLIN.

23.5 Dissolved-Phase Plume

23.5.1 Plume Concentrations: See Tables 23.2A and B, 23.3A and B, and 23.4A and B

23.5.2 Plume Size and Location: See Figures 23.2A and B, 23.3A and B, and 23.4A and B

23.5.3 Significant Changes from Previously Reported Data: Not Applicable. This is the first Management Report prepared by CATLIN. Groundwater sample analytical results compared to the 2L GWQS are discussed as follows:

EPA Methods 602 and 625 and MADEP VPH/EPH
No concentrations were detected above the 2L GWQS.

23.6 Potential Receptors

23.6.1 Contaminated Water Supply Well(s)?: None

23.6.2 Potable Water Supply Well Within 1,000 Feet of Source Area?: No

23.6.3 Any Water Supply Well Within 250 Feet of Source Area?: No

23.6.4 Surface Water Body Within 500 Feet?: No

23.6.5 Past Evidence of Vapors?: No

23.6.6 Significant Changes from Previously Reported Data?: Not Applicable. This is the first Management Report prepared by CATLIN.

23.7 Remediation

23.7.1 Status: Excavation of soil contamination planned when Building TT-3548 is demolished

23.7.2 Type: Excavation and Natural Attenuation

23.7.3 Progress: Excavation pending

23.7.4 Construction Contractor: Pending

23.7.5 Operating Contractor: Pending

23.8 Observations and Comments

On-site monitoring well should be sampled immediately before excavation occurs. Following excavation, evaluate site for closure. Natural attenuation of groundwater will be proposed, if necessary, with bi-annual sampling until all contaminants are below the 2L GWQS.

TABLE 23.1B
SITE TT-3548
FIELD MEASUREMENTS - FIRST QUARTER 2006

Date Measured: 1/19/2006

Well No.	Type	TOC	Stick up	DTW	Product Thickness	DTW BGS	GW Elevation
USTTT3548-MW01				13.11	0.00		

Notes:
1. TII = Type II monitoring well
   TIII = Type III monitoring well
   RW = Recovery well
2. TOC = Top of well casing elevation.
3. STICK UP = Height of well casing above land surface in feet.
4. DTW = Depth to water (in feet) from top of well casing.
5. Product thickness is measured in feet.
6. DTW BGS = Depth to water below ground surface in feet.
7. GW Elevation = Ground water elevation (not adjusted for free product)
8. A zero ("0.00") in the product thickness column indicates no measureable thickness.
9. Top of casing elevations are measured in feet relative to Mean Sea Level (NAD83).
10. Stick up values were not available for wells with no values in the STICK UP and DTW BGS columns.

TABLE 23.2A

SITE TT-3548

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 602

Contaminant of Concern →		
Well ID	**Date**	**Toluene**
2L GWQS		1000
GCL		257500
USTTT3548-MW01	7/6/2005	0.42
USTTT3548-MW01	1/19/2006	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 23.2B

SITE TT-3548

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 602

Contaminant of Concern →		
Well ID	**Date**	**Toluene**
2L GWQS		1000
GCL		257500
USTTT3548-MW01	7/6/2005	0.42
USTTT3548-MW01	1/19/2006	BQL

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 23.3A

SITE TT-3548

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

EPA METHOD 625

Contaminant of Concern →		
Well ID	**Date**	**Phenanthrene**
2L GWQS		210
GCL		410
USTTT3548-MW01	7/6/2005	2.10
USTTT3548-MW01	1/19/2006	1.60

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 23.3B

SITE TT-3548

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

EPA METHOD 625

Contaminant of Concern →		Phenanthrene
Well ID	Date	
2L GWQS		210
GCL		410
USTTT3548-MW01	7/6/2005	2.10
USTTT3548-MW01	1/19/2006	1.60

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 23.4A

SITE TT-3548

GROUNDWATER LABORATORY ANALYTICAL RESULTS - SECOND SEMESTER 2005/FIRST SEMESTER 2006

MADEP VPH/EPH

Contaminant of Concern →		C19-C36 Aliphatics	C9-C18 Aliphatics	C9-C22 Aromatics
Well ID	**Date**			
2L GWQS		12000	4200	210
GCL		0	0	0
USTTT3548-MW01	7/6/2005	BQL	BQL	140.00
USTTT3548-MW01	1/19/2006	110.00	840.00	150.00

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
4. BQL = Below Quantitaion Limits
5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL

