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MONITORING REPORTS

OPERABLE UNIT NO. 10 - SITE 35
MARINE CORPS BASE
CAMP LEJEUNE, NORTH CAROLINA

REPORTING PERIOD APRIL 1999 – JUNE 1999

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PREFACE

The monitoring reports that are presented herein describe the procedures, analytical findings, and subsequent recommendations of the monitoring program at Operable Unit (OU) No. 10 (Site 35), Marine Corps Base (MCB) Camp Lejeune, North Carolina. Figure P-1 depicts the location of OU 10. The monitoring reports have been prepared by Baker Environmental, Inc. (Baker) and submitted to the United States Environmental Protection Agency – Region IV; the North Carolina Department of Environment and Natural Resources; the Environment Management Department of MCB, Camp Lejeune; and the Naval Facilities Engineering Command, Atlantic Division (LANTDIV).

The previous field investigations that have been performed by Baker, have formed the basis for the forthcoming Record of Decision (ROD), which defines site-specific remedial goals. Based on the nature of contamination revealed by data from the past investigations, Site 35 was introduced as a candidate for remediation via monitored natural attenuation (NA) in January of 1999. NA is a process by which natural subsurface mechanisms reduce contaminant toxicity, mobility, or volume. These mechanisms include biodegradation, dispersion, dilution, sorption, volatilization, and chemical/biochemical stabilization. Baker has been tasked to implement monitoring at Site 35 to provide additional data necessary to support NA as a remedial alternative.

The principal objectives of the monitoring program at OU 10 are as follows: (1) monitor potential for human or ecological exposure due to off-site migration of contaminants, and (2) give a brief history on the installed groundwater treatment system located at Site 35. The quarterly monitoring reports document the findings and provide interested parties with information required to authorize future decisions regarding OU 10. The information presented in the reports will be used to either extend, modify, or discontinue the monitoring program as necessary.

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MONITORING REPORT

This monitoring report presents a summary of sampling activities, field observations, and analytical results that pertain to the natural attenuation monitoring program at Operable Unit (OU) No. 10 (Site 35), Marine Corps Base (MCB), Camp Lejeune, North Carolina. Recommendations regarding the monitoring program at OU 10 are also presented within this report.

Site 35 is located within Camp Geiger. Natural attenuation monitoring activities at Site 35 began in January of 1999 and are scheduled to continue on a quarterly basis. Monitoring includes the collection of groundwater and surface water samples. Groundwater samples were obtained from seven shallow monitoring wells and nine intermediate wells on April 16, 1999. Figure 1 depicts the locations of all monitoring wells at Site 35 and identified the wells and surface water sampling locations included in the monitoring program. Table 1 provides the total depths of monitoring wells included in the monitoring program at Site 35. [All tables and figures are provided after the text portion of this report.]

Groundwater monitoring at OU 10 includes sampling of natural attenuation (NA) parameters. NA is a process by which natural subsurface mechanisms reduce contaminant toxicity, mobility, or volume. These mechanisms include biodegradation, dispersion, dilution, sorption, volatilization, and chemical/biochemical stabilization. Certain parameters must be analyzed to evaluate the NA process. The following lists the NA-specific geochemical and biochemical parameters collected and evaluated at Site 35.

- Dissolved Oxygen (anaerobic pathway indicator)
- Nitrate (substrate for microbial respiration)
- Iron (II) (anaerobic degradation process indicator)
- Sulfate (substrate for microbial respiration)
- Methane/Ethane/Ethene (confirmation of biological transformation of chlorinated solvents)
- Chloride (sample confirmation of same aquifer system)
- Total Organic Carbon (used to classify plume)
- Alkalinity (measures buffering capacity of groundwater)
- pH (aerobic and anaerobic processes are pH sensitive)
- Temperature (well development)
- Conductivity (sample confirmation of same aquifer system)
- Oxidation-Reduction potential (used to identify reductive environments)

Measurements of pH, specific conductance, dissolved oxygen, temperature, turbidity, and oxidation-reduction potential (Eh) were field parameters recorded prior to sampling. A minimum of well three volumes was purged from each well prior to groundwater collection. Groundwater field parameters were measured between each volume or, in the case of large volumes, between each half volume. A summary of groundwater field parameters from Sites 35 is provided in Table 2.

To accurately evaluate the NA process, immediate field analyses for ferrous iron, alkalinity, and chloride were also conducted. Natural attenuation parameters are discussed later in this report.

Table 3 summarizes requested laboratory analyses and sample identifications. Requested laboratory analyses were chosen based on the results of contaminants detected during previous investigations at OU 10. Contaminants of concern at Sites 35 include Volatile Organic Compounds (VOCs). Additional laboratory analyses were conducted to monitor natural attenuation and to determine background conditions on site. Monitoring well 35-MW65B was designated as a background well.

Sampling activities were conducted and subsequent laboratory analyses were performed according to Standard Operating Procedures (SOPs) and methods specified in the Work Plans for Long Term Monitoring and Natural Attenuation Monitoring remedial investigation sites (Baker, 1999). Sample information, including well number, sample identification, time and date of sample collection, samplers, and analytical parameters, was recorded in a field logbook and on sample labels. Chain-of-Custody documentation, provided in Attachment A, accompanied the samples to the laboratory. Prior to the start of the natural attenuation evaluation program, monitoring wells at OU 10 were developed in September 1998 to remove fine-grained material from the well screens and to establish interconnection with the surrounding geologic formation. However, the wells were not developed prior to the introduction of Site 35 into the Long Term Monitoring (LTM) Program in January 1999. Site 35 will now be redeveloped once every two years in accordance with the redevelopment schedule for the remaining NA sites.

Groundwater Elevation and Flow Direction

On April, 1999, a complete round of static groundwater level measurements were recorded from the monitoring wells at Site 35. A summary of the static groundwater levels and corresponding groundwater elevations are provided in Table 4.

Groundwater flow in the upper portion of the surficial aquifer north of 5th Street is in a northeasterly direction toward Brinson Creek, as depicted by the groundwater contours in Figure 2. This pattern of groundwater flow is consistent with historical patterns. Hydrological conditions in the upper surficial aquifer are not monitored south of 5th Street because no permanent monitoring wells were installed in this interval during previous investigations.

Groundwater residing in the lower portion of the surficial aquifer also flows in a northeasterly direction towards Brinson Creek north of 7th Street. However, south of 7th Street groundwater in the lower portion of the surficial aquifer flows in a southeasterly direction towards Edwards Creek (not shown) located south of 8th Street. Groundwater contours in the lower portion of the surficial aquifer are depicted in Figure 3 and are generally consistent with historical patterns.

Field Observations

The following field observations were noted during the sampling events at Site 35. Recommendations concerning the field observations are presented later within this report.

Site 35 is currently being impacted by construction of the U.S. Highway 17 Jacksonville Bypass project. The right-of-way for the highway involved the abandonment of numerous monitoring wells and the clearing of vast areas of woodlands. Gaining access to the remaining monitoring wells has become increasingly difficult. The large volumes of heavy equipment traffic in the area also poses safety concerns during LTM field activities.

Three wells (35-GW47A, 35-GW47B, and 35-GW55A) were added to the sampling list and one well (35-MW43B) was taken off of the sampling list during the April 1999 sampling event. The reason for these changes at Site 35 is due to a change in Baker's focus on contamination in the wetland area. Well 35-MW43B was sampled during the previous quarter to track any chemical change south of 6th Street before the completion of the natural attenuation evaluation project. During this sampling event in April 1999, the focus had changed after the natural attenuation evaluation was finished. The EPA and NCDENR felt it was a high priority for Baker to concentrate on contamination discharging to Brinson Creek. The previously mentioned wells were added to this sampling event to better characterize the degradation of the contamination over distance from the source. Collecting more data from the wetland area will be used in an effort to demonstrate plume stability.

A number of the wells at Sites 35 continue to show signs of deterioration. The bollards and protective casings of many of the wells have developed rust. In addition, a number of padlocks used to secure the protective covers are either missing or no longer function properly. The usability and security of each monitoring well should be maintained if they are going to remain reliable groundwater sample collection points in the future.

ANALYTICAL RESULTS AND FINDINGS

This section presents analytical results from the groundwater sampling performed at Site 35 during the second quarter of 1999. A summary of all analytical results compiled during the sampling event are presented in Attachment B and corresponding laboratory data sheets are provided in Attachment C.

One trip blank sample was prepared prior to the sampling event. The trip blank accompanied all groundwater samples during shipment to the laboratory. As provided in Table 5, there were no positive detections of any organic compounds in the trip blank sample.

Volatile Organic Compounds

Groundwater samples were collected from a total of 16 monitoring wells at Site 35 during this sampling event. To monitor conditions in the upper portion of the surficial aquifer were samples were collected from seven monitoring wells (35-MW10S, 35-MW14S, 35-MW31A, 35-MW61A 35-MW62, 35-MW47A and 35-MW55A) that are screened across the water table. To monitor conditions in the lower portion of the surficial aquifer samples were collected from nine monitoring wells (35-MW10D, 35-MW14D, 35-MW31B, 35-MW40B, 35-MW47B, 35-MW55B, 35-MW63B, 35-MW64B and 35-MW65B) with screened intervals located immediately above the semiconfining unit that is prevalent at Site 35. A summary of groundwater analytical results is provided in Table 6 and a positive detection summary of all analytical results is presented in Table 7. A comparison of contaminants to regulatory standards is presented in Table 8. Contaminant data is presented graphically on Figures 4 and 5.

A total of eight solvent-related VOC contaminants were detected at the site during this sampling event. Two fuel-related contaminants were detected. Acetone was also detected but it assumed to be lab contaminant. The most prevalent solvent-related VOC contaminants were primarily trichloroethene (TCE), cis-1,2 dichloroethene (cis-1,2 DCE), trans-1,2 dichloroethene (trans-1,2 DCE) and vinyl chloride (VC). However, 1,1,2-trichloroethane, 1,1,2,2 tetrachloroethane, tetrachloroethene and 1,1 dichloroethene were also detected in a limited number of wells. Fuel-related contamination included benzene and toluene.

Solvent-related VOC contamination was detected in six (35-MW10S, 35-MW14S, 35-MW61A 35-MW47A, 35-MW55A and 35-MW62A) of the seven monitoring wells screened in the upper portion of the surficial aquifer. Four of these wells (35-MW14S, 35-MW47A, 35-MW55A and 35-MW61A) exhibited levels of solvent-related VOC contamination that exceeded regulatory standards.

Fuel-related contamination was detected in two (35-MW14S and 35-MW47A) of the seven monitoring wells screened in the upper portion of the surficial aquifer. One of these wells (35-MW47A) exhibited levels of fuel-related contamination that exceeded regulatory standards

Solvent-related VOC contamination was detected in all of the nine monitoring wells screened in the lower portion of the surficial aquifer. Solvent-related VOC contamination levels in seven of these wells (35-10D, 35-14D, 35-31B, 35-MW40B, 35-MW47B, 35-MW55B and 35-MW64B) exceeded regulatory standards.

Fuel-related contamination was detected in three (35-MW10D, 35-MW14D and 35-MW31B) of the seven monitoring wells screened in the upper portion of the surficial aquifer. Two of these wells (35-MW10D, and 35-MW14D) exhibited levels of fuel-related contamination that exceeded regulatory standards

The sample collected from monitoring well 35-MW55B (located in the wetland) exhibited the highest level of solvent-related VOC contamination (2,386 ug/L) detected in the lower surfical aquifer and at the site. The highest level of solvent-related VOC contamination in the upper surficial aquifer was observed in monitoring well 35-MW14S (located upgradient of the in-situ air sparging trench {IAS} trench)(810 ug/L).

The sample collected from monitoring well 35-MW10D (near intersection of 5th and E Strets)exhibited the highest level of fuel-related VOC contamination (5 ug/L) detected in the lower surfical aquifer and at the site. The highest level of fuel-related VOC contamination in the upper surficial aquifer was observed in monitoring well 35-MW47A (located in the Brinson Creek wetland)(2 ug/L).

Overall the levels of solvent-related VOC contamination observed in the wells sampled this quarter are consistent with the results of previous sample events. However, the following significant trends should be noted:

- The concentrations of solvent-related VOC contamination observed in monitoring well 35-MW10S was comparable to the January 1999 levels. However, both January 1999 and April 1999 results are substantially lower than previous rounds (with the exception of January 1998). It is uncertain if these low levels represent a trend or are due to seasonal fluctuation.

- A substantial decrease in contamination was observed in monitoring well 35-MW55B in between September 1998 and January 1999. The samples collected in September,1998 exhibited 2,391 ug/L of total solvent-related VOCs and samples collected in January 1999 exhibited 1,802 ug/L of total solvent-related VOC contamination.. However, solvent-related VOC contaminant levels observed during the April 1999 (2,382 ug/L) were very close to September 1998 levels. These fluctuations could potentially due to seasonal or tidal change.

Surface water samples were collected from Brinson Creek at locations depicted in Figure 6. No solvent or fuel-related contamination was detected in these samples. However, acetone and bromoform were detected at low levels. These detection are not consistent with previous sampling

events. A summary of surface water analytical results is presented in Table 9, and a positive detection summary is presented in Table 10. A comparison of contaminant levels to regulatory standards is presented in Table 11.

Monitored Natural Attenuation Results

Samples were analyzed for NA parameters in the field using a portable data logging spectrophotometer (Hach DR/2010), and at a fixed-base laboratory. Samples collected from all monitoring wells were analyzed for field NA parameters, which include ferrous iron, total alkalinity (as calcium carbonate $CaCO_3$), and chloride. The results of field analysis obtained at Site 35 for January and April 1999 are presented on Table 12.

Parameters analyzed by a fixed-base laboratory include nitrate, sulfate, nitrite, orthophosphate, ammonia, total organic carbon, total organic nitrogen, and dissolved gases (methane, ethane, ethene). Samples collected from all wells were analyzed for nitrate, sulfate and dissolved gases. In addition to these parameters the sample collected from background well 35-MW65B was analyzed for nitrite, orthophosphate, ammonia total organic carbon and total organic nitrogen. The results of NA analysis performed by a fixed-base laboratory are depicted on Figures 7 and 8. A positive detection summary of all analytical results is presented in Table 13, while Table 14 provides a summary of natural attenuation analytical results in groundwater.

In general, levels ferrous iron, total alkalinity (as calcium carbonate $CaCO_3$), chloride, nitrate, sulfate, dissolved gases, nitrite, orthophosphate, ammonia, total organic carbon, total organic nitrogen were consistent with previous rounds.

Dissolved oxygen levels and reduction-oxidation potentials reflect an overall subsurface environment that is reductive in nature. However, dissolved oxygen levels at monitoring wells 35-MW10S and 35-MW47B are inconsistent with reduction-oxidation values and previous dissolved oxygen data gathered at the site.

TREATMENT SYSTEM EVALUATION

An in-situ air sparging (IAS) trench was first considered at this site when it was evaluated as part of a field-scale pilot study conducted by Baker in the summer of 1996 (Baker, 1996). Baker recommended that IAS applied via horizontal injection wells set atop the semi-confining layer at the base of the surficial aquifer should be considered. Such a system was deemed feasible especially if the design included a permeable trench extending the entire depth of the surficial aquifer. The trench concept would allow for uninhibited air flow from the base of the surficial aquifer to the ground surface where it could be monitored. The need for the permeable trench resulted from Baker's observations during the field pilot study of the effects on air flow of lower permeability thin soil lenses. The soil lenses misdirected the air flow away from Baker's monitoring points resulting in poor off-gas management and collection.

Baker also noted the poor site conditions (i.e., saturated ground, difficult site access, limited work space between the edge of the proposed U.S. 17 Jacksonville Bypass right-of-way) in the wetlands area near Brinson Creek and recommended that IAS technology, if used at Site 35, be applied upgradient. At Site 35 the nearest available upgradient location for an IAS field study was approximately 400 feet to the west along the western edge of the proposed right-of-way. With LANTDIV's authorization Baker designed an IAS system in accordance with the recommendations of the pilot study in August 1997. Construction and operations of a portion of the design, deemed Phase I, completed in early 1998. The system has been operating ever since. Construction of Phase

II was subject to an evaluation of the Phase I system's effectiveness and its impact on natural attenuation processes at Site 35.

The treatment system data for the time period (January 1999 – March 1999) was unavailable to be documented in this report. However, future Site 35 monitoring reports will include this particular information.

RECOMMENDATIONS

In order to maintain the existing well field and monitor subsurface processes the following are recommended:

- Bollards and well casings should be repaired and painted with weather-resistant paint.
- Deteriorated or missing padlocks should be replaced.
- The existing monitoring program should be continued to assess the impact of seasonal and tidal changes.
- In general, nitrate has been detected at very low frequencies and very low levels site-wide since January 1998. Such low levels are typical of a wetland, such as the one Camp Geiger is constructed on. The collection of additional nitrate data at Site 35 will provides no additional insight into natural attenuative processes that are occurring at Site 35. As such, it is recommended that nitrate analysis be discontinued on samples collected at Site 35.
- Chemetrics™ ampules should be used to monitor dissolved oxygen.

REFERENCES

Baker Environmental, Inc. (Baker). July 1999. Long Term Monitoring and Natural Attenuation Monitoring. Prepared for the Navy Atlantic Division Naval Facilities Engineering Command, Norfolk, Virginia.

Baker, 1996. Treatment Study Work Plan, Pilot-Scale Evaluation of In-Situ Air Sparging. Marine Corps Base, Camp Lejeune, North Carolina.

TABLES

TABLE 1

SUMMARY OF WELL DEPTHS
OPERABLE UNIT NO. 10 - SITE 35
MONITORING AND O&M SUPPORT, CTO-0120
MCB, CAMP LEJEUNE, NORTH CAROLINA

Well Identification	Well Depth (ft bgs)
IR35-MW10S	17.14
IR35-MW10D	31.86
IR35-MW14S	16.16
IR35-MW14D	35.62
IR35-MW31A	14.93
IR35-MW31B	44.25
IR35-MW40B	43.91
IR35-MW47A	15.15
IR35-MW47B	34.40
IR35-MW55A	14.65
IR35-MW55B	27.36
IR35-MW61A	14.95
IR35-MW62A	16.50
IR35-MW63B	32.00
IR35-MW64B	32.80
IR35-MW65B	33.55

Notes:
bgs - Below ground surface
ft - Feet

TABLE 2

SUMMARY OF GROUNDWATER FIELD PARAMETERS
OPERABLE UNIT NO. 10 - SITE 35
MONITORING AND O&M SUPPORT, CTO-0120
MCB, CAMP LEJEUNE, NORTH CAROLINA

Well Number (Sample Date)	Measuring Time	Well Volumes	Field Parameters					
			Dissolved Oxygen (mg/L)	Specific Conductance (umhos/cm)	Temperature (^{0}C)	pH (S.U.)	Turbidity (N.T.U.)	Redox (mV)
35-MW10S (04/16/99)	1202	1.0	3.6	459	17.6	6.41	5.23	-50
	1214	2.0	3.0	467	17.5	6.48	2.8	-41.1
	1225	3.0	2.6	480	17.6	6.52	2.4	-29.9
35-MW10D (04/16/99)	1122	1.0	0.0	545	18.7	6.98	22	-180.9
	1147	2.0	0.9	545	18.5	6.94	3	-194.4
	1200	3.0	0.2	545	18.5	6.93	0	-198.5
35-MW14S (04/16/99)	1014	1.0	0.3	672	17.0	6.67	25	-7.7
	1018	2.0	0.2	660	17.0	6.66	11	-19.2
	1023	3.0	0.2	636	17.0	6.66	5	-28.9
	1030	4.0	0.1	611	17.1	6.66	2	-35.5
35-MW14D (04/16/99)	0822	1.0	0.01	509	19.0	7.10	12	-94.6
	0852	2.0	-0.03	510	19.1	7.10	3	-123.2
	0925	3.0	-0.05	509	19.2	7.09	1	-129.3
35-MW31A (04/16/99)	0825	1.0	1.7	268	16.9	6.02	1	174.4
	0835	2.0	1.3	261	16.9	6.01	1	164.8
	0845	3.0	1.3	252	17.1	6.02	2	88.9
35-MW31B (04/16/99)	0836	1.0	0.0	501	19.4	7.04	0	-128.6
	0850	1.5	0.0	502	19.4	7.12	2	-113.2
	0910	2.0	-0.03	502	19.6	7.15	2	-135.5
	0923	2.5	-0.03	501	19.7	7.15	0	-140.7
	0933	3.0	-0.04	501	19.7	7.15	2	-143.5
35-MW40B (04/16/99)	1210	1.0	0.25	457	21.1	7.32	6	-103.2
	1247	2.0	-0.01	461	21.2	7.35	1	-122.1
	1301	2.5	0.03	460	21.3	7.35	0	-126.7
	1316	3.0	-0.04	460	21.3	7.34	0	-129.7
35-MW47A (04/16/99)	1235	1.0	0.02	543	18.8	7.32	5	7.4
	1244	2.0	0.03	544	18.8	7.32	1	-21.0
	1255	3.0	-0.08	544	18.7	7.34	0	-38.8
	1300	4.0	-0.09	544	18.7	7.34	2	-45.6
	1310	5.0	0.02	544	18.8	7.34	3	-50.6
35-MW47B (04/16/99)	1350	1.0	6.21	471	18.7	7.43	0	-104.2
	1415	2.0	3.22	481	18.8	7.42	0	-102.9
	1435	3.0	1.70	489	18.9	7.42	0	-102.5
35-MW55A (04/16/99)	1447	1.0	0.45	360	17.6	6.51	144	-13.1
	1500	2.0	0.29	359	17.3	6.51	99	-25.6
	1523	3.0	0.33	360	17.6	6.46	63	-40.2
	1607	4.0	0.37	359	19.0	6.50	15.6	-36.2
35-MW55B (04/16/99)	1425	1.0	0.0	495	18.1	6.97	2	93.3
	1444	2.0	0.1	496	17.9	7.09	0	72.9
	1504	3.0	0.0	493	18.1	7.13	0	42.5

