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QUARTERLY GROUNDWATER QUALITY REPORT (YEAR TWO, QUARTER FOUR) GROUNDWATER INTERIM REMEDIAL ACTION

DUNN FIELD

MEMPHIS DEFENSE DEPOT, TENNESSEE

PREPARED FOR



MOBILE DISTRICT COE

CONTRACT NO. DACA01-99-D-0040

BY

JACOBS ENGINEERING GROUP

MARYLAND HEIGHTS, MISSOURI

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1.0 INTRODUCTION

This report summarizes the results of Year Two, Fourth Quarter monitoring (Y2Q4) for the Groundwater Interim Remedial Action (IRA) system at the Dunn Field area of the Memphis Defense Depot, Memphis, Tennessee (DDMT).

1.1 Scope of Work

This report is for the period from October through December 2000. System monitoring was performed in accordance with "Groundwater Interim Remedial Action, Defense Depot Memphis, Tennessee, Operations and Maintenance Plan" prepared by CH2M-Hill in May 1998 and Amendment Number 1 dated September, 1999. The plan contains an overview of the recovery system and its functions. Start-up, operation, and shutdown procedures are detailed, and requirements for sampling, monitoring and reporting are specified.

1.2 Site Description and Background

DDMT covers 642 acres in Shelby County, Tennessee (Figure 1). The facility is approximately four miles southeast of the central business district and one mile northwest of Memphis International Airport. Operations began in 1942 with the mission to inventory and supply materials for the United States Army. In 1964, its mission was expanded to serve as one of the principal distribution centers for a complete range of military commodities. Past activities at DDMT included a wide range of storage, distribution, and maintenance practices. DDMT has been closed since 1997 and is maintained by the Memphis Depot Caretaker Division, under the control of the Defense Depot, Susquehanna, Pennsylvania/Defense Logistics Agency (DLA). DDMT is currently undergoing Base Realignment and Closure (BRAC) activities.

Dunn Field, also called OU-1, consists of 68 acres of land located north of the main installation, across Dunn Road (Figure 1). The northwestern quadrant of Dunn Field was used as a landfill area. The southwestern and southeastern quadrants were used as a storage area for mineral stockpiles. The northeastern portion was used as a pistol range and later as a pesticide storage area. Until 1970, Army supplies, including hazardous and non-hazardous materials were burned or buried primarily in the northwest portion of Dunn Field. These materials potentially included oil and grease, paint, paint thinner, methyl bromide, pesticides, herbicides, and food supplies. Disposal operations at Dunn Field have created a plume of contaminated groundwater, in the shallow fluvial aquifer, along the western and northern portion of Dunn Field. Groundwater monitoring performed during the 1989 and 1990 remedial investigation/feasibility study (RI/FS) identified concentrations of dissolved volatile organic compounds (VOCs) and heavy metals above regulatory limits. Identified VOCs included, but were not limited to tetrachloroethene, trichloroethene, dichloroethene, carbon tetrachloride, chloroform and 1,1,2,2 – trichloroethane.

The DDMT facility is classified as a Superfund Site under the Comprehensive Environmental Response, Compensation, and Liability Act of 1990 (CERCLA) Section 120 (Federal Facilities).

1.3 Hydrogeology

DDMT is underlain by a layer of wind blown deposits (loess) about 20 to 30 feet thick. Underlying the loess, to a depth of generally 70 to 95 feet below land surface (bls), is a series of terrace deposits consisting primarily of silty to gravelly sands with some thin clay interbeds. The lower saturated portion of the terrace deposits is referred to as a fluvial aquifer, which is the uppermost aquifer beneath DDMT. The Jackson Formation, Upper Claiborne Group, which generally consists of high plasticity clay of variable thickness (5 to 75 feet), composes the base of the fluvial aquifer. The saturated thickness of the fluvial aquifer varies from 2 to 20 feet and is controlled, in part, by the topography of the Jackson Formation, Upper Claiborne Group.

Beneath the Jackson Formation, Upper Claiborne Group lies the Memphis Sand Aquifer, which is the primary source of drinking water for the City of Memphis. The Jackson Formation, Upper Claiborne Group clays serve as both the confining unit for the Memphis Sand Aquifer and the base of the fluvial aquifer.

1.4 Remedial Objectives

The DDMT facility, including Dunn Field, was placed on the National Priority List (NPL) in 1992 primarily because of the EPA's final Hazard Ranking System (HRS) Scoring Package of 58.06. In August 1995, CH2M-Hill submitted a Record of Decision (ROD) for a Groundwater IRA at Dunn Field to the regulatory agencies for approval. The ROD provided the basis of design for the components associated with the IRA for Dunn Field. The following remedial objectives were identified in the ROD and O&M Plan:

- Install recovery wells along the leading edge of the groundwater plume.
- Operate the system of recovery wells until contaminant concentrations are reduced to acceptable levels or until the final remedy is in place.
- Perform chemical analysis to monitor the quality of the discharge in accordance with city discharge permit requirements.
- Create a hydraulic barrier to prevent any further migration of contaminated groundwater offsite.

1.5 System Description

Seven groundwater extraction wells, one pre-cast concrete building, an underground conveyance system, a flow measurement and control system, and associated components were installed at Dunn Field in 1997. Equipment, process controls, operational requirements, recovery well sizes and depths, pumping rates, and construction drawings

are defined in the Technical Specifications prepared by CH2M-Hill. The system location is shown in Figure 1.

Completion of four additional recovery wells was on-going during this quarter. These additional monitoring wells are located in a line to the south (along the perimeter of Dunn Field) of RW-3. The startup of these wells is anticipated in the first quarter of 2001.

2.0 SYSTEM MONITORING METHODOLOGY

2.1 Groundwater Level Measurements

Water level measurements were recorded twice a month during this three month operational period from a select number of monitoring wells located both on and off Dunn Field. The following table lists the monitoring wells used:

MW-02	MW-15	MW-37[b]	MW-55
MW-03	MW-18	MW-38	MW-56
MW-04	MW-19[a]	MW-40	MW-57[a]
MW-05	MW-27	MW-41	MW-58[a]
MW-06	MW-28	MW-42	MW-59[a]
MW-07	MW-29	MW-43	MW-60[a]
MW-08	MW-30	MW-44	MW-62
MW-09	MW-31	MW-45	MW-63
MW-10	MW-32[b]	MW-46	MW-65
MW-11	MW-33	MW-49	MW-67
MW-12	MW-34[b]	MW-51	MW-68
MW-13	MW-35	MW-53	MW-69
MW-14	MW-36	MW-54	MW-70
			MW-71
			PZ-02

[a] The monitoring of these wells was added in quarter three and quarter four of year one
[b] These wells were monitored manually upon removal of USGS continuous recording devices

Monitoring wells MW-32, MW-34 and MW-37 were incorporated into the bi-monthly gauging events within a month after USGS removed their water level recording devices (transducers). Transducers were then installed in MW-13, 14, 32, 34, 37 and 70. These transducers are downloaded monthly. Representative water levels from these transducers are included in Appendix A. Complete transducer data files are submitted monthly with the operation and maintenance report. Four newly installed wells; MW-68, MW-69, MW-70 and MW-71 also required bi-monthly measurements for the second year O&M period. All wells were available for bi-monthly gauging events for the second year O&M period with the exception of MW-67. This well is unavailable due to the presence of a lodged sampling pump.

All wells requiring water level measurements were monitored in accordance with the requirements of Exhibit 5-1 of the Amendment #1 to the Groundwater Interim Remedial Action, Defense Depot Memphis, Tennessee Updated Operation and Maintenance Plan dated September 1999 (Updated O&M). Figure 2 shows the locations of all monitored wells. The Y2Q1, Y2Q2, and Y2Q3 measurement data were submitted to the USACE, DLA, TDEC and USEPA separately with their respective groundwater quality reports. A complete set of the Y2Q4 measurement data is given in Appendix A.

In addition to the monitoring wells discussed above, recovery well water levels from the seven operating wells are continuously electronically recorded during system operation. This data is recorded using water level transducers with readings taken at one hour intervals. Data is retrieved remotely on a routine basis from an electronic data logging system. Telemetry data from the recovery well system is included in electronic spreadsheet form in Appendix F. When the 4 new recovery wells are brought on-line in the first quarter of 2001, they will be added to the telemetry system.

2.2 Groundwater Sample Collection and Analyses

Groundwater samples were collected in November-00. Samples were collected from 19 of 20 selected monitoring wells, 7 recovery wells, and four recently installed, but not operational, recovery wells as identified in the following table:

Well Type	Well No.	Analyses/Method at Each Well	Date Performed
Downgradient Groundwater Monitoring Wells	MW-14 MW-15 MW-30 MW-31 MW-32 MW-33 MW-34 MW-40 MW-44 MW-51 MW-54 MW-56 MW-57 MW-58 MW-59 MW-68 MW-69 MW-70 MW-71	Quarterly Analyses: pH/Field Probe Conductivity/Field Probe Volatile Organics/SW8260 Annual Analyses: TAL Metals/SW200.7 Hg/SW245.1 Semi-Volatile Organics/SW8270C	06-Nov-00 through 10-Nov-00
Groundwater Recovery Wells	RW-1A RW-1B RW-01 RW-02 RW-03 RW-04 RW-05 RW-06 RW-07 RW-08 RW-09	Quarterly Analyses: pH/Field Probe Conductivity Field Probe Volatile Organics/SW8260 Annual Analyses: TAL Metals/SW200.7 Hg/SW245.1 Semi-Volatile Organics/SW8270C Herbicides/Pesticides/SW8151A /SW8081A	20-Nov-00 through 20-Nov-00

Cumulative analytical results for quarterly sampled monitoring wells presented in Table 2 include eight quarters of data following system start-up. Cumulative analytical results for the quarterly sampled recovery wells presented in Table 3 also include data following system start-up. Additional constituents were added to the analyte list for an annual sampling event. These include TAL Metals and Semi-Volatile Organics for the system monitoring wells and additionally included Pesticides/Herbicides for the recovery wells. Results of this annual analysis are given in Tables 4 and 5 respectively. Laboratory analytical reports are provided in Appendix B. A discussion of the results is presented in Section 3.0 of this report. A groundwater sample could not be collected from MW-67 during this monitoring period due to the presence of a sampling pump lodged in the well casing.

2.3 System Discharge Sample Collection and Analyses

Monthly effluent samples were collected from the groundwater extraction system at a location approximately 200 feet upstream from the final discharge point. The discharge point is a manhole located on Kyle Street at the north property line of the Depot.

Effluent samples have been collected on a monthly basis from February 1999 through December 2000. The samples were analyzed in accordance with Section F.1 of the Industrial Wastewater Discharge Agreement for Volatile Organic Compounds (VOCs), Semi-Volatile Organic Compounds (SVOCs) and Metals.

Analysis of the monthly samples was performed to evaluate compliance with the City of Memphis Industrial Wastewater Discharge Agreement and subsequent revisions. A copy of this agreement was provided in the Year One Operations and Maintenance Report. Analytical results for each effluent sample are presented in Table 1. Laboratory analytical reports are provided in Appendix C. A discussion of the results is presented in Section 3.0 of this report.

2.4 Field and Laboratory Quality Assurance/Quality Control Samples

As part of the Quality Assurance/Quality Control (QA/QC) Program, a variety of field and laboratory QA/QC samples were collected and analyzed during each sampling event. Groundwater was the only matrix analyzed; however, samples were collected from three different sources: groundwater monitoring wells, groundwater extraction recovery wells, and groundwater extraction effluent. A summary of Quality Control samples is given in Table 6.

2.4.1 Quarterly Groundwater Sampling Event

QA/QC samples collected in the field during this quarterly sampling event included 2 equipment blanks, 3 double blind duplicates, 2 field blanks, temperature blanks, and trip blanks. A trip blank and temperature blank was typically included in every cooler delivered to the laboratory. One double blind duplicate was collected for approximately every ten samples while one equipment blank and one field blank were collected for

approximately every 20 samples. Laboratory QA/QC included surrogate spikes to show control of organic analyses, a method blank and laboratory control sample, and matrix spike and matrix spike duplicate (MS/MSD) samples.

2.4.2 Monthly Effluent Sampling Event

QA/QC samples collected in the field during each monthly effluent sampling event included temperature blanks, trip blanks, and equipment blanks or double blind duplicates. Throughout the quarter, one equipment blank was collected in December. Laboratory QA/QC included method blanks and MS/MSDs. Surrogates were used by the laboratory to show control of organic analysis. A laboratory control duplicate sample was analyzed for batches that did not include MS/MSDs.

2.5 Sample Packaging and Handling

Upon collection, samples and associated field QA/QC samples were immediately placed on ice in a cooler. Stored samples were checked periodically and ice was replaced as needed to maintain a 4 degree Celsius temperature. Samples were segregated by sealed plastic bubble-wrap bags and placed in a cooler with the chain-of-custody forms. Samples were typically hand delivered the same day of collection to the laboratory, Environmental Testing and Consulting, Inc. (ETC) in Memphis, TN.

3.0 MONITORING RESULTS

This section discusses results of the Y2Q4 remedial action groundwater monitoring at DDMT in November 2000. Figure 2 shows the locations of monitoring and recovery wells at the site. Figure 3 reports results of each groundwater sample collected for this event.

3.1 Groundwater Elevation and Hydraulic Gradient

Groundwater level measurements at the site have been collected approximately twice a month at 54 monitoring wells since system start-up in November 1998. Groundwater elevation data for Y2Q4 that was collected for the Dunn Field area on November 7, 2000 was used as the basis for this report. The ground water interpolation for the fourth quarter 2000 data was prepared by the Waterways Experiment Station (WES) in Vicksburg, Mississippi. A description of the interpolation technique and tables of groundwater elevations are included in Appendix E.

Two separate interpolations were performed. Monitoring wells MW-36 and MW-37 are not located in the surficial aquifer and therefore are not included in any of the interpolations. The first interpolation did not include wells that may be located in a confined aquifer below the surficial aquifer. These "deep" monitoring wells include MW-18, MW-38, MW-40, MW-34 and MW-43. The second interpolation included this subset of wells. These two groundwater interpolations are given respectively as Figures 4 and 5.

The groundwater flow direction during the Y2Q4 groundwater measurement event was to the southwest. In general, the baseline calculated hydraulic gradient was approximately .011 ft/ft. Following startup of the recovery wells, the overall flow direction has remained unchanged. Quarterly groundwater level measurements of monitoring wells that are sampled are provided in Table 7. Groundwater measurement data from all monitored wells is provided in Appendix A.

3.2 Groundwater Analytical Results

This section discusses analytical results of effluent samples of water discharged to the Publicly Owned Treatment Works (POTW) as well as groundwater samples collected from recovery wells and select monitoring wells. Groundwater analytical results from the Y2Q4 sampling and analysis event are presented with historical data in Figure 3. A copy of the laboratory analytical reports for Y2Q4 monitoring/recovery wells, including chain-of-custody documentation, is provided in Appendix B. A copy of the laboratory analytical reports and chain-of-custody documentation for the monthly effluent samples is provided in Appendix C.

3.2.1 Effluent Analytical Results Summary

During the Y2Q4 monitoring period (October 1 through December 31), monthly effluent discharge samples were collected from the groundwater recovery system in compliance with the City of Memphis Discharge Permit. The samples were analyzed for pH (Method 150.1), TAL Metals (EPA 200 series), TCL Volatile Organics (Method 8260B) and TCL Semi-Volatile Organics (Method 8270C). Monthly effluent analytical reports are provided in Appendix C.

There were two exceedances of the discharge permit levels during the Y2Q4 period in October and November for Cis 1,2 – dichloroethene. The detected concentrations of 55.7 and 54.8 ug/L were acceptable according to the one day maximum level (100 ug/L), but exceeded the monthly average level (50 ug/L). As the monthly grab sample is more closely representative of a one-day maximum level, discharge permit compliance is still observed. Table 1 presents effluent sample analytical results from system startup through December 2000.

3.2.2 Recovery Well Analytical Results Summary

Y2Q4 groundwater samples were collected from the seven existing recovery wells during the week of November 20, 2000. Samples from the four new wells (RW-1, 1A, 1B, and 2) were collected on November 9th. The groundwater samples were analyzed for TCL Volatile Organics (Method 8260B), TAL Metals (SW200.7), Mercury (SW245.1), Semi-Volatile Organics (SW8270C), and Pesticides/Herbicides. Results are provided in Tables 3 and 5. Y2Q4 recovery well laboratory analytical results are provided in Appendix B.

Only compounds that have been detected are reported. Of the compounds detected, trichloroethene (TCE) is the only compound common to all recovery wells that has been detected above Drinking Water Contaminant Levels (MCLs) during each sampling event. Carbon Tetrachloride has been consistently detected at concentrations exceeding MCLs in the four new recovery wells (RW-1, 1A, 1B, and 2) and in RW-3. All of these wells are located from the western mid-section of Dunn Field southward.

Cis 1,2 Dichloroethene has been consistently detected in Recovery Wells RW-3 (5 of 8 samples), RW-7 (4 of last 5 samples), and RW-8 (6 of last 8 samples). Tetrachloroethene was detected above MCLs in RW-5 during an early sample round, and has then been detected exceeding MCLs in RW-4 (once), RW-6 (6 of 8 samples), RW-7 (all samples), RW-8 (7 of 8 samples), and RW-9 (all samples). The compound 1,1 Dichloroethene has been detected above MCLs in RW-8 (first three sample events) and RW-9 (all samples).

There was no detection of SVOCs in any recovery well, and no metals were found to exceed MCLs. The pesticide Dieldrin was detected at low concentrations in RW-04 (0.036 ug/L) and RW-05 (.068 ug/L).

RW-01 This was the fourth time this recovery well has been sampled since being installed in November 1999. Two compounds were detected at concentrations exceeding

MCLs. Carbon tetrachloride (CT) increased slightly from 41.50 to 46.10 ug/L. Trichloroethene (TCE) decreased from 40.20 to 28 ug/L.

RW-01A This was the fourth time this recovery well has been sampled since being installed in November 1999. Two compounds were detected at concentrations exceeding MCLs. CT increased from 9.47 to 15.6 ug/L. TCE decreased slightly from 73.9 to 66.4 ug/L.

RW-01B This was the fourth time this recovery well has been sampled since being installed in November 1999. Two compounds were detected at concentrations exceeding MCLs. CT decreased from 26.1 to20.1 ug/L. TCE decreased from 35.7 to 21.1 ug/L.

RW-02 This was the fourth time this recovery well has been sampled since being installed in November 1999. Two compounds were detected at concentrations exceeding MCLs. CT increased from 16.8 to 23.8 ug/L. TCE decreased slightly from 20.6 to 17.2 ug/L.

RW-03 Three compounds (CT, Cis 1,2-dichloroethene [Cis-DCE], and TCE) were detected at concentrations exceeding MCLs during Y2Q4. CT and TCE have exceeded MCLs during each of the eight quarterly sampling events. During the Y2Q4, CT increased slightly from Y2Q3 from 13.8 to 16 ug/L. Cis-DCE increased from 70.8 to 160 ug/L. TCE increased from 57.4 to 62.1 ug/L.

RW-04 One compound (TCE) was detected at concentrations exceeding MCLs during Y2Q4. TCE has exceeded MCLs during each of the eight quarterly sampling events. During Y2Q4 TCE decreased from 334 to 204 ug/L.

Note that Acetone and 2-Butanone were detected in several of the recovery wells which had been reconfigured during the November Recovery Well Upgrade project. These constituents are most likely attributable to the CPVC cement used in rebuilding the surface piping for these wells and should not continue to be detected in future events as the system flushes out during operation.

RW-05 TCE had consistently exceeded MCLs in all previous quarterly sampling events in which a sample was obtained, however this quarter's result was below the MCL for all constituents.

RW-06 One compound (TCE) was detected at a concentration exceeding MCLs during Y2Q4. TCE has consistently exceeded MCLs in each of the eight monitoring events. TCE decreased from 34 to 11.3 ug/L.

RW-07 Three compounds (Cis-DCE, PCE and TCE) were detected at concentrations exceeding MCLs during Y2Q4. Cis-DCE has exceeded MCLs in 4 of 8 quarterly sampling events, while PCE and TCE have exceeded MCLs in all eight events. Cis-DCE increased from 70.6 to 86.6 ug/L. PCE decreased from 10.7 to 9.3 ug/L while TCE increased slightly from 98.9 to 101 ug/L.

RW-08 One compound (TCE) exceeded the MCL concentration during the Y2Q4 sampling event. TCE has consistently exceeded MCLs in each of the eight events. PCE which had consistently exceeded MCLs decreased to sub-MCL levels this quarter. TCE decreased from 190 to 56.9 ug/L.

RW-09 Three compounds (1,1-DCE, PCE and TCE) were detected at concentrations exceeding the MCLs during the Y2Q4 sampling event. All three compounds have exceeded MCLs during each of the eight sampling events. 1,1- DCE increased slightly from 45.4 to 52.5 ug/L. PCE increased from 32.9 to 54.3 ug/L and TCE increased slightly from 35.5 to 36.3 ug/L.

3.2.3 Monitoring Well Analytical Results Summary

Y2Q4 groundwater samples were collected from select monitoring wells at the site. The samples were analyzed for TCL Volatile Organics (Method (8260B), TAL Metals (SW200.7), Mercury (SW245.1) and Semi-Volatile Organics (SW8270C). Y2Q4 monitoring well laboratory analytical reports are contained in Appendix B.

Tables 2 and 4 present TCL Volatile Organics , Semi-Volatile Organics, and TAL Metals analytical results from all monitoring wells sampled during the Y2Q4 event. Only compounds detected during any sampling event have been reported in the tables.