TABLE 23.4B

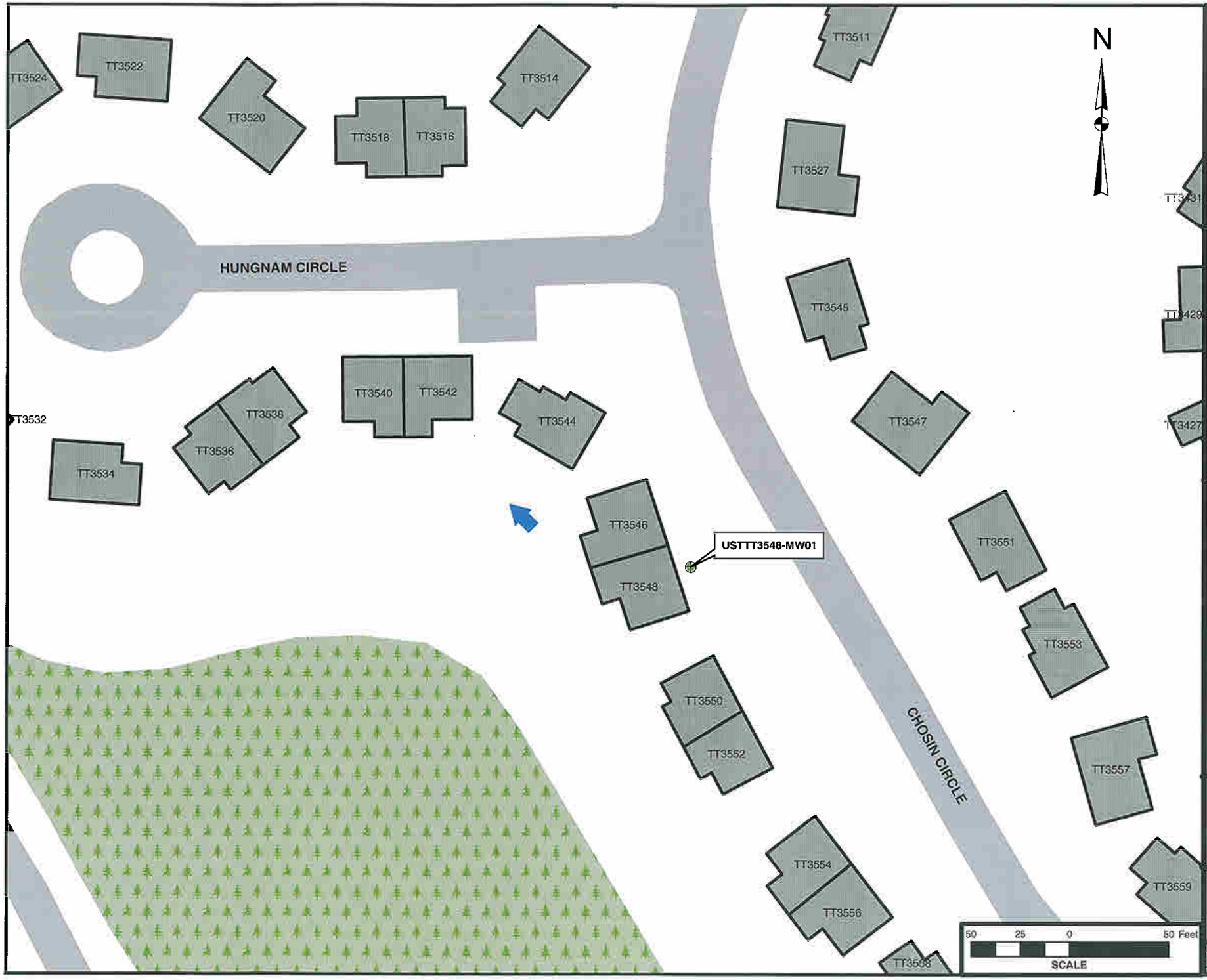
SITE TT-3548

HISTORICAL GROUNDWATER LABORATORY ANALYTICAL RESULTS BEGINNING JULY 2005

MADEP VPH/EPH

Contaminant of Concern →		C19-C36 Aliphatics	C9-C18 Aliphatics	C9-C22 Aromatics
Well ID	Date			
2L GWQS		12000	4200	210
GCL		0	0	0
USTTT3548-MW01	7/6/2005	BQL	BQL	140.00
USTTT3548-MW01	1/19/2006	110.00	840.00	150.00

Notes:
1. 2L GWQS = North Carolina groundwater quality standard 15A NCAC 2L .0202
2. GCL = Gross Contamination Levels for ground water as defined in "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater" Volume II January, 1998
3. All units are in ug/L (Micrograms per Liter)
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5. A zero in the 2L GWQS column indicates the 2L Standard is equal to the laboratory detection limit
6. A zero in the GCL column indicates a GCL has not been established
7. Shaded concentrations indicate exceedance of the 2L GWQS
8. Only compounds which were detected are shown on table. All other compounds were BQL



MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM

LEGEND

Monitoring Wells
- Type I
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- Unknown Well Type
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- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Free Product
- Free Product Detected
- No Measurable Thickness
- Free Product Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. Free Product was not detected at this site in any of the wells gauged during this monitoring event.