TABLE 2 (Continued)

SUMMARY OF GROUNDWATER FIELD PARAMETERS
OPERABLE UNIT NO. 10 - SITE 35
MONITORING AND O&M SUPPORT, CTO-0120
MCB, CAMP LEJEUNE, NORTH CAROLINA

Well Number (Sample Date)	Measuring Time	Well Volumes	Field Parameters					
			Dissolved Oxygen (mg/L)	Specific Conductance (umhos/cm)	Temperature (^{0}C)	pH (S.U.)	Turbidity (N.T.U.)	Redox (mV)
35-MW61A (04/16/99)	0802	1.0	0.08	566	16.4	7.17	10	-137.2
	0810	2.0	0.25	574	16.2	7.22	7	-137.9
	0822	3.0	0.14	579	16.1	7.23	0	-138.4
	0830	4.0	0.07	583	16.1	7.22	0	-139.1
35-MW62A (04/16/99)	0930	1.0	-0.02	641	17.7	7.20	8	-127.0
	0936	2.0	-0.05	640	17.8	7.20	4	-129.5
	0945	3.0	-0.06	640	17.8	7.20	0	-132.8
35-MW63B (04/16/99)	1048	1.0	0.03	461	17.7	7.55	1	-96.2
	1112	2.0	-0.06	463	17.7	7.56	0	-108.5
	1134	3.0	-0.06	463	17.8	7.56	0	-111.8
	1155	4.0	-0.06	464	17.9	7.57	0	-111.2
35-MW64B (04/16/99)	1510	1.0	0.06	387	20.3	7.38	2	NA
	1536	2.0	-0.02	391	20.6	7.36	0	-105.7
	1603	3.0	-0.06	393	20.4	7.40	0	-94.2
35-MW65B (04/16/99)	1604	1.0	0.10	531	19.0	7.67	5	-112.4
	1611	2.0	0.13	528	18.6	7.65	2	-113.8
	1622	3.0	0.01	523	18.5	7.67	1	-121.4

Notes:

°C = Degrees Centigrade
S.U. = Standard Units
mg/L = milligrams per liter
umhos/cm = micro ohms per centimeter
N.T.U. = Nephlometric Turbidity Units
mV = millivolt
NA = Not Analyzed

TABLE 3

SAMPLE SUMMARY
OPERABLE UNIT NO. 10 - SITE 35
MONITORING AND O&M SUPPORT, CTO-0120
MCB, CAMP LEJEUNE, NORTH CAROLINA

Location	Media	TCL Volatiles [1]	Dissolved Gases [2]	Nitrate [3]	Sulfate [4]	TOC [5]	TON [6]	Nitrite [7]	Ammonia [8]	Orthophosphate [9]	Laboratory Sample Identification
35-MW10S	GW	X	X	X	X						IR35-GW10-99B
35-MW10D	GW	X	X	X	X						IR35-GW10IW-99B
35-MW14S	GW	X	X	X	X						IR35-GW14-99B
35-MW14D	GW	X	X	X	X						IR35-GW14IW-99B
35-MW31A	GW	X	X	X	X						IR35-GW31-99B
35-MW31B	GW	X	X	X	X						IR35-GW31IW-99B
35-MW40B	GW	X	X	X	X						IR35-GW40IW-99B
35-MW47A	GW	X	X	X	X						IR35-GW47-99B
35-MW47B	GW	X	X	X	X						IR35-GW47IW-99B
35-MW55A	GW	X	X	X	X						IR35-GW55-99B
35-MW55B	GW	X	X	X	X						IR35-GW55IW-99B
35-MW61A	GW	X	X	X	X						IR35-GW61-99B
35-MW62A	GW	X	X	X	X						IR35-GW62-99B
35-MW63B	GW	X	X	X	X						IR35-GW63IW-99B
35-MW64B	GW	X	X	X	X						IR35-GW64IW-99B
35-MW65B	GW	X	X	X	X	X	X	X	X	X	IR35-GW65IW-99B
35-SW01	SW	X									IR35-SW01-99B
35-SW02	SW	X									IR35-SW02-99B
35-SW03	SW	X									IR35-SW03-99B

Notes:

(1) Target Compound List Volatile Organics by U.S. Environmental Protection Agency (EPA) Method 8260A. Speciate cis-, trans- 1,2-DCE.

(2) Method RSK 175 .

(3) IC Method 300.0.

(4) IC Method 300.0.

(5) Total Organic Carbon Method 9060 .

(6) Total Organic Nitrogen U.S. Environmental Protection Agency (EPA) Method 351.1/350.2.

(7) IC Method 300.0.

(8) U.S. Environmental Protection Agency (EPA) Method 350.2.

(9) IC Method E300.0.

SW = Surface Water GW = Groundwater X = Requested Analysis

TABLE 4

SUMMARY OF WATER LEVEL MEASUREMENTS
OPERABLE UNIT NO. 10 - SITE 35
MONITORING AND O&M SUPPORT, CTO-0120
MCB, CAMP LEJEUNE, NORTH CAROLINA

Well ID	Reference Elevation [1]	SWE 01/20/99	SWL 04/18/99	SWE 04/18/99
GWD3	NS	NA	9.08	NA
MP03D	16.26	6.78	9.74	6.52
MP03S	16.27	7.03	9.48	6.79
MP05D	16.10	7.10	9.58	6.52
MP05S	16.12	6.78	9.58	6.54
MP06D	15.72	7.34	8.96	6.76
MP06S	15.68	6.98	8.63	7.05
35-MW09A	18.92	NA	8.60	10.32
35-MW09B	18.88	NA	8.67	10.21
35-MW10D	19.01	13.45	8.19	10.82
35-MW10S	18.99	11.55	8.19	10.8
35-MW14D	17.73	6.88	11.15	6.58
35-MW14S	17.78	6.93	11.15	6.63
35-MW23A	8.74	3.14	5.90	2.84
35-MW23B	8.74	4.16	4.84	3.90
35-MW29A	20.62	12.89	8.37	12.25
35-MW29B	20.28	11.83	7.97	12.31
35-MW30A	18.38	12.84	6.50	11.80
35-MW30B	18.38	12.59	6.49	11.89
35-MW31A	18.32	8.00	10.56	7.76
35-MW31B	18.46	7.83	10.97	7.49
35-MW32A	18.23	10.25	8.82	9.41
35-MW32B	18.75	9.30	9.61	9.14
35-MW34A	16.77	11.21	7.53	9.24
35-MW34B	16.76	8.19	8.41	8.35
35-MW37A	20.30	15.35	7.13	13.17
35-MW37B	20.33	13.41	7.39	12.94
35-MW38A	19.74	13.12	6.54	13.20
35-MW38B	20.00	13.43	6.90	13.10
35-MW39B	18.83	13.37	5.40	13.43
35-MW40B	17.59	12.07	6.22	11.37
35-MW42B	15.12	NA	NA	NA
35-MW43B	15.01	13.58	NA	NA
35-MW47A	NS	NA	2.88	NA
35-MW47B	NS	NA	2.32	NA
35-MW55A	NS	NA	2.31	NA
35-MW55B	NS	NA	3.25	NA
35-MW61A	4.49	1.92	2.66	1.83
35-MW62A	5.39	1.74	3.58	1.81

TABLE 4 (Continued)

SUMMARY OF WATER LEVEL MEASUREMENTS
OPERABLE UNIT NO. 10 - SITE 35
MONITORING AND O&M SUPPORT, CTO-0120
MCB, CAMP LEJEUNE, NORTH CAROLINA

Well ID	Reference Elevation [1]	SWE 01/20/99	SWL 04/18/99	SWE 04/18/99
35-MW63B	4.73	2.63	2.21	2.52
35-MW64B	4.77	2.47	2.44	2.33
35-MW65B	5.08	2.13	3.02	2.06
35-MW66A	15.66	8.10	7.58	8.08
35-MW67	15.28	NA	7.88	7.40
35-MW68B	15.86	9.66	8.00	7.86
35-MW69B	19.83	9.63	10.66	9.17
35-MW70B	19.26	13.34	5.20	14.06
35-MW71B	12.70	11.27	1.98	10.72

Notes:

[1] Top of well casing expressed in feet above mean sea level.

SWL= Static water level taken from top of well casing.
SWE = Static water elevation expressed in feet above mean sea level.
NS = Not surveyed
NA = Not applicable or data not available.

TABLE 5

TRIP BLANK ANALYTICAL RESULTS
OPERABLE UNIT NO. 10 - SITE 35
MONITORING AND O&M SUPPORT, CTO-0120
MCB, CAMP LEJEUNE, NORTH CAROLINA

SAMPLE ID	IR35-TB01-99B
DATE SAMPLED	4/16/99
VOLATILES (ug/L)	
1,1,1-Trichloroethane	5 U
1,1,2,2-Tetrachloroethane	5 U
1,1,2-Trichloroethane	5 U
1,1-Dichloroethane	5 U
1,1-Dichloroethene	5 U
1,2-Dichloroethane	5 U
1,2-Dichloropropane	5 U
2-Butanone	10 U
2-Hexanone	10 U
4-Methyl-2-Pentanone	10 U
Acetone	10 U
Benzene	5 U
Bromodichloromethane	5 U
Bromoform	5 U
Bromomethane	5 U
Carbon Disulfide	5 U
Carbon Tetrachloride	5 U
Chlorobenzene	5 U
Chloroethane	5 U
Chloroform	5 U
Chloromethane	5 U
cis-1,2-Dichloroethene	5 U
cis-1,3-Dichloropropene	5 U
Dibromochloromethane	5 U
Ethylbenzene	5 U
Methylene Chloride	5 U
Styrene	5 U
Tetrachloroethene	5 U
Toluene	5 U
Total Xylenes	15 U
Trans-1,2-Dichloroethene	5 U
Trans-1,3-Dichloropropene	5 U
Trichloroethene	5 U
Vinyl Chloride	5 U

U = Not detected
ug/L = Micrograms per liter

TABLE 6

SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
OPERABLE UNIT NO. 10 - SITE 35
MONITORING AND O&M SUPPORT, CTO-0120
MCB, CAMP LEJEUNE, NORTH CAROLINA

Fraction	Detected Contaminants or Analytes	Comparison Criteria		Concentration Range		Location of Maximum Detection	Detection Frequency	Detected Above	
		NCWQS	MCL	Min.	Max.			NCWQS	MCL
Volatile Organics	1,1,2,2-Tetrachloroethane	NE	NE	1 J	8	35-GW55IW	2/16	NA	NA
	1,1,2-Trichloroethane	NE	5	1 J	2 J	35-GW55	2/16	NA	0
	1,1-Dichloroethene	7	7	1 J	4 J	35-GW14, 35-GW55IW	4/16	0	0
	Acetone	700	NE	1 J	3 J	35-GW62	6/16	0	NA
	Benzene	1	5	1 J	5	35-GW10IW	5/16	3	0
	cis-1,2-Dichloroethene	70	70	2 J	1,200 D	35-GW55IW	14/16	9	9
	Tetrachloroethene	0.7	5	2 J	2 J	35-GW55IW	1/16	1	0
	Toluene	1,000	1,000	2 J	2 J	35-GW10IW	1/16	0	0
	trans-1,2-Dichloroethene	NE	100	2 J	180	35-GW55IW	11/16	NA	1
	Trichloroethene	NE	5	3 J	950 D	35-GW55IW	11/16	NA	10
	Vinyl Chloride	0.015	2	1 J	39	35-GW55IW	11/16	11	8

Notes:

Organic concentrations presented in micrograms per liter (ug/L) or parts per billion.

D = Sample Dilution Required
J = Estimated Value
MCL = Federal Maximum Contaminant Level. Maximum permissible level of a contaminant in water which is delivered to any user of a public water system. (U.S. Environmental Protection Agency - Drinking Water Regulations and Health Advisories.)
NA = Not Applicable
NCWQS = North Carolina Water Quality Standards. Values Applicable to Groundwater (North Carolina Administrative Code, Title 15A, Subchapter 2L).
NE = Not Established

TABLE 7

POSITIVE DETECTIONS IN GROUNDWATER
OPERABLE UNIT NO. 10 - SITE 35
MONITORING AND O&M SUPPORT, CTO-0120
MCB, CAMP LEJEUNE, NORTH CAROLINA

SAMPLE ID	IR35-GW10-99B	IR35-GW10IW-99B	IR35-GW14-99B	IR35-GW14IW-99B	IR35-GW31-99B
DATE SAMPLED	4/16/99	4/16/99	4/16/99	4/16/99	4/16/99
VOLATILES (ug/L)					
1,1,2,2-Tetrachloroethane	5 U	5 U	5 U	5 U	5 U
1,1,2-Trichloroethane	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethene	5 U	3 J	4 J	5 U	5 U
Acetone	2 J	2 J	10 U	10 U	10 U
Benzene	5 U	5	1 J	3 J	5 U
cis-1,2-Dichloroethene	2 J	500 D	410 D	160	5 U
Tetrachloroethene	5 U	5 U	5 U	5 U	5 U
Toluene	5 U	2 J	5 U	5 U	5 U
Trans-1,2-Dichloroethene	5 U	43	50	18	5 U
Trichloroethene	5 U	290 D	340 D	70	5 U
Vinyl Chloride	5 U	11	6	3 J	5 U

D = Sample dilution required
J = Estimated Result
U = Not detected
ug/L = micrograms per liter

TABLE 7 (Continued)

POSITIVE DETECTIONS IN GROUNDWATER
OPERABLE UNIT NO. 10 - SITE 35
MONITORING AND O&M SUPPORT, CTO-0120
MCB, CAMP LEJEUNE, NORTH CAROLINA

SAMPLE ID	IR35-GW31IW-99B	IR35-GW40IW-99B	IR35-GW47-99B	IR35-GW47IW-99B	IR35-GW55-99B
DATE SAMPLED	4/16/99	4/16/99	4/16/99	4/16/99	4/16/99
VOLATILES (ug/L)					
1,1,2,2-Tetrachloroethane	5 U	5 U	5 U	5 U	1 J
1,1,2-Trichloroethane	5 U	5 U	5 U	5 U	2 J
1,1-Dichloroethene	5 U	5 U	5 U	5 U	5 U
Acetone	10 U	10 U	10 U	10 U	1 J
Benzene	1 J	5 U	2 J	5 U	5 U
cis-1,2-Dichloroethene	210 D	260 D	100	55	260 D
Tetrachloroethene	5 U	5 U	5 U	5 U	5 U
Toluene	5 U	5 U	5 U	5 U	5 U
Trans-1,2-Dichloroethene	32	11	6	4 J	27
Trichloroethene	88	7	16	7	130
Vinyl Chloride	5	6	1 J	1 J	4 J

D = Sample dilution required
J = Estimated Result
U = Not detected
ug/L = micrograms per liter

TABLE 7 (Continued)

POSITIVE DETECTIONS IN GROUNDWATER
OPERABLE UNIT NO. 10 - SITE 35
MONITORING AND O&M SUPPORT, CTO-0120
MCB, CAMP LEJEUNE, NORTH CAROLINA

SAMPLE ID	IR35-GW55IW-99B	IR35-GW61-99B	IR35-GW62-99B	IR35-GW63IW-99B	IR35-GW64IW-99B	IR35-GW65IW-99B
DATE SAMPLED	4/16/99	4/16/99	4/16/99	4/16/99	4/16/99	4/16/99
VOLATILES (ug/L)						
1,1,2,2-Tetrachloroethane	8	5 U	5 U	5 U	5 U	5 U
1,1,2-Trichloroethane	1 J	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethene	4 J	5 U	5 U	5 U	1 J	5 U
Acetone	2 J	10 U	3 J	10 U	10 U	1 J
Benzene	5 U	5 U	5 U	5 U	5 U	5 U
cis-1,2-Dichloroethene	1,200 D	42	8	2 J	400 D	5 U
Tetrachloroethene	2 J	5 U	5 U	5 U	5 U	5 U
Toluene	5 U	5 U	5 U	5 U	5 U	5 U
Trans-1,2-Dichloroethene	180	2 J	5 U	5 U	40	5 U
Trichloroethene	950 D	3 J	5 U	5 U	170	5 U
Vinyl Chloride	39	2 J	5 U	5 U	16	5 U

D = Sample dilution required
J = Estimated Result
U = Not detected
ug/L = micrograms per liter

TABLE 8

VOLATILE ORGANICS IN GROUNDWATER
APRIL 1999 - JUNE 1999
OPERABLE UNIT NO. 10 - SITE 35
MONITORING AND O&M SUPPORT, CTO-0120
MCB, CAMP LEJEUNE, NORTH CAROLINA

Monitoring Well/ Volatile Organic Compound	MCL	NCWQS	January 1999	April 1999
35-GW10				
Acetone	NE	700	ND	2 J
cis-1,2-Dichloroethene	70	70	ND	2 J
35-GW10IW				
1,1-Dichloroethene	7.0	7.0	4 J	3 J
Acetone	NE	700	ND	2 J
Benzene	5	1	ND	5
cis-1,2-Dichloroethene	70	70	350	500 D
Toluene	1000	1000	ND	2 J
trans-1,2-Dichloroethene	NE	100	33	43
Trichlorothene	5.0	2.8	190	290 D
Vinyl chloride	2.0	0.015	11	11
35-GW14				
1,1-Dichloroethene	7.0	7.0	ND	4 J
Benzene	5	1	ND	1 J
cis-1,2-Dichloroethene	70	70	290	410 D
trans-1,2-Dichloroethene	NE	100	30	50
Trichlorothene	5.0	2.8	310	340 D
Vinyl chloride	2.0	0.015	ND	6
35-GW14IW				
Benzene	5	1	ND	3 J
cis-1,2-Dichloroethene	70	70	140	160
trans-1,2-Dichloroethene	NE	100	15	18
Trichlorothene	5.0	2.8	83	70
Vinyl chloride	2.0	0.015	ND	3 J
35-GW31IW				
1,1,1-Trichloroethane	200	200	7 J	ND
Benzene	5	1	ND	1 J
cis-1,2-Dichloroethene	70	70	180	210 D
trans-1,2-Dichloroethene	NE	100	27	32
Trichlorothene	5.0	2.8	100	88
Vinyl chloride	2.0	0.015	ND	5
35-GW40IW				
cis-1,2-Dichloroethene	70	70	190	260 D
trans-1,2-Dichloroethene	NE	100	8	11
Trichlorothene	5.0	2.8	8	7
Vinyl chloride	2.0	0.015	6	6

TABLE 8 (Continued)

VOLATILE ORGANICS IN GROUNDWATER
APRIL 1999 - JUNE 1999
OPERABLE UNIT NO. 10 - SITE 35
MONITORING AND O&M SUPPORT, CTO-0120
MCB, CAMP LEJEUNE, NORTH CAROLINA

Monitoring Well/ Volatile Organic Compound	MCL	NCWQS	January 1999	April 1999
35-GW47				
Benzene	5	1	NS	2 J
cis-1,2-Dichloroethene	70	70	NS	100
trans-1,2-Dichloroethene	NE	100	NS	6
Trichlorothene	5.0	2.8	NS	16
Vinyl chloride	2.0	0.015	NS	1 J
35-GW47IW				
cis-1,2-Dichloroethene	70	70	NS	55
trans-1,2-Dichloroethene	NE	100	NS	4 J
Trichlorothene	5.0	2.8	NS	7
Vinyl chloride	2.0	0.015	NS	1 J
35-GW55				
1,1,2-Trichloroethane	5.0	NE	NS	2 J
1,1,2,2-Tetrachloroethane	NE	NE	NS	1 J
Acetone	NE	700	NS	1 J
cis-1,2-Dichloroethene	70	70	NS	260 D
trans-1,2-Dichloroethene	NE	100	NS	27
Trichlorothene	5.0	2.8	NS	130
Vinyl chloride	2.0	0.015	NS	4 J
35-GW55IW				
1,1-Dichloroethene	7.0	7.0	6	4 J
1,1,2-Trichloroethane	5.0	NE	ND	1 J
1,1,2,2-Tetrachloroethane	NE	NE	10	8
Acetone	NE	700	ND	2 J
cis-1,2-Dichloroethene	70	70	750	1,200 D
Tetrachloroethene	5	0.7	ND	2 J
trans-1,2-Dichloroethene	NE	100	180	180
Trichlorothene	5.0	2.8	820	950 D
Vinyl chloride	2.0	0.015	36	39
35-GW61				
cis-1,2-Dichloroethene	70	70	32	42
trans-1,2-Dichloroethene	NE	100	ND	2 J
Trichlorothene	5.0	2.8	4 J	3 J
Vinyl chloride	2.0	0.015	ND	2 J
35-GW62				
Acetone	NE	700	ND	3 J
cis-1,2-Dichloroethene	70	70	5 J	8
35-GW63IW				
cis-1,2-Dichloroethene	70	70	ND	2 J

TABLE 8 (Continued)

VOLATILE ORGANICS IN GROUNDWATER
APRIL 1999 - JUNE 1999
OPERABLE UNIT NO. 10 - SITE 35
MONITORING AND O&M SUPPORT, CTO-0120
MCB, CAMP LEJEUNE, NORTH CAROLINA

Monitoring Well/ Volatile Organic Compound	MCL	NCWQS	January 1999	April 1999
35-GW64IW				
1,1-Dichloroethene	7.0	7.0	ND	1 J
cis-1,2-Dichloroethene	70	70	200	400 D
trans-1,2-Dichloroethene	NE	100	22	40
Trichlorothene	5.0	2.8	110	170
Vinyl chloride	2.0	0.015	11	16
35-GW65IW				
Acetone	NE	700	ND	1 J

Notes:

Concentrations expressed in micrograms per liter (ug/L) or parts per billion.