MW-14 No Volatile Organic Compounds (VOCs) were detected at concentrations exceeding MCLs, however, 2 metals (chromium at 0.185 mg/L and lead at 0.198 mg/L) were detected at levels exceeding MCLs . Additionally, one SVOC (Benzo(a)Pyrene at 1.0 ug/L) was detected at a level in excess of the MCL.

MW-15 Two compounds (CT and TCE) were detected at concentrations exceeding MCLs during Y2Q4. CT and TCE have exceeded MCLs during each of the eight quarterly sampling events. CT decreased from 24.7 to 12.8 ug/L. TCE decreased from 234 to 65.9 ug/L.

MW-30 No VOCs have been detected at concentrations exceeding MCLs for all eight quarterly sampling events.

MW-31 One compounds (TCE) was detected at a concentration exceeding MCLs during Y2Q4. TCE has exceeded MCLs in each of eight quarterly sampling events and decreased from 68.1 to 18.5 ug/L.

MW-32 Three compounds (CT, PCE and TCE) were detected at concentrations exceeding the MCLs. Both CT and TCE have been detected at concentrations exceeding MCLs in each of the eight quarterly sampling events. PCE had previously been detected at concentrations exceeding the MCL only once (Y2Q3) PCE increased slightly from 5.9 to 6.39 ug/L. CT increased from 47.2 to 61.3 ug/L and TCE increased from 89.2 to 94.8 ug/L.

MW-33 No compounds have been detected at concentrations exceeding MCLs during all eight quarterly sampling events.

MW-34 No compounds have been detected at concentrations exceeding MCLs during all eight quarterly sampling events.

MW-40 No compounds have been detected at concentrations exceeding MCLs during all eight quarterly sampling events.

MW-44 No compounds were detected at concentrations exceeding the MCLs during Y2Q4.

MW-51 Two compounds (DCE and TCE) were detected at concentrations exceeding the MCLs during Y2Q4. DCE concentrations have exceeded MCLs in each event except for Y2Q1 and increased from 12.9 ug/L to 57.9 ug/L. TCE has exceeded MCLs only twice previously in Y1Q1 and Y2Q3 and increased from 6.33 to 13.2 ug/L between.

MW-54 Two VOC compounds (CT and TCE) were detected at concentrations exceeding MCLs during the Y2Q4 sampling event. CT increased from 7.97 to 12.8 ug/L and TCE increased slightly from 28.1 to 29 2 ug/L. TCE has exceeded MCLs in each of the eight sampling events.

MW-56 This was the fourth time this well has been sampled. No compounds have been detected at concentrations exceeding MCLs during all four quarterly sampling events.

MW-57 This was the fourth time this well has been sampled. Three compounds (CT, PCE, and TCE) were detected at concentrations exceeding MCLs. CT increased slightly from 45.7 to 48.3 ug/L. PCE decreased slightly from 5.1 to 5.07 ug/L. TCE decreased from 49.2 to 30.9 ug/L. Each of these compounds has exceeded MCLs in each of the prior sampling events.

MW-58 This was the fourth time this well has been sampled. No VOCs have been detected at concentrations exceeding MCLs during all four quarterly sampling events. Lead (0.158 mg/L) was found to exceed the MCL during Y2Q4.

MW-59 One compound (PCE) was detected at a concentration exceeding the MCL. PCE has exceeded MCLs in each of the four quarterly events in which this well has been sampled. The PCE concentration increased from 22 to 46.1 ug/L.

MW-67 This well could not be sampled during this monitoring period because the purge pump became lodged in the well and could not be lowered into the groundwater or removed from the well prior to the Y2Q2 event. Several attempts have been made to free the pump without success. The well was sampled once before during the Y2Q1 sampling event. No VOC compounds were detected at concentrations exceeding MCLs at that time.

MW-68 No VOC compounds exceeding MCLs were detected this quarter, however several metals including arsenic, beryllium, chromium, mercury and lead were found to exceed the MCLs.

MW-69 Two compounds (PCE and TCE) were detected at a concentration exceeding the MCL. TCE has been detected at concentrations exceeding the MCL in each of the four quarterly events in which this well has been sampled. TCE concentration increased this quarter from 50.4 to 282 ug/L. PCE (6.39 ug/L) had not previously been detected at levels exceeding the MCL.

MW-70 Four compounds (Cis-DCE, PCE, 1,1,2 Trichloroethane [1,1,2-TCA], and TCE) were detected at concentrations exceeding MCLs. Concentrations of the detected compounds were elevated somewhat from the previous quarter, although still significantly lower than the Y2Q1 event. Cis-DCE increased from 218 to 247 ug/L. PCE decreased from 35.8 to 32.5 ug/L. 1,1,2-TCA increased from 15.2 to 16 ug/L. TCE increased from 1120 to 1330 ug/L.

MW-71 Two VOC compounds (CT and TCE) were detected at concentrations exceeding MCLs during Y2Q4. CT and TCE have exceeded the MCLs in each of the four sampling events in which this well was sampled. CT decreased slightly from 32.9 to 26.5 ug/L. TCE decreased from 224 to 95.6 ug/L.

3.3 QA/QC Results

Quality control samples and results are presented in Table 6 for the Y2Q4 sampling event. A data evaluation was conducted for the quarterly sampling event and for the October, November and December monthly effluent sampling events. A copy of the complete data evaluation is provided in Appendix D.

3.3.1 Y2Q4 Samples

The three samples taken in duplicate were RW-05, MW-54 and MW-71. The duplicates were analyzed for the same tests as the original samples. The following table lists the duplicate relative percent difference (RPD) calculations. A blank space indicates that compound was not found in the sample or its duplicate.

Analyte	RW-05	MW-54	MW-71
Bromodichloromethane		200	
2-Butanone (MEK)	39		
Carbon Tetrachloride		39	29
Chloroform		34	26
Trans-1,2-Dichloroethene		34	37
1,1,2,2-Tetrachloroethane		11	30
Tetrachloroethene		36	26
1,1,2-Trichloroethane		19	38
Trichloroethene	16	25	24
Cis-1,2-Dichloroethene		37	32

Analyte	RW-05	MW-54	MW-71
Vinyl Chloride			
Aluminum		28	32
Arsenic			33
Barium	1	2	19
Beryllium			NC
Calcium	1	1	6
Cobalt			52
Chromium			13
Copper			38
Iron	51	21	38
Potassium	<1	6	17
Magnesium	<1	2	1
Manganese		22	56
Sodium	1	1	11
Nickel			30
Vanadium			16
Zinc	5	NC	25

The criteria for determining acceptable field duplicate RPD were based on project specific goals. Since no published EPA procedure exists for evaluation of field duplicate results, the following overview is included to document the evaluation procedure used for this report.

Duplicate results for liquid sample matrices which differ by more than a factor of two (RPD > 67) were considered to be in 'disagreement'. In the special case where one or both sample results were less than five times the laboratory practical quantitation limit (PQL), a difference of ± two times the reported PQL was used. Duplicate samples found in disagreement do not necessarily indicate an error has been made or inappropriate procedures used. Factors including the natural variability of the sample matrix, high or extremely low analyte concentrations, or the presence of compounds which interfere with analysis can each contribute to duplicate disagreement.

Most importantly, data found in disagreement were examined to determine if the disagreements were extreme, isolated occurrences, or if any negative trends existed. Negative trends may indicate systematic errors made in sampling, handling, or analytical procedures; or may indicate the selection of an inappropriate protocol. If negative trends or extreme non-conformances exists, associated data were evaluated carefully to determine their validity.

VOC RPD was found outside criteria in one of three duplicate pairs (MW-54) for bromodichloromethane. The non-conformance appeared to be isolated and was not indicative of a trend.

3.3.2 Monthly Effluent Samples

Three effluent samples were collected during the fourth quarter 2000 at the Defense Depot in Memphis, Tennessee. The required analyses included volatiles (EPA 8260B), semi-volatiles (EPA 8270C) and metals (EPA 200 series). Submitted with the samples were three trip blanks, one equipment blank, and one duplicate sample.

Trip blanks were submitted with all effluent samples and analyzed for volatiles (EPA 8260B). All trip blanks were non-detect for target compounds.

The equipment blank was associated with sample ST-EFF-031. This equipment blank yielded detectable concentrations of iron and sodium (0.012 and 0.072 mg/L). All other equipment blank recoveries were non-detect.

4.0 CONCLUSIONS

Conclusions to this quarterly groundwater quality report have been developed from the review of groundwater monitoring efforts and results throughout the quarter. The two major system monitoring methods included analytical sample results and groundwater level measurements.

4.1 Summary of Monitoring Results

- MW-32 continues to experience a gradual increase in concentration of compounds.
- MW-14 detectable concentrations of several semi-volatile compounds and exceeded MCLs for chromium and lead, while VOCs remained below detection limits.
- MW-68 had exceedance of MCLs for arsenic, beryllium, chromium, mercury and lead.
- MW-70 continues to exhibit the highest concentration of compounds of any sampled wells, however concentrations are still significantly lower in the Y2Q4 sampling event than in the Y2Q1 event (the first quarter this well was sampled).
- The groundwater flow during this quarter remains to the southwest. Since system startup, the flow direction has remained unchanged. The hydraulic gradient across the middle of the site has decreased somewhat from 0.06 ft/ft in Y2Q2 to 0.01 ft/ft in Y2Q4.
- Effluent discharge limits to the POTW were not exceeded this quarter.
- A sample was collected for each well except for MW-67 which remains out of commission due to the purge pump becoming lodged in the well prior to the Y2Q2 sampling event.
- Periods of downtime have been experienced for all wells. During this quarter, the entire system was shut down from October 31 through November 14th. The system was then restarted, but due to construction and below-freezing operating temperatures, it was run intermittently through the end of December.
- TCE concentrations have generally decreased in the majority of the monitored wells during this quarter. Exceptions include RW-3, RW-7, RW-9, MW-32, MW-51, MW-54, MW-69, and MW-70.

TABLES

Table 1

Summary of Analytical Results for Total Effluent (Nov-98 through Dec-00) of the Groundwater Recovery System

Sample Identification Number			ST-EFF-01	ST-EFF-02*	ST-EFF-03	ST-EFF-04	ST-EFF-04A (Duplicate)	ST-EFF-05	ST-EFF-06	City of Memphis
Laboratory ID No			9810617-01	9810819-01	9811263-01	9811479-01	9811479-04	9811705-01	9812045-01	Industrial Wastewater
Total System Effluent Sample Description			Week 1 of System Startup Testing	Week 2 of System Startup Testing	Week 1 of System Operation (O&M)	Week 2 of System Operation (O&M)		Week 3 of System Operation (O&M)	Week 4 of System Operation (O&M)	Discharge Max Levels
Date Effluent Sample Collected			19-Oct-98	26-Oct-98	9-Nov-98	16-Nov-98		23-Nov-98	30-Nov-98	--
Instantaneous Flow Rate			230 GPM/331,200 GPD	155* GPM/223,200 GPD	199 GPM/286 560 GPD	169 8 GPM/244,512 GPD		158 8 GPM/228,672 GPD	145 0 GPM / 208,800 GPD	561,600 GPD
Totalized Flow			1,382,400 GAL	3,408,480 GAL	5,976,549 GAL	7 748 690 GAL		9 343 370 GAL	10,969,840 GAL	--
LABORATORY ANALYSES	**DL**	**Units**								*Monthly Ave / One Day Max*
pH (Method 150 1)	--	SU	5 6	5 9	5 8	5 6	5 9	5 6	5 8	5 5 to 10 0
TAL Metals (EPA 200 Series)										*mg/L*
Aluminum (Method 200 7)	0 06	mg/L	ND	ND	ND	ND	ND	ND	ND	1 / 2
Arsenic (Method 206 2)	0 003	mg/L	ND	ND	ND	ND	ND	ND	ND	0 04 / 0 1
Barium (Method 200 7)	0 003	mg/L	0 104	0 107	0 109	0 118	0 117	0 112	0 124	NS
Cadmium (Method 200 7)	0 005	mg/L	ND	ND	ND	ND	ND	ND	ND	0 01 / 0 02
Calcium (Method 200 7)	0 015	mg/L	23	21 6	24 7	25 3	25	24 8	26 5	NS
Chromium (Method 200 7)	0 009	mg/L	ND	ND	ND	ND	ND	ND	ND	0 2 / 0 4
Copper (Method 200 7)	0 008	mg/L	ND	ND	ND	ND	ND	ND	ND	0 2 / 0 4
Iron (Method 200 7)	0 009	mg/L	0 07	0 046	0 022	0 019	0 019	0 036	0 01	10 / 20
Lead (Method 200 7)	0 06	mg/L	ND	ND	ND	ND	ND	ND	ND	0 15 / 0 3
Magnesium (Method 200 7)	0 04	mg/L	11 7	11 3	12 6	13	12 8	12 5	13	NS
Manganese (Method 200 7)	0 003	mg/L	ND	ND	ND	0 015	0 015	0 014	0 048	NS
Mercury (Method 245 1)	0 0002	mg/L	ND	ND	ND	ND	ND	ND	ND	0 001 / 0 002
Nickel (Method 200 7)	0 02	mg/L	ND	ND	ND	ND	ND	ND	ND	0 1 / 0 3
Potassium (Method 200 7)	0 25	mg/L	0 916	0 781	0 883	0 975	1 15	0 9	0 703	NS
Sodium (Method 200 7)	0 05	mg/L	27 8	28 3	27 7	27 9	28 7	28 6	26 1	NS
Zinc (Method 200 7)	0 01	mg/L	0 047	0 129	0 095	0 098	0 095	0 063	0 062	0 3 / 1 0
TCL Volatile Organics (Method 8260B)										*ug/L*
Carbon Tetrachloride	1	ug/L	2 9	4 3	3 06	3 27	3 38	4 07	3 22	20 / 40
Chloroform	1	ug/L	13 6	12 9	14 9	18 1	20 9	20 6	16 4	20 / 40
1 1-Dichloroethane	1	ug/L	ND	ND	ND	ND	ND	ND	ND	NS
1 1-Dichloroethene	1	ug/L	11 6	5 42	9 99	13 9	15 6	20 3	14 6	50 / 100
Cis 1,2-Dichlorothene	1	ug/L	29 2	43 8	30	33 3	36 8	37 3	32 8	50 / 100
Trans 1 2-Dichloroethene	1	ug/L	5 96	9 27	6 68	7 47	7 92	8 42	7 47	50 / 100
Methylene Chlonde	5	ug/L	ND	ND	ND	ND	ND	ND	ND	10 / 20
1,1,2,2-Tetrachloroethane	1	ug/L	87 1	159	234	234	257	272	178	500 / 1000
Tetrachloroethene	1	ug/L	25 7	22 6	28 9	30	29 7	34 4	25 6	60 / 120
Toluene	1	ug/L	ND	ND	ND	ND	ND	ND	ND	20 / 40
1,1,1-Trichloroethane	1	ug/L	ND	ND	ND	ND	ND	1	ND	10 / 20
1,1,2-Trichloroethane	1	ug/L	1 81	2 82	1 59	1 46	1 5	1 3	1 1	50 / 100
Trichloroethene	1 00	ug/L	108	226	195	225	220	217	160	400 / 800
TCL Semi-Volatile Organics (Method 8270C)										*ug/L*
Bis(2-ethylhexyl)phthalate	10	ug/L	ND	**23 6B**	ND	ND	ND	**26B**	ND	10 / 20
Di-n-butyl Phthalate	5	ug/L	**91 2**	2 5J	ND	ND	ND	ND	ND	30 / 60
Naphthalene	2	ug/L	ND	ND	ND	ND	ND	ND	ND	10 / 20
Phenol	5	ug/L	ND	ND	ND	ND	ND	ND	ND	10 / 20

NOTE Compounds included in this table are those listed in Section D 3 and detected as part of the analytical methods conducted per Section F 1 of Industrial Wastewater Discharge Agreement

All analyses performed by Environmental Testing & Consulting Inc , Memphis TN

* = Recovery well RW-09 was not in operation at the time of sample collection

** = Recovery well RW-08 was not in operation at the time of sample collection

A = Recovery well RW-03 was not in operation at the time of sample collection

NS = no standard listed in the Industrial Wastewater Discharge Agreement

J = estimated value - presence of the compound was confirmed but less than the reported DL

J* = estimated value quality control recoveries outside acceptance ranges

ND = not detected

B = analyte detected in associated method and/or equipment blank

mg/L = milligrams per liter

ug/L = micrograms per liter

DL = detection limit

GPM = gallons per minute

GPD = gallons per day

91 2 = bold number indicates that value exceeds Discharge Max Levels

A=Effluent meter zeroed out 03 Nov-99

Table 1

Summary of Analytical Results for Total Effluent (Nov-98 through Dec-00) of the Groundwater Recovery System

Sample Identification Number			ST-EFF-07*	ST-EFF-07A^ (Duplicate)	ST-EFF-08	ST-EFF-09	ST-EFF-HG-09A	ST-EFF-HG-05 (Duplicate)	ST-EFF-HG-09B	ST-EFF-HG-09C	City of Memphis
Laboratory ID No			9812784-01	9812784-02	9901688-01	9902664-01	9902702-01	9902702-02	9902756-01	9902775-01	Industrial Wastewater
Total System Effluent Sample Description			Week 7 of System Operation (O&M)		Week 13 of System Operation (O&M)	Week 17 of System Operation (O&M)					Discharge Max Levels
Date Effluent Sample Collected			18-Dec-98		26-Jan-99	22-Feb-99	23-Feb-99		24-Feb-99	25-Feb-99	--
Instantaneous Flow Rate			98 4* GPM/141,696 GPD		116 7 GPM/168 048 GPD	108 1 GPM/155,664 GPD	80 7 GPM**/118 208 GPD		79 2 GPM** / 114,048 GPD	104.2 GPM/150,048 GPD	561,600 GPD
Totalized Flow			14,448,100 GAL		20,527,972 GAL	24,668,250 GAL	24 817 070 GAL		24,924,750 GAL	25,017,830 GAL	--
LABORATORY ANALYSES	DL	Units									*Monthly Ave / One Day Max.*
pH (Method 150 1)	--	SU	5 8	5 8	6 5	6 1	--	--	--	--	5 5 to 10 0
TAL Metals (EPA 200 Series)											*mg/L*
Aluminum (Method 200 7)	0 06	mg/L	ND	ND	ND	ND	--	--	--	--	1 / 2
Arsenic (Method 206 2)	0 003	mg/L	ND	ND	ND	ND	--	--	--	--	0 04 / 0 1
Barium (Method 200 7)	0 003	mg/L	0 114	0 118	0 119	0 109	--	--	--	--	NS
Cadmium (Method 200 7)	0 005	mg/L	ND	ND	ND	ND	--	--	--	--	0 01 / 0 02
Calcium (Method 200 7)	0 015	mg/L	25 2	26 3	27 1	23 1	--	--	--	--	NS
Chromium (Method 200 7)	0 009	mg/L	ND	ND	ND	ND	--	--	--	--	0 2 / 0 4
Copper (Method 200 7)	0 008	mg/L	ND	ND	ND	ND	--	--	--	--	0 2 / 0 4
Iron (Method 200 7)	0 009	mg/L	0 020	0 014	0 044	0 151	--	--	--	--	10 / 20
Lead (Method 200 7)	0 06	mg/L	ND	ND	ND	ND	--	--	--	--	0 15 / 0 3
Magnesium (Method 200 7)	0 04	mg/L	11 9	12 4	12 5	11 3	--	--	--	--	NS
Manganese (Method 200 7)	0 003	mg/L	0 097	0 101	0 175	0 049	--	--	--	--	NS
Mercury (Method 245 1)	0 0002	mg/L	ND	ND	ND	ND	ND	ND	ND	ND	0 001 / 0 002
Nickel (Method 200 7)	0 02	mg/L	ND	ND	ND	ND	--	--	--	--	0 1 / 0 3
Potassium (Method 200 7)	0 25	mg/L	0 808	0 818	0 927	0 951	--	--	--	--	NS
Sodium (Method 200 7)	0 05	mg/L	25 3	26 8	26 5	24 1	--	--	--	--	NS
Zinc (Method 200 7)	0 01	mg/L	0 115	0 081	0 048	0 065	--	--	--	--	0 3 / 1 0
TCL Volatile Organics (Method 8260B)											*ug/L*
Carbon Tetrachloride	1	ug/L	4 50	4 72	2 32	2 53	--	--	--	--	20 / 40
Chloroform	1	ug/L	10 1	10 3	9 95	6 64	--	--	--	--	20 / 40
1,1-Dichloroethane	1	ug/L	ND	ND	ND	ND	--	--	--	--	NS
1,1-Dichloroethene	1	ug/L	4 8	5 36	13 3	19 5	--	--	--	--	50 / 100
Cis 1,2-Dichlorothene	1	ug/L	43 4	46 7	34	36 2	--	--	--	--	50 / 100
Trans 1,2-Dichloroethene	1	ug/L	9 78	10 4	7 85	11	--	--	--	--	50 / 100
Methylene Chloride	5	ug/L	ND	ND	ND	ND	--	--	--	--	10 / 20
1,1 2,2-Tetrachloroethane	1	ug/L	175	189	60 1	46 8	--	--	--	--	500 / 1000
Tetrachloroethene	1	ug/L	11 8	13 4	17 9	16 5	--	--	--	--	60 / 120
Toluene	1	ug/L	ND	ND	ND	ND	--	--	--	--	20 / 40
1,1 1-Trichloroethane	1	ug/L	ND	ND	ND	ND	--	--	--	--	10 / 20
1,1 2-Trichloroethane	1	ug/L	ND	1 06	ND	ND	--	--	--	--	50 / 100
Trichloroethene	1 00	ug/L	183	196	116	144	--	--	--	--	400 / 800
TCL Semi-Volatile Organics (Method 8270C)											*ug/L*
Bis(2-ethylhexyl)phthalate	10	ug/L	**11 9**	**11 6**	ND	ND	--	--	--	--	10 / 20
Di-n-butyl Phthalate	5	ug/L	ND	ND	ND	ND	--	--	--	--	30 / 60
Naphthalene	2	ug/L	ND	ND	ND	ND	--	--	--	--	10 / 20
Phenol	5	ug/L	ND	ND	ND	ND	--	--	--	--	10 / 20