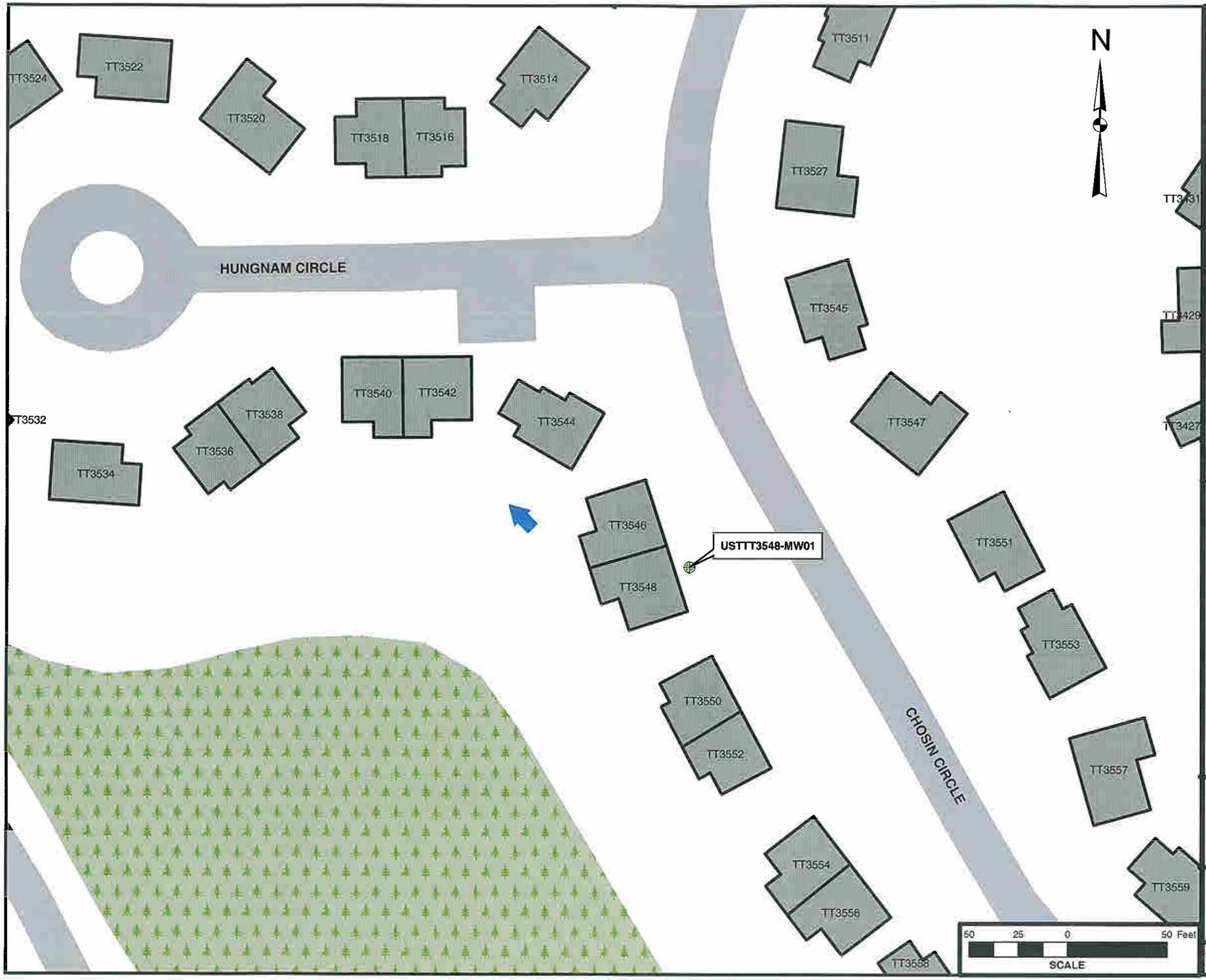
CATLIN ENGINEERS and SCIENTISTS

SITE TT-3548
FREE PRODUCT PLUME MAP
FIRST QUARTER 2006

FIGURE **23.1B**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM



LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Analytical Results
- 2L Non-Compliant
- 2L Compliant
- EPA 602 Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