MCL = Federal Maximum Contaminant Level. Maximum permissible level of a contaminant in water which is delivered to any user of a public water system. (U.S. Environmental Protection Agency - Drinking Water Regulations and Health Advisories.)

NCWQS = North Carolina Water Quality Standards. Values Applicable to Groundwater (North Carolina Administrative Code, Title 15A, Subchapter 2L).

ND = Not Detected

NE = Not Established

NS = Not Sampled during the 1999A Quarter

TABLE 9

SUMMARY OF SURFACE WATER ANALYTICAL RESULTS
OPERABLE UNIT NO. 10 - SITE 35
MONITORING AND O&M SUPPORT, CTO-0120
MCB, CAMP LEJEUNE, NORTH CAROLINA

Fraction	Detected Contaminants or Analytes	Comparison Criteria		Concentration Range		Location of Maximum Detection	Detection Frequency	Detected Above	
		NCWQS	MCL	Min.	Max.			NCWQS	MCL
Volatile Organics	Acetone	700	NE	3 J	8 J	35-SW02	3/3	0	NA
	Bromoform	0.19	100	1 J	1 J	35-SW01	1/3	1	0

Notes:

Organic concentrations presented in micrograms per liter (ug/L) or parts per billion.

J = Estimated Value
MCL = Federal Maximum Contaminant Level. Maximum permissible level of a contaminant in water which is delivered to any user of a public water system. (U.S. Environmental Protection Agency - Drinking Water Regulations and Health Advisories.)
NA = Not Applicable
NCWQS = North Carolina Water Quality Standards. Values Applicable to Groundwater (North Carolina Administrative Code, Title 15A, Subchapter 2L).
NE = Not Established

TABLE 10

POSITIVE DETECTIONS IN SURFACE WATER
OPERABLE UNIT NO. 10 - SITE 35
MONITORING AND O&M SUPPORT, CTO-0120
MCB, CAMP LEJEUNE, NORTH CAROLINA

SAMPLE ID	IR35-SW01-99B	IR35-SW02-99B	IR35-SW03-99B
DATE SAMPLED	4/16/99	4/16/99	4/16/99
VOLATILES (ug/L)			
Acetone	3 J	8 J	3 J
Bromoform	1 J	5 U	5 U

J = Estimated Result
U = Not detected
ug/L = micrograms per liter

TABLE 11

VOLATILE ORGANICS IN SURFACE WATER
APRIL 1999 - JUNE 1999
OPERABLE UNIT NO. 10 - SITE 35
MONITORING AND O&M SUPPORT, CTO-0120
MCB, CAMP LEJEUNE, NORTH CAROLINA

Monitoring Well/ Volatile Organic Compound	MCL	NCWQS	January 1999	April 1999
35-SW01				
Acetone	NE	700	ND	3 J
Bromoform	100	0.19	ND	1 J
35-SW02				
Acetone	NE	700	ND	8 J
35-SW03				
Acetone	NE	700	ND	3 J

Notes:

Concentrations expressed in micrograms per liter (ug/L) or parts per billion.

MCL = Federal Maximum Contaminant Level. Maximum permissible level of a contaminant in water which is delivered to any user of a public water system. (U.S. Environmental Protection Agency - Drinking Water Regulations and Health Advisories.)

NCWQS = North Carolina Water Quality Standards. Values Applicable to Groundwater (North Carolina Administrative Code, Title 15A, Subchapter 2L).

ND = Not Detected

NE = Not Established

TABLE 12

NATURAL ATTENUATION FIELD TEST RESULTS
OPERABLE UNIT NO. 10 - SITE 35
MONITORING AND O&M SUPPORT, CTO-0120
MCB, CAMP LEJEUNE, NORTH CAROLINA

	Ferrous Iron (mg/L)		$CaCO_3$ (mg/L)		Chloride (mg/L)	
Sample ID	January 1999	April 1999	January 1999	April 1999	January 1999	April 1999
35-MW10S	0.23	0.48	216	238	5.4	5.3
35-MW10D	0.92	1.28	313	352	6.3	7.1
35-MW14S	3.03	3.46	310	ND	12.7	10.9
35-MW14D	0.65	0.75	287	214	6.3	5.8
35-MW31A	0.12	0.21	45.6	63	9.9	10.8
35-MW31B	0.56	0.51	283	281	5.5	6.5
35-MW40B	0.27	0.54	221	241	13.5	15.7
35-MW43B	2.17	NA	194	NA	9.0	NA
35-MW47A	NA	0.00	NA	218	NA	6.0
35-MW47B	NA	0.04	NA	224	NA	9.8
35-MW55A	NA	0.02	NA	159	NA	0.0
35-MW55B	0.00	0.00	261	260	5.9	8.8
35-MW61A	1.00	1.28	235	237	9.8	7.1
35-MW62A	1.28	1.49	267	277	6.8	6.6
35-MW63B	0.04	0.04	184	186	8.3	12.3
35-MW64B	0.16	0.00	205	209	9.5	9.5
35-MW65B	0.01	0.00	191	106	16.4	15.7

Notes:

NA = Not Analyzed

ND = Detected concentration of $CaCo_3$ in the sample exceeded the detection limit of the field test kit.

TABLE 13

POSITIVE DETECTIONS IN GROUNDWATER
OPERABLE UNIT NO. 10 - SITE 35
MONITORING AND O&M SUPPORT, CTO-0120
MCB, CAMP LEJEUNE, NORTH CAROLINA

SAMPLE ID	IR35-GW10-99B	IR35-GW10IW-99B	IR35-GW14-99B	IR35-GW14IW-99B	IR35-GW31-99B
DATE SAMPLED	4/16/99	4/16/99	4/16/99	4/16/99	4/16/99
NATURAL ATTENUATION PARAMETERS					
Ammonia (mg/L)	NA	NA	NA	NA	NA
Sulfate (mg/L)	18	5.55	18.4	11	34.3
Total Organic Carbon (mg/L)	NA	NA	NA	NA	NA

NA = Not Analyzed
mg/L = milligrams per liter

TABLE 13 (Continued)

POSITIVE DETECTIONS IN GROUNDWATER
OPERABLE UNIT NO. 10 - SITE 35
MONITORING AND O&M SUPPORT, CTO-0120
MCB, CAMP LEJEUNE, NORTH CAROLINA

SAMPLE ID	IR35-GW31IW-99B	IR35-GW40IW-99B	IR35-GW47-99B	IR35-GW47IW-99B	IR35-GW55-99B
DATE SAMPLED	4/16/99	4/16/99	4/16/99	4/16/99	4/16/99
NATURAL ATTENUATION PARAMETERS					
Ammonia (mg/L)	NA	NA	NA	NA	NA
Sulfate (mg/L)	16.5	18	24.2	7.2	38.8
Total Organic Carbon (mg/L)	NA	NA	NA	NA	NA

NA = Not Analyzed
mg/L = milligrams per liter

TABLE 13 (Continued)

POSITIVE DETECTIONS IN GROUNDWATER
OPERABLE UNIT NO. 10 - SITE 35
MONITORING AND O&M SUPPORT, CTO-0120
MCB, CAMP LEJEUNE, NORTH CAROLINA

SAMPLE ID	IR35-GW55IW-99B	IR35-GW61-99B	IR35-GW62-99B	IR35-GW63IW-99B	IR35-GW64IW-99B	IR35-GW65IW-99B
DATE SAMPLED	4/16/99	4/16/99	4/16/99	4/16/99	4/16/99	4/16/99
NATURAL ATTENUATION PARAMETERS						
Ammonia (mg/L)	NA	NA	NA	NA	NA	0.16
Sulfate (mg/L)	29.3	14.1	14.5	2.2	10	2.76
Total Organic Carbon (mg/L)	NA	NA	NA	NA	NA	2.5

NA = Not Analyzed
mg/L = milligrams per liter

TABLE 14

NATURAL ATTENUATION ANALYTICAL RESULTS FOR GROUNDWATER
OPERABLE UNIT NO. 10 - SITE 35
MONITORING AND O&M SUPPORT, CTO-0120
MCB, CAMP LEJEUNE, NORTH CAROLINA

Monitoring Well/Analytical Results	January 1999	April 1999
Natural Attenuation Parameters (mg/L)		
IR35-GW10		
Sulfate	23	18
Methane	0.00007	NA
IR35-GW10IW		
Sulfate	4.9	5.55
Methane	0.0024	NA
IR35-GW14		
Sulfate	17	18.4
Methane	0.00048	NA
IR35-GW14IW		
Sulfate	10	11
Methane	0.00065	NA
IR35-GW31		
Nitrogen, Nitrate	1.8	NA
Sulfate	36	34.3
Methane	0.000095	NA
IR35-GW31IW		
Nitrogen, Nitrate	0.28	NA
Sulfate	14	16.5
Methane	0.0002	NA
IR35-GW40IW		
Sulfate	16	18
Methane	0.000016	NA
IR35-GW43IW		
Sulfate	35	NA
Methane	0.00007	NA
IR35-GW47		
Sulfate	NA	24.2
IR35-GW47IW		
Sulfate	NA	7.2
IR35-GW55		
Sulfate	NA	38.8
IR35-GW55IW		
Nitrogen, Nitrate	0.42	NA
Sulfate	26	29.3
Methane	0.000066	NA
IR35-GW61		
Sulfate	10	14.1
Methane	0.000093	NA

TABLE 14 (Continued)

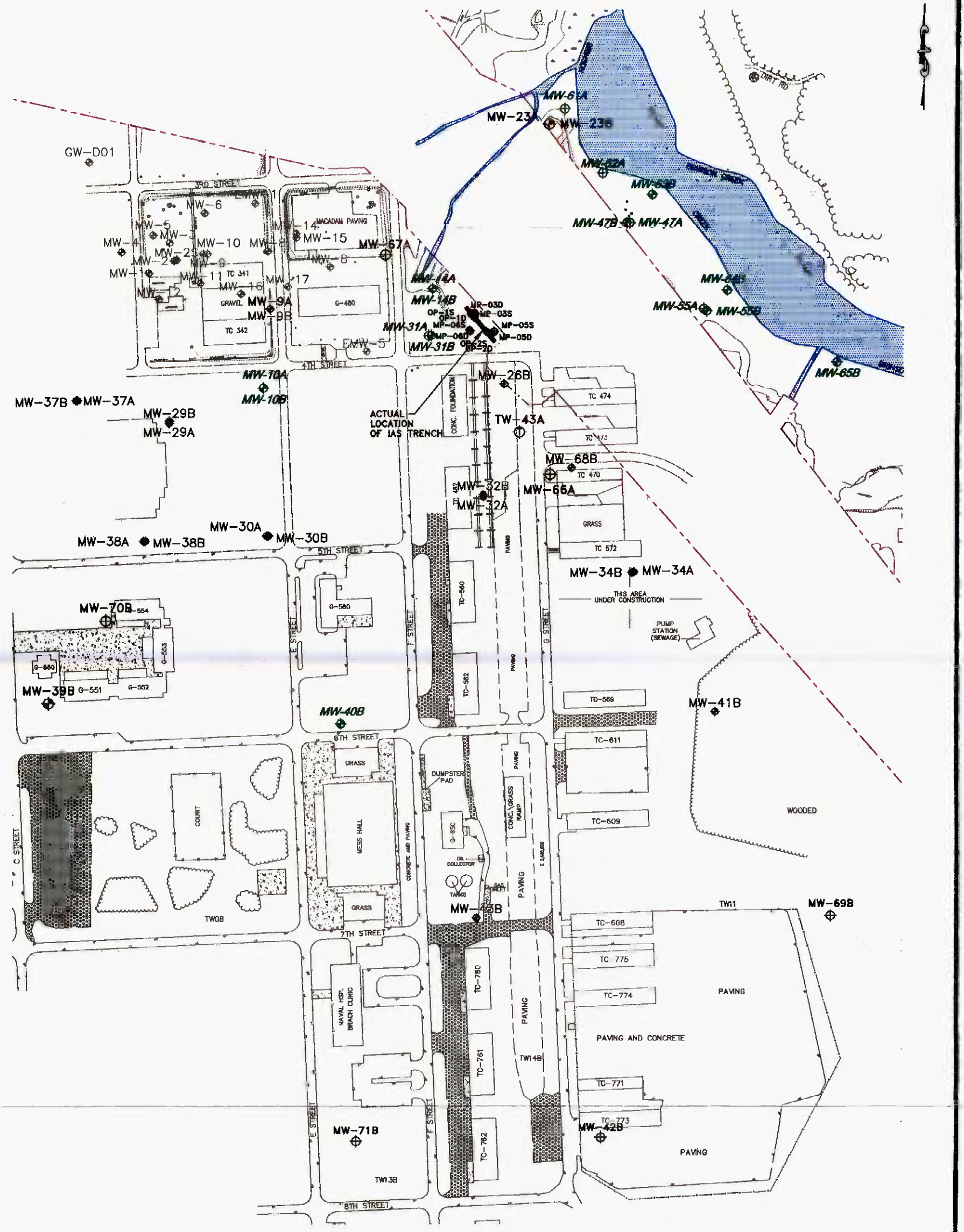
NATURAL ATTENUATION ANALYTICAL RESULTS FOR GROUNDWATER
OPERABLE UNIT NO. 10 - SITE 35
MONITORING AND O&M SUPPORT, CTO-0120
MCB, CAMP LEJEUNE, NORTH CAROLINA

Monitoring Well/Analytical Results	January 1999	April 1999
Natural Attenuation Parameters (mg/L)		
IR35-GW62		
Sulfate	14	14.5
Methane	0.00036	NA
IR35-GW63IW		
Sulfate	2.3	2.2
Methane	0.00001	NA
IR35-GW64IW		
Sulfate	NA	10
Methane	0.00002	NA
IR35-GW65IW		
Ammonia	NA	0.16
Sulfate	2.6	2.76
TOC	NA	2.5

Notes:

NA = Not Analyzed
TOC = Total Organic Carbon

FIGURES



NOTE:
-WELLS SHOWN IN BLACK REGULAR FONT ARE NOT INCLUDED IN THE MONITORING PROGRAM.

240 0 120 240
1 inch = 240 ft.

367201MR

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Baker Environmental, Inc.

LEGEND

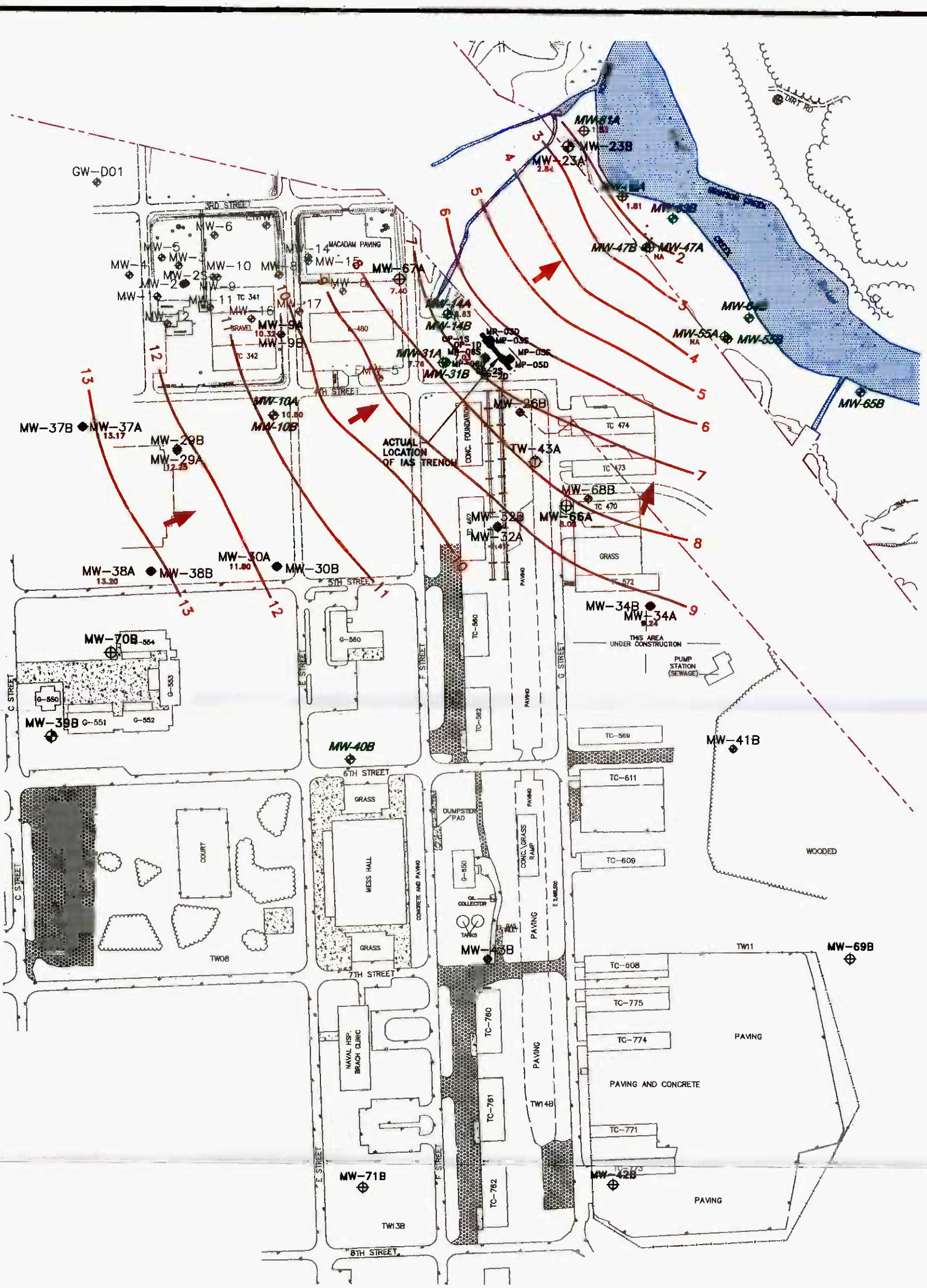
- ⊕ – MONITORING WELLS INCLUDED IN SAMPLING PLAN
- ⊕ – SHALLOW GROUNDWATER MONITORING WELL
- ◆ – INTERMEDIATE GROUNDWATER MONITORING WELL
- – – – – US ROUTE 17 BYPASS RIGHT-OF-WAY

SOURCE: LANIER AND ASSOCIATES

FIGURE 1
MONITORING WELL LOCATION MAP
OPERABLE UNIT No. 10 – SITE 35
MONITORING AND O&M SUPPORT, CTO-0120

MARINE CORPS BASE, CAMP LEJEUNE
NORTH CAROLINA

02330IIB1Y



NOTE:
-WELLS SHOWN IN BLACK REGULAR FONT ARE NOT INCLUDED IN THE MONITORING PROGRAM.

240 0 120 240
1 inch = 240 ft.

367202MR

Baker
Baker Environmental, Inc.

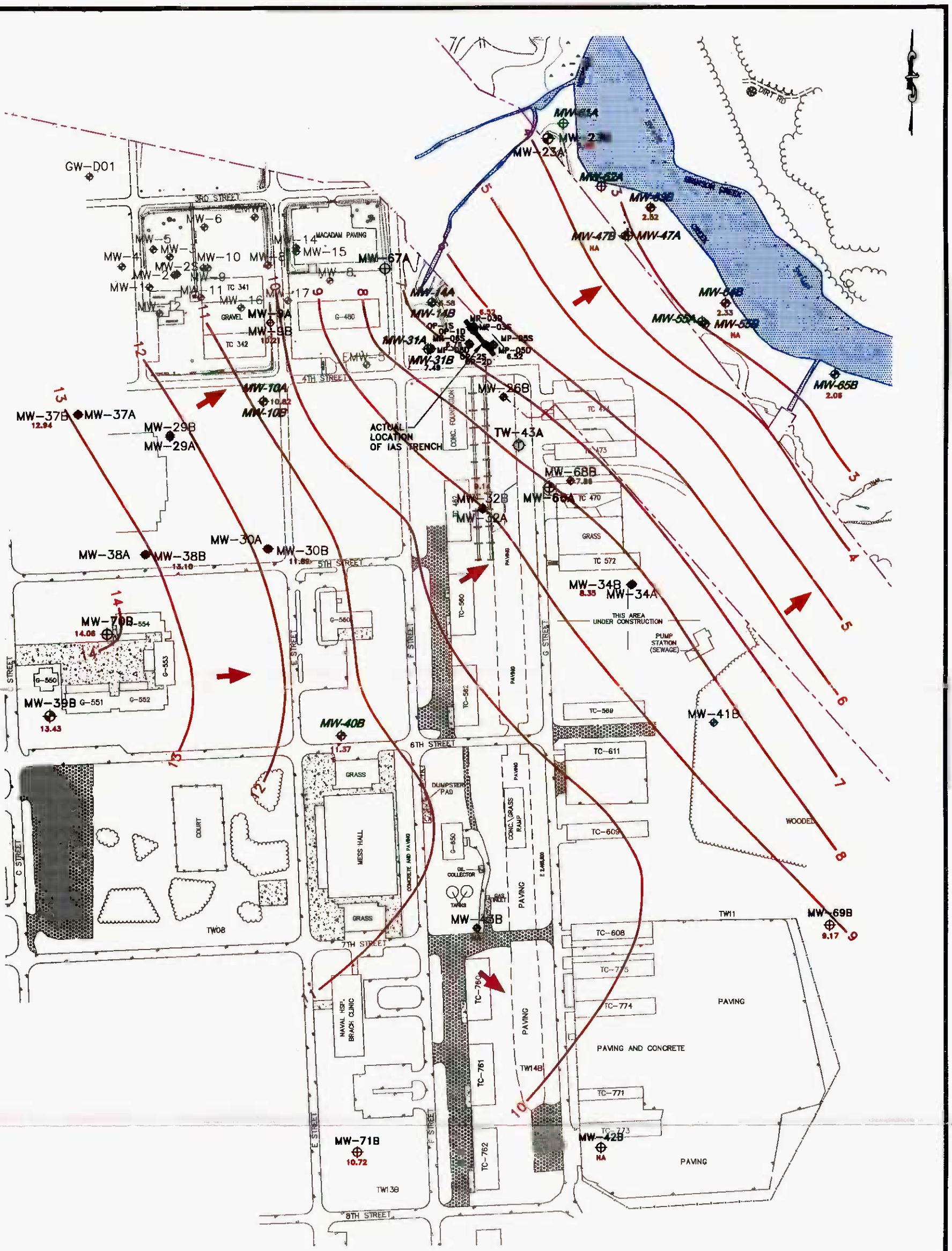
LEGEND

- ⊕ – MONITORING WELLS INCLUDED IN SAMPLING PLAN
- ⊕ – SHALLOW GROUNDWATER MONITORING WELL
- ⊕ – INTERMEDIATE GROUNDWATER MONITORING WELL
- 1.81 – GROUNDWATER ELEVATION (FEET)
- ——— – GROUNDWATER CONTOUR LINE
- ➔ – GROUNDWATER FLOW DIRECTION
- – – – – – US ROUTE 17 BYPASS RIGHT-OF-WAY

SOURCE: LANIER AND ASSOCIATES

FIGURE 2
SHALLOW GROUNDWATER CONTOUR MAP
OPERABLE UNIT No. 10 – SITE 35
MONITORING AND O&M SUPPORT, CTO-0120

MARINE CORPS BASE, CAMP LEJEUNE
NORTH CAROLINA



NOTE:
-WELLS SHOWN IN BLACK REGULAR FONT ARE NOT INCLUDED IN THE MONITORING PROGRAM.