NOTE Compounds included in this table are those listed in Section D 3 and detected as part of the analytical methods conducted per Section F 1 of Industrial Wastewater Discharge Agreement

All analyses performed by Environmental Testing & Consulting Inc , Memphis, TN

* = Recovery well RW-09 was not in operation at the time of sample collection

** = Recovery well RW-08 was not in operation at the time of sample collection

^ = Recovery well RW-03 was not in operation at the time of sample collection

NS = no standard listed in the Industrial Wastewater Discharge Agreement

J = estimated value - presence of the compound was confirmed but less than the reported DL

J* = estimated value quality control recoveries outside acceptance ranges

ND = not detected

B = analyte detected in associated method and/or equipment blank

mg/L = milligrams per liter

ug/L = micrograms per liter

DL = detection limit

GPM = gallons per minute

GPD = gallons per day

91 2 = bold number indicates that value exceeds Discharge Max Levels

A=Effluent meter zeroed out 03-Nov-99

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Table 1

Summary of Analytical Results for Total Effluent (Nov-98 through Dec-00) of the Groundwater Recovery System

Sample Identification Number			ST-EFF-10	ST-EFF-11	ST-INF-11 (Duplicate)	ST-EFF-12	ST-EFF-13	ST-EFF-14	ST-INF-14 (Duplicate)	City of Memphis
Laboratory ID No				9904750-01	9904750-02	9905639-01	9907002-01	9907539-01	9907539-02	Industrial Wastewater
Total System Effluent Sample Description			Week 21 of System Operation (O&M)	Week 26 of System Operation (O&M)		Week 30 of System Operation (O&M)	Week 35 of System Operation (O&M)	Week 38 of System Operation (O&M)		Discharge Max Levels
Date Effluent Sample Collected			26-Mar-99	27-Apr-99		24-May-99	30-Jun-99	21-Jul-99		--
Instantaneous Flow Rate			94 3 GPM/135,792 GPD	105 3 GPM/151 632 GPD		87 9 GPM/126 576 GPD	81 3 GPM/117,072 GPD	80 9 GPM / 116,496 GPD		561 600 GPD
Totalized Flow			28,964,822 GAL	32,187,260 GAL		36,220,118 GAL	40,550,682 GAL	42 647,212 GAL		--
LABORATORY ANALYSES	**DL**	**Units**								*Monthly Ave / One Day Max*
pH (Method 150 1)	--	SU	5 7	6 6	6 2	6 0	5 9	5 8	5 9	5 5 to 10 0
TAL Metals (EPA 200 Series)										*mg/L*
Aluminum (Method 200 7)	0 06	mg/L	ND	ND	ND	ND	ND	ND	ND	1 / 2
Arsenic (Method 206 2)	0 003	mg/L	ND	ND	ND	ND	ND	ND	ND	0 04 / 0 1
Barium (Method 200 7)	0 003	mg/L	0 106	0 108	0 114	0 11	0 107	0 101	0 099	NS
Cadmium (Method 200 7)	0 005	mg/L	ND	ND	ND	ND	ND	ND	ND	0 01 / 0 02
Calcium (Method 200 7)	0 015	mg/L	22 7	23	22 8	23 1	21 4	21	21 2	NS
Chromium (Method 200 7)	0 009	mg/L	ND	ND	ND	ND	ND	ND	ND	0 2 / 0 4
Copper (Method 200 7)	0 008	mg/L	ND	ND	ND	ND	ND	ND	ND	0 2 / 0 4
Iron (Method 200 7)	0 009	mg/L	0 034	0 025	0 034	0 012	0 016	0 016	0 011	10 / 20
Lead (Method 200 7)	0 06	mg/L	ND	ND	ND	ND	ND	ND	ND	0 15 / 0 3
Magnesium (Method 200 7)	0 04	mg/L	11 3	11 6	11 7	11 4	10 5	10 6	10 6	NS
Manganese (Method 200 7)	0 003	mg/L	0 04	0 029	0 03	0 031	0 027	0 014	0 059	NS
Mercury (Method 245 1)	0 0002	mg/L	ND	ND	ND	ND	ND	ND	ND	0 001 / 0 002
Nickel (Method 200 7)	0 02	mg/L	ND	ND	ND	ND	ND	ND	ND	0 1 / 0 3
Potassium (Method 200 7)	0 25	mg/L	0 861	0 728	0 859	0 844	0 767	0 835	0 806	NS
Sodium (Method 200 7)	0 05	mg/L	23 8	22 9	24 1	24 2	23 8	22 8	22 4	NS
Zinc (Method 200 7)	0 01	mg/L	0 069	0 04	0 045	0 047	0 026	0 028	0 03	0 3 / 1 0
TCL Volatile Organics (Method 8260B)										*ug/L*
Carbon Tetrachloride	1	ug/L	2 17	1 47	1 61	2 25	2 29	1 46	1 29	20 / 40
Chloroform	1	ug/L	5 59	8 63	7 15	4 54	9 3	8 46	7 93	20 / 40
1,1-Dichloroethane	1	ug/L	ND	ND	ND	ND	ND	ND	ND	NS
1 1-Dichloroethene	1	ug/L	13 9	11 8	11 8	16 2	17 8	14 2	13 4	50 / 100
Cis 1 2-Dichlorothene	1	ug/L	37	37	37 2	42 8	48 3	34 1	32 5	50 / 100
Trans 1,2-Dichloroethene	1	ug/L	10 8	9 77	9 7	12 0	13 7	10 1	9 66	50 / 100
Methylene Chlonde	5	ug/L	ND	ND	ND	ND	ND	ND	ND	10 / 20
1,1,2,2-Tetrachloroethane	1	ug/L	29 3	38 9	39 2	56 1	76 4	65 1	59 8	500 / 1000
Tetrachloroethene	1	ug/L	18 7	12 9	13 6	16 1	17	14 6	13 3	60 / 120
Toluene	1	ug/L	ND	ND	ND	ND	1 5B	1	ND	20 / 40
1,1,1-Trichloroethane	1	ug/L	ND	ND	ND	ND	ND	ND	ND	10 / 20
1 1 2-Trichloroethane	1	ug/L	ND	ND	ND	ND	ND	ND	ND	50 / 100
Trichloroethene	1 00	ug/L	116	116	117	150	163	117	110	400 / 800
TCL Semi-Volatile Organics (Method 8270C)										*ug/L*
Bis(2-ethylhexyl)phthalate	10	ug/L	**24.4B**	ND	**14 1B**	**13 6B**	ND	ND	ND	10 / 20
Di n-butyl Phthalate	5	ug/L	ND	ND	ND	ND	ND	ND	ND	30 / 60
Naphthalene	2	ug/L	ND	ND	ND	ND	ND	ND	ND	10 / 20
Phenol	5	ug/L	ND	ND	ND	ND	ND	ND	ND	10 / 20

NOTE Compounds included in this table are those listed in Section D 3 and detected as part of the analytical methods conducted per Section F 1 of Industrial Wastewater Discharge Agreement

All analyses performed by Environmental Testing & Consulting Inc Memphis TN

* = Recovery well RW-09 was not in operation at the time of sample collection

** = Recovery well RW 08 was not in operation at the time of sample collection

^ = Recovery well RW-03 was not in operation at the time of sample collection

NS = no standard listed in the Industrial Wastewater Discharge Agreement

J = estimated value - presence of the compound was confirmed but less than the reported DL

J* = estimated value, quality control recoveries outside acceptance ranges

ND = not detected

mg/L = milligrams per liter

DL = detection limit

GPD = gallons per day

A=Effluent meter zeroed out 03-Nov-99

B = analyte detected in associated method and/or equipment blank

ug/L = micrograms per liter

GPM = gallons per minute

91 2 = bold number indicates that value exceeds Discharge Max Levels

Table 1

Summary of Analytical Results for Total Effluent (Nov-98 through Dec-00) of the Groundwater Recovery System

Sample Identification Number			ST-EFF-15	ST-INF-15 (Duplicate)	ST-EFF-16	ST-EFF-17	ST-EFF-018	ST-EFF-116 (Duplicate)	ST-EFF-019	ST-EFF-117 (Duplicate)	City of Memphis
Laboratory ID No			9908593-02	9908593-01	9909614-01	9910519-01	9911451-01	9911451-02	9912495-01	9912495-02	Industrial Wastewater
Total System Effluent Sample Description			Week 43 of System Operation (O&M)		Week 47 of System Operation (O&M)	Week 51 of System Operation (O&M)	Week 55 of System Operation (O&M)		Week 59 of System Operation (O&M)		
Date Effluent Sample Collected			23-Aug-99		22-Sep-99	21-Oct-99	16-Nov-99		15-Dec-99		--
Instantaneous Flow Rate			74 7 GPM / 107,576 GPD		72 2 GPM/104,112 GPD	72 3 GPM/104,112 GPD	76 2 GPM/109 728 GPD		71 5 GPM/102,960 GPD		561 600 GPD
Totalized Flow			46,332,590 GAL		49 474,353 GAL	52,388,107 GAL	55,040,162 GAL		57,672,540 GAL		--
LABORATORY ANALYSES	DL	Units									*Monthly Ave / One Day Max*
pH (Method 150 1)	--	SU	5 7	5 7	6 0	5 7	6 1		5 9	5 7	5 5 to 10 0
TAL Metals (EPA 200 Series)											*mg/L*
Aluminum (Method 200 7)	0 06	mg/L	0 07	ND	ND	ND	ND	ND	ND	ND	1 / 2
Arsenic (Method 206 2)	0 003	mg/L	ND	ND	ND	ND	ND	ND	ND	ND	0 04 / 0 1
Barium (Method 200 7)	0 003	mg/L	0 099	0 1	0 098	0 099	0 1	0 101	0 099	0 097	NS
Cadmium (Method 200 7)	0 005	mg/L	ND	ND	ND	ND	ND	ND	ND	ND	0 01 / 0 02
Calcium (Method 200 7)	0 015	mg/L	21 1	20 7	20 6	20 6	21 1	21 3	20 1	19 8	NS
Chromium (Method 200 7)	0 009	mg/L	ND	ND	ND	ND	ND	ND	ND	ND	0 2 / 0 4
Copper (Method 200 7)	0 008	mg/L	ND	ND	ND	ND	0 011	ND	ND	ND	0 2 / 0 4
Iron (Method 200 7)	0 009	mg/L	0 1	0 093	0 088	0 018	0 025	0 034	0 019	0 015	10 / 20
Lead (Method 200 7)	0 06	mg/L	ND	ND	ND	ND	ND	ND	ND	ND	0 15 / 0 3
Magnesium (Method 200 7)	0 04	mg/L	10 6	10 6	10 3	10 7	10 5	10 6	10 3	10 2	NS
Manganese (Method 200 7)	0 003	mg/L	0 028	0 026	0 018	0 020	0 022	0 022	0 007	0 007	NS
Mercury (Method 245 1)	0 0002	mg/L	ND	ND	ND	ND	ND	ND	ND	ND	0 001 / 0 002
Nickel (Method 200 7)	0 02	mg/L	ND	ND	ND	ND	0 066	ND	ND	ND	0 1 / 0 3
Potassium (Method 200 7)	0 25	mg/L	0 798	0 79	0 852	0 926	1 16	0 82	0 84	0 764	NS
Sodium (Method 200 7)	0 05	mg/L	24 6	25 3	22 2	23 0	22 8	22 4	23 1	21 8	NS
Zinc (Method 200 7)	0 01	mg/L	0 033	ND	0 043	0 028	0 07	0 055	0 047	0 045	0 3 / 1 0
TCL Volatile Organics (Method 8260B)											*ug/L*
Carbon Tetrachloride	1	ug/L	1 21	1 18	2 05	2 22	1 77	1 69	1 18	0 18J	20 / 40
Chloroform	1	ug/L	9 38	9 78	9 88	8 30	7 41	7 49	8 81	6 4	20 / 40
1,1-Dichloroethane	1	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	NS
1 1-Dichloroethene	1	ug/L	17	18	19 3	16 6	16 6	16 7	15 7	10 2	50 / 100
Cis 1,2-Dichlorothene	1	ug/L	47 1	**50 2**	49 8	44 1	48 9	49 4	47	32 5	50 / 100
Trans 1,2-Dichloroethene	1	ug/L	14 6	14 9	14 5	13 0	12 7	13 0	12 6	8 4	50 / 100
Methylene Chloride	5	ug/L	**11.9B**	**12 8B**	ND	ND	ND	ND	ND	ND	10 / 20
1,1,2 2-Tetrachloroethane	1	ug/L	137	131	148	183	120	118	137	144	500 / 1000
Tetrachloroethene	1	ug/L	19 8	19 8	21 8	19 2	17 9	17 8	19 1	14 2	60 / 120
Toluene	1	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	20 / 40
1,1,1-Trichloroethane	1	ug/L	ND	ND	ND	ND	ND	ND	0 61J	0 43J	10 / 20
1,1,2-Trichloroethane	1	ug/L	ND	ND	ND	ND	ND	ND	0 89J	ND	50 / 100
Trichloroethene	1 00	ug/L	207	216	214	208	177	181	174	134	400 / 800
TCL Semi-Volatile Organics (Method 8270C)											*ug/L*
Bis(2-ethylhexyl)phthalate	10	ug/L	ND	ND	**10 6B**	ND	ND	ND	ND	**13 7B**	10 / 20
Di-n-butyl Phthalate	5	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	30 / 60
Naphthalene	2	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	10 / 20
Phenol	5	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	10 / 20

NOTE Compounds included in this table are those listed in Section D 3 and detected as part of the analytical methods conducted per Section F 1 of Industrial Wastewater Discharge Agreement

All analyses performed by Environmental Testing & Consulting Inc Memphis, TN

* = Recovery well RW-09 was not in operation at the time of sample collection

** = Recovery well RW-08 was not in operation at the time of sample collection

A = Recovery well RW-03 was not in operation at the time of sample collection

NS = no standard listed in the Industrial Wastewater Discharge Agreement

J = estimated value presence of the compound was confirmed but less than the reported DL

J* = estimated value quality control recoveries outside acceptance ranges

ND = not detected

B = analyte detected in associated method and/or equipment blank

mg/L = milligrams per liter

ug/L = micrograms per liter

DL = detection limit

GPM = gallons per minute

GPD = gallons per day

91 2 = bold number indicates that value exceeds Discharge Max Levels

A=Effluent meter zeroed out 03-Nov-99

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Table 1

Summary of Analytical Results for Total Effluent (Nov-98 through Dec-00) of the Groundwater Recovery System

Sample Identification Number			ST-EFF-020	ST-EFF-021	ST-EFF-121 (Duplicate)	ST-EFF-022	ST-INF-022 (Duplicate)	ST-EFF-023	ST-EFF-024	EQB-024	City of Memphis
Laboratory ID No			0001189-01	0002422 01	0002422-02	0003418-01	0003418-02	0004399-01	0005400-01	0005400-02	Industrial Wastewater
Total System Effluent Sample Description			Week 63 of System Operation (O&M)	Week 68 of System Operation (O&M)		Week 72 of System Operation (O&M)		Week 76 of System Operation (O&M)	Week 80 of System Operation (O&M)	Week 80 of System Operation (O&M)	
Date Effluent Sample Collected			10-Jan-00	15-Feb-00		15-Mar-00		14-Apr-00	16-May-00	16-May-00	–
Instantaneous Flow Rate			A64 9 GPM/93 456 GPD	70 6 GPM/101 664 GPD		57 1 GPM/82,224		57 1 GPM/82 224 GPD	52 1 GPM/75,024 GPD	52 1 GPM/75,024 GPD	561,600 GPD
Totalized Flow			59,949,612 GAL	62,926 034 GAL		65,383,409 GAL		67,775,983 GAL	70,137,871 GAL	70,137,871 GAL	–
LABORATORY ANALYSES	DL	Units									*Monthly Ave / One Day Max*
pH (Method 150 1)	–	SU	7 0	6 1	5 4	6 1	5 8	6 1	5 9	6 0	5 5 to 10 0
TAL Metals (EPA 200 Series)											*mg/L*
Aluminum (Method 200 7)	0 06	mg/L	ND	ND	ND	ND	ND	ND	ND	ND	1 / 2
Arsenic (Method 206 2)	0 003	mg/L	ND	ND	ND	ND	ND	ND	ND	ND	0 04 / 0 1
Barium (Method 200 7)	0 003	mg/L	0 099	0 106	0 108	0 106	0 104	0 111	ND	ND	NS
Cadmium (Method 200 7)	0 005	mg/L	ND	ND	ND	ND	ND	ND	ND	ND	0 01 / 0 02
Calcium (Method 200 7)	0 015	mg/L	19 9	21 0	21 6	21 9B	21 8B	21 1B	21 4	20 8	NS
Chromium (Method 200 7)	0 009	mg/L	ND	ND	ND	ND	ND	ND	ND	ND	0 2 / 0 4
Copper (Method 200 7)	0 008	mg/L	ND	ND	ND	ND	ND	ND	ND	ND	0 2 / 0 4
Iron (Method 200 7)	0 009	mg/L	0 021	0 114	0 036	0 155J*	0 029J*	0 048	ND	0 032	10 / 20
Lead (Method 200 7)	0 06	mg/L	ND	ND	ND	ND	ND	ND	ND	ND	0 15 / 0 3
Magnesium (Method 200 7)	0 04	mg/L	10 6	10 8	11 3	11 2	11	10 9	11 4	11	NS
Manganese (Method 200 7)	0 003	mg/L	ND	0 025	0 025	0 015	0 015	0 019	ND	ND	NS
Mercury (Method 245 1)	0 0002	mg/L	ND	ND	ND	ND	ND	ND	ND	ND	0 001 / 0 002
Nickel (Method 200 7)	0 02	mg/L	ND	ND	ND	ND	ND	ND	ND	ND	0 1 / 0 3
Potassium (Method 200 7)	0 25	mg/L	0 752	0 816	0 874	0 852	0 809	0 826	0 681	0 892	NS
Sodium (Method 200 7)	0 05	mg/L	22 8	22 7	23 5	24 6	23 5	22 9	23 3	22 3	NS
Zinc (Method 200 7)	0 01	mg/L	0 038	**0 305**	0 053	0 04	0 043	0 052	0 045	0 038	0 3 / 1 0
TCL Volatile Organics (Method 8260B)											*ug/L*
Carbon Tetrachloride	1	ug/L	1 14	1 71	1 67	1 56	1 5	1 63	0 87	ND	20 / 40
Chloroform	1	ug/L	8 34	6 51	6 58	7 76	8 36	7 60	7 59	7 78	20 / 40
1,1-Dichloroethane	1	ug/L	ND	ND	ND	ND	ND	0 47J	ND	ND	NS
1,1-Dichloroethene	1	ug/L	ND	13 8	14 1	12 8	13 5	ND	14 8	15 6	50 / 100
Cis 1 2-Dichlorothene	1	ug/L	46	43 8	43 7	42 6	43 1	**51 5**	**50 9**	**52 4**	50 / 100
Trans 1,2-Dichloroethene	1	ug/L	13 4	12 3	12 0	13 2	13 4	14 9	15 8	16 3	50 / 100
Methylene Chloride	5	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	10 / 20
1,1,2,2-Tetrachloroethane	1	ug/L	218	177	189	47 5	51 7	54 7	51	51 3	500 / 1000
Tetrachloroethene	1	ug/L	17 7	14 9J*	15 3J*	17 2	18	18	15 2	15 9	60 / 120
Toluene	1	ug/L	ND	ND	ND	ND	1 53J	ND	ND	ND	20 / 40
1,1,1-Trichloroethane	1	ug/L	ND	0 48J	0 48J	0 52J	ND	ND	ND	ND	10 / 20
1,1,2-Trichloroethane	1	ug/L	ND	0 80J	0 75J	0 66J*	0 97J	0 96J	ND	0 78	50 / 100
Trichloroethene	1 00	ug/L	189	177	179	115	121	189	124	129	400 / 800
TCL Semi-Volatile Organics (Method 8270C)											*ug/L*
Bis(2-ethylhexyl)phthalate	10	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	10 / 20
Di-n-butyl Phthalate	5	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	30 / 60
Naphthalene	2	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	10 / 20
Phenol	5	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	10 / 20

NOTE Compounds included in this table are those listed in Section D 3 and detected as part of the analytical methods conducted per Section F 1 of Industrial Wastewater Discharge Agreement

All analyses performed by Environmental Testing & Consulting Inc Memphis TN

* = Recovery well RW-09 was not in operation at the time of sample collection

** = Recovery well RW-08 was not in operation at the time of sample collection

A = Recovery well RW-03 was not in operation at the time of sample collection

NS = no standard listed in the Industrial Wastewater Discharge Agreement

J = estimated value - presence of the compound was confirmed but less than the reported DL

J* = estimated value quality control recoveries outside acceptance ranges

ND = not detected

B = analyte detected in associated method and/or equipment blank

mg/L = milligrams per liter

ug/L = micrograms per liter

DL = detection limit

GPM = gallons per minute

GPD = gallons per day

81 2 = bold number indicates that value exceeds Discharge Max Levels

A=Effluent meter zeroed out 03-Nov-99

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Table 1

Summary of Analytical Results for Total Effluent (Nov-98 through Dec-00) of the Groundwater Recovery System