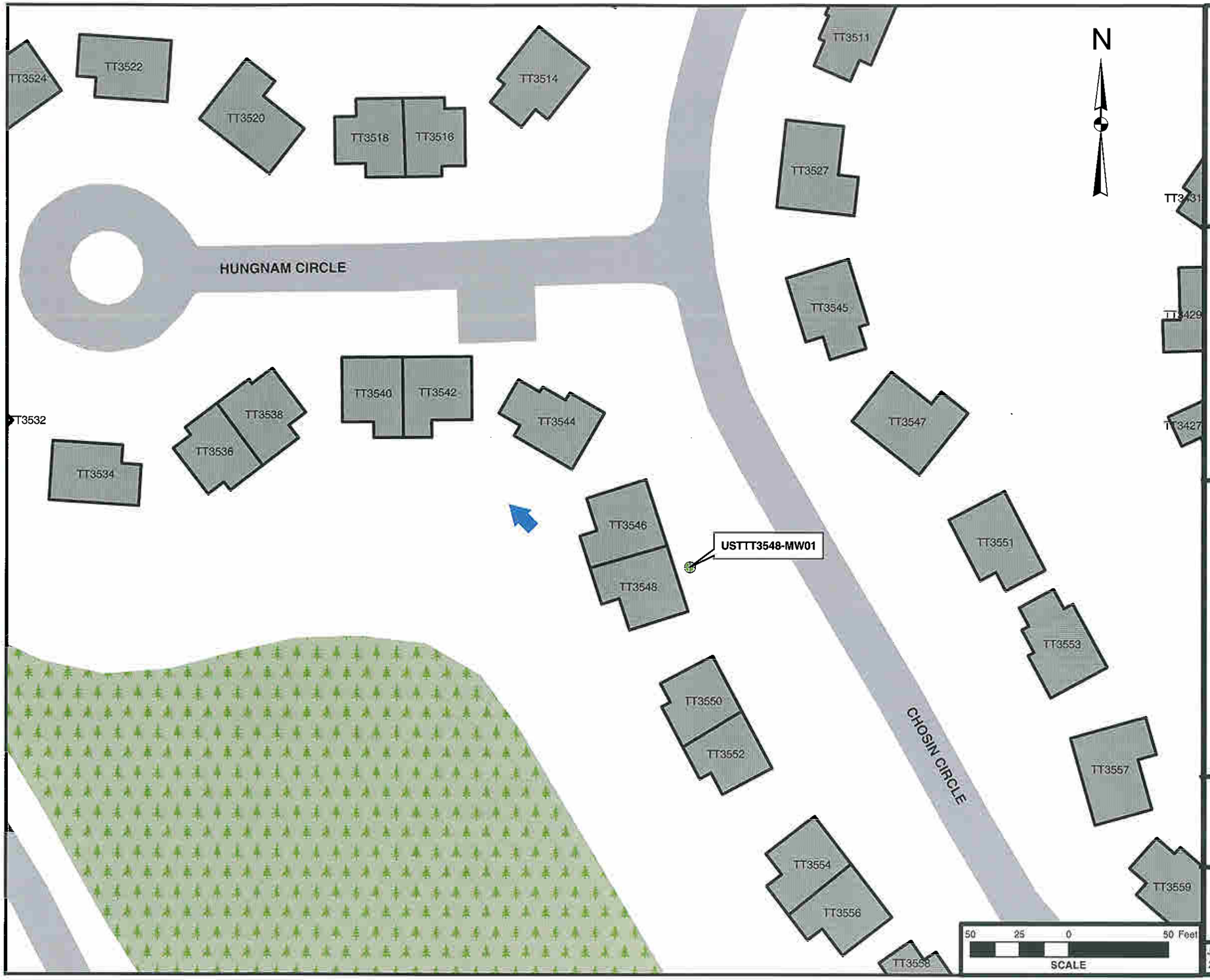
1. No EPA Method 602 Compounds were detected above the 2L GWQS in any wells sampled during this monitoring event.