240 0 120 240
1 inch = 240 ft.

367203MR

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LEGEND

- ⊕ – MONITORING WELLS INCLUDED IN SAMPLING PLAN
- ⊕ – SHALLOW GROUNDWATER MONITORING WELL
- ⊕ – INTERMEDIATE GROUNDWATER MONITORING WELL
- 1.81 – GROUNDWATER ELEVATION (FEET)
- ——— – GROUNDWATER CONTOUR LINE
- → – GROUNDWATER FLOW DIRECTION
- – – – – US ROUTE 17 BYPASS RIGHT-OF-WAY

SOURCE: LANIER AND ASSOCIATES

FIGURE 3
INTERMEDIATE GROUNDWATER CONTOUR MAP
OPERABLE UNIT No. 10 – SITE 35
MONITORING AND O&M SUPPORT, CTO-0120

MARINE CORPS BASE, CAMP LEJEUNE
NORTH CAROLINA

FEDERAL MAXIMUM CONTAMINANT LEVELS (MCL) AND NORTH CAROLINA WATER QUALITY STANDARDS (NCWQS)

VOLATILE ORGANIC COMPOUNDS	NCWQS	MCL
1,1,2,2-Tetrachloroethane	NE	NE
1,1,2-Trichloroethane	NE	5.0
1,1-Dichloroethene	7.0	7.0
cis-1,2-Dichloroethene	70	70
trans-1,2-Dichloroethene	NE	100
Acetone	700	NE
Benzene	1.0	5.0
Tetrachloroethene	0.7	5.0
Trichloroethene	2.8	5.0
Vinyl Chloride	0.015	2.0

NOTE:
1.) CONCENTRATIONS PRESENTED IN MICROGRAMS PER LITER OR PARTS PER BILLION
2.) EXCEED NCWQS SHOWN IN GREEN.
3.) EXCEED BOTH NCWQS AND MCL SHOWN IN RED.

SAMPLE ID	IR35-GW61-99B
DATE SAMPLED	4/16/99
VOLATILES (ug/L)	
cis-1,2-Dichloroethene	42
Trans-1,2-Dichloroethene	2 J
Trichloroethene	3 J
Vinyl Chloride	2 J

SAMPLE ID	IR35-GW62-99B
DATE SAMPLED	4/16/99
VOLATILES (ug/L)	
Acetone	3 J
cis-1,2-Dichloroethene	8

SAMPLE ID	IR35-GW14-99B
DATE SAMPLED	4/16/99
VOLATILES (ug/L)	
1,1-Dichloroethene	4 J
Benzene	1 J
cis-1,2-Dichloroethene	410 D
Trans-1,2-Dichloroethene	50
Trichloroethene	340 D
Vinyl Chloride	6

SAMPLE ID	IR35-GW47-99B
DATE SAMPLED	4/16/99
VOLATILES (ug/L)	
Benzene	2 J
cis-1,2-Dichloroethene	100
Trans-1,2-Dichloroethene	6
Trichloroethene	16
Vinyl Chloride	1 J

SAMPLE ID	IR35-GW10-99B
DATE SAMPLED	4/16/99
VOLATILES (ug/L)	
Acetone	2 J
cis-1,2-Dichloroethene	2 J

SAMPLE ID	IR35-GW55-99B
DATE SAMPLED	4/16/99
VOLATILES (ug/L)	
1,1,2,2-Tetrachloroethane	1 J
1,1,2-Trichloroethane	2 J
Acetone	1 J
cis-1,2-Dichloroethene	260 D
Trans-1,2-Dichloroethene	27
Trichloroethene	130
Vinyl Chloride	4 J

NOTE:
-WELLS SHOWN IN BLACK REGULAR FONT ARE NOT INCLUDED IN THE MONITORING PROGRAM.

240 0 120 240
1 inch = 240 ft.

367210MR

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LEGEND

- ⊕ – MONITORING WELLS INCLUDED IN SAMPLING PLAN
- ⊕ – SHALLOW GROUNDWATER MONITORING WELL
- ◆ – INTERMEDIATE GROUNDWATER MONITORING WELL
- – – – – US ROUTE 17 BYPASS RIGHT-OF-WAY

SOURCE: LANIER AND ASSOCIATES

FIGURE 4
VOLATILE ORGANIC COMPOUNDS
SHALLOW SURFICIAL AQUIFER
OPERABLE UNIT No. 10 – SITE 35
MONITORING AND O&M SUPPORT, CTO-0120
MARINE CORPS BASE, CAMP LEJEUNE
NORTH CAROLINA

FEDERAL MAXIMUM CONTAMINANT LEVELS (MCL) AND NORTH CAROLINA WATER QUALITY STANDARDS (NCWQS)

VOLATILE ORGANIC COMPOUNDS	NCWQS	MCL
1,1,2,2–Tetrachloroethane	NE	NE
1,1,2–Trichloroethane	NE	5.0
1,1–Dichloroethene	7.0	7.0
Acetone	700	NE
Benzene	1.0	5.0
cis–1,2–Dichloroethene	70	70
trans–1,2–Dichloroethene	NE	100
Tetrachloroethene	0.7	5.0
Trichloroethene	2.8	5.0
Vinyl Chloride	0.015	2.0

NOTE:
1.) CONCENTRATIONS PRESENTED IN MICROGRAMS PER LITER OR PARTS PER BILLION
2.) EXCEED NCWQS SHOWN IN GREEN.
3.) EXCEED BOTH NCWQS AND MCL SHOWN IN RED.

SAMPLE ID	IR35–GW64IW–99B
DATE SAMPLED	4/16/99
VOLATILES (ug/L)	
1,1–Dichloroethene	1 J
cis–1,2–Dichloroethene	400 D
Trans–1,2–Dichloroethene	40
Trichloroethene	170
Vinyl Chloride	16

SAMPLE ID	IR35–GW47IW–99B
DATE SAMPLED	4/16/99
VOLATILES (ug/L)	
cis–1,2–Dichloroethene	55
Trans–1,2–Dichloroethene	4 J
Trichloroethene	7
Vinyl Chloride	1 J

SAMPLE ID	IR35–GW63IW–99B
DATE SAMPLED	4/16/99
VOLATILES (ug/L)	
cis–1,2–Dichloroethene	2 J

SAMPLE ID	IR35–GW14IW–99B
DATE SAMPLED	4/16/99
VOLATILES (ug/L)	
Benzene	3 J
cis–1,2–Dichloroethene	160
Trans–1,2–Dichloroethene	18
Trichloroethene	70
Vinyl Chloride	3 J

SAMPLE ID	IR35–GW10IW–99B
DATE SAMPLED	4/16/99
VOLATILES (ug/L)	
1,1–Dichloroethene	3 J
Acetone	2 J
Benzene	5
cis–1,2–Dichloroethene	500 D
Toluene	2 J
Trans–1,2–Dichloroethene	43
Trichloroethene	290 D
Vinyl Chloride	11

SAMPLE ID	IR35–GW31IW–99B
DATE SAMPLED	4/16/99
VOLATILES (ug/L)	
Benzene	1 J
cis–1,2–Dichloroethene	210 D
Trans–1,2–Dichloroethene	32
Trichloroethene	88
Vinyl Chloride	5

SAMPLE ID	IR35–GW65IW–99B
DATE SAMPLED	4/16/99
VOLATILES (ug/L)	
Acetone	1 J

SAMPLE ID	IR35–GW40IW–99B
DATE SAMPLED	4/16/99
VOLATILES (ug/L)	
cis–1,2–Dichloroethene	260 D
Trans–1,2–Dichloroethene	11
Trichloroethene	7
Vinyl Chloride	6

SAMPLE ID	IR35–GW55IW–99B
DATE SAMPLED	4/16/99
VOLATILES (ug/L)	
1,1,2,2–Tetrachloroethane	8
1,1,2–Trichloroethane	1 J
1,1–Dichloroethene	4 J
Acetone	2 J
cis–1,2–Dichloroethene	1200 D
Tetrachloroethene	2 J
Trans–1,2–Dichloroethene	180
Trichloroethene	950 D
Vinyl Chloride	39

NOTE:
–WELLS SHOWN IN BLACK REGULAR FONT ARE NOT INCLUDED IN THE MONITORING PROGRAM.

240 0 120 240
1 inch = 240 ft.

36721MR

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LEGEND
- ⊕ – MONITORING WELLS INCLUDED IN SAMPLING PLAN
- ⊕ – SHALLOW GROUNDWATER MONITORING WELL
- ⊕ – INTERMEDIATE GROUNDWATER MONITORING WELL
- – – – – US ROUTE 17 BYPASS RIGHT–OF–WAY

SOURCE: LANIER AND ASSOCIATES

FIGURE 5
VOLATILE ORGANIC COMPOUNDS
INTERMEDIATE SURFICIAL AQUIFER
OPERABLE UNIT No. 10 – SITE 35
MONITORING AND O&M SUPPORT, CTO–0120
MARINE CORPS BASE, CAMP LEJEUNE
NORTH CAROLINA

FEDERAL MAXIMUM CONTAMINANT LEVELS (MCL)
AND NORTH CAROLINA WATER
QUALITY STANDARDS (NCWQS)

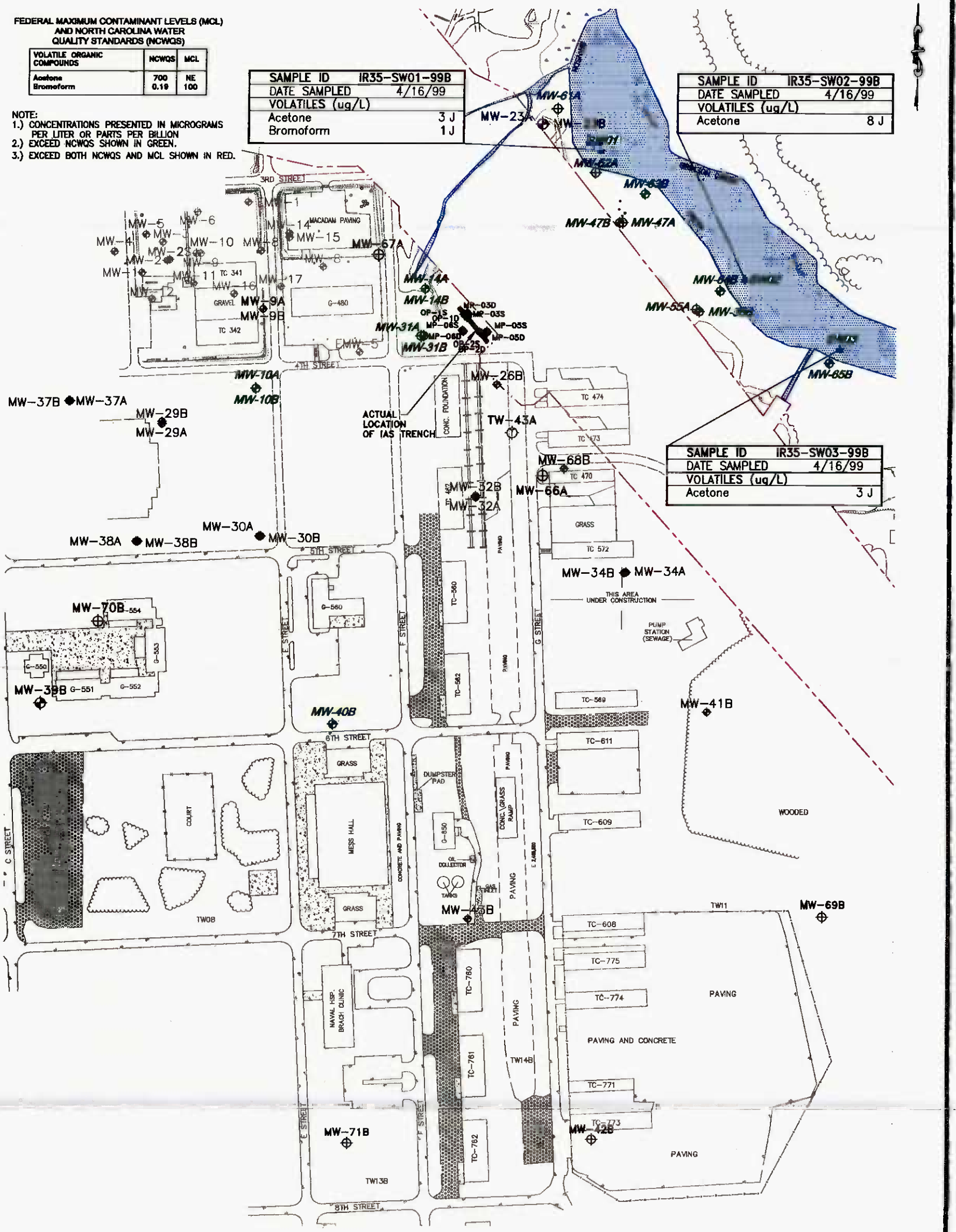
VOLATILE ORGANIC COMPOUNDS	NCWQS	MCL
Acetone	700	NE
Bromoform	0.19	100

NOTE:
1.) CONCENTRATIONS PRESENTED IN MICROGRAMS PER LITER OR PARTS PER BILLION
2.) EXCEED NCWQS SHOWN IN GREEN.
3.) EXCEED BOTH NCWQS AND MCL SHOWN IN RED.

SAMPLE ID	IR35-SW01-99B
DATE SAMPLED	4/16/99
VOLATILES (ug/L)	
Acetone	3 J
Bromoform	1 J

SAMPLE ID	IR35-SW02-99B
DATE SAMPLED	4/16/99
VOLATILES (ug/L)	
Acetone	8 J

SAMPLE ID	IR35-SW03-99B
DATE SAMPLED	4/16/99
VOLATILES (ug/L)	
Acetone	3 J



NOTE:
—WELLS SHOWN IN BLACK REGULAR FONT ARE NOT INCLUDED IN THE MONITORING PROGRAM.

240 0 120 240
1 inch = 240 ft.

387212MR

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LEGEND

- ⊕ — MONITORING WELLS INCLUDED IN SAMPLING PLAN
- ⊕ — SHALLOW GROUNDWATER MONITORING WELL
- ◆ — INTERMEDIATE GROUNDWATER MONITORING WELL
- ⛲ — SURFACE WATER SAMPLE LOCATION
- — — — — — US ROUTE 17 BYPASS RIGHT-OF-WAY

SOURCE: LANIER AND ASSOCIATES

FIGURE 6
VOLATILE ORGANIC COMPOUNDS
SURFACE WATER
OPERABLE UNIT No. 10 – SITE 35
MONITORING AND O&M SUPPORT, CTO-0120
MARINE CORPS BASE, CAMP LEJEUNE
NORTH CAROLINA

SAMPLE ID	IR35-GW61-99B
DATE SAMPLED	4/16/99
NATURAL ATTENUATION PARAMETERS	
Sulfate (mg/L)	14.1

SAMPLE ID	IR35-GW62-99B
DATE SAMPLED	4/16/99
NATURAL ATTENUATION PARAMETERS	
Sulfate (mg/L)	14.5

SAMPLE ID	IR35-GW47-99B
DATE SAMPLED	4/16/99
NATURAL ATTENUATION PARAMETERS	
Sulfate (mg/L)	24.2

SAMPLE ID	IR35-GW14-99B
DATE SAMPLED	4/16/99
NATURAL ATTENUATION PARAMETERS	
Sulfate (mg/L)	18.4

SAMPLE ID	IR35-GW10-99B
DATE SAMPLED	4/16/99
NATURAL ATTENUATION PARAMETERS	
Sulfate (mg/L)	18

SAMPLE ID	IR35-GW31-99B
DATE SAMPLED	4/16/99
NATURAL ATTENUATION PARAMETERS	
Sulfate (mg/L)	34.3

SAMPLE ID	IR35-GW55-99B
DATE SAMPLED	4/16/99
NATURAL ATTENUATION PARAMETERS	
Sulfate (mg/L)	38.8

MW-61A MW-23A MW-62A MW-47B MW-47A MW-67A MW-14A MW-14B MW-31A MW-31B MW-10A MW-10B MW-37B MW-37A MW-29B MW-29A MW-30A MW-30B MW-38A MW-38B MW-70B MW-39B MW-40B MW-26B TW-43A MW-68B MW-66A MW-32B MW-32A MW-34B MW-34A MW-41B MW-43B MW-69B MW-42B MW-71B MW-65A MW-65B

3RD STREET 4TH STREET 5TH STREET 6TH STREET 7TH STREET 8TH STREET C STREET E STREET F STREET G STREET

MACADAM PAVING G-480 TC 341 TC 342 EMW-5 ACTUAL LOCATION OF IAS TRENCH CONC. FOUNDATION TC 474 TC 473 TC 470 TC 452 TC 572 GRASS PAVING THIS AREA UNDER CONSTRUCTION PUMP STATION (SEWAGE) G-554 G-553 G-550 G-551 G-552 G-560 TC-560 TC-562 TC-589 TC-611 TC-609 WOODED COURT TW08 MESS HALL CONCRETE AND PAVING GRASS DUMPSTER PAD G-850 OIL COLLECTOR TANKS CONC. GRASS RAMP TW11 TC-608 TC-775 TC-774 PAVING AND CONCRETE TW14B TC-771 TC-773 TC-760 TC-761 TC-762 NAVAL HSP. BRANCH CLINIC TW13B

NOTE:
-WELLS SHOWN IN BLACK REGULAR FONT ARE NOT INCLUDED IN THE MONITORING PROGRAM.

240 0 120 240
1 inch = 240 ft.

387213MR

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Baker Environmental, Inc.

LEGEND

- ⊕ – MONITORING WELLS INCLUDED IN SAMPLING PLAN
- ⊕ – SHALLOW GROUNDWATER MONITORING WELL
- ◆ – INTERMEDIATE GROUNDWATER MONITORING WELL
- – – – – US ROUTE 17 BYPASS RIGHT-OF-WAY

SOURCE: LANIER AND ASSOCIATES

FIGURE 7
NATURAL ATTENUATION PARAMETERS SHALLOW SURFICIAL AQUIFER OPERABLE UNIT No. 10 – SITE 35 MONITORING AND O&M SUPPORT, CTO-0120
MARINE CORPS BASE, CAMP LEJEUNE
NORTH CAROLINA

SAMPLE ID	IR35-GW63IW-99B
DATE SAMPLED	4/16/99
NATURAL ATTENUATION PARAMETERS	
Sulfate (mg/L)	2.2

SAMPLE ID	IR35-GW64IW-99B
DATE SAMPLED	4/16/99
NATURAL ATTENUATION PARAMETERS	
Sulfate (mg/L)	10

SAMPLE ID	IR35-GW47IW-99B
DATE SAMPLED	4/16/99
NATURAL ATTENUATION PARAMETERS	
Sulfate (mg/L)	7.2

SAMPLE ID	IR35-GW14IW-99B
DATE SAMPLED	4/16/99
NATURAL ATTENUATION PARAMETERS	
Sulfate (mg/L)	11

SAMPLE ID	IR35-GW10IW-99B
DATE SAMPLED	4/16/99
NATURAL ATTENUATION PARAMETERS	
Sulfate (mg/L)	5.55

SAMPLE ID	IR35-GW55IW-99B
DATE SAMPLED	4/16/99
NATURAL ATTENUATION PARAMETERS	
Sulfate (mg/L)	29.3

SAMPLE ID	IR35-GW65IW-99B
DATE SAMPLED	4/16/99
NATURAL ATTENUATION PARAMETERS	
Ammonia (as N) (mg/L)	0.16
Sulfate (mg/L)	2.76
Total Organic Carbon (mg/L)	2.5

SAMPLE ID	IR35-GW31IW-99B
DATE SAMPLED	4/16/99
NATURAL ATTENUATION PARAMETERS	
Sulfate (mg/L)	16.5

SAMPLE ID	IR35-GW40IW-99B
DATE SAMPLED	4/16/99
NATURAL ATTENUATION PARAMETERS	
Sulfate (mg/L)	18

NOTE:
-WELLS SHOWN IN BLACK REGULAR FONT ARE NOT INCLUDED IN THE MONITORING PROGRAM.