Sample Identification Number			ST-EFF-025	ST-EFF-026	EQB-026	ST-EFF-027	ST-EFF-028	EQB-028(DUPLICATE)	ST-EFF-029	EQB-029(DUPLICATE)	City of Memphis
Laboratory ID No			0006716-01	0007278-01	0007278-02	0008325-01	0009443-01	0009443-02	0010460-01	0010460-02	Industrial Wastewater
Total System Effluent Sample Description			Week 85 of System Operation (O&M)	Week 88 of System Operation (O&M)	Week 88 of System Operation (O&M)	Week 92 of System Operation (O&M)	Week 97 of System Operation (O&M)	Week 97 of System Operation (O&M)	Week 101 of System Operation (O&M)	Week 101 of System Operation (O&M)	
Date Effluent Sample Collected			23-Jun-00	13-Jul-00	13-Jul-00	11-Aug-00	19-Sep-00	19-Sep-00	18-Oct-00	18-Oct-00	–
Instantaneous Flow Rate			55 09 GPM/79 330 GPD	52 78 GPM/76,003 GPD	52 78 GPM/76,003 GPD	57 22 GPM/82,396 GPD	55 95 GPM/80 568 GPD	55 95 GPM/80 568 GPD	45 14 GPM/65 002 GPD	45 14 GPM/65,002 GPD	561 600 GPD
Totalized Flow			73,321,836 GAL	75,673,706 GALLONS	75,673,706 GALLONS	78,223,187	80,640,059 GALLONS	80 640,059 GALLONS	82 655,006 GALLONS	82,655,006 GALLONS	–
LABORATORY ANALYSES	DL	Units									*Monthly Ave / One Day Max*
pH (Method 150 1)	–	SU	5 7	7 7	8 4	6 1	5 8	6 1	6 0	6 0	5 5 to 10 0
TAL Metals (EPA 200 Series)											*mg/L*
Aluminum (Method 200 7)	0 06	mg/L	ND	ND	ND	ND	ND	ND	ND	ND	1 / 2
Arsenic (Method 206 2)	0 003	mg/L	ND	ND	ND	ND	ND	ND	ND	ND	0 04 / 0 1
Barium (Method 200 7)	0 003	mg/L	0 109	0 104	ND	0 111	0 115	0 117	0 108	0 109	NS
Cadmium (Method 200 7)	0 005	mg/L	ND	ND	ND	ND	ND	ND	ND	ND	0 01 / 0 02
Calcium (Method 200 7)	0 015	mg/L	21 8	21 3	0 067	21 7	22 8	23 1	21 1	21 4	NS
Chromium (Method 200 7)	0 009	mg/L	ND	ND	ND	ND	ND	ND	ND	ND	0 2 / 0 4
Copper (Method 200 7)	0 008	mg/L	ND	ND	ND	ND	ND	ND	ND	ND	0 2 / 0 4
Iron (Method 200 7)	0 009	mg/L	0 094	0 029	ND	0 137	0 187	0 739	0 061	0 036	10 / 20
Lead (Method 200 7)	0 06	mg/L	ND	ND	ND	ND	ND	ND	ND	ND	0 15 / 0 3
Magnesium (Method 200 7)	0 04	mg/L	11 4	11	ND	10 8	10 9	11	10 3	10 5	NS
Manganese (Method 200 7)	0 003	mg/L	0 014	0 009	ND	0 011	0 010	0 010	ND	ND	NS
Mercury (Method 245 1)	0 0002	mg/L	ND	ND	ND	ND	ND	ND	ND	ND	0 001 / 0 002
Nickel (Method 200 7)	0 02	mg/L	ND	ND	ND	ND	0 03	0 336	ND	ND	0 1 / 0 3
Potassium (Method 200 7)	0 25	mg/L	0 829	0 836	ND	0 87	0 886	0 954	0 886	0 872	NS
Sodium (Method 200 7)	0 05	mg/L	22 0	23 7	3 2	23 8	23 2	23 4	23 7	25 4	NS
Zinc (Method 200 7)	0 01	mg/L	0 04	0 061	ND	0 045	0 118	0 084	0 094	0 074	0 3 / 1 0
TCL Volatile Organics (Method 8260B)											*ug/L*
Carbon Tetrachloride	1	ug/L	1 3	1 2	ND	1 82	2 31	2 12	1 57	1 65	20 / 40
Chloroform	1	ug/L	9 41	8 92	ND	7 96	9 24	8 30	9 69	8 54	20 / 40
1,1-Dichloroethane	1	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	NS
1 1-Dichloroethene	1	ug/L	16 6	15	ND	13 2	17 6	17 1	18 8	18	50 / 100
Cis 1,2-Dichlorothene	1	ug/L	62 7	54 4	ND	44 5	50	46 5	55 7	51	50 / 100
Trans 1 2-Dichloroethene	1	ug/L	18 5	15 9	ND	11 6	13 4	11 5	16 0	14 8	50 / 100
Methylene Chloride	5	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	10 / 20
1,1,2,2-Tetrachloroethane	1	ug/L	59 2	52	ND	42 7	61 4	60 3	61 3	58 7	500 / 1000
Tetrachloroethene	1	ug/L	14 5	13 8	ND	13 8	22 1	22 8	15 9	15 9	60 / 120
Toluene	1	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	20 / 40
1,1,1-Trichloroethane	1	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	10 / 20
1 1,2-Trichloroethane	1	ug/L	0 93	0 669J	ND	0 86J	1 14	ND	ND	1 01	50 / 100
Trichloroethene	1 00	ug/L	139	123	ND	148	152	159	101	102	400 / 800
TCL Semi-Volatile Organics (Method 8270C)											*ug/L*
Bis(2-ethylhexyl)phthalate	10	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	10 / 20
Di-n-butyl Phthalate	5	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	30 / 60
Naphthalene	2	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	10 / 20
Phenol	5	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	10 / 20

Table 1

Summary of Analytical Results for Total Effluent (Nov-98 through Dec-00) of the Groundwater Recovery System

Sample Identification Number			ST-EFF-030	ST-EFF-031	EQB-031	City of Memphis
Laboratory ID No			0011634-01	0012504-01	0012504-02	Industrial Wastewater
Total System Effluent Sample Description			Week 105 of System Operation (O&M)	Week 109 of System Operation (O&M)	Week 109 of System Operation (O&M)	
Date Effluent Sample Collected			21-Nov-00	20-Dec-00	20-Dec-00	--
Instantaneous Flow Rate			11 11 GPM/15 998 GPD			--
Totalized Flow			83,150 768 GALLONS			--
LABORATORY ANALYSES	DL	Units				*Monthly Ave / One Day Max*
pH (Method 150 1)	--	SU	5 8	6 5	7 3	5 5 to 10 0
TAL Metals (EPA 200 Series)						*mg/L*
Aluminum (Method 200 7)	0 06	mg/L	ND	ND	ND	1 / 2
Arsenic (Method 206 2)	0 003	mg/L	ND	ND	ND	0 04 / 0 1
Barium (Method 200 7)	0 003	mg/L	ND	0 117	ND	NS
Cadmium (Method 200 7)	0 005	mg/L	ND	ND	ND	0 01 / 0 02
Calcium (Method 200 7)	0 015	mg/L	20 1	23 4	ND	NS
Chromium (Method 200 7)	0 009	mg/L	ND	ND	ND	0 2 / 0 4
Copper (Method 200 7)	0 008	mg/L	ND	ND	ND	0 2 / 0 4
Iron (Method 200 7)	0 009	mg/L	0 053	0 211	0 012	10 / 20
Lead (Method 200 7)	0 06	mg/L	ND	ND	ND	0 15 / 0 3
Magnesium (Method 200 7)	0 04	mg/L	9 87	11 5	ND	NS
Manganese (Method 200 7)	0 003	mg/L	ND	0 009	ND	NS
Mercury (Method 245 1)	0 0002	mg/L	ND	ND	ND	0 001 / 0 002
Nickel (Method 200 7)	0 02	mg/L	0 028	ND	ND	0 1 / 0 3
Potassium (Method 200 7)	0 25	mg/L	0 839	0 978	ND	NS
Sodium (Method 200 7)	0 05	mg/L	23 1	21 8	0 072	NS
Zinc (Method 200 7)	0 01	mg/L	0 059	0 063	ND	0 3 / 1 0
TCL Volatile Organics (Method 8260B)						*ug/L*
Carbon Tetrachloride	1	ug/L	1 82	ND	ND	20 / 40
Chloroform	1	ug/L	7 88	7 15	ND	20 / 40
1,1-Dichloroethane	1	ug/L	ND	0 51J	ND	NS
1,1-Dichloroethene	1	ug/L	16 7	14 6	ND	50 / 100
Cis 1,2-Dichlorothene	1	ug/L	54 8	18 2	ND	50 / 100
Trans 1,2-Dichloroethene	1	ug/L	ND	ND	ND	50 / 100
Methylene Chloride	5	ug/L	ND	ND	ND	10 / 20
1,1,2,2-Tetrachloroethane	1	ug/L	29 7	ND	ND	500 / 1000
Tetrachloroethene	1	ug/L	18 3	20 7	ND	60 / 120
Toluene	1	ug/L	ND	ND	ND	20 / 40
1,1,1-Trichloroethane	1	ug/L	ND	0 52 J	ND	10 / 20
1,1,2-Trichloroethane	1	ug/L	1 05	ND	ND	50 / 100
Trichloroethene	1 00	ug/L	99 3	57 6	ND	400 / 800
TCL Semi-Volatile Organics (Method 8270C)						*ug/L*
Bis(2-ethylhexyl)phthalate	10	ug/L	ND	ND	ND	10 / 20
Di-n-butyl Phthalate	5	ug/L	ND	ND	ND	30 / 60
Naphthalene	2	ug/L	ND	ND	ND	10 / 20
Phenol	5	ug/L	ND	ND	ND	10 / 20

[redacted]2

Quarterly Analytical Results for TCL Volatile Organics on Sampled Monitoring Wells

Sample Identification Number			MW-14-Y2Q1	MW-14-Y2Q2	MW-14-Y2Q3-RE*	MW-14-Y2Q4	Maximum Contaminant Level (MCL)-Primary Drinking Water Standard	USEPA Region III RBCs-Tap Water (October 7, 1999)
Laboratory & Lab Sample ID No			0002480-08	0005523-27	0008674-04	0011216-02		
Date Sample Collected			16-Feb-00	18-May-00	24-Aug-00	6-Nov-00		
pH			5 7	6 1	7 0	6 7		
Conductivity (umhos)			218	200	201	NP		
Temperature			17 6	21 9	NP	18 8		
Turbidity (ntu)			184	>999	NP	NP		
Laboratory Analyses	DL	Units						
TCL Volatile Organics (Method 8260B)								
Benzene	1	ug/L	ND	ND	ND	ND	5	0 32
Bromodichloromethane	1	ug/L	ND	<1 00	ND	ND	NS	0 17
Carbon Tetrachloride	1	ug/L	ND	<1 00	ND	ND	5	0 16
Chlorobenzene	1	ug/L	ND	<1 00	ND	ND	100	110
Chloroform	1	ug/L	ND	<1 00	ND	ND	NS	0 15
Chloromethane	1	ug/L	ND	<1 00	ND	ND	NS	3 6
1,1-Dichloroethane	1	ug/L	ND	<1 00	ND	ND	NS	800
1,2-Dichloroethane	1	ug/L	ND	<1 00	ND	ND	5	0 12
1,1-Dichloroethene	1	ug/L	ND	<1 00	ND	ND	7	0 044
Trans 1,2-Dichloroethene	1	ug/L	ND	<1 00	ND	ND	100	120
Cis 1 2-Dichloroethene	1	ug/L	ND	<1 00	ND	ND	70	61
1,1,2,2-Tetrachloroethane	1	ug/L	ND	<1 00	ND	ND	NS	0 053
Tetrachloroethene	1	ug/L	ND	<1 00	ND	ND	5	1 1
Toluene	1	ug/L	ND	<1 00	ND	ND	1000	750
1,2,4 - Trichlorobenzene	1	ug/L	ND	<1 00	ND	ND	70	190
1 1,1-Trichloroethane	1	ug/L	ND	<1 00	ND	ND	200	540
1,1,2-Trichloroethane	1	ug/L	ND	<1 00	ND	ND	5	0 19
Trichloroethene	1	ug/L	ND	<1 00	ND	ND	5	1 6
Vinyl Chloride	1	ug/L	ND	<1 00	ND	ND	2	0 019

Only compounds detected are listed
ug/L = micrograms per liter
DL = Detection Limit
TCL = Target Compound List
BDL = Below Detection Limit
MCL = Maximum Contaminant Level - Primary Drinking Water Standards
RBCs = Risk Based Contaminants
NS = no standard NP = not performed
NA = not available
B = Analyte detected in associated method and/or equipment blank
J = Estimated value - presence of the compound was confirmed but less than the reported DL
J* = estimated value - quality control recovenes outside acceptance ranges
E = Concentration exceeds the established method calibration range but is w/in instrument working range

* MW-14-Y2Q3 was retested due to potential carryover from a previous sample See analytical report (Appendix C)

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Quarterly Analytical Results for TCL Volatile Organics
on Sampled Monitoring Wells

Sample Identification Number			MW-15-Y1Q1	MW-15-Y1Q2	MW-15-Y1Q3	MW-15-Y1Q4	MW-15-Y2Q1	MW-15-Y2Q2	MW-15-Y2Q3	MW-15-Y2Q4	Maximum Contaminant Level (MCL)-Primary Drinking Water Standard	USEPA Region III RBCs-Tap Water (October 7, 1999)
Laboratory & Lab Sample ID No			9902125-12	9905638-01	9908741-10	9911147-12	0002423-015	0005523-05	0008592-03	0011218-03		
Date Sample Collected			3-Feb-99	24-May-99	27-Aug-99	3-Nov-99	15-Feb-00	17-May-00	22-Aug-00	6-Nov-00		
pH			4 6	4 6	7 6	5 8	5 8	5 9	7 55	7 71		
Conductivity (umhos)			208	196	157	204	240	245	210	111		
Temperature			NA	17 9	20	17 1	17 8	18 8	NP	17 5		
Turbidity (ntu)			NA	10	221	8 71	16 3	>999	NP	NP		
Laboratory Analyses	DL	Units										
TCL Volatile Organics (Method 8260B)												
Benzene	1	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	5	0 32
Bromodichloromethane	1	ug/L	ND	1 35	1 12	ND	1 42	<1 00	ND	ND	NS	0 17
Carbon Tetrachloride	1	ug/L	27 9	79 6	39 2	35 2	29	16 3	24 7	12 8	5	0 16
Chlorobenzene	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	100	110
Chloroform	1	ug/L	308	1610	1270	1020	1060	704	848	224*	NS	0 15
Chloromethane	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	NS	3 6
1,1-Dichloroethane	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	NS	800
1,2-Dichloroethane	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	5	0 12
1,1-Dichloroethene	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	7	0 044
Trans 1,2-Dichloroethene	1	ug/L	2 13	8 26	4 29	4 08	4 54	2 29	4 17	1 73	100	120
Cis 1,2-Dichloroethene	1	ug/L	5 96	22 6	12 4	10 8	14 3	6 96	12	4 75	70	61
1,1,2,2-Tetrachloroethane	1	ug/L	ND	31 5	187	291	522	343	389	147	NS	0 053
Tetrachloroethene	1	ug/L	4 75	20 6	10	8 46	6 91	3 96	7 18	2 84	5	1 1
Toluene	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	1000	750
1,2,4 - Trichlorobenzene	1	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	70	190
1 1,1-Trichloroethane	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	200	540
1,1,2-Trichloroethane	1	ug/L	ND	2 66	4 18	5 72	10 2	4 69	5 7	2 6	5	0 19
Trichloroethene	1	ug/L	115	518	331	299	299	154	234	65 9	5	1 6
Vinyl Chloride	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	2	0 019

Only compounds detected are listed
ug/L = micrograms per liter
DL = Detection Limit
TCL = Target Compound List
BDL = Below Detection Limit
MCL = Maximum Contaminant Level - Primary Drinking Water Standards
RBCs = Risk Based Contaminants
NS = no standard NP = not performed
NA = not available
B = Analyte detected in associated method and/or equipment blank
J = Estimated value - presence of the compound was confirmed but less than the reported DL
J* = estimated value - quality control recovenes outside acceptance ranges
E = Concentration exceeds the established method calibration range but is w/in instrument working range

*Original analysis was 'E' qualified
This value represents the diluted sample result

[redacted]2

Quarterly Analytical Results for TCL Volatile Organics
on Sampled Monitoring Wells

Sample Identification Number			MW-30-Y1Q1	MW-30-Y1Q2	MW-30-Y1Q3	MW-30-Y1-Q4	MW-30-Y2Q1	MW-30-Y2Q2	MW-30-Y2Q3	MW-30-Y2Q4	Maximum Contaminant Level (MCL)-Primary Drinking Water Standard	USEPA Region III RBCs-Tap Water (October 7, 1999)
Laboratory & Lab Sample ID No			9902125-04	9905638-10	9908741-02	9911147-02	0002423-02	0005523-12	0008592-09	0011216-08		
Date Sample Collected			02-Feb-99	24-May-99	28-Aug-99	02-Nov-99	15-Feb-00	16-May-00	22-Aug-00	07-Nov-00		
pH			6 1	5 4	7 4	5 7	6 3	6 3	6 5	6 29		
Conductivity (umhos)			NA	174	228	300	325	286	243	116		
Temperature			15 1	19 6	21 3	16 4	14 8	20 1	NP	18 4		
Turbidity (ntu)			NA	>999	>999	8 52	>999	473	NP	NP		
Laboratory Analyses	DL	Units										
TCL Volatile Organics (Method 8260B)												
Benzene	1	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	5	0 32
Bromodichloromethane	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	NS	0 17
Carbon Tetrachloride	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	5	0 16
Chlorobenzene	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	100	110
Chloroform	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	NS	0 15
Chloromethane	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	NS	3 6
1 1-Dichloroethane	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	NS	800
1,2-Dichloroethane	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	5	0 12
1,1-Dichloroethene	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	7	0 044
Trans 1,2-Dichloroethene	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	100	120
Cis 1 2-Dichloroethene	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	70	61
1,1,2,2-Tetrachloroethane	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	NS	0 053
Tetrachloroethene	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	5	1 1
Toluene	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	1000	750
1 2 4 - Trichlorobenzene	1	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	70	190
1,1,1-Trichloroethane	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	200	540
1,1,2-Trichloroethane	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	5	0 19
Trichloroethene	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	5	1 6
Vinyl Chloride	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	2	0 019

Only compounds detected are listed
ug/L = micrograms per liter
DL = Detection Limit
TCL = Target Compound List
BDL = Below Detection Limit
MCL = Maximum Contaminant Level - Primary Drinking Water Standards
RBCs = Risk Based Contaminants
NS = no standard NP = not performed
NA = not available
B = Analyte detected in associated method and/or equipment blank
J = Estimated value - presence of the compound was confirmed but less than the reported DL
J* = estimated value - quality control recoveries outside acceptance ranges
E = Concentration exceeds the established method calibration range but is w/in instrument working range

TABLE 2

Quarterly Analytical Results for TCL Volatile Organics
on Sampled Monitoring Wells

Sample Identification Number			MW-31-Y1Q1	MW-31-Y1Q2	MW-31-Y1Q3	MW-31-Y1Q4	MW-31-Y2Q1	MW-31-Y2Q2	MW-31-Y2Q3	MW-31-Y2Q4	Maximum	
Laboratory & Lab Sample ID No			9902125-11	9905638-16	9908741-08	9911147-09	002423-02	0005523-07	0008634-06	0011216-07	Contaminant Level	USEPA Region III
Date Sample Collected			03-Feb-99	25-May-99	27-Aug-99	03-Nov-99	15-Feb-00	17-May-00	23-Aug-00	07-Nov-00	(MCL)-Primary	RBCs-Tap Water
pH			4 7	6 4	7 2	5 9	6	NP	5 9	6 5	Drinking Water	(October 7, 1999)
Conductivity (umhos)			376	262	275	256	238	NP	236	112	Standard	
Temperature			NA	18 1	19 2	17 9	17 5	NP	NP	18		
Turbidity (ntu)			NA	7	244	9 74	182	NP	NP	NP		
Laboratory Analyses	**DL**	**Units**										
TCL Volatile Organics (Method 8260B)												
Benzene	1	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	5	0 32
Bromodichloromethane	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	NS	0 17
Carbon Tetrachlonde	1	ug/L	1 51	ND	0 59 J	ND	ND	<1 00	0 40 J	ND	5	0 16
Chlorobenzene	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	100	110
Chloroform	1	ug/L	7 22	ND	1 66	0 92 J	1 19	1 29	ND	ND	NS	0 15
Chloromethane	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	NS	3 6
1 1-Dichloroethane	1	ug/L	ND	ND	ND	ND	ND	<1 00	18 9	ND	NS	800
1 2-Dichloroethane	1	ug/L	ND	ND	ND	ND	ND	<1 00	9 58	ND	5	0 12
1,1-Dichloroethene	1	ug/L	7 86	33 3	7 9	5 98	9 89	22 3	ND	31 5	7	0 044
Trans 1,2-Dichloroethene	1	ug/L	22 2	2 14	4 66	2 52	3 37	7 78	ND	4 53	100	120
Cis 1 2-Dichloroethene	1	ug/L	58 9	4 78	4 34	5 09	6 89	15 5	12 3	4 24	70	61
1,1,2,2-Tetrachloroethane	1	ug/L	3 22	ND	ND	ND	ND	<1 00	ND	ND	NS	0 053
Tetrachloroethene	1	ug/L	4 25	7 55	1 31	0 90 J	0 64 J	1 16	2 08	0 92 J	5	1 1
Toluene	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	1000	750
1,2,4 - Trichlorobenzene	1	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	70	190
1,1 1-Trichloroethane	1	ug/L	1 26	ND	ND	ND	ND	<1 00	0 42 J	ND	200	540
1,1,2-Trichloroethane	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	5	0 19
Trichloroethene	1	ug/L	140	23 9	33 7	18	25 6	49 5	68 1	18 5	5	1 6
Vinyl Chloride	1	ug/L	N D	ND	ND	ND	ND	<1 00	ND	ND	2	0 019