CATLIN ENGINEERS and SCIENTISTS

SITE TT-3548
EPA METHOD 602 COLORIMETRY AND PLUME IN EXCESS OF 2L
THIRD QUARTER 2005

FIGURE 23.2A

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM



MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM

LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Analytical Results
- 2L Non-Compliant
- 2L Compliant
- EPA 602 Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

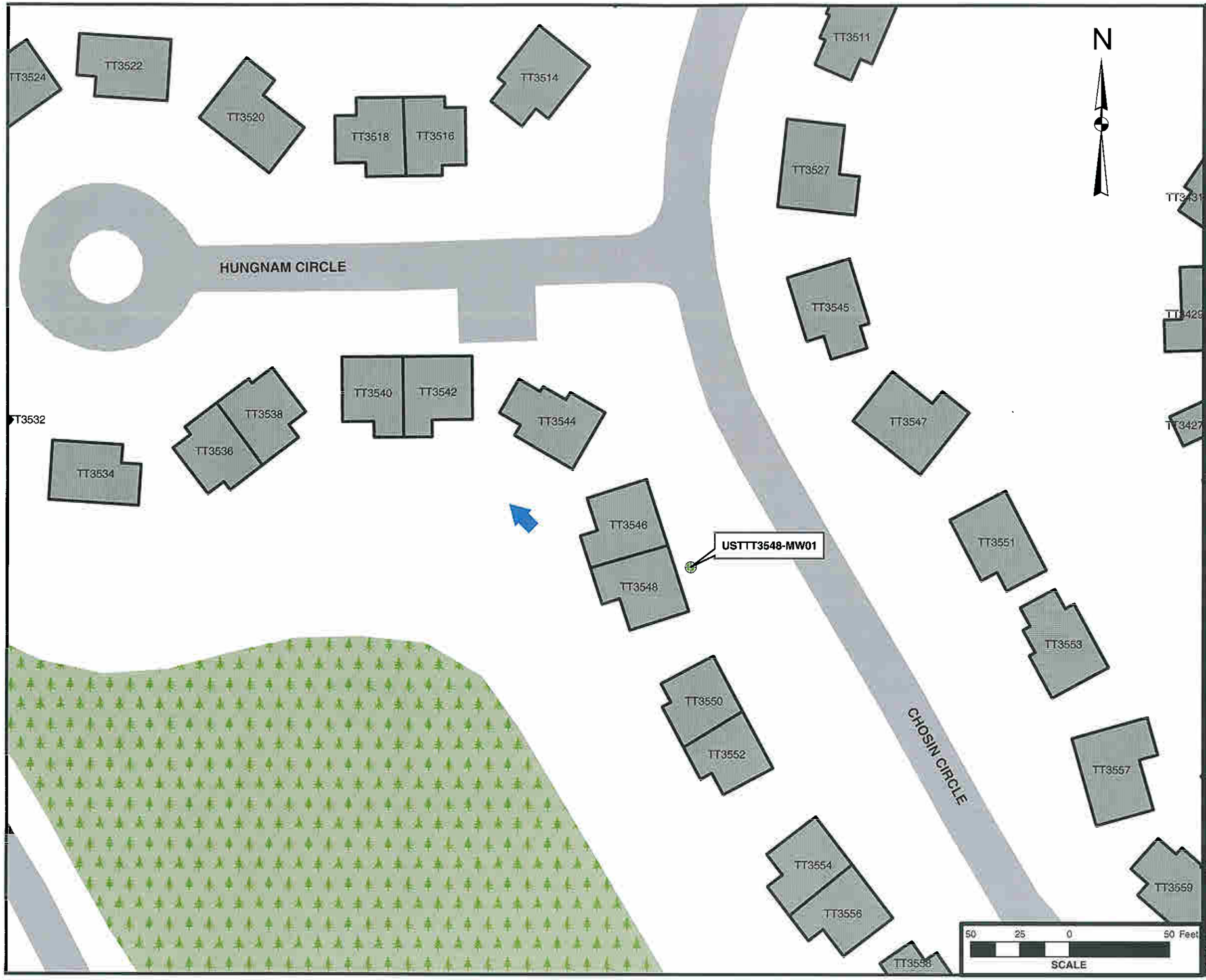
1. No EPA Method 602 Compounds were detected above the 2L GWQS in any wells sampled during this monitoring event.

CATLIN ENGINEERS and SCIENTISTS

SITE TT-3548
EPA METHOD 602 COLORIMETRY AND PLUME IN EXCESS OF 2L FIRST QUARTER 2006

FIGURE **23.2B**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM



MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM

LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Analytical Results
- 2L Non-Compliant
- 2L Compliant
- EPA 625 Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. No EPA Method 625 Compounds were detected above the 2L GWQS in any wells sampled during this monitoring event.