240 0 120 240
1 inch = 240 ft.

387214MR

Baker
Baker Environmental, Inc.

LEGEND

- ⊕ – MONITORING WELLS INCLUDED IN SAMPLING PLAN
- ⊕ – SHALLOW GROUNDWATER MONITORING WELL
- ◆ – INTERMEDIATE GROUNDWATER MONITORING WELL
- – – – – US ROUTE 17 BYPASS RIGHT-OF-WAY

SOURCE: LANIER AND ASSOCIATES

FIGURE 8
NATURAL ATTENUATION PARAMETERS INTERMEDIATE SURFICIAL AQUIFER OPERABLE UNIT No. 10 – SITE 35 MONITORING AND O&M SUPPORT, CTO-0120
MARINE CORPS BASE, CAMP LEJEUNE
NORTH CAROLINA

ATTACHMENTS

ATTACHMENT A
CHAIN-OF-CUSTODY DOCUMENTATION

62470- _ _ 7-04-99B

Chain of Custody

Original Chain of Custody goes to Laboratory

0864

Page 1 of 4

Project #	Project Name	Cooler Temp.	Analyses
	Camp Lejeune LTM		
Samplers (please print) Ellen Bjerklie, Jon Edel, Heather Grenier, Tim Trebilcock		Cooler #	

Lab ID	1999 Date	Time	Comp. / Grab	Sample Identification	Sample Matrix	No. of Containers	TCL Volatiles 8260	pH	Dissolved Gas RSK 175	pH	Nitrate 300	pH	Sulfate 300	pH	[illegible]	pH	[illegible]	pH	[illegible]	pH	Remarks
	4/16	0945	grab	IR35-GW01-99B	water	7	X		X		X		X								
	4/16	0650	grab	IR35-GW31-99B	water	7	X		X		X		X								
	4/16	0910	grab	IR35-SW01-99B	water	3	X														
	4/16	0935	grab	IR35-GW31IW-99B	water	7	X		X		X		X								
	4/16	0935	grab	IR35-GW14IW-99B	water	7	X		X		X		X								
	4/16	0950	grab	IR35-GW62-99B	water	7	X		X		X		X								
	4/16	1030	grab	IR35-GW14-99B	water	7	X		X		X		X								
	4/16	1200	grab	IR35-GW63IW-99B	water	7	X		X		X		X								
	4/16	1220	grab	IR35-TB01-99B	water	3	X														
	4/16	1320	grab	IR35-GW40IW-99B	water	7	X		X		X		X								

Ceimic Project #	Relinquished by (signature)	Date/Time	Received by (signature)	Date/Time
	Ellen Bjerklie	4/16/99 1630		
Storage Location	Relinquished by (signature)	Date/Time	Received by (signature)	Date/Time
	Relinquished by (signature)	Date/Time	Received by Ceimic (signature)	Date/Time

Remarks: Airbill # 806677589175

= Lab Use Only

Ceimic Corporation, 10 Dean Knauss Drive, Narragansett, RI 02882 - Tel: (401) 782-8900, Fax: (401) 782-8905

6241 367-Ø4B-99B

Chain of Custody

Original Chain of Custody goes to Laboratory

0366

Project #	Project Name	Cooler Temp.
	Camp Lejeune LTM	

Samplers (please print): Ellen Bjerklie, Jon Edel, Heather Govenor, Tom Trebilcock

Cooler #:

Lab ID	1999 Date	Time	Comp. / Grab	Sample Identification	Sample Matrix	No. of Containers	TCL Volatiles 8260	pH	Dissolved Gas RSK 175	pH	Nitrate 300	pH	Sulfate 300	pH	Nitrite IC 300.0	pH	Orthophosphate IC-E300.0	pH	TOC 9060	pH	Remarks
	4/16	1235	grab	IR35-GW10-99B	water	7	X		X		X		X								
	4/16	1235	grab	IR35-GW10-99B-MS	water	3	X														
	4/16	1235	grab	IR35-GW10-99B-MSD	water	3	X														
	4/16	1215	grab	IR35-GW10IW-99B	water	7	X		X		X		X								
	4/16	1505	grab	IR35-GW55IW-99B	water	7	X		X		X		X								
	4/16	1550	grab	IR35-SW03-99B	water	3	X														
	4/16	1455	grab	IR35-GW47IW-99B	water	7	X		X		X		X								
	4/16	1320	grab	IR35-GW47-99B	water	7	X		X		X		X								
	4/16	1605	grab	IR35-GW64IW-99B	water	7	X		X		X		X								
	4/16	1630	grab	IR35-GW65IW-99B	water	8	X		X		X		X		X		X		X		

Ceimic Project #	Relinquished by (signature)	Date/Time	Received by (signature)	Date/Time
	Ellen Bjerklie	4/16/99 ~~1650~~ 1700		
	Relinquished by (signature)	Date/Time	Received by (signature)	Date/Time
Storage Location	Relinquished by (signature)	Date/Time	Received by Ceimic (signature)	Date/Time

Remarks: Airbill # 806677589175

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62470 367-04C-99B

Chain of Custody

Original Chain of Custody goes to Laboratory

0865

Page 3 of 4

Project #	Project Name	Cooler Temp.
	Camp Lejeune LTM	
Samplers (please print) Ellen Bjerklie, Jon Eidel, Heather Governor, Tom Trebilcock		Cooler #

Lab ID	Date	Time	Comp. / Grab	Sample Identification	Sample Matrix	No. of Containers	TON 351.1/353.2	pH	Ammonia 350.2	pH		pH		pH		pH		pH	Remarks
	4/16	1235	grab	IR35-GW10-99B	water														
	4/16	1235	grab	IR35-GW10-99B-MS	water														
	4/16	1235	grab	IR35-GW10-99B-MSD	water														
	4/16	1215	grab	IR35-GW10IW-99B	water														
	4/16	1505	grab	IR35-GW55IW-99B	water														
	4/16	1550	grab	IR35-SW03-99B	water														
	4/16	1455	grab	IR35-GW47IW-99B	water														
	4/16	1320	grab	IR35-GW47-99B	water														
	4/16	1605	grab	IR35-GW64IW-99B	water														
	4/16	1630	grab	IR35-GW65IW-99B	water		X		X										

Ceimic Project #	Relinquished by (signature)	Date/Time	Received by (signature)	Date/Time
	Ellen Bjerklie	4/16/99 1700		
Storage Location	Relinquished by (signature)	Date/Time	Received by (signature)	Date/Time
	Relinquished by (signature)	Date/Time	Received by Ceimic (signature)	Date/Time

Remarks: Airbill # 806677589175

= Lab Use Only

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6247c 367-04D-99B

Chain of Custody

Original Chain of Custody goes to Laboratory

0367

Project #	Project Name	Cooler Temp.
Samplers (please print)		Cooler #

Lab ID	Date	Time	Comp. Grab	Sample Identification	Sample Matrix	No. of Containers	TCL Volatiles 8260	pH	Dissolved Gas RSK 175	pH	Nitrate 300	pH	Sulfate 300	pH		pH		pH		pH	Remarks
	4/16	1645	grab	IR35-SW02-99B	water	3	X														
	4/16	1610	grab	IR35-GW55-99B	water	7	X		X		X		X								

Ceimic Project #	Relinquished by (signature)	Date/Time	Received by (signature)	Date/Time
	Ellen Bjarkholm	4/16/99 1700		
Storage Location	Relinquished by (signature)	Date/Time	Received by (signature)	Date/Time
	Relinquished by (signature)	Date/Time	Received by Ceimic (signature)	Date/Time

Remarks: Airbill # 806677589175

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ATTACHMENT B
MONITORING PROGRAM ANALYTICAL RESULTS

GROUNDWATER ANALYTICAL RESULTS
OPERABLE UNIT NO. 10 - SITE 35
MONITORING AND O&M SUPPORT, CTO-0367
MCB, CAMP LEJEUNE, NORTH CAROLINA
VOLATILE ORGANICS

SAMPLE ID	IR35-GW10-99B	IR35-GW10IW-99B	IR35-GW14-99B	IR35-GW14IW-99B
DATE SAMPLED	4/16/99	4/16/99	4/16/99	4/16/99
VOLATILES (ug/L)				
1,1,1-Trichloroethane	5 U	5 U	5 U	5 U
1,1,2,2-Tetrachloroethane	5 U	5 U	5 U	5 U
1,1,2-Trichloroethane	5 U	5 U	5 U	5 U
1,1-Dichloroethane	5 U	5 U	5 U	5 U
1,1-Dichloroethene	5 U	3 J	4 J	5 U
1,2-Dichloroethane	5 U	5 U	5 U	5 U
1,2-Dichloropropane	5 U	5 U	5 U	5 U
2-Butanone	10 U	10 U	10 U	10 U
2-Hexanone	10 U	10 U	10 U	10 U
4-Methyl-2-Pentanone	10 U	10 U	10 U	10 U
Acetone	2 J	2 J	10 U	10 U
Benzene	5 U	5	1 J	3 J
Bromodichloromethane	5 U	5 U	5 U	5 U
Bromoform	5 U	5 U	5 U	5 U
Bromomethane	5 U	5 U	5 U	5 U
Carbon Disulfide	5 U	5 U	5 U	5 U
Carbon Tetrachloride	5 U	5 U	5 U	5 U
Chlorobenzene	5 U	5 U	5 U	5 U
Chloroethane	5 U	5 U	5 U	5 U
Chloroform	5 U	5 U	5 U	5 U
Chloromethane	5 U	5 U	5 U	5 U
cis-1,2-Dichloroethene	2 J	500 D	410 D	160
cis-1,3-Dichloropropene	5 U	5 U	5 U	5 U
Dibromochloromethane	5 U	5 U	5 U	5 U
Ethylbenzene	5 U	5 U	5 U	5 U
Methylene Chloride	5 U	5 U	5 U	5 U
Styrene	5 U	5 U	5 U	5 U
Tetrachloroethene	5 U	5 U	5 U	5 U
Toluene	5 U	2 J	5 U	5 U
Total Xylenes	15 U	15 U	15 U	15 U
Trans-1,2-Dichloroethene	5 U	43	50	18
Trans-1,3-Dichloropropen	5 U	5 U	5 U	5 U
Trichloroethene	5 U	290 D	340 D	70
Vinyl Chloride	5 U	11	6	3 J

GROUNDWATER ANALYTICAL RESULTS
OPERABLE UNIT NO. 10 - SITE 35
MONITORING AND O&M SUPPORT, CTO-0367
MCB, CAMP LEJEUNE, NORTH CAROLINA
VOLATILE ORGANICS

SAMPLE ID	IR35-GW31-99B	IR35-GW31IW-99B	IR35-GW40IW-99B	IR35-GW47-99B
DATE SAMPLED	4/16/99	4/16/99	4/16/99	4/16/99
VOLATILES (ug/L)				
1,1,1-Trichloroethane	5 U	5 U	5 U	5 U
1,1,2,2-Tetrachloroethane	5 U	5 U	5 U	5 U
1,1,2-Trichloroethane	5 U	5 U	5 U	5 U
1,1-Dichloroethane	5 U	5 U	5 U	5 U
1,1-Dichloroethene	5 U	5 U	5 U	5 U
1,2-Dichloroethane	5 U	5 U	5 U	5 U
1,2-Dichloropropane	5 U	5 U	5 U	5 U
2-Butanone	10 U	10 U	10 U	10 U
2-Hexanone	10 U	10 U	10 U	10 U
4-Methyl-2-Pentanone	10 U	10 U	10 U	10 U
Acetone	10 U	10 U	10 U	10 U
Benzene	5 U	1 J	5 U	2 J
Bromodichloromethane	5 U	5 U	5 U	5 U
Bromoform	5 U	5 U	5 U	5 U
Bromomethane	5 U	5 U	5 U	5 U
Carbon Disulfide	5 U	5 U	5 U	5 U
Carbon Tetrachloride	5 U	5 U	5 U	5 U
Chlorobenzene	5 U	5 U	5 U	5 U
Chloroethane	5 U	5 U	5 U	5 U
Chloroform	5 U	5 U	5 U	5 U
Chloromethane	5 U	5 U	5 U	5 U
cis-1,2-Dichloroethene	5 U	210 D	260 D	100
cis-1,3-Dichloropropene	5 U	5 U	5 U	5 U
Dibromochloromethane	5 U	5 U	5 U	5 U
Ethylbenzene	5 U	5 U	5 U	5 U
Methylene Chloride	5 U	5 U	5 U	5 U
Styrene	5 U	5 U	5 U	5 U
Tetrachloroethene	5 U	5 U	5 U	5 U
Toluene	5 U	5 U	5 U	5 U
Total Xylenes	15 U	15 U	15 U	15 U
Trans-1,2-Dichloroethene	5 U	32	11	6
Trans-1,3-Dichloropropen	5 U	5 U	5 U	5 U
Trichloroethene	5 U	88	7	16
Vinyl Chloride	5 U	5	6	1 J

GROUNDWATER ANALYTICAL RESULTS
OPERABLE UNIT NO. 10 - SITE 35
MONITORING AND O&M SUPPORT, CTO-0367
MCB, CAMP LEJEUNE, NORTH CAROLINA
VOLATILE ORGANICS

SAMPLE ID	IR35-GW47IW-99B	IR35-GW55-99B	IR35-GW55IW-99B	IR35-GW61-99B
DATE SAMPLED	4/16/99	4/16/99	4/16/99	4/16/99
VOLATILES (ug/L)				
1,1,1-Trichloroethane	5 U	5 U	5 U	5 U
1,1,2,2-Tetrachloroethane	5 U	1 J	8	5 U
1,1,2-Trichloroethane	5 U	2 J	1 J	5 U
1,1-Dichloroethane	5 U	5 U	5 U	5 U
1,1-Dichloroethene	5 U	5 U	4 J	5 U
1,2-Dichloroethane	5 U	5 U	5 U	5 U
1,2-Dichloropropane	5 U	5 U	5 U	5 U
2-Butanone	10 U	10 U	10 U	10 U
2-Hexanone	10 U	10 U	10 U	10 U
4-Methyl-2-Pentanone	10 U	10 U	10 U	10 U
Acetone	10 U	1 J	2 J	10 U
Benzene	5 U	5 U	5 U	5 U
Bromodichloromethane	5 U	5 U	5 U	5 U
Bromoform	5 U	5 U	5 U	5 U
Bromomethane	5 U	5 U	5 U	5 U
Carbon Disulfide	5 U	5 U	5 U	5 U
Carbon Tetrachloride	5 U	5 U	5 U	5 U
Chlorobenzene	5 U	5 U	5 U	5 U
Chloroethane	5 U	5 U	5 U	5 U
Chloroform	5 U	5 U	5 U	5 U
Chloromethane	5 U	5 U	5 U	5 U
cis-1,2-Dichloroethene	55	260 D	1200 D	42
cis-1,3-Dichloropropene	5 U	5 U	5 U	5 U
Dibromochloromethane	5 U	5 U	5 U	5 U
Ethylbenzene	5 U	5 U	5 U	5 U
Methylene Chloride	5 U	5 U	5 U	5 U
Styrene	5 U	5 U	5 U	5 U
Tetrachloroethene	5 U	5 U	2 J	5 U
Toluene	5 U	5 U	5 U	5 U
Total Xylenes	15 U	15 U	15 U	15 U
Trans-1,2-Dichloroethene	4 J	27	180	2 J
Trans-1,3-Dichloropropen	5 U	5 U	5 U	5 U
Trichloroethene	7	130	950 D	3 J
Vinyl Chloride	1 J	4 J	39	2 J

GROUNDWATER ANALYTICAL RESULTS
OPERABLE UNIT NO. 10 - SITE 35
MONITORING AND O&M SUPPORT, CTO-0367
MCB, CAMP LEJEUNE, NORTH CAROLINA
VOLATILE ORGANICS

SAMPLE ID	IR35-GW62-99B	IR35-GW63IW-99B	IR35-GW64IW-99B	IR35-GW65IW-99B
DATE SAMPLED	4/16/99	4/16/99	4/16/99	4/16/99
VOLATILES (ug/L)				
1,1,1-Trichloroethane	5 U	5 U	5 U	5 U
1,1,2,2-Tetrachloroethane	5 U	5 U	5 U	5 U
1,1,2-Trichloroethane	5 U	5 U	5 U	5 U
1,1-Dichloroethane	5 U	5 U	5 U	5 U
1,1-Dichloroethene	5 U	5 U	1 J	5 U
1,2-Dichloroethane	5 U	5 U	5 U	5 U
1,2-Dichloropropane	5 U	5 U	5 U	5 U
2-Butanone	10 U	10 U	10 U	10 U
2-Hexanone	10 U	10 U	10 U	10 U
4-Methyl-2-Pentanone	10 U	10 U	10 U	10 U
Acetone	3 J	10 U	10 U	1 J
Benzene	5 U	5 U	5 U	5 U
Bromodichloromethane	5 U	5 U	5 U	5 U
Bromoform	5 U	5 U	5 U	5 U
Bromomethane	5 U	5 U	5 U	5 U
Carbon Disulfide	5 U	5 U	5 U	5 U
Carbon Tetrachloride	5 U	5 U	5 U	5 U
Chlorobenzene	5 U	5 U	5 U	5 U
Chloroethane	5 U	5 U	5 U	5 U
Chloroform	5 U	5 U	5 U	5 U
Chloromethane	5 U	5 U	5 U	5 U
cis-1,2-Dichloroethene	8	2 J	400 D	5 U
cis-1,3-Dichloropropene	5 U	5 U	5 U	5 U
Dibromochloromethane	5 U	5 U	5 U	5 U
Ethylbenzene	5 U	5 U	5 U	5 U
Methylene Chloride	5 U	5 U	5 U	5 U
Styrene	5 U	5 U	5 U	5 U
Tetrachloroethene	5 U	5 U	5 U	5 U
Toluene	5 U	5 U	5 U	5 U
Total Xylenes	15 U	15 U	15 U	15 U
Trans-1,2-Dichloroethene	5 U	5 U	40	5 U
Trans-1,3-Dichloropropen	5 U	5 U	5 U	5 U
Trichloroethene	5 U	5 U	170	5 U
Vinyl Chloride	5 U	5 U	16	5 U

GROUNDWATER ANALYTICAL RESULTS
OPERABLE UNIT NO. 10 - SITE 35
MONITORING AND O&M SUPPORT, CTO-0367
MCB, CAMP LEJEUNE, NORTH CAROLINA
NATURAL ATTENUATION PARAMETERS

SAMPLE ID	IR35-GW10-99B	IR35-GW10IW-99B	IR35-GW14-99B	IR35-GW14IW-99B	IR35-GW31-99B	IR35-GW31IW-99B
DATE SAMPLED	4/16/99	4/16/99	4/16/99	4/16/99	4/16/99	4/16/99
NATURAL ATTENUATION PARAMETERS						
Ammonia (as N) (mg/l)	NA	NA	NA	NA	NA	NA
Ethene (ug/l)	2 U	2 U	2 U	2 U	2 U	2 U
Sulfate (mg/l)	18	5.55	18.4	11	34.3	16.5
Total Organic Carbon (mg/l)	NA	NA	NA	NA	NA	NA

GROUNDWATER ANALYTICAL RESULTS
OPERABLE UNIT NO. 10 - SITE 35
MONITORING AND O&M SUPPORT, CTO-0367
MCB, CAMP LEJEUNE, NORTH CAROLINA
NATURAL ATTENUATION PARAMETERS

SAMPLE ID	IR35-GW40IW-99B	IR35-GW47-99B	IR35-GW47IW-99B	IR35-GW55-99B	IR35-GW55IW-99B	IR35-GW61-99B
DATE SAMPLED	4/16/99	4/16/99	4/16/99	4/16/99	4/16/99	4/16/99
NATURAL ATTENUATION PARAMETERS						
Ammonia (as N) (mg/l)	NA	NA	NA	NA	NA	NA
Ethene (ug/l)	2 U	2 U	2 U	2 U	2 U	2 U
Sulfate (mg/l)	18	24.2	7.2	38.8	29.3	14.1
Total Organic Carbon (mg/l)	NA	NA	NA	NA	NA	NA

GROUNDWATER ANALYTICAL RESULTS
OPERABLE UNIT NO. 10 - SITE 35
MONITORING AND O&M SUPPORT, CTO-0367
MCB, CAMP LEJEUNE, NORTH CAROLINA
NATURAL ATTENUATION PARAMETERS

SAMPLE ID	IR35-GW62-99B	IR35-GW63IW-99B	IR35-GW64IW-99B	IR35-GW65IW-99B
DATE SAMPLED	4/16/99	4/16/99	4/16/99	4/16/99
NATURAL ATTENUATION PARAMETERS				
Ammonia (as N) (mg/l)	NA	NA	NA	0.16
Ethene (ug/l)	2 U	2 U	2 U	2 U
Sulfate (mg/l)	14.5	2.2	10	2.76
Total Organic Carbon (mg/l)	NA	NA	NA	2.5

SURFACE WATER ANALYTICAL RESULTS
OPERABLE UNIT NO. 10 - SITE 35
MONITORING AND O&M SUPPORT, CTO-0367
MCB, CAMP LEJEUNE, NORTH CAROLINA
VOLATILE ORGANICS

SAMPLE ID	IR35-SW01-99B	IR35-SW02-99B	IR35-SW03-99B
DATE SAMPLED	4/16/99	4/16/99	4/16/99
VOLATILES (ug/L)			
1,1,1-Trichloroethane	5 U	5 U	5 U
1,1,2,2-Tetrachloroethane	5 U	5 U	5 U
1,1,2-Trichloroethane	5 U	5 U	5 U
1,1-Dichloroethane	5 U	5 U	5 U
1,1-Dichloroethene	5 U	5 U	5 U
1,2-Dichloroethane	5 U	5 U	5 U
1,2-Dichloropropane	5 U	5 U	5 U
2-Butanone	10 U	10 U	10 U
2-Hexanone	10 U	10 U	10 U
4-Methyl-2-Pentanone	10 U	10 U	10 U
Acetone	3 J	8 J	3 J
Benzene	5 U	5 U	5 U
Bromodichloromethane	5 U	5 U	5 U
Bromoform	1 J	5 U	5 U
Bromomethane	5 U	5 U	5 U
Carbon Disulfide	5 U	5 U	5 U
Carbon Tetrachloride	5 U	5 U	5 U
Chlorobenzene	5 U	5 U	5 U
Chloroethane	5 U	5 U	5 U
Chloroform	5 U	5 U	5 U
Chloromethane	5 U	5 U	5 U
cis-1,2-Dichloroethene	5 U	5 U	5 U
cis-1,3-Dichloropropene	5 U	5 U	5 U
Dibromochloromethane	5 U	5 U	5 U
Ethylbenzene	5 U	5 U	5 U
Methylene Chloride	5 U	5 U	5 U
Styrene	5 U	5 U	5 U
Tetrachloroethene	5 U	5 U	5 U
Toluene	5 U	5 U	5 U
Total Xylenes	15 U	15 U	15 U
Trans-1,2-Dichloroethene	5 U	5 U	5 U
Trans-1,3-Dichloropropen	5 U	5 U	5 U
Trichloroethene	5 U	5 U	5 U
Vinyl Chloride	5 U	5 U	5 U

ATTACHMENT C
ANALYTICAL LABORATORY DATA SHEETS

CEIMIC
Corporation
"Analytical Chemistry for Environmental Management"

Fax Cover Sheet

To:	Karren Wood Baker Environmental
Fax #:	(412) 269-2002
From:	Linda Magee
Date:	April 19, 1999
Re:	MCB Camp LeJeune Project
# of Pages: **(includes cover sheet)**	6

Included is a Corrected Corrective Action Form reflecting our telephone conversation. We will cancel Nitrate, Nitrite and Orthophospate analysis but the Sulfate will not be cancelled. Thank you for your patience. Also included is the Chain of Custody Forms.