Only compounds detected are listed
ug/L = micrograms per liter
DL = Detection Limit
TCL = Target Compound List
BDL = Below Detection Limit
MCL = Maximum Contaminant Level - Primary Drinking Water Standards
RBCs = Risk Based Contaminants
NS = no standard NP = not performed
NA = not available
B = Analyte detected in associated method and/or equipment blank
J = Estimated value - presence of the compound was confirmed but less than the reported DL
J* = estimated value - quality control recoveries outside acceptance ranges
E = Concentration exceeds the established method calibration range but is w/in instrument working range

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Quarterly Analytical Results for TCL Volatile Organics
on Sampled Monitoring Wells

Sample Identification Number			MW-32-Y1Q1	MW-32-Y1Q2	MW-32-Y1Q3	MW-32-Y1Q4	MW-32-Y2Q1	MW-32-Y2Q2	MW-32-Y2Q3	MW-32-Y2Q4	Maximum Contaminant Level (MCL)-Primary Drinking Water Standard	USEPA Region III RBCs-Tap Water (October 7, 1999)
Laboratory & Lab Sample ID No			9902125-09	9905638-14	9908741-06	9911147-10	0002423-07	0005523-18	0008674-06	0011335-04		
Date Sample Collected			03-Feb-99	25-May-99	26-Aug-99	03-Nov-99	15-Feb-00	16-May-00	24-Aug-00	09-Nov-00		
pH			5 8	6 2	7 4	6	6 5	6	7 25	7 2		
Conductivity (umhos)			432	283	224	NA	278	310	308	121		
Temperature			NA	18 2	20 5	16 8	17 1	20	NP	13 3		
Turbidity (ntu)			NA	0	>999	9 75	>999	>999	NP	NP		
Laboratory Analyses	DL	Units										
TCL Volatile Organics (Method 8260B)												
Benzene	1	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	5	0 32
Bromodichloromethane	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	NS	0 17
Carbon Tetrachloride	1	ug/L	**25 2**	**14 2**	**17 3**	**25 2**	**25 5**	**37**	**47 2**	**61 3**	5	0 16
Chlorobenzene	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	100	110
Chloroform	1	ug/L	7 89	32 2	76 9	73	77 2	117	171	372	NS	0 15
Chloromethane	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	NS	3 6
1,1-Dichloroethane	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	NS	800
1,2-Dichloroethane	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	5	0 12
1,1-Dichloroethene	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	7	0 044
Trans 1,2-Dichloroethene	1	ug/L	3 82	1 76	0 99 J	1 01	1 12	2	2 68	4 53	100	120
Cis 1,2-Dichloroethene	1	ug/L	30 5	16 7	4 64	4 59	5 07	6 61	5 66	8 55	70	61
1,1,2,2-Tetrachloroethane	1	ug/L	5 67	4 42	0 92 J	ND	ND	<1 00	2 12	21 5	NS	0 053
Tetrachloroethene	1	ug/L	1 16	1 28	2 22	2 63	2 34	3 94	**5 9**	**6 39**	5	1 1
Toluene	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	1000	750
1,2,4 - Trichlorobenzene	1	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	70	190
1,1,1-Trichloroethane	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	200	540
1 1 2-Trichloroethane	1	ug/L	1 54	ND	ND	ND	ND	<1 00	ND	0 61 J	5	0 19
Trichloroethene	1	ug/L	**31 9**	**28 1**	**34 6**	**36 8**	**41 8**	**58 2**	**89 2**	**94 8**	5	1 6
Vinyl Chloride	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	2	0 019

Only compounds detected are listed
ug/L = micrograms per liter
DL = Detection Limit
TCL = Target Compound List
BDL = Below Detection Limit
MCL = Maximum Contaminant Level - Primary Drinking Water Standards
RBCs = Risk Based Contaminants
NS = no standard NP = not performed
NA = not available
B = Analyte detected in associated method and/or equipment blank
J = Estimated value - presence of the compound was confirmed but less than the reported DL
J* = estimated value - quality control recovenes outside acceptance ranges
E = Concentration exceeds the established method calibration range but is w/in instrument working range

Quarterly Analytical Results for TCL Volatile Organics
on Sampled Monitoring Wells

Sample Identification Number			MW-33-Y1Q1	MW-33-Y1Q2	MW-33-Y1Q3	MW-33-Y1Q4	MW-33-Y2Q1	MW-33-Y2Q2	MW-33-Y2Q3	MW-33-Y2Q4	Maximum	
Laboratory & Lab Sample ID No			9902125-07	9905638-13	9908741-05	9911147-04	0002423-05	0005523-17	0008592-06	0011258-05	Contaminant Level	USEPA Region III
Date Sample Collected			02-Feb-99	25-May-99	26-Aug-99	02-Nov-99	15-Feb-00	16-May-00	22-Aug-00	08-Nov-00	(MCL)-Primary	RBCs-Tap Water
pH			5 7	6 2	7 4	5 3	5 8	5 7	7 6	6 47	Drinking Water	(October 7, 1999)
Conductivity (umhos)			181	181	146	190	191	181	126	221	Standard	
Temperature			NA	18 6	20	18 2	17 6	19 9	NP	17 1		
Turbidity (ntu)			NA	5	>999	8 77	224	>999	NP	NP		
Laboratory Analyses	DL	Units										
TCL Volatile Organics (Method 8260B)												
Benzene	1	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	5	0 32
Bromodichloromethane	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	NS	0 17
Carbon Tetrachloride	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	5	0 16
Chlorobenzene	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	100	110
Chloroform	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	NS	0 15
Chloromethane	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	NS	3 6
1,1-Dichloroethane	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	NS	800
1 2-Dichloroethane	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	5	0 12
1,1-Dichloroethene	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	7	0 044
Trans 1,2-Dichloroethene	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	100	120
Cis 1,2-Dichloroethene	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	70	61
1 1 2,2-Tetrachloroethane	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	NS	0 053
Tetrachloroethene	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	5	1 1
Toluene	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	1000	750
1,2,4 - Trichlorobenzene	1	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	70	190
1,1 1-Trichloroethane	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	200	540
1,1,2-Trichloroethane	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	5	0 19
Trichloroethene	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	5	1 6
Vinyl Chloride	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	2	0 019

Only compounds detected are listed
ug/L = micrograms per liter
DL = Detection Limit
TCL = Target Compound List
BDL = Below Detection Limit
MCL = Maximum Contaminant Level - Primary Drinking Water Standards
RBCs = Risk Based Contaminants
NS = no standard NP = not performed
NA = not available
B = Analyte detected in associated method and/or equipment blank
J = Estimated value - presence of the compound was confirmed but less than the reported DL
J* = estimated value - quality control recovenes outside acceptance ranges
E = Concentration exceeds the established method calibration range but is w/in instrument working range

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Quarterly Analytical Results for TCL Volatile Organics
on Sampled Monitoring Wells

Sample Identification Number			MW-34-Y1Q1	MW-34-Y1Q2	MW-34-Y1Q3	MW-34-Y1Q4	MW-34-Y2Q1	MW-34-Y2Q2	MW-34-Y2Q3	MW-34-Y2Q4	Maximum	
Laboratory & Lab Sample ID No			9902168-01	9905638-17	9908741-09	9911147-07	0002480-09	0005523-32	0008674-07	0011216-09	Contaminant Level	USEPA Region III
Date Sample Collected			04-Feb-99	25-May-99	27-Aug-99	03-Nov-99	16-Feb-00	18-May-00	24-Aug-00	07-Nov-00	(MCL)-Primary	RBCs-Tap Water
pH			5 2	5 7	7 4	5 9	NA	5 9	7 13	NP	Drinking Water	(October 7, 1999)
Conductivity (umhos)			184	185	148	169	NA	181 2	196	NP	Standard	
Temperature			NA	18 8	20 1	17 6	NA	22 2	NP	NP		
Turbidity (ntu)			NA	4	451	7 48	NA	219	NP	NP		
Laboratory Analyses	**DL**	**Units**										
TCL Volatile Organics (Method 8260B)												
Benzene	1	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	5	0 32
Bromodichloromethane	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	NS	0 17
Carbon Tetrachloride	1	ug/L	1 01	1 23	0 51 J	ND	1 04	1 03	0 86 J	ND	5	0 16
Chlorobenzene	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	100	110
Chloroform	1	ug/L	4 34	ND	0 66 J	ND	1 98	3 49	ND	ND	NS	0 15
Chloromethane	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	NS	3 6
1,1-Dichloroethane	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	NS	800
1,2-Dichloroethane	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	5	0 12
1,1-Dichloroethene	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	7	0 044
Trans 1,2-Dichloroethene	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	100	120
Cis 1,2-Dichloroethene	1	ug/L	1 03	ND	ND	ND	ND	<1 00	ND	ND	70	61
1,1 2,2-Tetrachloroethane	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	NS	0 053
Tetrachloroethene	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	5	1 1
Toluene	1	ug/L	ND	ND	0 53 J	ND	ND	<1 00	ND	ND	1000	750
1,2,4 - Trichlorobenzene	1	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	70	190
1 1 1-Trichloroethane	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	200	540
1,1,2-Trichloroethane	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	5	0 19
Trichloroethene	1	ug/L	4 39	ND	0 64 J	ND	0 85 J	2 15	2 55	1 43	5	1 6
Vinyl Chloride	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	2	0 019

Only compounds detected are listed
ug/L = micrograms per liter
DL = Detection Limit
TCL = Target Compound List
BDL = Below Detection Limit
MCL = Maximum Contaminant Level - Primary Drinking Water Standards
RBCs = Risk Based Contaminants
NS = no standard NP = not performed
NA = not available
B = Analyte detected in associated method and/or equipment blank
J = Estimated value - presence of the compound was confirmed but less than the reported DL
J* = estimated value - quality control recoveries outside acceptance ranges
E = Concentration exceeds the established method calibration range but is w/in instrument working range

Quarterly Analytical Results for TCL Volatile Organics
on Sampled Monitoring Wells

Sample Identification Number			MW-40-Y1Q1	MW-40-Y1Q2	MW-40-Y1Q3	MW-40-Y1Q4	MW-40-Y2Q1	MW-40-Y2Q2	MW-40-Y2Q3	MW-40-Y2Q4	Maximum Contaminant Level (MCL)-Primary Drinking Water Standard	USEPA Region III RBCs-Tap Water (October 7, 1999)
Laboratory & Lab Sample ID No			9902125-03	9905638-09	9908741-01	9911147-01	0002423-01	0005523-11	0008634-05	0011258-03		
Date Sample Collected			02-Feb-99	24-May-99	26-Aug-99	02-Nov-99	15-Feb-00	17-May-00	23-Aug-00	07-Nov-00		
pH			8 4	6	7 4	6 3	6 5	6 3	7 9	6 97		
Conductivity (umhos)			<1000	413	641	775	857	855	739	111		
Temperature			15 9	21 2	24 2	22 2	16 3	19	NP	16 1		
Turbidity (ntu)			NA	51	78	9 17	8 57	30 7	NP	NP		
Laboratory Analyses	DL	Units										
TCL Volatile Organics (Method 8260B)												
Benzene	1	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	5	0 32
Bromodichloromethane	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	NS	0 17
Carbon Tetrachloride	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	5	0 16
Chlorobenzene	1	ug/L	ND	ND	0 94 J	1 06	ND	0 99 J	ND	ND	100	110
Chloroform	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	NS	0 15
Chloromethane	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	NS	3 6
1,1-Dichloroethane	1	ug/L	1 48	1 23	ND	ND	ND	<1 00	ND	ND	NS	800
1,2-Dichloroethane	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	5	0 12
1,1-Dichloroethene	1	ug/L	1 06	1 07	ND	ND	ND	<1 00	ND	ND	7	0 044
Trans 1,2-Dichloroethene	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	100	120
Cis 1,2-Dichloroethene	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	70	61
1,1 2,2-Tetrachloroethane	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	NS	0 053
Tetrachloroethene	1	ug/L	ND J*	ND	ND	ND	ND	<1 00	ND	ND	5	1 1
Toluene	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	1000	750
1,2,4 - Trichlorobenzene	1	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	70	190
1,1,1-Trichloroethane	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	200	540
1,1,2-Trichloroethane	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	5	0 19
Trichloroethene	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	5	1 6
Vinyl Chloride	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	2	0 019

Only compounds detected are listed
ug/L = micrograms per liter
DL = Detection Limit
TCL = Target Compound List
BDL = Below Detection Limit
MCL = Maximum Contaminant Level - Primary Drinking Water Standards
RBCs = Risk Based Contaminants
NS = no standard NP = not performed
NA = not available
B = Analyte detected in associated method and/or equipment blank
J = Estimated value - presence of the compound was confirmed but less than the reported DL
J* = estimated value - quality control recoveries outside acceptance ranges
E = Concentration exceeds the established method calibration range but is w/in instrument working range

Quarterly Analytical Results for TCL Volatile Organics
on Sampled Monitoring Wells

Sample Identification Number			MW-44-Y1Q1	MW-44-Y1Q2	MW-44-Y1Q3	MW-44-Y1Q4	MW-44-Y2Q1	MW-44-Y2Q2	MW-44-Y2Q3	MW-44-Y2Q4	Maximum Contaminant Level (MCL)-Primary Drinking Water Standard	USEPA Region III RBCs-Tap Water (October 7, 1999)
Laboratory & Lab Sample ID No			9902125-06	9905638-12	9908741-04	9911147-03	0002423-04	0005523-16	0008674-10	0011258-04		
Date Sample Collected			02-Feb-99	25-May-99	26-Aug-99	02-Nov-99	15-Feb-00	16-May-00	24-Aug-00	08-Nov-00		
pH			6 1	6 3	7 1	5 8	6 1	6 2	7 46	7 4		
Conductivity (umhos)			292	289	247	294	307	284	274	214		
Temperature			NA	18 3	20 4	18	17 2	22 1	NP	NP		
Turbidity (ntu)			NA	10	391	6 76	13 4	424	NP	NP		
Laboratory Analyses	DL	Units										
TCL Volatile Organics (Method 8260B)												
Benzene	1	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	5	0 32
Bromodichloromethane	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	1 66	NS	0 17
Carbon Tetrachloride	1	ug/L	ND	ND	ND	ND	ND	2 3	5 3	2 1	5	0 16
Chlorobenzene	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	100	110
Chloroform	1	ug/L	ND	ND	ND	ND	ND	1 88	3 62	1 23	NS	0 15
Chloromethane	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	NS	3 6
1,1-Dichloroethane	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	NS	800
1,2-Dichloroethane	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	5	0 12
1,1-Dichloroethene	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	7	0 044
Trans 1,2-Dichloroethene	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	100	120
Cis 1,2 Dichloroethene	1	ug/L	ND	ND	ND	ND	ND	0 65 J	1 35	0 62 J	70	61
1,1,2,2-Tetrachloroethane	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	NS	0 053
Tetrachloroethene	1	ug/L	ND	ND	ND	ND	ND	<1 00	4 92	ND	5	1 1
Toluene	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	1000	750
1,2,4 - Trichlorobenzene	1	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	70	190
1,1 1-Trichloroethane	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	200	540
1 1 2-Trichloroethane	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	5	0 19
Trichloroethene	1	ug/L	ND	ND	ND	ND	ND	1 36	ND	0 79 J	5	1 6
Vinyl Chloride	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	2	0 019

Only compounds detected are listed
ug/L = micrograms per liter
DL = Detection Limit
TCL = Target Compound List
BDL = Below Detection Limit
MCL = Maximum Contaminant Level - Primary Drinking Water Standards
RBCs = Risk Based Contaminants
NS = no standard NP = not performed
NA = not available
B = Analyte detected in associated method and/or equipment blank
J = Estimated value - presence of the compound was confirmed but less than the reported DL
J* = estimated value - quality control recoveries outside acceptance ranges
E = Concentration exceeds the established method calibration range but is w/in instrument working range

Quarterly Analytical Results for TCL Volatile Organics
on Sampled Monitoring Wells

Sample Identification Number			MW-51-Y1Q1	MW-51-Y1Q2	MW-51-Y1Q3	MW-51-Y1Q4	MW-51-Y2Q1	MW-51-Y2Q2	MW-51-Y2Q3	MW-51-Y2Q4	Maximum	
Laboratory & Lab Sample ID No			9902125-05	9905638-11	9908741-03	9911147-08	0002423-03	0005523-13	0008674-14	0011258-01	Contaminant Level	USEPA Region III
Date Sample Collected			02-Feb-99	24-May-99	26-Aug-99	03-Nov-99	15-Feb-00	16-May-00	24-Aug-00	08-Nov-00	(MCL)-Primary	RBCs-Tap Water
pH			5 9	4 8	7 3	5 9	5 9	5 9	7 46	6 49	Drinking Water	(October 7, 1999)
Conductivity (umhos)			295	188	249	256	309	290	274	113	Standard	
Temperature			NA	19 3	20 8	18	16 8	20 3	NP	16 6		
Turbidity (ntu)			NA	15	330	9 2	17 5	4 9	NP	NP		
Laboratory Analyses	DL	Units										
TCL Volatile Organics (Method 8260B)												
Benzene	1	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	5	0 32
Bromodichloromethane	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	NS	0 17
Carbon Tetrachloride	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	5	0 16
Chlorobenzene	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	100	110
Chloroform	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	NS	0 15
Chloromethane	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	NS	3 6
1,1-Dichloroethane	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	NS	800
1,2-Dichloroethane	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	5	0 12
1 1-Dichloroethene	1	ug/L	23 4	16 9	15 2	8 19	1 08	8 23	12 9	57 9	7	0 044
Trans 1,2-Dichloroethene	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	100	120
Cis 1,2-Dichloroethene	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	70	61
1 1,2,2-Tetrachloroethane	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	NS	0 053
Tetrachloroethene	1	ug/L	1 5	ND	0 54 J	0 83 J	ND	<1 00	1 49	3 51	5	1 1
Toluene	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	1000	750
1,2,4 - Trichlorobenzene	1	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	70	190
1,1,1-Trichloroethane	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	1 79	200	540
1,1,2-Trichloroethane	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	5	0 19
Trichloroethene	1	ug/L	8 44	4 64	3 71	2 93	0 70 J	4 63	6 33	13 2	5	1 6
Vinyl Chloride	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	2	0 019

Only compounds detected are listed
ug/L = micrograms per liter
DL = Detection Limit
TCL = Target Compound List
BDL = Below Detection Limit
MCL = Maximum Contaminant Level - Primary Drinking Water Standards
RBCs = Risk Based Contaminants
NS = no standard NP = not performed
NA = not available
B = Analyte detected in associated method and/or equipment blank
J = Estimated value - presence of the compound was confirmed but less than the reported DL
J* = estimated value - quality control recovenes outside acceptance ranges
E = Concentration exceeds the established method calibration range but is w/in instrument working range

Quarterly Analytical Results for TCL Volatile Organics
on Sampled Monitoring Wells

Sample Identification Number			MW-54-Y1Q1	MW-54-Y1Q2	MW-54-Y1Q3	MW-54-Y1Q4	MW 54-Y2Q1	MW-54-Y2Q2	MW-54-Y2Q3	MW-54-Y2Q4	Maximum	
Laboratory & Lab Sample ID No			9902125-10	9905638-15	9908741-07	9911147-11	0002423-10	0005523-03	0008592-07	0011216-06	Contaminant Level	USEPA Region III
Date Sample Collected			03-Feb-99	25-May-99	26-Aug-99	03-Nov-99	05-Feb-00	17-May-00	22-Aug-00	07-Nov-00	(MCL)-Primary	RBCs-Tap Water
pH			5 6	6 4	7 4	5 7	5 9	5 9	7 6	6 51	Drinking Water	(October 7, 1999)
Conductivity (umhos)			213	253	216	366	385	347	264	111	Standard	
Temperature			NA	18 2	19 7	17 2	17 7	20 4	NP	17 5		
Turbidity (ntu)			NA	0	149	9 93	16 6	11 8	NP	NP		
Laboratory Analyses	**DL**	**Units**										
TCL Volatile Organics (Method 8260B)												
Benzene	1	ug/L	ND	ND	ND	ND	ND	<1 00	0 33 J	ND	5	0 32
Bromodichloromethane	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	NS	0 17
Carbon Tetrachloride	1	ug/L	ND	3 53	12 8	5 02	14 7	4 46	7 97	12 8	5	0 16
Chlorobenzene	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	100	110
Chloroform	1	ug/L	ND	ND	5 04	2 54	12 4	5 54	13 8	19 8	NS	0 15
Chloromethane	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	NS	3 6
1,1-Dichloroethane	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	NS	800
1 2-Dichloroethane	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	5	0 12
1 1-Dichloroethene	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	7	0 044
Trans 1,2-Dichloroethene	1	ug/L	ND	ND	ND	1 4	2 01	<1 00	1 39	2 58	100	120
Cis 1,2-Dichloroethene	1	ug/L	3 6	3 9	10 3	24 1	22 5	7 08	14 9	34 6	70	61
1,1,2 2-Tetrachloroethane	1	ug/L	ND	ND	ND	40 1	23 6	<1 00	4 9	22 7	NS	0 053
Tetrachloroethene	1	ug/L	ND	ND	ND	0 68 J	0 94 J	<1 00	0 74 J	0 91 J	5	1 1
Toluene	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	1000	750
1,2,4 - Trichlorobenzene	1	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	70	190
1,1,1-Trichloroethane	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	200	540
1,1,2-Trichloroethane	1	ug/L	ND	ND	ND	1 15	0 90 J	<1 00	0 56 J	1 24	5	0 19
Trichloroethene	1	ug/L	60 6	61	50	30 6	43 3	11 6	28 1	29 2	5	1 6
Vinyl Chloride	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	2	0 019