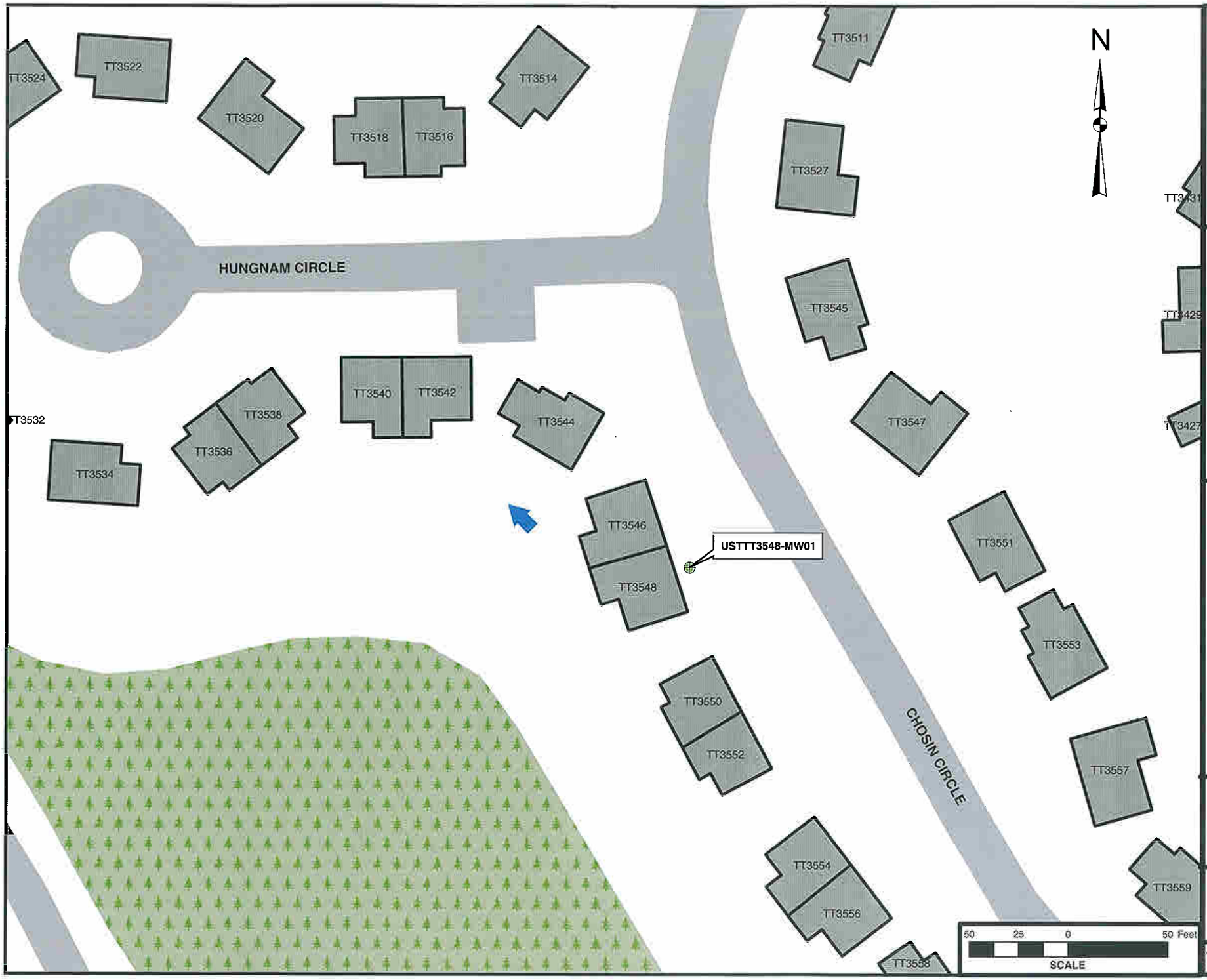
CATLIN ENGINEERS and SCIENTISTS

SITE TT-3548
EPA METHOD 625 COLORIMETRY AND PLUME IN EXCESS OF 2L
THIRD QUARTER 2005

FIGURE **23.3A**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM

MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM



LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Analytical Results
- 2L Non-Compliant
- 2L Compliant
- EPA 625 Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