04

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CEIMIC
Corporation
"Analytical Chemistry for Environmental Management"

Corrective Action Form

Name: David Hallinan II Date: 4/19/99

Out of Control Situation :
(describe what happened, when, where and how, and who discovered the problem) 4/19/99 xm

Samples for Nitrate ~~and Sulfate~~ Nitrite and Orthophosphate Analysis were received out of Hold.

Client(s): DH 4/19/99 ~~EASTR~~ BAKER
Samples Affected: 990324
(reference both Ceimic and client IDs)

Action Taken: Contacted Karren Wood and explained situation.
(if client contacted, reference client contact name and date) She said to cancel analysis and send a copy of Corrective Action Form and Chain of Custody Forms. They will not re-sample.

Name: Linda Magee Date: 4/19/99

Proof of Return to Control: Copy to project folder and SOG Narrative.

Supervisor: Linda Magee QA/QC Officer: [signature]
Date: 4/19/99 Date: 4/19/99

Corrective Action Tracking # 99SE030 063
QAT0237 Page #

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05

INORGANIC SUMMARY PACKAGE

CEIMIC
Corporation
"Analytical Chemistry for Environmental Management"

INORGANIC ANALYTES

Client: Baker Environmental

Client Sample ID: IR35-GW61-99B

Date Sampled: 04/16/99

Laboratory ID: 990324-01

Date Sample Received: 04/19/99

Matrix: Aqueous

Target Analyte	Result	Units	Method Reporting Limit	Date Prep'd	Date Analyzed
[illegible]te	14.1	mg/L	2.50	04/21/99	04/21/99

Reported by: ______________________

Approved by: ______________________ 14

CEIMIC
Corporation
"Analytical Chemistry for Environmental Management"

INORGANIC ANALYTES

Client: Baker Environmental

Client Sample ID: IR35-GW31-99B

Date Sampled: 04/16/99 Laboratory ID: 990324-02

Date Sample Received: 04/19/99

Matrix: Aqueous

Target Analyte	Result	Units	Method Reporting Limit	Date Prep'd	Date Analyzed
Sulfate	34.3	mg/L	2.50	04/21/99	04/21/99

Reported by: Jeffrey D. Mayman Approved by: Donald Tatarelli

INORGANIC ANALYTES

Client: Baker Environmental

Client Sample ID: IR35-GW31IW-99B

Date Sampled: 04/16/99 Laboratory ID: 990324-04

Date Sample Received: 04/19/99

Matrix: Aqueous

Target Analyte	Result	Units	Method Reporting Limit	Date Prep'd	Date Analyzed
Sulfate	16.5	mg/L	2.50	04/21/99	04/21/99

Reported by: Jeffrey D. Mayfield Approved by: Donald Fortelli

CEIMIC
Corporation
"Analytical Chemistry for Environmental Management"

INORGANIC ANALYTES

Client: Baker Environmental

Client Sample ID: IR35-GW14IW-99B

Date Sampled: 04/16/99 Laboratory ID: 990324-05

Date Sample Received: 04/19/99

Matrix: Aqueous

Target Analyte	Result	Units	Method Reporting Limit	Date Prep'd	Date Analyzed
ıte	11.0	mg/L	2.50	05/13/99	05/13/99

Reported by: Jeffrey D. Wagner Approved by: Donald Tatarelli

INORGANIC ANALYTES

Client: Baker Environmental

Client Sample ID: IR35-GW62-99B

Date Sampled: 04/16/99

Laboratory ID: 990324-06

Date Sample Received: 04/19/99

Matrix: Aqueous

Target Analyte	Result	Units	Method Reporting Limit	Date Prep'd	Date Analyzed
Sulfate	14.5	mg/L	2.50	05/13/99	05/13/99

Reported by: _____ Approved by: _____

CEIMIC
Corporation
"Analytical Chemistry for Environmental Management"

INORGANIC ANALYTES

Client: Baker Environmental

Client Sample ID: IR35-GW14-99B

Date Sampled: 04/16/99 Laboratory ID: 990324-07

Date Sample Received: 04/19/99

Matrix: Aqueous

Target Analyte	Result	Units	Method Reporting Limit	Date Prep'd	Date Analyzed
Sulfate	18.4	mg/L	2.50	05/13/99	05/13/99

Reported by: Approved by:

CEIMIC
Corporation
"Analytical Chemistry for Environmental Management"

INORGANIC ANALYTES

Client: Baker Environmental

Client Sample ID: IR35-GW63IW-99B

Date Sampled: 04/16/99 Laboratory ID: 990324-08

Date Sample Received: 04/19/99

Matrix: Aqueous

Target Analyte	Result	Units	Method Reporting Limit	Date Prep'd	Date Analyzed
Sulfate	2.20	mg/L	0.10	05/13/99	05/13/99

Reported by: Jeffrey D Magnuson Approved by: Donald Tatarelli

CEIMIC
Corporation
"Analytical Chemistry for Environmental Management"

INORGANIC ANALYTES

Client: Baker Environmental

Client Sample ID: IR35-GW40IW-99B

Date Sampled: 04/16/99 Laboratory ID: 990324-10

Date Sample Received: 04/19/99

Matrix: Aqueous

Target Analyte	Result	Units	Method Reporting Limit	Date Prep'd	Date Analyzed
Sulfate	18.0	mg/L	2.50	05/14/99	05/14/99

Reported by: Jeffrey D. Magnuson Approved by: Donald Tatarell

INORGANIC ANALYTES

Client: Baker Environmental

Client Sample ID: IR35-GW10-99B

Date Sampled: 04/16/99 Laboratory ID: 990324-11

Date Sample Received: 04/19/99

Matrix: Aqueous

Target Analyte	Result	Units	Method Reporting Limit	Date Prep'd	Date Analyzed
Sulfate	18.0	mg/L	2.50	05/14/99	05/14/99

22

Reported by: Jeffrey D. Mayson Approved by: Donald Tortorelli

CEIMIC
Corporation
"Analytical Chemistry for Environmental Management"

INORGANIC ANALYTES

Client: Baker Environmental

Client Sample ID: IR35-GW10IW-99B

Date Sampled: 04/16/99 Laboratory ID: 990324-12

Date Sample Received: 04/19/99

Matrix: Aqueous

Target Analyte	Result	Units	Method Reporting Limit	Date Prep'd	Date Analyzed
Sulfate	5.55	mg/L	0.10	05/14/99	05/14/99

Reported by: Jeffrey D. Meyer

Approved by: Donald Fortuna

CEIMIC
Corporation
"Analytical Chemistry for Environmental Management"

INORGANIC ANALYTES

Client: Baker Environmental

Client Sample ID: IR35-GW55IW-99B

Date Sampled: 04/16/99 Laboratory ID: 990324-13

Date Sample Received: 04/19/99

Matrix: Aqueous

Target Analyte	Result	Units	Method Reporting Limit	Date Prep'd	Date Analyzed
Sulfate	29.3	mg/L	2.50	05/14/99	05/14/99

Reported by: Jeffrey D. Wagman

Approved by: Donald Tatarelli

INORGANIC ANALYTES

Client: Baker Environmental

Client Sample ID: IR35-GW47IW-99B

Date Sampled: 04/16/99

Laboratory ID: 990324-15

Date Sample Received: 04/19/99

Matrix: Aqueous

Target Analyte	Result	Units	Method Reporting Limit	Date Prep'd	Date Analyzed
Sulfate	7.20	mg/L	0.10	05/14/99	05/14/99

Reported by: Jeffrey D. Mayman

Approved by: Donald Tatarelli

CEIMIC
Corporation
"Analytical Chemistry for Environmental Management"

INORGANIC ANALYTES

Client: Baker Environmental

Client Sample ID: IR35-GW47-99B

Date Sampled: 04/16/99 Laboratory ID: 990324-16

Date Sample Received: 04/19/99

Matrix: Aqueous

Target Analyte	Result	Units	Method Reporting Limit	Date Prep'd	Date Analyzed
Sulfate	24.2	mg/L	2.50	05/14/99	05/14/99

Reported by: Jeffrey D. Maymon

Approved by: Gerald Fortuelli

INORGANIC ANALYTES

Client: Baker Environmental

Client Sample ID: IR35-GW64IW-99B

Date Sampled: 04/16/99 Laboratory ID: 990324-17

Date Sample Received: 04/19/99

Matrix: Aqueous

Target Analyte	Result	Units	Method Reporting Limit	Date Prep'd	Date Analyzed
Sulfate	10.0	mg/L	2.50	05/14/99	05/14/99

Reported by: Jeffrey D Naymon Approved by: David Fotouhi 27

INORGANIC ANALYTES

Client: Baker Environmental

Client Sample ID: IR35-GW65IW-99B

Date Sampled: 04/16/99

Laboratory ID: 990324-18

Date Sample Received: 04/19/99

Matrix: Aqueous

Target Analyte	Result	Units	Method Reporting Limit	Date Prep'd	Date Analyzed
Ammonia (as N)	0.16	mg/L	0.10	05/11/99	05/11/99
Sulfate	2.76	mg/L	0.10	05/14/99	05/14/99
Total Organic Carbon	2.5	mg/L	1.0	05/03/99	05/03/99
Total Organic Nitrogen	ND	mg/L	0.20	05/11/99	05/11/99

ND = Not Detected

Reported by: Jeffrey D. Maymon

Approved by: Harold Tootell

SPIKE SAMPLE SUMMARY
INORGANIC ANALYTES

Client: Baker Environmental

Client Sample ID: IR35-GW65IW-99B

Date Sampled: 04/16/99

Laboratory ID: 990324-18Spk

Date Sample Received: 04/19/99

Concentration in: mg/L (ppm)

Matrix: Aqueous

Target Analyte	Sample Result	Spike Added	Spiked Sample Result	Recovery(%) Predigest Spike	Recovery(%) QC Limits
Ammonia (as N)	0.16	1.00	1.12	96	75-125
Sulfate	2.76	1.60	4.46	106	75-125
Total Organic Carbon	2.5	10.0	13.3	108	75-125

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Reported by: Jeffrey D. Maymon

Approved by: Donald Tortelli

DUPLICATE SAMPLE SUMMARY
INORGANIC ANALYTES

Client: Baker Environmental

Client Sample ID: IR35-GW65IW-99B

Date Sampled: 04/16/99

Laboratory ID: 990324-18Dup

Date Sample Received: 04/19/99

Concentration in: mg/L (ppm)

Matrix: Aqueous

Target Analyte	Sample Result	Duplicate Result	RPD(%)	QC Limit(%)
Ammonia (as N)	0.16	0.18	**	±0.10
Sulfate	2.76	2.82	2	20
Total Organic Carbon	2.5	2.4	**	±1.0
Total Organic Nitrogen	ND	ND	**	±0.20

ND = Not Detected
RPD = Relative Percent Difference
** For these analytes the sample concentration was less than five times the quantitation limit. In these cases the control limit is ± the quantitation limit.

Reported by: _____ Approved by: _____

CEIMIC
Corporation
"Analytical Chemistry for Environmental Management"

INORGANIC ANALYTES

Client: Baker Environmental

Client Sample ID: IR35-GW55-99B

Date Sampled: 04/16/99 Laboratory ID: 990324-20

Date Sample Received: 04/19/99

Matrix: Aqueous

Target Analyte	Result	Units	Method Reporting Limit	Date Prep'd	Date Analyzed
Sulfate	38.8	mg/L	2.50	05/14/99	05/14/99

Reported by: Jeffrey D. Magnuson Approved by: Harold Tatorelli

Organic Summary Package

2. TCL and TIC

(1) VOA
(2) SV
(3) PEST

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

IR35GW1099

Lab Name: CEIMIC CORP Contract: BAKER

Lab Code: CEIMIC Case No.: 62470 SAS No.: _____ SDG No.: 35GW61

Matrix: (soil/water) WATER Lab Sample ID: 990324-11

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: L1642

Level: (low/med) LOW Date Received: 04/19/99

% Moisture: not dec. ____ Date Analyzed: 04/28/99

GC Column: DB624 ID: 0.180 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	5	U
74-83-9	Bromomethane	5	U
75-01-4	Vinyl Chloride	5	U
75-00-3	Chloroethane	5	U
75-09-2	Methylene Chloride	5	U
67-64-1	Acetone	2	J
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
156-59-2	cis-1,2-Dichloroethene	2	J
156-60-5	trans-1,2-Dichloroethene	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

IR35GW1099

Lab Name: CEIMIC CORP Contract: BAKER

Lab Code: CEIMIC Case No.: 62470 SAS No.: _____ SDG No.: 35GW61

Matrix: (soil/water) WATER Lab Sample ID: 990324-11

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: L1642

Level: (low/med) LOW Date Received: 04/19/99

% Moisture: not dec. ____ Date Analyzed: 04/28/99

GC Column: DB624 ID: 0.180 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
1330-20-7	Xylene (total)	15	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

IR35GW10IW

Name: CEIMIC CORP Contract: BAKER

Lab Code: CEIMIC Case No.: 62470 SAS No.: _____ SDG No.: 35GW61

Matrix: (soil/water) WATER Lab Sample ID: 990324-12

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: L1643

Level: (low/med) LOW Date Received: 04/19/99

% Moisture: not dec. _____ Date Analyzed: 04/28/99

GC Column: DB624 ID: 0.180 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	5	U
74-83-9	Bromomethane	5	U
75-01-4	Vinyl Chloride	11	
75-00-3	Chloroethane	5	U
75-09-2	Methylene Chloride	5	U
67-64-1	Acetone	2	J
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	3	J
75-34-3	1,1-Dichloroethane	5	U
156-59-2	cis-1,2-Dichloroethene	530	E
156-60-5	trans-1,2-Dichloroethene	43	
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	300	E
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	2	J
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

IR35GW10IW

Lab Name: CEIMIC CORP Contract: BAKER

Lab Code: CEIMIC Case No.: 62470 SAS No.: _____ SDG No.: 35GW61

Matrix: (soil/water) WATER Lab Sample ID: 990324-12

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: L1643

Level: (low/med) LOW Date Received: 04/19/99

% Moisture: not dec. _____ Date Analyzed: 04/28/99

GC Column: DB624 ID: 0.180 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
1330-20-7	Xylene (total)	15	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

IR35GW10IWDL

Lab Name: CEIMIC CORP Contract: BAKER

Lab Code: CEIMIC Case No.: 62470 SAS No.: _____ SDG No.: 35GW61

Matrix: (soil/water) WATER Lab Sample ID: 990324-12DL

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: L1688

Level: (low/med) LOW Date Received: 04/19/99

% Moisture: not dec. ____ Date Analyzed: 04/29/99

GC Column: DB624 ID: 0.180 (mm) Dilution Factor: 5.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	25	U
74-83-9	Bromomethane	25	U
75-01-4	Vinyl Chloride	11	DJ
75-00-3	Chloroethane	25	U
75-09-2	Methylene Chloride	25	U
67-64-1	Acetone	50	U
75-15-0	Carbon Disulfide	25	U
75-35-4	1,1-Dichloroethene	25	U
75-34-3	1,1-Dichloroethane	25	U
156-59-2	cis-1,2-Dichloroethene	500	D
156-60-5	trans-1,2-Dichloroethene	41	D
67-66-3	Chloroform	25	U
107-06-2	1,2-Dichloroethane	25	U
78-93-3	2-Butanone	50	U
71-55-6	1,1,1-Trichloroethane	25	U
56-23-5	Carbon Tetrachloride	25	U
75-27-4	Bromodichloromethane	25	U
78-87-5	1,2-Dichloropropane	25	U
10061-01-5	cis-1,3-Dichloropropene	25	U
79-01-6	Trichloroethene	290	D
124-48-1	Dibromochloromethane	25	U
79-00-5	1,1,2-Trichloroethane	25	U
71-43-2	Benzene	25	U
10061-02-6	trans-1,3-Dichloropropene	25	U
75-25-2	Bromoform	25	U
108-10-1	4-Methyl-2-Pentanone	50	U
591-78-6	2-Hexanone	50	U
127-18-4	Tetrachloroethene	25	U
79-34-5	1,1,2,2-Tetrachloroethane	25	U
108-88-3	Toluene	25	U
108-90-7	Chlorobenzene	25	U
100-41-4	Ethylbenzene	25	U
100-42-5	Styrene	25	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

IR35GW10IWDL

Lab Name: CEIMIC CORP Contract: BAKER

Lab Code: CEIMIC Case No.: 62470 SAS No.: _____ SDG No.: 35GW61

Matrix: (soil/water) WATER Lab Sample ID: 990324-12DL

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: L1688

Level: (low/med) LOW Date Received: 04/19/99

% Moisture: not dec. ____ Date Analyzed: 04/29/99

GC Column: DB624 ID: 0.180 (mm) Dilution Factor: 5.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
1330-20-7	Xylene (total)	75	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
IR35GW1499B

Lab Name: CEIMIC CORP Contract: BAKER

Lab Code: CEIMIC Case No.: 62470 SAS No.: _____ SDG No.: 35GW61

Matrix: (soil/water) WATER Lab Sample ID: 990324-07

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: L1638

Level: (low/med) LOW Date Received: 04/19/99

% Moisture: not dec. _____ Date Analyzed: 04/28/99

GC Column: DB624 ID: 0.180 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	5	U
74-83-9	Bromomethane	5	U
75-01-4	Vinyl Chloride	6	
75-00-3	Chloroethane	5	U
75-09-2	Methylene Chloride	5	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	4	J
75-34-3	1,1-Dichloroethane	5	U
156-59-2	cis-1,2-Dichloroethene	440	E
156-60-5	trans-1,2-Dichloroethene	50	
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	360	E
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	1	J
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

IR35GW1499B

Lab Name: CEIMIC CORP Contract: BAKER

Lab Code: CEIMIC Case No.: 62470 SAS No.: _____ SDG No.: 35GW61

Matrix: (soil/water) WATER Lab Sample ID: 990324-07

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: L1638

Level: (low/med) LOW Date Received: 04/19/99

% Moisture: not dec. _____ Date Analyzed: 04/28/99

GC Column: DB624 ID: 0.180 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
1330-20-7	Xylene (total)	15	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

IR35GW1499BDL

Lab Name: CEIMIC CORP Contract: BAKER

Lab Code: CEIMIC Case No.: 62470 SAS No.: _____ SDG No.: 35GW61

Matrix: (soil/water) WATER Lab Sample ID: 990324-07DL

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: L1687

Level: (low/med) LOW Date Received: 04/19/99

% Moisture: not dec. _____ Date Analyzed: 04/29/99

GC Column: DB624 ID: 0.180 (mm) Dilution Factor: 5.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	25	U
74-83-9	Bromomethane	25	U
75-01-4	Vinyl Chloride	6	DJ
75-00-3	Chloroethane	25	U
75-09-2	Methylene Chloride	25	U
67-64-1	Acetone	50	U
75-15-0	Carbon Disulfide	25	U
75-35-4	1,1-Dichloroethene	25	U
75-34-3	1,1-Dichloroethane	25	U
156-59-2	cis-1,2-Dichloroethene	410	D
156-60-5	trans-1,2-Dichloroethene	46	D
67-66-3	Chloroform	25	U
107-06-2	1,2-Dichloroethane	25	U
78-93-3	2-Butanone	50	U
71-55-6	1,1,1-Trichloroethane	25	U
56-23-5	Carbon Tetrachloride	25	U
75-27-4	Bromodichloromethane	25	U
78-87-5	1,2-Dichloropropane	25	U
10061-01-5	cis-1,3-Dichloropropene	25	U
79-01-6	Trichloroethene	340	D
124-48-1	Dibromochloromethane	25	U
79-00-5	1,1,2-Trichloroethane	25	U
71-43-2	Benzene	25	U
10061-02-6	trans-1,3-Dichloropropene	25	U
75-25-2	Bromoform	25	U
108-10-1	4-Methyl-2-Pentanone	50	U
591-78-6	2-Hexanone	50	U
127-18-4	Tetrachloroethene	25	U
79-34-5	1,1,2,2-Tetrachloroethane	25	U
108-88-3	Toluene	25	U
108-90-7	Chlorobenzene	25	U
100-41-4	Ethylbenzene	25	U
100-42-5	Styrene	25	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