Only compounds detected are listed
ug/L = micrograms per liter
DL = Detection Limit
TCL = Target Compound List
BDL = Below Detection Limit
MCL = Maximum Contaminant Level - Primary Drinking Water Standards
RBCs = Risk Based Contaminants
NS = no standard NP = not performed
NA = not available
B = Analyte detected in associated method and/or equipment blank
J = Estimated value - presence of the compound was confirmed but less than the reported DL
J* = estimated value - quality control recovenes outside acceptance ranges
E = Concentration exceeds the established method calibration range but is w/in instrument working range

Quarterly Analytical Results for TCL Volatile Organics
on Sampled Monitoring Wells

Sample Identification Number			MW-56-Y2Q1	MW-56-Y2Q2	MW-56-Y2Q3	MW-56-Y2Q4	MW-57-Y2Q1	MW-57-Y2Q2	MW-57-Y2Q3	MW-57-Y2Q4	Maximum Contaminant Level (MCL)-Primary Drinking Water Standard	USEPA Region III RBCs-Tap Water (October 7 1999)
Laboratory & Lab Sample ID No			0002480-11	0005523-01	0008592-05	0011216-05	0002480-05	0005523-19	0008592-02	0011216-01		
Date Sample Collected			16-Feb-00	17-May-00	22-Aug-00	07-Nov-00	16-Feb-00	17-May-00	22-Aug-00	07-Nov-00		
pH			6 1	5 9	7 24	6 58	5 7	5 8	7 8	NP		
Conductivity (umhos)			238	249	208	111	189	191	141	NP		
Temperature			16 2	19 7	NP	17 9	19 2	19	NP	NP		
Turbidity (ntu)			NA	>999	NP	NP	>999	>999	NP	NP		
Laboratory Analyses	DL	Units										
TCL Volatile Organics (Method 8260B)												
Benzene	1	ug/L	ND	<1 00	ND	ND	ND	<1 00	ND	ND	5	0 32
Bromodichloromethane	1	ug/L	ND	<1 00	ND	ND	ND	<1 00	ND	12 4	NS	0 17
Carbon Tetrachloride	1	ug/L	0 57 J	<1 00	ND	ND	39 9	50 6	45 7	48 3	5	0 16
Chlorobenzene	1	ug/L	ND	<1 00	ND	ND	ND	<1 00	ND	ND	100	110
Chloroform	1	ug/L	38 2	43 4	1 67	39 4	13 2	10 3	11 3	8 93	NS	0 15
Chloromethane	1	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	NS	3 6
1 1-Dichloroethane	1	ug/L	ND	<1 00	ND	ND	ND	<1 00	ND	ND	NS	800
1 2-Dichloroethane	1	ug/L	ND	<1 00	ND	ND	ND	<1 00	ND	ND	5	0 12
1,1-Dichloroethene	1	ug/L	ND	<1 00	ND	ND	ND	<1 00	ND	ND	7	0 044
Trans 1,2-Dichloroethene	1	ug/L	ND	<1 00	ND	ND	1 55	1 51	1 83	1 5	100	120
Cis 1,2-Dichloroethene	1	ug/L	ND	<1 00	ND	ND	ND	<1 00	0 53 J	0 41 J	70	61
1,1,2,2-Tetrachloroethane	1	ug/L	ND	<1 00	ND	ND	ND	<1 00	ND	ND	NS	0 053
Tetrachloroethene	1	ug/L	ND	<1 00	0 41 J	ND	5 38	5 1	5 86	5 07	5	1 1
Toluene	1	ug/L	ND	<1 00	ND	ND	ND	<1 00	ND	ND	1000	750
1 2 4 - Trichlorobenzene	1	ug/L	ND	ND	ND	1 6	ND	ND	ND	ND	70	190
1,1,1-Trichloroethane	1	ug/L	ND	<1 00	ND	ND	ND	<1 00	ND	ND	200	540
1,1,2-Trichloroethane	1	ug/L	ND	<1 00	ND	ND	ND	<1 00	ND	ND	5	0 19
Trichloroethene	1	ug/L	1 7	1 82	0 74 J	1 54	50 8	46 5	49 2	30 9	5	1 6
Vinyl Chloride	1	ug/L	ND	<1 00	ND	ND	ND	<1 00	ND	ND	2	0 019

Only compounds detected are listed
ug/L = micrograms per liter
DL = Detection Limit
TCL = Target Compound List
BDL = Below Detection Limit
MCL = Maximum Contaminant Level - Primary Drinking Water Standards
RBCs = Risk Based Contaminants
NS = no standard NP = not performed
NA = not available
B = Analyte detected in associated method and/or equipment blank
J = Estimated value - presence of the compound was confirmed but less than the reported DL
J* = estimated value - quality control recovenes outside acceptance ranges
E = Concentration exceeds the established method calibration range but is w/in instrument working range

Quarterly Analytical Results for TCL Volatile Organics
on Sampled Monitoring Wells

Sample Identification Number			MW-58-Y2Q1	MW-58-Y2Q2	MW-58-Y2Q3	MW-58-Y2Q4	MW-59-Y2Q1	MW-59-Y2Q2	MW-59-Y2Q3	MW-59-Y2Q4	Maximum	
Laboratory & Lab Sample ID No			0002480-12	0005523-02	0008592-04	0011216-04	0002480-06	0005523-08	0008592-10	0011258-07	Contaminant Level	USEPA Region III
Date Sample Collected			16-Feb-00	17-May-00	22-Aug-00	08-Nov-00	16-Feb-00	17-May-00	22-Aug-00	08-Nov-00	(MCL)-Primary	RBCs-Tap Water
pH			6	6	8 1	6 7	5 8	5 9	8 1	NP	Drinking Water	(October 7, 1999)
Conductivity (umhos)			222	219	178	110	227	227	178	NP	Standard	
Temperature			17 7	20	NP	17 4	18 8	20 4	NP	NP		
Turbidity (ntu)			>999	>999	NP	NP	362	155	NP	NP		
Laboratory Analyses	DL	Units										
TCL Volatile Organics (Method 8260B)												
Benzene	1	ug/L	ND	<1 00	ND	ND	ND	<1 00	ND	ND	5	0 32
Bromodichloromethane	1	ug/L	ND	<1 00	ND	ND	ND	<1 00	ND	ND	NS	0 17
Carbon Tetrachloride	1	ug/L	ND	<1 00	0 26 J	ND	ND	<1 00	ND	ND	5	0 16
Chlorobenzene	1	ug/L	ND	<1 00	ND	ND	ND	1 82	ND	ND	100	110
Chloroform	1	ug/L	3 68	5 88	2 42	1 91	ND	<1 00	ND	1 04	NS	0 15
Chloromethane	1	ug/L	ND	<1 00	ND	ND	ND	<1 00	ND	ND	NS	3 6
1 1-Dichloroethane	1	ug/L	ND	<1 00	ND	ND	ND	<1 00	ND	ND	NS	800
1,2-Dichloroethane	1	ug/L	ND	<1 00	ND	ND	ND	<1 00	ND	ND	5	0 12
1,1-Dichloroethene	1	ug/L	ND	<1 00	ND	ND	ND	<1 00	ND	ND	7	0 044
Trans 1,2-Dichloroethene	1	ug/L	ND	<1 00	ND	ND	ND	0 82 J	ND	ND	100	120
Cis 1 2-Dichloroethene	1	ug/L	ND	<1 00	ND	ND	ND	2 38	0 38 J	ND	70	61
1,1,2,2-Tetrachloroethane	1	ug/L	ND	<1 00	ND	ND	ND	<1 00	ND	ND	NS	0 053
Tetrachloroethene	1	ug/L	ND	<1 00	0 41 J	ND	35	24 1	22	46 1	5	1 1
Toluene	1	ug/L	ND	<1 00	ND	ND	ND	<1 00	ND	ND	1000	750
1,2,4 - Trichlorobenzene	1	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	70	190
1,1,1-Trichloroethane	1	ug/L	ND	<1 00	ND	ND	ND	<1 00	ND	ND	200	540
1,1 2-Trichloroethane	1	ug/L	ND	<1 00	ND	ND	ND	<1 00	ND	ND	5	0 19
Trichloroethene	1	ug/L	4 36	4 22	1 44	2 72	1 49	4 94	0 88 J	1 17	5	1 6
Vinyl Chloride	1	ug/L	ND	<1 00	ND	ND	ND	<1 00	ND	ND	2	0 019

Only compounds detected are listed
ug/L = micrograms per liter
DL = Detection Limit
TCL = Target Compound List
BDL = Below Detection Limit
MCL = Maximum Contaminant Level - Primary Drinking Water Standards
RBCs = Risk Based Contaminants
NS = no standard NP = not performed
NA = not available
B = Analyte detected in associated method and/or equipment blank
J = Estimated value - presence of the compound was confirmed but less than the reported DL
J* = estimated value - quality control recovenes outside acceptance ranges
E = Concentration exceeds the established method calibration range but is w/in instrument working range

Quarterly Analytical Results for TCL Volatile Organics
on Sampled Monitoring Wells

Sample Identification Number			MW-67-Y2Q1	MW-67-Y2Q2	MW-67-Y2Q3	MW-67-Y2Q4	MW-68-Y2Q2	MW-68-Y2Q3	MW-68-Y2Q4	Maximum Contaminant Level (MCL)-Primary Drinking Water Standard	USEPA Region III RBCs-Tap Water (October 7, 1999)
Laboratory & Lab Sample ID No			0002480-10	NP	NP	NP	0005523-29	0008634-09	0011258-06		
Date Sample Collected			18-Feb-00	NP	NP	NP	18-May-00	23-Aug-00	08-Nov-00		
pH			6	NP	NP	NP	5 84	7 9	6 4		
Conductivity (umhos)			189	NP	NP	NP	268	210	17 1		
Temperature			17 7	NP	NP	NP	22 4	NP	192		
Turbidity (ntu)			0	NP	NP	NP	>999	NP	NP		
Laboratory Analyses	DL	Units									
TCL Volatile Organics (Method 8260B)											
Benzene	1	ug/L	ND	NP	NP	NP	<1 00	ND	ND	5	0 32
Bromodichloromethane	1	ug/L	ND	NP	NP	NP	<1 00	ND	0 47 J	NS	0 17
Carbon Tetrachloride	1	ug/L	ND	NP	NP	NP	0 89 J	ND	ND	5	0 16
Chlorobenzene	1	ug/L	ND	NP	NP	NP	<1 00	ND	ND	100	110
Chloroform	1	ug/L	ND	NP	NP	NP	6 44	ND	ND	NS	0 15
Chloromethane	1	ug/L	ND	NP	NP	NP	<1 00	1 81	ND	NS	3 6
1,1-Dichloroethane	1	ug/L	ND	NP	NP	NP	<1 00	ND	ND	NS	800
1,2-Dichloroethane	1	ug/L	ND	NP	NP	NP	<1 00	ND	ND	5	0 12
1,1-Dichloroethene	1	ug/L	ND	NP	NP	NP	<1 00	ND	ND	7	0 044
Trans 1 2-Dichloroethene	1	ug/L	ND	NP	NP	NP	13 1	9 38	1 4	100	120
Cis 1,2-Dichloroethene	1	ug/L	ND	NP	NP	NP	13 7	31	1 9	70	61
1,1,2,2-Tetrachloroethane	1	ug/L	ND	NP	NP	NP	<1 00	6 55	ND	NS	0 053
Tetrachloroethene	1	ug/L	ND	NP	NP	NP	2 07	8 35	0 40 J	5	1 1
Toluene	1	ug/L	ND	NP	NP	NP	<1 00	ND	ND	1000	750
1,2,4 - Trichlorobenzene	1	ug/L	ND	NP	NP	NP	ND	ND	ND	70	190
1,1,1-Trichloroethane	1	ug/L	ND	NP	NP	NP	<1 00	ND	ND	200	540
1,1,2-Trichloroethane	1	ug/L	ND	NP	NP	NP	<1 00	ND	ND	5	0 19
Trichloroethene	1	ug/L	1 26	NP	NP	NP	44 5	48 9	3 21	5	1 6
Vinyl Chloride	1	ug/L	ND	NP	NP	NP	<1 00	ND	ND	2	0 019

Only compounds detected are listed
ug/L = micrograms per liter
DL = Detection Limit
TCL = Target Compound List
BDL = Below Detection Limit
MCL = Maximum Contaminant Level - Primary Drinking Water Standards
RBCs = Risk Based Contaminants
NS = no standard NP = not performed
NA = not available
B = Analyte detected in associated method and/or equipment blank
J = Estimated value - presence of the compound was confirmed but less than the reported DL
J* = estimated value - quality control recovenes outside acceptance ranges
E = Concentration exceeds the established method calibration range but is w/in instrument working range

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Quarterly Analytical Results for TCL Volatile Organics
on Sampled Monitoring Wells

Sample Identification Number			MW-69-Y2Q1	MW-69-Y2Q2	MW-69-Y2Q3	MW-69-Y2Q4	MW-70-Y2Q1	MW-70-Top-Y2Q2	MW-70-Bottom-Y2Q2	MW-70-Y2Q3	MW-70-Y2Q4	Maximum Contaminant Level (MCL)-Primary Drinking Water Standard	USEPA Region III RBCs-Tap Water (October 7, 1999)
Laboratory & Lab Sample ID No			0002460-01	0005523-25	0008674-02	0011335-01	0002423-08	0005523-30	0005523-31	0008674-01	0011335-10		
Date Sample Collected			16-Feb-00	17-May-00	24-Aug-00	09-Nov-00	15-Feb-00	18-May-00	18-May-00	24-Aug-00	09-Nov-00		
pH			5 8	5 9	7 63	6 65	5 8	5 9	5 9	6 98	6 5		
Conductivity (umhos)			251	213	215	119	233	213	213	209	111		
Temperature			16 9	19 9		18 1	18 5	23 1	23 1	NP	17 8		
Turbidity (ntu)			>999	>999		NP	>999	601	601	NP	NP		
Laboratory Analyses	**DL**	**Units**											
TCL Volatile Organics (Method 8260B)													
Benzene	1	ug/L	ND	<1 00	ND	ND	ND	<1 00	<1 00	ND	ND	5	0 32
Bromodichloromethane	1	ug/L	ND	<1 00	ND	ND	ND	<1 00	<1 00	ND	ND	NS	0 17
Carbon Tetrachloride	1	ug/L	ND	0 73 J	ND	ND	3 48	<1 00	0 64 J	2 46	1 81	5	0 16
Chlorobenzene	1	ug/L	ND	<1 00	ND	ND	ND	<1 00	<1 00	ND	ND	100	110
Chloroform	1	ug/L	ND	3 56	ND	2 12	18 2	4 36	5 18	8 46	9 37	NS	0 15
Chloromethane	1	ug/L	ND	<1 00	ND	ND	ND	<1 00	<1 00	ND	ND	NS	3 6
1 1-Dichloroethane	1	ug/L	ND	<1 00	ND	ND	ND	<1 00	<1 00	ND	ND	NS	800
1,2-Dichloroethane	1	ug/L	ND	<1 00	ND	ND	1 77	<1 00	<1 00	ND	1	5	0 12
1,1-Dichloroethene	1	ug/L	ND	<1 00	ND	ND	0 61 J	<1 00	<1 00	ND	ND	7	0 044
Trans 1,2-Dichloroethene	1	ug/L	2 26	19 1	0 86 J	12 3	149	10 1	12	50 4	57 3	100	120
Cis 1,2-Dichloroethene	1	ug/L	4 11	31 2	2 26	23 1	522	38 8	54 8	211*	247	70	61
1 1,2,2-Tetrachloroethane	1	ug/L	ND	<1 00	4 36	ND	4830	284	342	930*	3370**	NS	0 053
Tetrachloroethene	1	ug/L	1 76	4 87	0 68 J	6 39	89 7	2 92	5 35	35 8	32 5	5	1 1
Toluene	1	ug/L	ND	<1 00	ND	ND	ND	<1 00	<1 00	ND	ND	1000	750
1,2 4 - Trichlorobenzene	1	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	70	190
1,1,1-Trichloroethane	1	ug/L	ND	<1 00	ND	ND	ND	<1 00	<1 00	ND	ND	200	540
1,1,2-Trichloroethane	1	ug/L	ND	<1 00	ND	ND	39 7	2 64	3 93	15 2	16	5	0 19
Trichloroethene	1	ug/L	99 2	642	50 4	464	11700	538	720	4240*	4040**	5	1 6
Vinyl Chloride	1	ug/L	ND	<1 00	ND	ND	1 88	<1 00	<1 00	0 62 J	1 69	2	0 019

Only compounds detected are listed
ug/L = micrograms per liter
DL = Detection Limit
TCL = Target Compound List
BDL = Below Detection Limit
MCL = Maximum Contaminant Level - Primary Drinking Water Standards
RBCs = Risk Based Contaminants
NS = no standard NP = not performed
NA = not available
B = Analyte detected in associated method and/or equipment blank
J = Estimated value - presence of the compound was confirmed but less than the reported DL
J* = estimated value - quality control recoveries outside acceptance ranges
E = Concentration exceeds the established method calibration range but is w/in instrument working range

*The values shown in the previous report (Y2Q3) were 'E' qualified values These have been changed here to reflect the values obtained upon dilution of the samples

**Original analysis was 'E' qualified This value represents the diluted sample result

Quarterly Analytical Results for TCL Volatile Organics
on Sampled Monitoring Wells

Sample Identification Number			MW-71-Y2Q1	MW-71-Y2Q2	MW-71-Y2Q3	MW-71-Y2Q4	Maximum Contaminant Level (MCL)-Primary Drinking Water Standard	USEPA Region III RBCs-Tap Water (October 7, 1999)
Laboratory & Lab Sample ID No			0002423-09	0005523-28	0008634-07	0011335-02		
Date Sample Collected			15-Feb-00	18-May-00	23-Aug-00	09-Nov-00		
pH			5 9	5 9	5 7	7 04		
Conductivity (umhos)			226	203	149	121		
Temperature			18 1	20 2	NP	14 3		
Turbidity (ntu)			>999	>999	NP	NP		
Laboratory Analyses	DL	Units						
TCL Volatile Organics (Method 8260B)								
Benzene	1	ug/L	ND	<1 00	ND	ND	5	0 32
Bromodichloromethane	1	ug/L	ND	<1 00	ND	ND	NS	0 17
Carbon Tetrachloride	1	ug/L	**53 9**	**34**	**32 9**	**26 5**	5	0 16
Chlorobenzene	1	ug/L	ND	<1 00	ND	ND	100	110
Chloroform	1	ug/L	998	1080	989*	605**	NS	0 15
Chloromethane	1	ug/L	ND	<1 00	ND	ND	NS	3 6
1 1-Dichloroethane	1	ug/L	ND	<1 00	ND	ND	NS	800
1,2-Dichloroethane	1	ug/L	ND	<1 00	ND	ND	5	0 12
1,1-Dichloroethene	1	ug/L	ND	<1 00	ND	ND	7	0 044
Trans 1,2-Dichloroethene	1	ug/L	4 7	3 72	2 94	2 29	100	120
Cis 1 2-Dichloroethene	1	ug/L	11 5	9 98	8 94	6 49	70	61
1,1,2,2-Tetrachloroethane	1	ug/L	97 7	181	168	106	NS	0 053
Tetrachloroethene	1	ug/L	**10**	**4 54**	**7 02**	4 09	5	1 1
Toluene	1	ug/L	ND	<1 00	ND	ND	1000	750
1,2,4 - Trichlorobenzene	1	ug/L	ND	ND	ND	ND	70	190
1,1,1-Trichloroethane	1	ug/L	ND	<1 00	ND	ND	200	540
1,1,2-Trichloroethane	1	ug/L	3 21	<1 00	4 04	2 99	5	0 19
Trichloroethene	1	ug/L	**330**	**239**	**142***	**95 6**	5	1 6
Vinyl Chloride	1	ug/L	ND	<1 00	ND	ND	2	0 019

Only compounds detected are listed
ug/L = micrograms per liter
DL = Detection Limit
TCL = Target Compound List
BDL = Below Detection Limit
MCL = Maximum Contaminant Level - Primary Drinking Water Standards
RBCs = Risk Based Contaminants
NS = no standard NP = not performed
NA = not available
B = Analyte detected in associated method and/or equipment blank
J = Estimated value - presence of the compound was confirmed but less than the reported DL
J* = estimated value - quality control recoveries outside acceptance ranges
E = Concentration exceeds the established method calibration range but is w/in instrument working range

*The values shown in the previous report (Y2Q3) were 'E' qualified values These have been changed here to reflect the values obtained upon dilution of the samples

**Original analysis was 'E' qualified This value represents the diluted sample result

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Quarterly Analytical Results for TCL Volatile Organics on System Recovery Wells