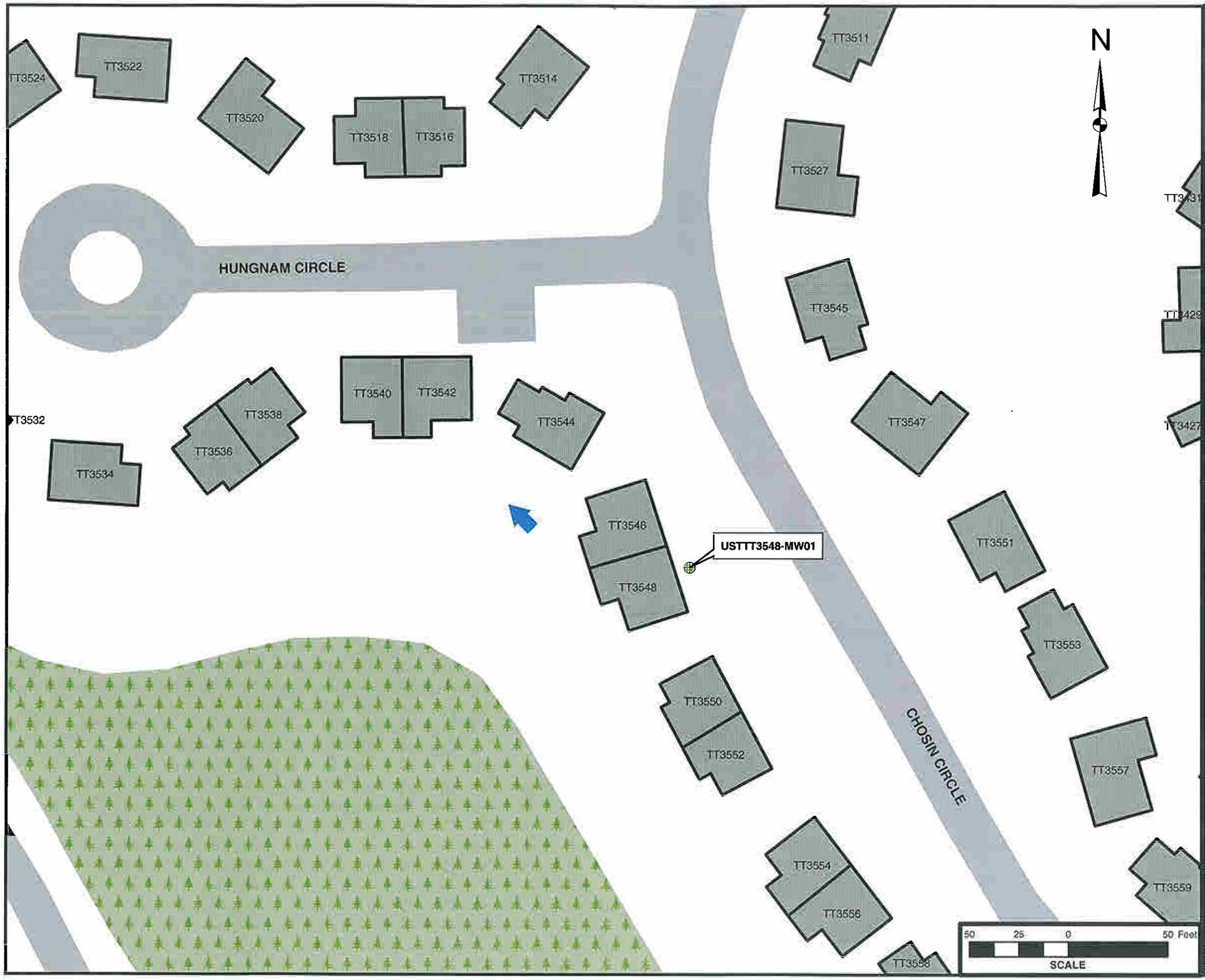
1. No EPA Method 625 Compounds were detected above the 2L GWQS in any wells sampled during this monitoring event.

CATLIN ENGINEERS and SCIENTISTS

SITE TT-3548
EPA METHOD 625 COLORIMETRY AND PLUME IN EXCESS OF 2L FIRST QUARTER 2006

FIGURE **23.3B**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM



MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM

LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Analytical Results
- 2L Non-Compliant
- 2L Compliant
- MADEP VPH/EPH Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