IR35GW1499BDL

Name: CEIMIC CORP Contract: BAKER

Lab Code: CEIMIC Case No.: 62470 SAS No.: _____ SDG No.: 35GW61

Matrix: (soil/water) WATER Lab Sample ID: 990324-07DL

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: L1687

Level: (low/med) LOW Date Received: 04/19/99

% Moisture: not dec. _____ Date Analyzed: 04/29/99

GC Column: DB624 ID: 0.180 (mm) Dilution Factor: 5.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
1330-20-7	Xylene (total)	75	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

IR35GW14IW99B

Lab Name: CEIMIC CORP Contract: BAKER

Lab Code: CEIMIC Case No.: 62470 SAS No.: _____ SDG No.: 35GW61

Matrix: (soil/water) WATER Lab Sample ID: 990324-05

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: L1636

Level: (low/med) LOW Date Received: 04/19/99

% Moisture: not dec. _____ Date Analyzed: 04/28/99

GC Column: DB624 ID: 0.180 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	5	U
74-83-9	Bromomethane	5	U
75-01-4	Vinyl Chloride	3	J
75-00-3	Chloroethane	5	U
75-09-2	Methylene Chloride	5	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
156-59-2	cis-1,2-Dichloroethene	160	
156-60-5	trans-1,2-Dichloroethene	18	
67-66-3	Chloroform	.5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	70	
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	3	J
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

IR35GW14IW99B

Lab Name: CEIMIC CORP Contract: BAKER

Lab Code: CEIMIC Case No.: 62470 SAS No.: _____ SDG No.: 35GW61

Matrix: (soil/water) WATER Lab Sample ID: 990324-05

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: L1636

Level: (low/med) LOW Date Received: 04/19/99

% Moisture: not dec. ____ Date Analyzed: 04/28/99

GC Column: DB624 ID: 0.180 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
1330-20-7	Xylene (total)	15	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

IR35GW3199B

Lab Name: CEIMIC CORP Contract: BAKER

Lab Code: CEIMIC Case No.: 62470 SAS No.: _____ SDG No.: 35GW61

Matrix: (soil/water) WATER Lab Sample ID: 990324-02

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: L1633

Level: (low/med) LOW Date Received: 04/19/99

% Moisture: not dec. _____ Date Analyzed: 04/28/99

GC Column: DB624 ID: 0.180 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	5	U
74-83-9	Bromomethane	5	U
75-01-4	Vinyl Chloride	5	U
75-00-3	Chloroethane	5	U
75-09-2	Methylene Chloride	5	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
156-59-2	cis-1,2-Dichloroethene	5	U
156-60-5	trans-1,2-Dichloroethene	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U

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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

IR35GW3199B

Lab Name: CEIMIC CORP Contract: BAKER

Lab Code: CEIMIC Case No.: 62470 SAS No.: _____ SDG No.: 35GW61

Matrix: (soil/water) WATER Lab Sample ID: 990324-02

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: L1633

Level: (low/med) LOW Date Received: 04/19/99

% Moisture: not dec. _____ Date Analyzed: 04/28/99

GC Column: DB624 ID: 0.180 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
1330-20-7	Xylene (total)	15	U

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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

IR35GW31IW

Lab Name: CEIMIC CORP Contract: BAKER

Lab Code: CEIMIC Case No.: 62470 SAS No.: _____ SDG No.: 35GW61

Matrix: (soil/water) WATER Lab Sample ID: 990324-04

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: L1635

Level: (low/med) LOW Date Received: 04/19/99

% Moisture: not dec. ____ Date Analyzed: 04/28/99

GC Column: DB624 ID: 0.180 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	5	U
74-83-9	Bromomethane	5	U
75-01-4	Vinyl Chloride	5	
75-00-3	Chloroethane	5	U
75-09-2	Methylene Chloride	5	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
156-59-2	cis-1,2-Dichloroethene	230	E
156-60-5	trans-1,2-Dichloroethene	32	
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	88	
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	1	J
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

IR35GW31IW

Lab Name: CEIMIC CORP Contract: BAKER

Lab Code: CEIMIC Case No.: 62470 SAS No.: _____ SDG No.: 35GW61

Matrix: (soil/water) WATER Lab Sample ID: 990324-04

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: L1635

Level: (low/med) LOW Date Received: 04/19/99

% Moisture: not dec. ____ Date Analyzed: 04/28/99

GC Column: DB624 ID: 0.180 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
1330-20-7	Xylene (total)	15	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

IR35GW31IWDL

Name: CEIMIC CORP Contract: BAKER

Lab Code: CEIMIC Case No.: 62470 SAS No.: _____ SDG No.: 35GW61

Matrix: (soil/water) WATER Lab Sample ID: 990324-04DL

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: L1684

Level: (low/med) LOW Date Received: 04/19/99

% Moisture: not dec. _____ Date Analyzed: 04/29/99

GC Column: DB624 ID: 0.180 (mm) Dilution Factor: 2.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	5	DJ
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	5	DJ
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
156-59-2	cis-1,2-Dichloroethene	210	D
156-60-5	trans-1,2-Dichloroethene	30	D
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	20	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	81	D
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	20	U
591-78-6	2-Hexanone	20	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

IR35GW31IWDL

Lab Name: CEIMIC CORP Contract: BAKER

Lab Code: CEIMIC Case No.: 62470 SAS No.: _____ SDG No.: 35GW61

Matrix: (soil/water) WATER Lab Sample ID: 990324-04DL

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: L1684

Level: (low/med) LOW Date Received: 04/19/99

% Moisture: not dec. _____ Date Analyzed: 04/29/99

GC Column: DB624 ID: 0.180 (mm) Dilution Factor: 2.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
1330-20-7	Xylene (total)	30	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GW55
IR35~~GW35~~99B

Lab Name: CEIMIC CORP Contract: BAKER

Lab Code: CEIMIC Case No.: 62470 SAS No.: _____ SDG No.: 35GW61

Matrix: (soil/water) WATER Lab Sample ID: 990324-20

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: L1656

Level: (low/med) LOW Date Received: 04/19/99

% Moisture: not dec. ____ Date Analyzed: 04/29/99

GC Column: DB624 ID: 0.180 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	5	U
74-83-9	Bromomethane	5	U
75-01-4	Vinyl Chloride	4	J
75-00-3	Chloroethane	5	U
75-09-2	Methylene Chloride	5	U
67-64-1	Acetone	1	J
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
156-59-2	cis-1,2-Dichloroethene	270	E
156-60-5	trans-1,2-Dichloroethene	27	
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	130	
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	2	J
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	1	J
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

IR35GW3599B

Lab Name: CEIMIC CORP Contract: BAKER

Lab Code: CEIMIC Case No.: 62470 SAS No.: _____ SDG No.: 35GW61

Matrix: (soil/water) WATER Lab Sample ID: 990324-20

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: L1656

Level: (low/med) LOW Date Received: 04/19/99

% Moisture: not dec. ____ Date Analyzed: 04/29/99

GC Column: DB624 ID: 0.180 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
1330-20-7	Xylene (total)	15	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SW56
IR35GW3599BDL

Lab Name: CEIMIC CORP Contract: BAKER

Lab Code: CEIMIC Case No.: 62470 SAS No.: _____ SDG No.: 35GW61

Matrix: (soil/water) WATER Lab Sample ID: 990324-20DL

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: L1686

Level: (low/med) LOW Date Received: 04/19/99

% Moisture: not dec. _____ Date Analyzed: 04/29/99

GC Column: DB624 ID: 0.180 (mm) Dilution Factor: 2.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	4	DJ
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	20	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
156-59-2	cis-1,2-Dichloroethene	260	D
156-60-5	trans-1,2-Dichloroethene	25	D
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	20	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	120	D
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	20	U
591-78-6	2-Hexanone	20	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

IR35GW3599BDL

Lab Name: CEIMIC CORP Contract: BAKER

Lab Code: CEIMIC Case No.: 62470 SAS No.: _____ SDG No.: 35GW61

Matrix: (soil/water) WATER Lab Sample ID: 990324-20DL

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: L1686

Level: (low/med) LOW Date Received: 04/19/99

% Moisture: not dec. ____ Date Analyzed: 04/29/99

GC Column: DB624 ID: 0.180 (mm) Dilution Factor: 2.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
1330-20-7	Xylene (total)	30	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

IR35GW40IW

Lab Name: CEIMIC CORP Contract: BAKER

Lab Code: CEIMIC Case No.: 62470 SAS No.: _____ SDG No.: 35GW61

Matrix: (soil/water) WATER Lab Sample ID: 990324-10

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: L1641

Level: (low/med) LOW Date Received: 04/19/99

% Moisture: not dec. _____ Date Analyzed: 04/28/99

GC Column: DB624 ID: 0.180 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	5	U
74-83-9	Bromomethane	5	U
75-01-4	Vinyl Chloride	6	
75-00-3	Chloroethane	5	U
75-09-2	Methylene Chloride	5	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
156-59-2	cis-1,2-Dichloroethene	270	E
156-60-5	trans-1,2-Dichloroethene	11	
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	7	
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

IR35GW40IW

Lab Name: CEIMIC CORP Contract: BAKER

Lab Code: CEIMIC Case No.: 62470 SAS No.: _____ SDG No.: 35GW61

Matrix: (soil/water) WATER Lab Sample ID: 990324-10

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: L1641

Level: (low/med) LOW Date Received: 04/19/99

% Moisture: not dec. _____ Date Analyzed: 04/28/99

GC Column: DB624 ID: 0.180 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
1330-20-7	Xylene (total)	15	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

IR35GW40IWDL

Lab Name: CEIMIC CORP Contract: BAKER

Lab Code: CEIMIC Case No.: 62470 SAS No.: _____ SDG No.: 35GW61

Matrix: (soil/water) WATER Lab Sample ID: 990324-10DL

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: L1685

Level: (low/med) LOW Date Received: 04/19/99

% Moisture: not dec. ____ Date Analyzed: 04/29/99

GC Column: DB624 ID: 0.180 (mm) Dilution Factor: 2.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	6	DJ
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	20	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
156-59-2	cis-1,2-Dichloroethene	260	D
156-60-5	trans-1,2-Dichloroethene	11	D
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	20	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	7	DJ
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	20	U
591-78-6	2-Hexanone	20	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

IR35GW40IWDL

Lab Name: CEIMIC CORP Contract: BAKER

Lab Code: CEIMIC Case No.: 62470 SAS No.: _____ SDG No.: 35GW61

Matrix: (soil/water) WATER Lab Sample ID: 990324-10DL

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: L1685

Level: (low/med) LOW Date Received: 04/19/99

% Moisture: not dec. ____ Date Analyzed: 04/29/99

GC Column: DB624 ID: 0.180 (mm) Dilution Factor: 2.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
1330-20-7	Xylene (total)	30	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

IR35GW4799B

Lab Name: CEIMIC CORP Contract: BAKER

Lab Code: CEIMIC Case No.: 62470 SAS No.: _____ SDG No.: 35GW61

Matrix: (soil/water) WATER Lab Sample ID: 990324-16

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: L1652

Level: (low/med) LOW Date Received: 04/19/99

% Moisture: not dec. _____ Date Analyzed: 04/29/99

GC Column: DB624 ID: 0.180 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	5	U
74-83-9	Bromomethane	5	U
75-01-4	Vinyl Chloride	1	J
75-00-3	Chloroethane	5	U
75-09-2	Methylene Chloride	5	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
156-59-2	cis-1,2-Dichloroethene	100	
156-60-5	trans-1,2-Dichloroethene	6	
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	16	
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	2	J
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

IR35GW4799B

Lab Name: CEIMIC CORP Contract: BAKER

Lab Code: CEIMIC Case No.: 62470 SAS No.: _____ SDG No.: 35GW61

Matrix: (soil/water) WATER Lab Sample ID: 990324-16

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: L1652

Level: (low/med) LOW Date Received: 04/19/99

% Moisture: not dec. _____ Date Analyzed: 04/29/99

GC Column: DB624 ID: 0.180 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
1330-20-7	Xylene (total)	15	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

IR35GW47IW99B

Lab Name: CEIMIC CORP Contract: BAKER

Lab Code: CEIMIC Case No.: 62470 SAS No.: _____ SDG No.: 35GW61

Matrix: (soil/water) WATER Lab Sample ID: 990324-15

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: L1651

Level: (low/med) LOW Date Received: 04/19/99

% Moisture: not dec. _____ Date Analyzed: 04/29/99

GC Column: DB624 ID: 0.180 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	5	U
74-83-9	Bromomethane	5	U
75-01-4	Vinyl Chloride	1	J
75-00-3	Chloroethane	5	U
75-09-2	Methylene Chloride	5	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
156-59-2	cis-1,2-Dichloroethene	55	
156-60-5	trans-1,2-Dichloroethene	4	J
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	7	
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

IR35GW47IW99B

Lab Name: CEIMIC CORP Contract: BAKER

Lab Code: CEIMIC Case No.: 62470 SAS No.: _____ SDG No.: 35GW61

Matrix: (soil/water) WATER Lab Sample ID: 990324-15

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: L1651

Level: (low/med) LOW Date Received: 04/19/99

% Moisture: not dec. _____ Date Analyzed: 04/29/99

GC Column: DB624 ID: 0.180 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
1330-20-7	Xylene (total)	15	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

IR35GW55IW

Lab Name: CEIMIC CORP Contract: BAKER

Lab Code: CEIMIC Case No.: 62470 SAS No.: _____ SDG No.: 35GW61

Matrix: (soil/water) WATER Lab Sample ID: 990324-13

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: L1649

Level: (low/med) LOW Date Received: 04/19/99

% Moisture: not dec. _____ Date Analyzed: 04/29/99

GC Column: DB624 ID: 0.180 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	5	U
74-83-9	Bromomethane	5	U
75-01-4	Vinyl Chloride	39	
75-00-3	Chloroethane	5	U
75-09-2	Methylene Chloride	5	U
67-64-1	Acetone	2	J
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	4	J
75-34-3	1,1-Dichloroethane	5	U
156-59-2	cis-1,2-Dichloroethene	1100	E
156-60-5	trans-1,2-Dichloroethene	180	
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	830	E
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	1	J
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	2	J
79-34-5	1,1,2,2-Tetrachloroethane	8	
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

IR35GW55IW

Lab Name: CEIMIC CORP Contract: BAKER

Lab Code: CEIMIC Case No.: 62470 SAS No.: _____ SDG No.: 35GW61

Matrix: (soil/water) WATER Lab Sample ID: 990324-13

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: L1649

Level: (low/med) LOW Date Received: 04/19/99

% Moisture: not dec. _____ Date Analyzed: 04/29/99

GC Column: DB624 ID: 0.180 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
1330-20-7	Xylene (total)	15	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

IR35GW55IWDL

Lab Name: CEIMIC CORP Contract: BAKER

Lab Code: CEIMIC Case No.: 62470 SAS No.: _____ SDG No.: 35GW61

Matrix: (soil/water) WATER Lab Sample ID: 990324-13DL

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: L1690

Level: (low/med) LOW Date Received: 04/19/99

% Moisture: not dec. ____ Date Analyzed: 04/29/99

GC Column: DB624 ID: 0.180 (mm) Dilution Factor: 10.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	50	U
74-83-9	Bromomethane	50	U
75-01-4	Vinyl Chloride	37	DJ
75-00-3	Chloroethane	50	U
75-09-2	Methylene Chloride	50	U
67-64-1	Acetone	100	U
75-15-0	Carbon Disulfide	50	U
75-35-4	1,1-Dichloroethene	50	U
75-34-3	1,1-Dichloroethane	50	U
156-59-2	cis-1,2-Dichloroethene	1200	D
156-60-5	trans-1,2-Dichloroethene	190	D
67-66-3	Chloroform	50	U
107-06-2	1,2-Dichloroethane	50	U
78-93-3	2-Butanone	100	U
71-55-6	1,1,1-Trichloroethane	50	U
56-23-5	Carbon Tetrachloride	50	U
75-27-4	Bromodichloromethane	50	U
78-87-5	1,2-Dichloropropane	50	U
10061-01-5	cis-1,3-Dichloropropene	50	U
79-01-6	Trichloroethene	950	D
124-48-1	Dibromochloromethane	50	U
79-00-5	1,1,2-Trichloroethane	50	U
71-43-2	Benzene	50	U
10061-02-6	trans-1,3-Dichloropropene	50	U
75-25-2	Bromoform	50	U
108-10-1	4-Methyl-2-Pentanone	100	U
591-78-6	2-Hexanone	100	U
127-18-4	Tetrachloroethene	50	U
79-34-5	1,1,2,2-Tetrachloroethane	50	U
108-88-3	Toluene	50	U
108-90-7	Chlorobenzene	50	U
100-41-4	Ethylbenzene	50	U
100-42-5	Styrene	50	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

IR35GW55IWDL

Lab Name: CEIMIC CORP Contract: BAKER

Lab Code: CEIMIC Case No.: 62470 SAS No.: _____ SDG No.: 35GW61

Matrix: (soil/water) WATER Lab Sample ID: 990324-13DL

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: L1690

Level: (low/med) LOW Date Received: 04/19/99

% Moisture: not dec. ____ Date Analyzed: 04/29/99

GC Column: DB624 ID: 0.180 (mm) Dilution Factor: 10.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
1330-20-7	Xylene (total)	150	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

IR35GW6199B

Lab Name: CEIMIC CORP Contract: BAKER

Lab Code: CEIMIC Case No.: 62470 SAS No.: _____ SDG No.: 35GW61

Matrix: (soil/water) WATER Lab Sample ID: 990324-01

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: L1632

Level: (low/med) LOW Date Received: 04/19/99

% Moisture: not dec. ____ Date Analyzed: 04/28/99

GC Column: DB624 ID: 0.180 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	5	U
74-83-9	Bromomethane	5	U
75-01-4	Vinyl Chloride	2	J
75-00-3	Chloroethane	5	U
75-09-2	Methylene Chloride	5	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
156-59-2	cis-1,2-Dichloroethene	42	
156-60-5	trans-1,2-Dichloroethene	2	J
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	3	J
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

IR35GW6199B

Lab Name: CEIMIC CORP Contract: BAKER

Lab Code: CEIMIC Case No.: 62470 SAS No.: _____ SDG No.: 35GW61

Matrix: (soil/water) WATER Lab Sample ID: 990324-01

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: L1632

Level: (low/med) LOW Date Received: 04/19/99

% Moisture: not dec. _____ Date Analyzed: 04/28/99

GC Column: DB624 ID: 0.180 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
1330-20-7	Xylene (total)	15	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

IR35GW6299B

Name: CEIMIC CORP Contract: BAKER

Lab Code: CEIMIC Case No.: 62470 SAS No.: _____ SDG No.: 35GW61

Matrix: (soil/water) WATER Lab Sample ID: 990324-06

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: L1637

Level: (low/med) LOW Date Received: 04/19/99

% Moisture: not dec. _____ Date Analyzed: 04/28/99

GC Column: DB624 ID: 0.180 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	5	U
74-83-9	Bromomethane	5	U
75-01-4	Vinyl Chloride	5	U
75-00-3	Chloroethane	5	U
75-09-2	Methylene Chloride	5	U
67-64-1	Acetone	3	J
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
156-59-2	cis-1,2-Dichloroethene	8	
156-60-5	trans-1,2-Dichloroethene	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

IR35GW6299B

Lab Name: CEIMIC CORP Contract: BAKER

Lab Code: CEIMIC Case No.: 62470 SAS No.: _____ SDG No.: 35GW61

Matrix: (soil/water) WATER Lab Sample ID: 990324-06

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: L1637

Level: (low/med) LOW Date Received: 04/19/99

% Moisture: not dec. _____ Date Analyzed: 04/28/99

GC Column: DB624 ID: 0.180 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
1330-20-7	Xylene (total)	15	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

IR35GW63IW99B

Lab Name: CEIMIC CORP Contract: BAKER

Lab Code: CEIMIC Case No.: 62470 SAS No.: _____ SDG No.: 35GW61

Matrix: (soil/water) WATER Lab Sample ID: 990324-08

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: L1639

Level: (low/med) LOW Date Received: 04/19/99

% Moisture: not dec. _____ Date Analyzed: 04/28/99

GC Column: DB624 ID: 0.180 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	5	U
74-83-9	Bromomethane	5	U
75-01-4	Vinyl Chloride	5	U
75-00-3	Chloroethane	5	U
75-09-2	Methylene Chloride	5	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
156-59-2	cis-1,2-Dichloroethene	2	J
156-60-5	trans-1,2-Dichloroethene	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