Sample Identification Number			RW-1A-Y2Q1	RW-1A-Y2Q2	RW-1A-Y2Q3	RW-1A-Y2Q4	RW-1B-Y2Q1	RW-1B-Y2Q2	RW-1B-Y2Q3	RW-1B-Y2Q4	Maximum Contaminant Level (MCL)-Primary Drinking Water Standard	USEPA Region III RBCs-Tap Water (October 7, 1999)
Laboratory & Lab Sample ID No			0002423-16	0005523-20	0008634-08	0011335-06	0002480-03	0005523-10	0008634-04	0011335-07		
Date Sample Collected			15-Feb-00	17-May-00	8/23/00	11/9/00	16-Feb-00	17-May-00	23-Aug-00	9-Nov-00		
pH			5 8	5 8	7 6	7 1	6 0	6 1	7 5	7 1		
Conductivity (umhos)			254	262	201	119	300	285	257	120		
Temperature			17 4	19 4	NP	16 7	17 2	19 7	NP	16 7		
Turbidity (ntu)			12 7	62 4	NP	NP	35 5	66 4	NP	NP		
Laboratory Analyses	DL	Units										
TCL Volatile Organics (Method 8260B)												
Acetone	20	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	NS	610
2-Butanone (MEK)	20	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	NS	1900
Carbon Tetrachlonde	1	ug/L	**15 20**	**10 60**	**9 47**	**15 60**	**20 60**	**12 30**	**26.10**	**20 10**	5	0 16
Chloroform	1	ug/L	397 00	339 00	292*	420**	20 70	15 30	49 40	37 00	NS	0 15
1,1-Dichloroethane	1	ug/L	ND	<1 00	ND	ND	ND	<1 00	ND	ND	NS	800
1,2-Dichloroethane	1	ug/L	ND	<1 00	ND	ND	ND	<1 00	ND	ND	5	0 12
1 1-Dichloroethene	1	ug/L	ND	<1 00	ND	ND	ND	<1 00	ND	ND	7	0 044
Trans 1,2-Dichloroethene	1	ug/L	1 40	0 96 J	0 96 J	1 59	1 23	0 80 J	1 70	1 22	100	120
Cis 1,2-Dichloroethene	1	ug/L	3 63	2 49	2 75	3 29	3 32	2 18	5 57	3 66	70	61
1,1,2 2-Tetrachloroethane	1	ug/L	49 80	25 80	35 30	43 90	ND	<1 00	ND	ND	NS	0 053
Tetrachloroethene	1	ug/L	3 14	2 31	2 20	2 62	2 37	1 08	2 84	1 93	5	1 1
1 1,1-Trichloroethane	1	ug/L	ND	<1 00	ND	ND	ND	<1 00	ND	ND	200	540
1,1,2-Trichloroethane	1	ug/L	1 54	0 82 J	1 08	1 39	ND	<1 00	0 32 J	ND	5	0 19
Trichloroethene	1	ug/L	**119 00**	**73.00**	**73 90**	**66 40**	**21 90**	**13 60**	**35 70**	**21 10**	5	1 6

Only compounds detected are listed
ug/L = micrograms per liter
DL = Detection Limit
TCL = Target Compound List
BDL = Below Detection Limit
MCL = Maximum Contaminant Level - Primary Drinking Water Standards
RBCs = Risk Based Contaminants
NS = no standard NP = not performed
NA = not available
B = Analyte detected in associated method and/or equipment blank
J = Estimated value - presence of the compound was confirmed but less than the reported DL
J* = estimated value - quality control recoveries outside acceptance ranges
E = Concentration exceeds the established method calibration range but is within the working range of the instrument

*The values shown in the previous report (Y2Q3) were 'E' qualified values These have been changed here to reflect the values obtained upon dilution of the samples

**Original analysis was 'E' qualified This value represents the diluted sample result

TABLE 3

Quarterly Analytical Results for TCL Volatile Organics on System Recovery Wells

Sample Identification Number			RW-01-Y2Q1	RW-01-Y2Q2	RW-01-Y2Q3	RW-01-Y2Q4	RW-02-Y2Q1	RW-02-Y2Q2	RW-02-Y2Q3	RW-02-Y2Q4	Maximum Contaminant Level (MCL)-Primary Drinking Water Standard	USEPA Region III RBCs-Tap Water (October 7, 1999)
Laboratory & Lab Sample ID No			0002480-04	0005523-21	0008634-10	0011335-05	0002840-02	0005523-08	0008634-02	0011335-09		
Date Sample Collected			16-Feb-00	17-May-00	23-Aug-00	09-Nov-00	15-Feb-00	17-May-00	23-Aug-00	09-Nov-00		
pH			6 1	6 1	7 5	7 2	5 8	5 9	7 9	7 1		
Conductivity (umhos)			358	407	291	119	296	267	266	106		
Temperature			18 2	19 3	NP	16 3	17 4	19 7	NP	16 8		
Turbidity (ntu)			101	138	NP	NP	168	128	NP	NP		
Laboratory Analyses	DL	Units										
TCL Volatile Organics (Method 8260B)												
Acetone	20	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	NS	610
2-Butanone (MEK)	20	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	NS	1900
Carbon Tetrachlonde	1	ug/L	**42 40**	**45 40**	**41 50**	**46 10**	**15 70**	**16 40**	**16 80**	**23 80**	5	0 16
Chloroform	1	ug/L	15 70	22 80	15 50	13 10	14 20	11 50	15 40	20 20	NS	0 15
1,1-Dichloroethane	1	ug/L	ND	<1 00	ND	ND	ND	<1 00	ND	ND	NS	800
1,2-Dichloroethane	1	ug/L	ND	<1 00	ND	ND	ND	<1 00	ND	ND	5	0 12
1,1-Dichloroethene	1	ug/L	ND	<1 00	ND	ND	ND	<1 00	ND	ND	7	0 044
Trans 1,2-Dichloroethene	1	ug/L	0 93 J	1 18	0 80 J	1 18	1 69	1 30	1 77	1 93	100	120
Cis 1,2-Dichloroethene	1	ug/L	ND	<1 00	ND	ND	17 40	10 70	13 60	12 10	70	61
1,1,2,2-Tetrachloroethane	1	ug/L	ND	<1 00	ND	ND	4 04	<1 00	ND	2 18	NS	0 053
Tetrachloroethene	1	ug/L	4 66	4 28	3 99	3 77	1 25	1 06	1 29	1 36	5	1 1
1,1,1-Trichloroethane	1	ug/L	0 95 J	<1 00	ND	ND	ND	<1 00	ND	ND	200	540
1,1,2-Trichloroethane	1	ug/L	ND	<1 00	ND	ND	0 61 J	<1 00	0 51 J	ND	5	0 19
Trichloroethene	1	ug/L	**35 20**	**45.50**	**40 20**	**28 00**	**21 40**	**16 90**	**20 60**	**17 20**	5	1 6

Only compounds detected are listed
ug/L = micrograms per liter
DL = Detection Limit
TCL = Target Compound List
BDL = Below Detection Limit
MCL = Maximum Contaminant Level - Primary Drinking Water Standards
RBCs = Risk Based Contaminants
NS = no standard NP = not performed
NA = not available
B = Analyte detected in associated method and/or equipment blank
J = Estimated value - presence of the compound was confirmed but less than the reported DL
J* = estimated value - quality control recovenes outside acceptance ranges
E = Concentration exceeds the established method calibration range, but is within the working range of the instrument

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Quarterly Analytical Results for TCL Volatile Organics on System Recovery Wells

Sample Identification Number			RW-03P-Y1Q1	RW-03-Y1Q2	RW-03-Y1Q3	RW-03-Y1Q4	RW-03-Y2Q1	RW-03-Y2Q2	RW-03-Y2Q3	RW-03-Y2Q4	Maximum	
Laboratory & Lab Sample ID No			9902206-01	9905638-01	9908741-15	9911028-01	0002385-01	0005523-33	0008674-08	0011593-08	Contaminant Level	USEPA Region III
Date Sample Collected			05-Feb-99	24-May-99	27-Aug-99	01-Nov-99	14-Feb-00	18-May-00	24-Aug-00	20-Nov-00	(MCL)-Primary	RBCs-Tap Water
pH			NA	5 9	7 4	6 0	5 8	NP	7 2	6 1	Drinking Water	(October 7 1999)
Conductivity (umhos)			NA	231	272	313	258	NP	410	748	Standard	
Temperature			NA	18 6	19 8	18 3	16 3	NP	NP	18 7		
Turbidity (ntu)			NA	10	6	0 1	0 2	NP	NP	NP		
Laboratory Analyses	**DL**	**Units**										
TCL Volatile Organics (Method 8260B)												
Acetone	20	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	NS	610
2-Butanone (MEK)	20	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	NS	1900
Carbon Tetrachloride	1	ug/L	**16 40**	**13 30**	**10 50**	**13 20**	**10 90**	**16 30**	**13 80**	**16 00**	5	0 16
Chloroform	1	ug/L	5 89	1 36	5 66	5 24	4 57	5 51	4 77	5 36	NS	0 15
1,1-Dichloroethane	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	NS	800
1,2-Dichloroethane	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	5	0 12
1,1-Dichloroethene	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	7	0 044
Trans 1,2-Dichloroethene	1	ug/L	5 51	3 94	2 97	3 31	4 52	7 42	4 78	7 53	100	120
Cis 1,2-Dichloroethene	1	ug/L	**79 30**	56 00	47 00	44 00	**101 00**	**138 00**	**70 80**	**160 00**	70	61
1,1 2 2-Tetrachloroethane	1	ug/L	80 00	42 50	40 80	42 30	61 90	85 50	59 60	97 50	NS	0 053
Tetrachloroethene	1	ug/L	ND	ND	0 73 J	1 01	0 65 J	0 73 J	0 84 J	ND	5	1 1
1,1,1-Trichloroethane	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	200	540
1,1 2-Trichloroethane	1	ug/L	3 23	2 73	1 98	1 85	2 80	3 23	2 39	ND	5	0 19
Trichloroethene	1	ug/L	**78 20**	**54 30**	**42 10**	**55 00**	**57 80**	**78 80**	**57 40**	**62.10**	5	1 6

Only compounds detected are listed
ug/L = micrograms per liter
DL = Detection Limit
TCL = Target Compound List
BDL = Below Detection Limit
MCL = Maximum Contaminant Level - Primary Drinking Water Standards
RBCs = Risk Based Contaminants
NS = no standard NP = not performed
NA = not available
B = Analyte detected in associated method and/or equipment blank
J = Estimated value - presence of the compound was confirmed but less than the reported DL
J* = estimated value - quality control recovenes outside acceptance ranges
E = Concentration exceeds the established method calibration range but is within the working range of the instrument

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Quarterly Analytical Results for TCL Volatile Organics on System Recovery Wells

Sample Identification Number	RW-04P-Y1Q1	RW-04-Y1Q2	RW-04-Y1Q3	RW-04-Y1Q4	RW-04-Y2Q1	RW-04-Y2Q2	RW-04-Y2Q3	RW-04-Y2Q4	Maximum	
Laboratory & Lab Sample ID No	9902206-02	9905638-02	9908740-16	9911028-02	0002385-02	005399-07	0008674-15	0011593-07	Contaminant Level	USEPA Region III
Date Sample Collected	05-Feb-99	24-May-99	27-Aug-99	01-Nov-99	14-Feb-00	15-May-00	24-Aug-00	20-Nov-00	(MCL)-Primary	RBCs-Tap Water
pH	NA	6 0	7 3	6 1	6 0	6 0	7 3	6 2	Drinking Water	(October 7, 1999)
Conductivity (umhos)	NA	145	7	214	237	219	216	235	Standard	
Temperature	NA	19 3	20 6	18 6	17 1	22 1	NP	17		
Turbidity (ntu)	NA	5	5	0 2	0 6	0 3	NP	NP		
Laboratory Analyses	**DL**	**Units**								
TCL Volatile Organics (Method 8260B)										
Acetone	20	ug/L	ND	ND	ND	ND	ND	ND	ND	180 00	NS	610
2-Butanone (MEK)	20	ug/L	ND	ND	ND	ND	ND	ND	ND	2760**	NS	1900
Carbon Tetrachloride	1	ug/L	3 04	3 51	3 23	<100	**6.97**	4 26	**5 83**	ND	5	0 16
Chloroform	1	ug/L	1 84	ND	2 3 B	<100	2 80	2 27	2 82	ND	NS	0 15
1,1-Dichloroethane	1	ug/L	ND	ND	ND	<100	ND	<1 00	ND	ND	NS	800
1,2-Dichloroethane	1	ug/L	ND	ND	ND	<100	ND	<1 00	ND	ND	5	0 12
1,1-Dichloroethene	1	ug/L	ND	ND	ND	<100	ND	<1 00	ND	ND	7	0 044
Trans 1,2-Dichloroethene	1	ug/L	3 58	2 74	3 03	<100	2 15	2 65	4 72	3 08	100	120
Cis 1,2-Dichloroethene	1	ug/L	18 20	15 40	17 60	26 6 J	15 00	16 00	29 60	17 80	70	61
1 1,2,2-Tetrachloroethane	1	ug/L	219 00	21 90	19 20	<100	12 30	12 90	20 20	14 90	NS	0 053
Tetrachloroethene	1	ug/L	2 43	2 40	2 92	<100	2 03	1 97	**5.14**	ND	5	1 1
1,1,1-Trichloroethane	1	ug/L	ND	ND	ND	<100	ND	<1 00	ND	ND	200	540
1,1 2-Trichloroethane	1	ug/L	1 32	1 50	1 40	<100	0 76 J	0 70 J	1 41	ND	5	0 19
Trichloroethene	1	ug/L	**382 00**	**294 00**	**368 00**	**649 00**	**252 00**	**316.00**	**438***	**204 00**	5	1 6

Only compounds detected are listed
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TCL = Target Compound List
BDL = Below Detection Limit
MCL = Maximum Contaminant Level - Primary Drinking Water Standards
RBCs = Risk Based Contaminants
NS = no standard NP = not performed
NA = not available
B = Analyte detected in associated method and/or equipment blank
J = Estimated value - presence of the compound was confirmed but less than the reported DL
J* = estimated value - quality control recoveries outside acceptance ranges
E = Concentration exceeds the established method calibration range, but is within the working range of the instrument

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**Original analysis was 'E' qualified This value represents the diluted sample result.

TA[redacted]3

Quarterly Analytical Results for TCL Volatile Organics
on System Recovery Wells

Sample Identification Number			RW-05P-Y1Q1	RW-05-Y1Q2	RW-05-Y1Q3	RW-05-Y1Q4	RW-05-Y2Q1	RW-05-Y2Q2	RW-05-Y2Q3	RW-05-Y2Q4	Maximum Contaminant Level (MCL)-Primary Drinking Water Standard	USEPA Region III RBCs-Tap Water (October 7, 1999)
Laboratory & Lab Sample ID No			9902206-05	9905638-03	9908741-17	9911028-03	0002385-03	NP	0008674-18	0011593-05		
Date Sample Collected			05-Feb-99	24-May-99	27-Aug-99	01-Nov-99	14-Feb-00	NP	24-Aug-00	20-Nov-00		
pH			NA	5 9	7 4	6 0	5 9	NP	7 3	6 2		
Conductivity (umhos)			NA	151	190	220	220	NP	214	222		
Temperature			NA	18	19 7	17 8	16 4	NP	NP	17		
Turbidity (ntu)			NA	6	17	0 1	0 6	NP	NP	NP		
Laboratory Analyses	DL	Units										
TCL Volatile Organics (Method 8260B)												
Acetone	20	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	NS	610
2-Butanone (MEK)	20	ug/L	ND	ND	ND	ND	ND	ND	ND	76 40	NS	1900
Carbon Tetrachloride	1	ug/L	ND	ND	ND	<100	ND	NP	2 65	ND	5	0 16
Chloroform	1	ug/L	ND	ND	1 62	<100	1 36	NP	1 29	ND	NS	0 15
1,1-Dichloroethane	1	ug/L	ND	ND	ND	<100	ND	NP	ND	ND	NS	800
1,2-Dichloroethane	1	ug/L	ND	ND	ND	<100	ND	NP	ND	ND	5	0 12
1,1-Dichloroethene	1	ug/L	ND	ND	ND	<100	ND	NP	ND	ND	7	0 044
Trans 1,2-Dichloroethene	1	ug/L	6 45	15 70	14 30	<100	12 30	NP	2 28	ND	100	120
Cis 1,2-Dichloroethene	1	ug/L	17 90	50 10	49 60	48 4 J	50 20	NP	17 90	ND	70	61
1,1,2,2-Tetrachloroethane	1	ug/L	11 40	582 00	1380 00	2260 00	3120 00	NP	167 00	ND	NS	0 053
Tetrachloroethene	1	ug/L	**5 87**	**12 90**	**12 20**	**45 1 J**	**10 80**	NP	1 45	ND	5	1 1
1 1,1-Trichloroethane	1	ug/L	ND	ND	ND	<100	ND	NP	ND	ND	200	540
1,1 2-Trichloroethane	1	ug/L	ND	ND	1 15	<100	1 93	NP	0 60 J	ND	5	0 19
Trichloroethene	1	ug/L	**433 00**	**1180 00**	**1270 00**	**1290 00**	**1170.00**	NP	**132 00**	1 89	5	1 6

Only compounds detected are listed
ug/L = micrograms per liter
DL = Detection Limit
TCL = Target Compound List
BDL = Below Detection Limit
MCL = Maximum Contaminant Level - Primary Drinking Water Standards
RBCs = Risk Based Contaminants
NS = no standard NP = not performed
NA = not available
B = Analyte detected in associated method and/or equipment blank
J = Estimated value - presence of the compound was confirmed but less than the reported DL
J* = estimated value - quality control recoveries outside acceptance ranges
E = Concentration exceeds the established method calibration range but is within the working range of the instrument

TABLE 3

Quarterly Analytical Results for TCL Volatile Organics on System Recovery Wells

Sample Identification Number			RW-06P-Y1Q1	RW-06-Y1Q2	RW-06-Y1Q3	RW-06-Y1Q4	RW-06-Y2Q1	RW-06-Y2Q2	RW-06-Y2Q3	RW-06-Y2Q4	Maximum Contaminant Level (MCL)-Primary Drinking Water Standard	USEPA Region III RBCs-Tap Water (October 7, 1999)
Laboratory & Lab Sample ID No			9902206-05	9905638-04	9908741-18	9911028-04	0002385-04	0005399-06	0008674-17	0011593-04		
Date Sample Collected			05-Feb-99	24-May-99	27-Aug-99	01-Nov-99	14-Feb-00	15-May-00	24-Aug-00	20-Nov-00		
pH			NA	4 6	7 4	6 2	5 9	5 9	7 5	6 3		
Conductivity (umhos)			NA	168	208	250	268	250	251	NP		
Temperature			NA	19	20	17 8	16 6	20 8	NP	17 4		
Turbidity (ntu)			NA	6	31	0 5	0 2	0 1	NP	NP		
Laboratory Analyses	**DL**	**Units**										
TCL Volatile Organics (Method 8260B)												
Acetone	20	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	NS	610
2-Butanone (MEK)	20	ug/L	ND	ND	ND	ND	ND	ND	ND	47 90	NS	1900
Carbon Tetrachloride	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	5	0 16
Chloroform	1	ug/L	2 11	ND	3 09	2 48	3 20	2 26	1 98	2 38	NS	0 15
1,1-Dichloroethane	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	NS	800
1,2-Dichloroethane	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	5	0 12
1,1-Dichloroethene	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	7	0 044
Trans 1,2-Dichloroethene	1	ug/L	1 39	1 49	1 89	1 59	0 69 J	2 03	2 28	1 25	100	120
Cis 1,2-Dichloroethene	1	ug/L	3 67	4 53	5 10	2 34	1 18	5 12	5 96	3 14	70	61
1 1,2,2-Tetrachloroethane	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	NS	0 053
Tetrachloroethene	1	ug/L	**24 20**	4 93	**10 10**	**5 80**	**6.48**	**5.52**	**5 90**	2 18	5	1 1
1,1,1-Trichloroethane	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	200	540
1,1,2-Trichloroethane	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	5	0 19
Trichloroethene	1	ug/L	**27 60**	**22 00**	**32.70**	**24.20**	**17 00**	**37 90**	**34 00**	**11 30**	5	1 6

Only compounds detected are listed
ug/L = micrograms per liter
DL = Detection Limit
TCL = Target Compound List
BDL = Below Detection Limit
MCL = Maximum Contaminant Level - Primary Drinking Water Standards
RBCs = Risk Based Contaminants
NS = no standard NP = not performed
NA = not available
B = Analyte detected in associated method and/or equipment blank
J = Estimated value - presence of the compound was confirmed but less than the reported DL
J* = estimated value - quality control recovenes outside acceptance ranges
E = Concentration exceeds the established method calibration range, but is within the working range of the instrument