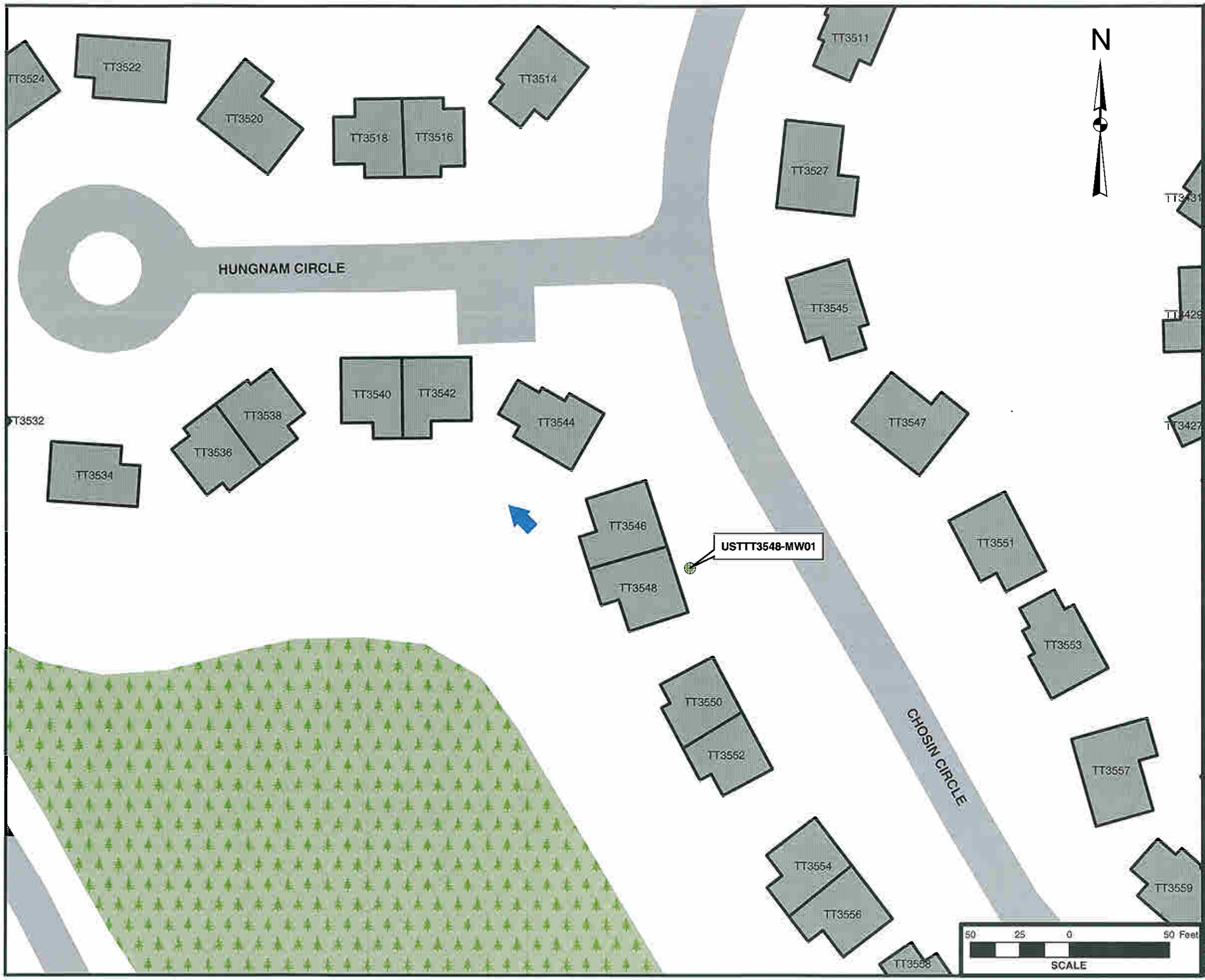
1. No MADEP VPH/EPH Compounds were detected above the 2L GWQS in any wells sampled during this monitoring event.

CATLIN ENGINEERS and SCIENTISTS

SITE TT-3548
MADEP VPH/EPH COLORIMETRY AND PLUME IN EXCESS OF 2L
THIRD QUARTER 2005

FIGURE 23.4A

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM



MCB CAMP LEJEUNE
UST MANAGEMENT PROGRAM

LEGEND

Monitoring Wells
- Type I
- Type II
- Type III
- Pumping Well
- Unknown Well Type
- Water Supply Wells
- Above Ground Storage Tank
- Underground Storage Tank
- Railroad Tracks

Walls and Fences
- FENCE
- GATE
- WALL

Analytical Results
- 2L Non-Compliant
- 2L Compliant
- MADEP VPH/EPH Plume
- Buildings and Structures
- Demolished Structures
- Oil/Water Separators
- Slabs
- Roads
- Driveways
- Parking Lots
- Surface Water Bodies
- Creeks and Streams
- Groundwater Flow Direction

Vegetation Cover
- Forestland
- Scrubland
- Wetland

Airfield Pavement
- HELIPAD
- RAMP
- RUNWAY
- SHLDR_OVERRUN
- TAXIWAY

NOTES

1. No MADEP VPH/EPH Compounds were detected above the 2L GWQS in any wells sampled during this monitoring event.

CATLIN ENGINEERS and SCIENTISTS

SITE TT-3548
MADEP VPH/EPH COLORIMETRY AND PLUME IN EXCESS OF 2L
SECOND QUARTER 2006

FIGURE **23.4B**

Job No.:	Date:	Scale:	Drawn By:	Checked By:
204-080	JUNE 2006	AS SHOWN	SAC	MEM