IR35GW63IW99B

Lab Name: CEIMIC CORP Contract: BAKER

Lab Code: CEIMIC Case No.: 62470 SAS No.: _____ SDG No.: 35GW61

Matrix: (soil/water) WATER Lab Sample ID: 990324-08

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: L1639

Level: (low/med) LOW Date Received: 04/19/99

% Moisture: not dec. _____ Date Analyzed: 04/28/99

GC Column: DB624 ID: 0.180 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
1330-20-7	Xylene (total)	15	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

IR35GW64IW

Lab Name: CEIMIC CORP Contract: BAKER

Lab Code: CEIMIC Case No.: 62470 SAS No.: _____ SDG No.: 35GW61

Matrix: (soil/water) WATER Lab Sample ID: 990324-17

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: L1653

Level: (low/med) LOW Date Received: 04/19/99

% Moisture: not dec. _____ Date Analyzed: 04/29/99

GC Column: DB624 ID: 0.180 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	5	U
74-83-9	Bromomethane	5	U
75-01-4	Vinyl Chloride	16	
75-00-3	Chloroethane	5	U
75-09-2	Methylene Chloride	5	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	1	J
75-34-3	1,1-Dichloroethane	5	U
156-59-2	cis-1,2-Dichloroethene	410	E
156-60-5	trans-1,2-Dichloroethene	40	
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	170	
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

IR35GW64IW

Lab Name: CEIMIC CORP Contract: BAKER

Lab Code: CEIMIC Case No.: 62470 SAS No.: _____ SDG No.: 35GW61

Matrix: (soil/water) WATER Lab Sample ID: 990324-17

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: L1653

Level: (low/med) LOW Date Received: 04/19/99

% Moisture: not dec. _____ Date Analyzed: 04/29/99

GC Column: DB624 ID: 0.180 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
1330-20-7	Xylene (total)	15	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

IR35GW64IWDL

Lab Name: CEIMIC CORP Contract: BAKER

Lab Code: CEIMIC Case No.: 62470 SAS No.: _____ SDG No.: 35GW61

Matrix: (soil/water) WATER Lab Sample ID: 990324-17DL

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: L1689

Level: (low/med) LOW Date Received: 04/19/99

% Moisture: not dec. _____ Date Analyzed: 04/29/99

GC Column: DB624 ID: 0.180 (mm) Dilution Factor: 5.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	25	U
74-83-9	Bromomethane	25	U
75-01-4	Vinyl Chloride	15	DJ
75-00-3	Chloroethane	25	U
75-09-2	Methylene Chloride	25	U
67-64-1	Acetone	50	U
75-15-0	Carbon Disulfide	25	U
75-35-4	1,1-Dichloroethene	25	U
75-34-3	1,1-Dichloroethane	25	U
156-59-2	cis-1,2-Dichloroethene	400	D
156-60-5	trans-1,2-Dichloroethene	41	D
67-66-3	Chloroform	25	U
107-06-2	1,2-Dichloroethane	25	U
78-93-3	2-Butanone	50	U
71-55-6	1,1,1-Trichloroethane	25	U
56-23-5	Carbon Tetrachloride	25	U
75-27-4	Bromodichloromethane	25	U
78-87-5	1,2-Dichloropropane	25	U
10061-01-5	cis-1,3-Dichloropropene	25	U
79-01-6	Trichloroethene	160	D
124-48-1	Dibromochloromethane	25	U
79-00-5	1,1,2-Trichloroethane	25	U
71-43-2	Benzene	25	U
10061-02-6	trans-1,3-Dichloropropene	25	U
75-25-2	Bromoform	25	U
108-10-1	4-Methyl-2-Pentanone	50	U
591-78-6	2-Hexanone	50	U
127-18-4	Tetrachloroethene	25	U
79-34-5	1,1,2,2-Tetrachloroethane	25	U
108-88-3	Toluene	25	U
108-90-7	Chlorobenzene	25	U
100-41-4	Ethylbenzene	25	U
100-42-5	Styrene	25	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

IR35GW64IWDL

Lab Name: CEIMIC CORP Contract: BAKER

Lab Code: CEIMIC Case No.: 62470 SAS No.: _____ SDG No.: 35GW61

Matrix: (soil/water) WATER Lab Sample ID: 990324-17DL

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: L1689

Level: (low/med) LOW Date Received: 04/19/99

% Moisture: not dec. ____ Date Analyzed: 04/29/99

GC Column: DB624 ID: 0.180 (mm) Dilution Factor: 5.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
1330-20-7	Xylene (total)	75	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

IR35GW65IW99B

Lab Name: CEIMIC CORP Contract: BAKER

Lab Code: CEIMIC Case No.: 62470 SAS No.: _____ SDG No.: 35GW61

Matrix: (soil/water) WATER Lab Sample ID: 990324-18

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: L1654

Level: (low/med) LOW Date Received: 04/19/99

% Moisture: not dec. _____ Date Analyzed: 04/29/99

GC Column: DB624 ID: 0.180 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	5	U
74-83-9	Bromomethane	5	U
75-01-4	Vinyl Chloride	5	U
75-00-3	Chloroethane	5	U
75-09-2	Methylene Chloride	5	U
67-64-1	Acetone	1	J
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
156-59-2	cis-1,2-Dichloroethene	5	U
156-60-5	trans-1,2-Dichloroethene	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

IR35GW65IW99B

Lab Name: CEIMIC CORP Contract: BAKER

Lab Code: CEIMIC Case No.: 62470 SAS No.: _____ SDG No.: 35GW61

Matrix: (soil/water) WATER Lab Sample ID: 990324-18

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: L1654

Level: (low/med) LOW Date Received: 04/19/99

% Moisture: not dec. ____ Date Analyzed: 04/29/99

GC Column: DB624 ID: 0.180 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
1330-20-7	Xylene (total)	15	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

IR35SW0199B

Lab Name: CEIMIC CORP Contract: BAKER

Lab Code: CEIMIC Case No.: 62470 SAS No.: _____ SDG No.: 35GW61

Matrix: (soil/water) WATER Lab Sample ID: 990324-03

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: L1634

Level: (low/med) LOW Date Received: 04/19/99

% Moisture: not dec. _____ Date Analyzed: 04/28/99

GC Column: DB624 ID: 0.180 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	5	U
74-83-9	Bromomethane	5	U
75-01-4	Vinyl Chloride	5	U
75-00-3	Chloroethane	5	U
75-09-2	Methylene Chloride	5	U
67-64-1	Acetone	3	J
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
156-59-2	cis-1,2-Dichloroethene	5	U
156-60-5	trans-1,2-Dichloroethene	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	1	J
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

IR35SW0199B

Lab Name: CEIMIC CORP Contract: BAKER

Lab Code: CEIMIC Case No.: 62470 SAS No.: _____ SDG No.: 35GW61

Matrix: (soil/water) WATER Lab Sample ID: 990324-03

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: L1634

Level: (low/med) LOW Date Received: 04/19/99

% Moisture: not dec. _____ Date Analyzed: 04/28/99

GC Column: DB624 ID: 0.180 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
1330-20-7	Xylene (total)	15	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

IR35SW0299B

Name: CEIMIC CORP Contract: BAKER

Lab Code: CEIMIC Case No.: 62470 SAS No.: _____ SDG No.: 35GW61

Matrix: (soil/water) WATER Lab Sample ID: 990324-19

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: L1655

Level: (low/med) LOW Date Received: 04/19/99

% Moisture: not dec. ____ Date Analyzed: 04/29/99

GC Column: DB624 ID: 0.180 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	5	U
74-83-9	Bromomethane	5	U
75-01-4	Vinyl Chloride	5	U
75-00-3	Chloroethane	5	U
75-09-2	Methylene Chloride	5	U
67-64-1	Acetone	8	J
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
156-59-2	cis-1,2-Dichloroethene	5	U
156-60-5	trans-1,2-Dichloroethene	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

IR35SW0299B

Name: CEIMIC CORP Contract: BAKER

Lab Code: CEIMIC Case No.: 62470 SAS No.: _____ SDG No.: 35GW61

Matrix: (soil/water) WATER Lab Sample ID: 990324-19

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: L1655

Level: (low/med) LOW Date Received: 04/19/99

% Moisture: not dec. _____ Date Analyzed: 04/29/99

GC Column: DB624 ID: 0.180 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
1330-20-7	Xylene (total)	15	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

IR35SW0399B

Lab Name: CEIMIC CORP Contract: BAKER

Lab Code: CEIMIC Case No.: 62470 SAS No.: _____ SDG No.: 35GW61

Matrix: (soil/water) WATER Lab Sample ID: 990324-14

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: L1650

Level: (low/med) LOW Date Received: 04/19/99

% Moisture: not dec. _____ Date Analyzed: 04/29/99

GC Column: DB624 ID: 0.180 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	5	U
74-83-9	Bromomethane	5	U
75-01-4	Vinyl Chloride	5	U
75-00-3	Chloroethane	5	U
75-09-2	Methylene Chloride	5	U
67-64-1	Acetone	3	J
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
156-59-2	cis-1,2-Dichloroethene	5	U
156-60-5	trans-1,2-Dichloroethene	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

IR35SW0399B

b Name: CEIMIC CORP Contract: BAKER

Lab Code: CEIMIC Case No.: 62470 SAS No.: _____ SDG No.: 35GW61

Matrix: (soil/water) WATER Lab Sample ID: 990324-14

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: L1650

Level: (low/med) LOW Date Received: 04/19/99

% Moisture: not dec. ____ Date Analyzed: 04/29/99

GC Column: DB624 ID: 0.180 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
1330-20-7	Xylene (total)	15	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

IR35TB0199B

Name: CEIMIC CORP Contract: BAKER

Lab Code: CEIMIC Case No.: 62470 SAS No.: _____ SDG No.: 35GW61

Matrix: (soil/water) WATER Lab Sample ID: 990324-09

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: L1640

Level: (low/med) LOW Date Received: 04/19/99

% Moisture: not dec. _____ Date Analyzed: 04/28/99

GC Column: DB624 ID: 0.180 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	5	U
74-83-9	Bromomethane	5	U
75-01-4	Vinyl Chloride	5	U
75-00-3	Chloroethane	5	U
75-09-2	Methylene Chloride	5	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
156-59-2	cis-1,2-Dichloroethene	5	U
156-60-5	trans-1,2-Dichloroethene	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

IR35TB0199B

Lab Name: CEIMIC CORP Contract: BAKER

Lab Code: CEIMIC Case No.: 62470 SAS No.: _____ SDG No.: 35GW61

Matrix: (soil/water) WATER Lab Sample ID: 990324-09

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: L1640

Level: (low/med) LOW Date Received: 04/19/99

% Moisture: not dec. ____ Date Analyzed: 04/28/99

GC Column: DB624 ID: 0.180 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
1330-20-7	Xylene (total)	15	U

Headspace Analysis by GC/FID
SW846 Method 3810 Modified

Client: Baker Environmental

Client Sample ID: IR35-GW61-99B

Date Sampled: 04/16/99

Date Sample Received: 04/19/99

Matrix: Aqueous

Laboratory ID: 990324-01

Date Sample Extracted: 04/29/99

Date Sample Analyzed: 04/29/99

Associated Method Blank: M0429-B2

Final Extract Volume (mL):1.0

Dilution Factor: 1

Concentration in: ug/L (ppb)

Target Analyte	Sample Concentration	Quantitation Limit
METHANE	160	2
ETHANE	ND	1
ETHENE	ND	2

ND = Not detected

Reported by: HC

Approved by: HC

Headspace Analysis by GC/FID
SW846 Method 3810 Modified

Client: Baker Environmental
Client Sample ID: IR35-GW31-99B
Date Sampled: 04/16/99
Date Sample Received: 04/19/99
Matrix: Aqueous

Laboratory ID: 990324-02
Date Sample Extracted: 04/29/99
Date Sample Analyzed: 04/29/99
Associated Method Blank: M0429-B2
Final Extract Volume (mL):1.0
Dilution Factor: 1

Concentration in: ug/L (ppb)

Target Analyte	Sample Concentration	Quantitation Limit
METHANE	7.6	2
ETHANE	ND	1
ETHENE	ND	2

ND = Not detected

Reported by: HC

Approved by: HC

Headspace Analysis by GC/FID
SW846 Method 3810 Modified

Client: Baker Environmental
Client Sample ID: IR35-GW31IW-99B
Date Sampled: 04/16/99
Date Sample Received: 04/19/99
Matrix: Aqueous

Laboratory ID: 990324-04
Date Sample Extracted: 04/29/99
Date Sample Analyzed: 04/29/99
Associated Method Blank: M0429-B2
Final Extract Volume (mL):1.0
Dilution Factor: 1

Concentration in: ug/L (ppb)

Target Analyte	Sample Concentration	Quantitation Limit
METHANE	280	2
ETHANE	ND	1
ETHENE	ND	2

ND = Not detected

Reported by: HL

Approved by: BK

Headspace Analysis by GC/FID
SW846 Method 3810 Modified

Client: Baker Environmental
Client Sample ID: IR35-GW14IW-99B
Date Sampled: 04/16/99
Date Sample Received: 04/19/99
Matrix: Aqueous

Laboratory ID: 990324-05
Date Sample Extracted: 04/29/99
Date Sample Analyzed: 04/29/99
Associated Method Blank: M0429-B2
Final Extract Volume (mL):1.0
Dilution Factor: 1

Concentration in: ug/L (ppb)

Target Analyte	Sample Concentration	Quantitation Limit
METHANE	1200	2
ETHANE	ND	1
ETHENE	ND	2

ND = Not detected

Reported by: _____ Approved by: _____

Headspace Analysis by GC/FID
SW846 Method 3810 Modified

Client: Baker Environmental
Client Sample ID: IR35-GW62-99B
Date Sampled: 04/16/99
Date Sample Received: 04/19/99
Matrix: Aqueous

Laboratory ID: 990324-06
Date Sample Extracted: 04/29/99
Date Sample Analyzed: 04/29/99
Associated Method Blank: M0429-B2
Final Extract Volume (mL):1.0
Dilution Factor: 1

Concentration in: ug/L (ppb)

Target Analyte	Sample Concentration	Quantitation Limit
METHANE	540	2
ETHANE	ND	1
ETHENE	ND	2

ND = Not detected

Reported by: HL

Approved by: HL

Form I

Headspace Analysis by GC/FID
SW846 Method 3810 Modified

Client: Baker Environmental
Client Sample ID: IR35-GW14-99B
Date Sampled: 04/16/99
Date Sample Received: 04/19/99
Matrix: Aqueous

Laboratory ID: 990324-07
Date Sample Extracted: 04/29/99
Date Sample Analyzed: 04/29/99
Associated Method Blank: M0429-B2
Final Extract Volume (mL):1.0
Dilution Factor: 1

Concentration in: ug/L (ppb)

Target Analyte	Sample Concentration	Quantitation Limit
METHANE	1500	2
ETHANE	ND	1
ETHENE	ND	2

ND = Not detected

Reported by: HL

Approved by: HL

Headspace Analysis by GC/FID
SW846 Method 3810 Modified

Client: Baker Environmental

Client Sample ID: IR35-GW63IW-99B

Date Sampled: 04/16/99

Date Sample Received: 04/19/99

Matrix: Aqueous

Laboratory ID: 990324-08

Date Sample Extracted: 04/29/99

Date Sample Analyzed: 04/29/99

Associated Method Blank: M0429-B2

Final Extract Volume (mL):1.0

Dilution Factor: 1

Concentration in: ug/L (ppb)

Target Analyte	Sample Concentration	Quantitation Limit
METHANE	16	2
ETHANE	ND	1
ETHENE	ND	2

ND = Not detected

Reported by: HC

Approved by: HC

Headspace Analysis by GC/FID
SW846 Method 3810 Modified

Client: Baker Environmental
Client Sample ID: IR35-GW40IW-99B
Date Sampled: 04/16/99
Date Sample Received: 04/19/99
Matrix: Aqueous

Laboratory ID: 990324-10
Date Sample Extracted: 04/29/99
Date Sample Analyzed: 04/29/99
Associated Method Blank: M0429-B2
Final Extract Volume (mL):1.0
Dilution Factor: 1

Concentration in: ug/L (ppb)

Target Analyte	Sample Concentration	Quantitation Limit
METHANE	12	2
ETHANE	ND	1
ETHENE	ND	2

ND = Not detected

Reported by: HL

Approved by: HL

Headspace Analysis by GC/FID
SW846 Method 3810 Modified

Client: Baker Environmental
Client Sample ID: IR35-GW10-99B
Date Sampled: 04/16/99
Date Sample Received: 04/19/99
Matrix: Aqueous

Laboratory ID: 990324-11
Date Sample Extracted: 04/29/99
Date Sample Analyzed: 04/29/99
Associated Method Blank: M0429-B2
Final Extract Volume (mL):1.0
Dilution Factor: 1

Concentration in: ug/L (ppb)

Target Analyte	Sample Concentration	Quantitation Limit
METHANE	140	2
ETHANE	ND	1
ETHENE	ND	2

ND = Not detected

Reported by: HL

Approved by: [signature]

Headspace Analysis by GC/FID
SW846 Method 3810 Modified

Client: Baker Environmental
Client Sample ID: IR35-GW10IW-99B
Date Sampled: 04/16/99
Date Sample Received: 04/19/99
Matrix: Aqueous

Laboratory ID: 990324-12
Date Sample Extracted: 04/29/99
Date Sample Analyzed: 04/29/99
Associated Method Blank: M0429-B2
Final Extract Volume (mL):1.0
Dilution Factor: 1

Concentration in: ug/L (ppb)

Target Analyte	Sample Concentration	Quantitation Limit
METHANE	2100	2
ETHANE	ND	1
ETHENE	ND	2

ND = Not detected

Reported by: HC

Approved by: HC

Headspace Analysis by GC/FID
SW846 Method 3810 Modified

Client: Baker Environmental
Client Sample ID: IR35-GW55IW-99B
Date Sampled: 04/16/99
Date Sample Received: 04/19/99
Matrix: Aqueous

Laboratory ID: 990324-13
Date Sample Extracted: 04/29/99
Date Sample Analyzed: 04/29/99
Associated Method Blank: M0429-B2
Final Extract Volume (mL):1.0
Dilution Factor: 1

Concentration in: ug/L (ppb)

Target Analyte	Sample Concentration	Quantitation Limit
METHANE	160	2
ETHANE	ND	1
ETHENE	ND	2

ND = Not detected

Reported by: HL

Approved by: [signature]

Headspace Analysis by GC/FID
SW846 Method 3810 Modified

Client: Baker Environmental

Client Sample ID: IR35-GW47IW-99B

Date Sampled: 04/16/99

Date Sample Received: 04/19/99

Matrix: Aqueous

Laboratory ID: 990324-15

Date Sample Extracted: 04/29/99

Date Sample Analyzed: 04/29/99

Associated Method Blank: M0429-B2

Final Extract Volume (mL):1.0

Dilution Factor: 1

Concentration in: ug/L (ppb)

Target Analyte	Sample Concentration	Quantitation Limit
METHANE	110	2
ETHANE	ND	1
ETHENE	ND	2

ND = Not detected

Reported by: _____ Approved by: _____

Headspace Analysis by GC/FID
SW846 Method 3810 Modified

Client: Baker Environmental

Client Sample ID: IR35-GW47-99B

Date Sampled: 04/16/99

Date Sample Received: 04/19/99

Matrix: Aqueous

Laboratory ID: 990324-16

Date Sample Extracted: 04/29/99

Date Sample Analyzed: 04/29/99

Associated Method Blank: M0429-B2

Final Extract Volume (mL):1.0

Dilution Factor: 1

Concentration in: ug/L (ppb)

Target Analyte	Sample Concentration	Quantitation Limit
METHANE	60	2
ETHANE	ND	1
ETHENE	ND	2

ND = Not detected

Reported by: _____ Approved by: _____

Headspace Analysis by GC/FID
SW846 Method 3810 Modified

Client: Baker Environmental
Client Sample ID: IR35-GW64IW-99B
Date Sampled: 04/16/99
Date Sample Received: 04/19/99
Matrix: Aqueous

Laboratory ID: 990324-17
Date Sample Extracted: 04/29/99
Date Sample Analyzed: 04/29/99
Associated Method Blank: M0429-B2
Final Extract Volume (mL):1.0
Dilution Factor: 1

Concentration in: ug/L (ppb)

Target Analyte	Sample Concentration	Quantitation Limit
METHANE	33	2
ETHANE	ND	1
ETHENE	ND	2

ND = Not detected

Reported by: _____ Approved by: _____

Headspace Analysis by GC/FID
SW846 Method 3810 Modified

Client: Baker Environmental

Client Sample ID: IR35-GW65IW-99B

Date Sampled: 04/16/99

Date Sample Received: 04/19/99

Matrix: Aqueous

Laboratory ID: 990324-18

Date Sample Extracted: 04/29/99

Date Sample Analyzed: 04/29/99

Associated Method Blank: M0429-B2

Final Extract Volume (mL):1.0

Dilution Factor: 1

Concentration in: ug/L (ppb)

Target Analyte	Sample Concentration	Quantitation Limit
METHANE	16	2
ETHANE	ND	1
ETHENE	ND	2

ND = Not detected

Reported by: HC

Approved by: HC

Headspace Analysis by GC/FID
SW846 Method 3810 Modified

Client: Baker Environmental

Client Sample ID: IR35-GW55-99B

Date Sampled: 04/16/99

Date Sample Received: 04/19/99

Matrix: Aqueous

Laboratory ID: 990324-20

Date Sample Extracted: 04/29/99

Date Sample Analyzed: 04/29/99

Associated Method Blank: M0429-B2

Final Extract Volume (mL):1.0

Dilution Factor: 1

Concentration in: ug/L (ppb)

Target Analyte	Sample Concentration	Quantitation Limit
METHANE	300	2
ETHANE	ND	1
ETHENE	ND	2

ND = Not detected

Reported by: HL

Approved by: HL

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