TABLE 3

Quarterly Analytical Results for TCL Volatile Organics on System Recovery Wells

Sample Identification Number			RW-07P-Y1Q1	RW-07-Y1Q2	RW-07-Y1Q3	RW-07-Y1Q4	RW-07-Y2Q1	RW-07-Y2Q2	RW-07-Y2Q3	RW-07-Y2Q4	Maximum Contaminant Level (MCL)-Primary Drinking Water Standard	USEPA Region III RBCs-Tap Water (October 7, 1999)
Laboratory & Lab Sample ID No			9902206-05	9905638-05	9908741-19	9911028-05	0002385-05	0005399-04	0008674-13	0011593-03		
Date Sample Collected			05-Feb-99	24-May-99	27-Aug-99	01-Nov-99	14-Feb-00	15-May-00	24-Aug-00	20-Nov-00		
pH			NA	5 9	7 4	5 9	5 9	5 8	7 3	6 2		
Conductivity (umhos)			NA	162	211	250	268	257	251	NP		
Temperature			NA	18	20	18 2	16 6	21 6	NP	16 4		
Turbidity (ntu)			NA	3	5	0 1	0 2	0 2	NP	NP		
Laboratory Analyses	**DL**	**Units**										
TCL Volatile Organics (Method 8260B)												
Acetone	20	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	NS	610
2-Butanone (MEK)	20	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	NS	1900
Carbon Tetrachlonde	1	ug/L	ND	ND	0 54 J	ND	ND	<1 00	ND	0 43 J	5	0 16
Chloroform	1	ug/L	1 91	ND	3 39	2 28	1 84	1 27	1 59	3 08	NS	0 15
1,1-Dichloroethane	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	NS	800
1,2-Dichloroethane	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	5	0 12
1,1-Dichloroethene	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	7	0 044
Trans 1,2-Dichloroethene	1	ug/L	15 60	17 10	17 30	23 60	19 20	17 40	19 70	22 90	100	120
Cis 1,2-Dichloroethene	1	ug/L	45 30	54 60	59 10	**74 70**	**70 30**	59 60	**70 60**	**86 60**	70	61
1,1,2,2-Tetrachloroethane	1	ug/L	19 50	28 80	43 20	60 70	49 90	52 20	65 80	49 80	NS	0 053
Tetrachloroethene	1	ug/L	**11 20**	**7 94**	**9 81**	**12 20**	**9 33**	**7 76**	**10 70**	**9 30**	5	1 1
1 1,1-Trichloroethane	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	200	540
1,1,2-Trichloroethane	1	ug/L	ND	ND	0 85 J	1 08	1 03	0 95 J	1 44	1 88	5	0 19
Trichloroethene	1	ug/L	**86 60**	**89 50**	**94 00**	**145.00**	**102 00**	**97 20**	**98 90**	**101.00**	5	1 6

Only compounds detected are listed
ug/L = micrograms per liter
DL = Detection Limit
TCL = Target Compound List
BDL = Below Detection Limit
MCL = Maximum Contaminant Level - Primary Drinking Water Standards
RBCs = Risk Based Contaminants
NS = no standard NP = not performed
NA = not available
B = Analyte detected in associated method and/or equipment blank
J = Estimated value - presence of the compound was confirmed but less than the reported DL
J* = estimated value - quality control recoveries outside acceptance ranges
E = Concentration exceeds the established method calibration range, but is within the working range of the instrument

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TABLE 3

Quarterly Analytical Results for TCL Volatile Organics on System Recovery Wells

Sample Identification Number			RW-08P-Y1Q1	RW-08-Y1Q2	RW-08-Y1Q3	RW-08-Y1Q4	RW-08-Y2Q1	RW-08-Y2Q2	RW-08-Y2Q3	RW-08-Y2Q4	Maximum Contaminant Level (MCL)-Primary Drinking Water Standard	USEPA Region III RBCs-Tap Water (October 7, 1999)
Laboratory & Lab Sample ID No			9902206-06	9905638-06	9908741-20	9911028-06	0002385-05	0005399-03	0008674-16	0011593-02		
Date Sample Collected			05-Feb-99	24-May-99	27-Aug-99	01-Nov-99	14-Feb-00	15-May-00	24-Aug-00	20-Nov-00		
pH			NA	5 8	7 5	6 1	5 8	6 0	7 5	6 5		
Conductivity (umhos)			NA	195	252	316	323	301	298	NP		
Temperature			NA	17 7	19 1	18 4	15 7	20 4	NP	16 3		
Turbidity (ntu)			NA	3	0	0 3	0 2	0 1	NP	NP		
Laboratory Analyses	DL	Units										
TCL Volatile Organics (Method 8260B)												
Acetone	20	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	NS	610
2-Butanone (MEK)	20	ug/L	ND	ND	ND	ND	ND	ND	ND	43 40	NS	1900
Carbon Tetrachlonde	1	ug/L	1 21	1 38	1 30	1 11	1 03	0 89 J	0 94 J	ND	5	0 16
Chloroform	1	ug/L	13 10	10 30	14 10	10 30	10 50	8 41	8 72	6 53	NS	0 15
1,1-Dichloroethane	1	ug/L	ND	ND	ND	7 84	ND	<1 00	ND	ND	NS	800
1,2-Dichloroethane	1	ug/L	ND	ND	ND	**27.80**	ND	<1 00	ND	ND	5	0 12
1,1-Dichloroethene	1	ug/L	**16 00**	**15 20**	**9 79**	ND	6 82	4 98	5 10	ND	7	0 044
Trans 1,2-Dichloroethene	1	ug/L	20 10	42 10	27 00	ND	30 80	37 60	39 70	11 90	100	120
Cis 1,2-Dichloroethene	1	ug/L	64 70	**126 00**	**93 00**	**89 10**	**115 00**	**120 00**	**128 00**	40 10	70	61
1,1 2 2-Tetrachloroethane	1	ug/L	45 90	88 00	108 00	119 00	121 00	121 00	109 00	ND	NS	0 053
Tetrachloroethene	1	ug/L	**6 35**	**5 96**	**5 60**	**6 14**	**6 67**	**5 19**	**5.66**	2 02	5	1 1
1,1,1-Trichloroethane	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	200	540
1,1 2-Trichloroethane	1	ug/L	ND	1 66	1 32	1 28	1 58	1 74	1 97	ND	5	0 19
Trichloroethene	1	ug/L	**140.00**	**273 00**	**173 00**	**261 00**	**190 00**	**268.00**	**190 00**	**56 90**	5	1 6

Only compounds detected are listed
ug/L = micrograms per liter
DL = Detection Limit
TCL = Target Compound List
BDL = Below Detection Limit
MCL = Maximum Contaminant Level - Primary Drinking Water Standards
RBCs = Risk Based Contaminants
NS = no standard NP = not performed
NA = not available
B = Analyte detected in associated method and/or equipment blank
J = Estimated value - presence of the compound was confirmed but less than the reported DL
J* = estimated value - quality control recoveries outside acceptance ranges
E = Concentration exceeds the established method calibration range but is within the working range of the instrument

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Quarterly Analytical Results for TCL Volatile Organics on System Recovery Wells

Sample Identification Number			RW-09P-Y1Q1	RW-09-Y1Q2	RW-09-Y1Q3	RW-09-Y1Q4	RW-09-Y2Q1	RW-09-Y2Q2	RW-09-Y2Q3	RW-09-Y2Q4	Maximum	
Laboratory & Lab Sample ID No			9902206-07	9905638-07	9908741-21	9911028-06	0002385-08	0005399-01	0008674-11	0011593-01	Contaminant Level	USEPA Region III
Date Sample Collected			05-Feb-99	24-May-99	27-Aug-99	01-Nov-99	14-Feb-00	15-May-00	24-Aug-00	20-Nov-00	(MCL)-Primary	RBCs-Tap Water
pH			NA	5 9	7 4	6 0	5 9	6 0	7 6	6 6	Drinking Water	(October 7, 1999)
Conductivity (umhos)			NA	220	282	327	368	340	345	NP	Standard	
Temperature			NA	17 4	19 2	18 7	15 7	20 6	NP	19 4		
Turbidity (ntu)			NA	2	183	0 1	0 5	0 2	NP	NP		
Laboratory Analyses	**DL**	**Units**										
TCL Volatile Organics (Method 8260B)												
Acetone	20	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	NS	610
2-Butanone (MEK)	20	ug/L	ND	ND	ND	ND	ND	ND	ND	131 00	NS	1900
Carbon Tetrachlonde	1	ug/L	ND	1 43	1 21	1 12	0 79 J	0 90 J	1 17	ND	5	0 16
Chloroform	1	ug/L	10 10	10 20	15 40	11 80	12 50	10 80	12 50	13 30	NS	0 15
1 1-Dichloroethane	1	ug/L	1 17	1 45	1 35	1 24	1 88	1 15	1 18	1 82	NS	800
1,2-Dichloroethane	1	ug/L	ND	ND	0 63 J	0 53 J	0 70 J	<1 00	ND	ND	5	0 12
1,1-Dichloroethene	1	ug/L	**40 40**	**49 20**	**45 10**	**44 40**	**52 90**	**35 90**	**45.40**	**52 50**	7	0 044
Trans 1,2-Dichloroethene	1	ug/L	2 28	3 18	1 94	1 86	2 23	2 24	2 53	ND	100	120
Cis 1,2-Dichloroethene	1	ug/L	5 20	8 47	5 65	4 95	5 45	6 03	7 68	2 02	70	61
1,1,2,2-Tetrachloroethane	1	ug/L	ND	1 21	1 52	ND	2 98	<1 00	2 55	ND	NS	0 053
Tetrachloroethene	1	ug/L	**35 40**	**41 50**	**37 70**	**38 80**	**61.20**	**32 10**	**32 90**	**54 30**	5	1 1
1,1 1-Trichloroethane	1	ug/L	1 58	2 01	1 67	1 73	1 56	1 40	1 25	1 92	200	540
1,1,2-Trichloroethane	1	ug/L	ND	ND	ND	ND	ND	<1 00	ND	ND	5	0 19
Trichloroethene	1	ug/L	**39 10**	**52 00**	**41 10**	**43 30**	**51.40**	**37 70**	**35 50**	**36 30**	5	1 6

Only compounds detected are listed
ug/L = micrograms per liter
DL = Detection Limit
TCL = Target Compound List
BDL = Below Detection Limit
MCL = Maximum Contaminant Level - Primary Drinking Water Standards
RBCs = Risk Based Contaminants
NS = no standard NP = not performed
NA = not available
B = Analyte detected in associated method and/or equipment blank
J = Estimated value - presence of the compound was confirmed but less than the reported DL
J* = estimated value - quality control recoveries outside acceptance ranges
E = Concentration exceeds the established method calibration range, but is within the working range of the instrument

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Annual Analytical Results for Metals and Semi Volatile Organics on Sampled Monitoring Wells

Sample Identification Number			MW-14-Y2Q4	MW-15-Y2Q4	MW-30-Y2Q4	MW-31-Y2Q4	MW-32-Y2Q4	MW-33-Y2Q4	MW-34-Y2Q4	MW-40-Y2Q4	Maximum Contaminant Level (MCL)-Primary Drinking Water Standard	USEPA Region III RBCs-Tap Water (October 7, 1999)
Laboratory & Lab Sample ID No			0011216-02	0011216-03	0011216-08	0011216-07	0011335-04	0011258-05	0011216-09	0011258-03		
Date Sample Collected			6-Nov-00	6-Nov-00	07-Nov-00	07-Nov-00	09-Nov-00	08-Nov-00	07-Nov-00	07-Nov-00		
pH			6 7	7 71	6 29	6 5	7 2	6 47	NP	6 97		
Conductivity (umhos)			NP	111	116	112	121	221	NP	111		
Temperature			18 8	17 5	18 4	18	13 3	17 1	NP	16 1		
Turbidity (ntu)			NP	NP	NP	NP	NP	NP	NP	NP		
Laboratory Analyses	DL	Units										
Metals (Method 200 7) + Mercury (Method 245 1)												
Aluminum	0 06	mg/L	62 3	7 49	16 6	3 61	3 92	25 7	1 1	3 83	NS	37
Arsenic	0 003	mg/L	0 036	0 013	0 006	0 005	0 005	0 02	ND	ND	0 05	0 000045
Barium	0 003	mg/L	0 453	0 135	0 132	0 126	0 133	0 211	0 117	0 387	2	2 6
Beryllium	0 002	mg/L	0 003	ND	ND	ND	0 003	ND	ND	ND	0 004	0 0073
Calcium	0 005	mg/L	15 8	18	11 4	19 3	26 6	14 8	12 7	69 7	NS	NS
Cobalt	0 009	mg/L	0 071	ND	ND	ND	ND	ND	ND	0 009	NS	2 2
Chromium	0 009	mg/L	0 185	0 018	0 041	ND	ND	0 036	ND	0 011	0 1	55
Copper	0 008	mg/L	0 052	0 008	0 01	ND	ND	0 011	ND	0 025	1 3	1 5
Iron	0 009	mg/L	96 7	24	23 5	18 4	14 6	47 5	1 2	4 15	NS	11
Mercury	0 0002	mg/L	0 0003	ND	ND	ND	ND	ND	ND	0 0003	0 002	NS
Potassium	0 25	mg/L	7 29	2 27	3 58	1 32	1 93	3 7	2 36	6 81	NS	NS
Magnesium	0 04	mg/L	10	8 47	9 52	9 5	9 68	7 77	5 83	34 6	NS	NS
Manganese	0 003	mg/L	1 95	0 105	0 092	0 053	0 338	0 441	0 019	1 27	NS	0 73
Sodium	0 05	mg/L	15	16 8	843	19	30 8	16 9	11 2	87 6	NS	NS
Nickel	0 02	mg/L	0 045	ND	0 023	ND	ND	ND	ND	ND	NS	0 73
Lead	0 06	mg/L	0 198	ND	ND	ND	ND	ND	ND	ND	0 015	NS
Vanadium	0 01	mg/L	0 133	0 033	0 031	0 014	0 021	0 059	ND	ND	NS	0 26
Zinc	0 01	mg/L	0 368	0 029	0 026	0 015	0 165	0 037	0 073	0 038	NS	11
GC/MS Base/Neutral & Acid (SVOCs) (Method 8270C)												
Benzo(A)anthracene	2	ug/L	0 93 J	ND	ND	ND	ND	ND	ND	ND	NS	0 092
Benzo(B)fluoranthene	2	ug/L	1 74 J	ND	ND	ND	ND	ND	ND	ND	NS	0 092
Benzo(K)fluorenthene	2	ug/L	0 57 J	ND	ND	ND	ND	ND	ND	ND	NS	0 92
Benzo(g h I)perylene	2	ug/L	1 24 J	ND	ND	ND	ND	ND	ND	ND	NS	NS
Benzo(a)pyrene	2	ug/L	1 00 J	ND	ND	ND	ND	ND	ND	ND	0 2	0 0092
Bis(2-ethylhexyl)phthalate	10	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS
Chrysene	2	ug/L	1 3 J	ND	ND	ND	ND	ND	ND	ND	NS	9 2
Di-n-butyl phthalate	5	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS
2 4 - Dinitrotoluene	5	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS
2 6 - Dinitrotoluene	5	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS
Fluoranthene	2	ug/L	2 4	ND	ND	ND	ND	ND	ND	ND	NS	1500
Indeno(1,2,3-cd)pyrene	2	ug/L	1 81 J	ND	ND	ND	ND	ND	ND	ND	NS	0 092
Napthalene	2	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	NS	6 5
Phenanthrene	2	ug/L	0 92 J	ND	ND	ND	ND	ND	ND	ND	NS	NS
Pyrene	2	ug/L	1 53 J	ND	ND	ND	ND	ND	ND	ND	NS	180

Only compounds detected are listed

ug/L = micrograms per liter

DL = Detection Limit

TCL = Target Compound List

BDL = Below Detection Limit

MCL = Maximum Contaminant Level - Primary Drinking Water Standards

RBCs = Risk Based Contaminants

NS = no standard NP = not performed

NA = not available

B = Analyte detected in associated method and/or equipment blank

J = Estimated value - presence of the compound was confirmed but less than the reported DL

J* = estimated value - quality control recoveries outside acceptance ranges

E = Concentration exceeds the established method calibration range, but is within the working range of the instrument

[redacted]4

Annual Analytical Results for Metals and Semi Volatile Organics on Sampled Monitoring Wells

Sample Identification Number			MW-44-Y2Q4	MW-51-Y2Q4	MW-54-Y2Q4	MW-56-Y2Q4	MW-57-Y2Q4	MW-58-Y2Q4	MW-59-Y2Q4	MW-67-Y2Q4	Maximum Contaminant Level (MCL)-Primary Drinking Water Standard	USEPA Region III RBCs-Tap Water (October 7, 1999)
Laboratory & Lab Sample ID No			0011258-04	0011258-01	0011216-06	0011216-05	0011216-01	0011216-04	0011258-07	NP		
Date Sample Collected			08-Nov-00	08-Nov-00	07-Nov-00	07-Nov-00	07-Nov-00	08-Nov-00	08-Nov-00	NP		
pH			7 4	6 49	6 51	6 58	NP	6 7	NP	NP		
Conductivity (umhos)			214	113	111	111	NP	110	NP	NP		
Temperature			NP	16 6	17 5	17 9	NP	17 4	NP	NP		
Turbidity (ntu)			NP	NP	NP	NP	NP	NP	NP	NP		
Laboratory Analyses	DL	Units										
Metals (Method 200 7) + Mercury (Method 245 1)												
Aluminum	0 06	mg/L	0 739	1 78	0 067	40 7	18 2	110	59	NP	NS	37
Arsenic	0 003	mg/L	0 017	ND	ND	0 014	0 01	0 155	0 031	NP	0 05	0 000045
Barium	0 003	mg/L	0 047	0 102	0 219	0 402	0 247	2 51	0 245	NP	2	2 6
Beryllium	0 002	mg/L	ND	ND	ND	ND	ND	0 022	0 004	NP	0 004	0 0073
Calcium	0 005	mg/L	15 8	23 8	25 3	23	13 7	19 8	15	NP	NS	NS
Cobalt	0 009	mg/L	ND	ND	ND	0 013	0 014	0 624	0 075	NP	NS	2 2
Chromium	0 009	mg/L	ND	ND	ND	0 063	0 042	0 163	0 066	NP	0 1	55
Copper	0 006	mg/L	ND	ND	ND	0 046	0 045	0 164	0 032	NP	1 3	1 5
Iron	0 009	mg/L	0 868	2 3	0 573	62 6	41 5	724	108	NP	NS	11
Mercury	0 0002	mg/L	ND	ND	ND	0 0002	ND	0 0017	0 0003	NP	0 002	NS
Potassium	0 25	mg/L	7 45	1 32	ND	5 17	3 07	6 56	5 67	NP	NS	NS
Magnesium	0 04	mg/L	6 23	11	1 15	13 3	6 5	11 8	6 98	NP	NS	NS
Manganese	0 003	mg/L	0 011	0 026	0 005	0 5	0 439	13 4	0 897	NP	NS	0 73
Sodium	0 05	mg/L	11 6	20 9	21 9	17 6	19 6	14 4	22 8	NP	NS	NS
Nickel	0 02	mg/L	ND	ND	ND	0 024	0 042	0 162	0 039	NP	NS	0 73
Lead	0 06	mg/L	ND	ND	ND	ND	ND	0 158	ND	NP	0 015	NS
Vanadium	0 01	mg/L	ND	ND	ND	0 075	0 051	0 642	0 104	NP	NS	0 26
Zinc	0 01	mg/L	0 027	0 01	ND	0 21	0 575	0 556	0 138	NP	NS	11
GC/MS Base/Neutral & Acid (SVOCs) (Method 8270C)												
Benzo(A)anthracene	2	ug/L	ND	ND	ND	ND	ND	ND	ND	NP	NS	0 092
Benzo(B)fluoranthene	2	ug/L	ND	ND	ND	ND	ND	ND	ND	NP	NS	0 092
Benzo(K)fluorenthene	2	ug/L	ND	ND	ND	ND	ND	ND	ND	NP	NS	0 92
Benzo(g,h,I)perylene	2	ug/L	ND	ND	ND	ND	ND	ND	ND	NP	NS	NS
Benzo(a)pyrene	2	ug/L	ND	ND	ND	ND	ND	ND	ND	NP	0 2	0 0092
Bis(2-ethylhexyl)phthalate	10	ug/L	ND	ND	ND	ND	ND	ND	ND	NP	NS	NS
Chrysene	2	ug/L	ND	ND	ND	ND	ND	ND	ND	NP	NS	9 2
Di-n-butyl phthalate	5	ug/L	ND	ND	ND	ND	ND	ND	ND	NP	NS	NS
2,4 - Dinitrotoluene	5	ug/L	ND	ND	ND	ND	ND	ND	ND	NP	NS	NS
2 6 - Dinitrotoluene	5	ug/L	ND	ND	ND	ND	ND	ND	ND	NP	NS	NS
Fluoranthene	2	ug/L	ND	ND	ND	ND	ND	ND	ND	NP	NS	1500
Indeno(1,2,3-cd)pyrene	2	ug/L	ND	ND	ND	ND	ND	ND	ND	NP	NS	0 092
Napthalene	2	ug/L	ND	ND	ND	ND	ND	ND	ND	NP	NS	6 5
Phenanthrene	2	ug/L	ND	ND	ND	ND	ND	ND	ND	NP	NS	NS
Pyrene	2	ug/L	ND	ND	ND	ND	ND	ND	ND	NP	NS	180

Only compounds detected are listed

ug/L = micrograms per liter

DL = Detection Limit

TCL = Target Compound List

BDL = Below Detection Limit

MCL = Maximum Contaminant Level - Primary Drinking Water Standards

RBCs = Risk Based Contaminants

NS = no standard NP = not performed

NA = not available

B = Analyte detected in associated method and/or equipment blank

J = Estimated value - presence of the compound was confirmed but less than the reported DL

J* = estimated value - quality control recoveries outside acceptance ranges

E = Concentration exceeds the established method calibration range, but is within the working range of the instrument

Annual Analytical Results for Metals and Semi Volatile Organics on Sampled Monitoring Wells

Sample Identification Number			MW-68-Y2Q4	MW-69-Y2Q4	MW-70-Y2Q4	MW-71-Y2Q4	Maximum Contaminant Level (MCL)-Primary Drinking Water Standard	USEPA Region III RBCs-Tap Water (October 7, 1999)
Laboratory & Lab Sample ID No			0011258-06	0011335-01	0011335-10	0011335-02		
Date Sample Collected			08-Nov-00	09-Nov-00	09-Nov-00	09-Nov-00		
pH			6 4	6 65	6 5	7 04		
Conductivity (umhos)			17 1	119	111	121		
Temperature			192	16 1	17 8	14 3		
Turbidity (ntu)			NP	NP	NP	NP		
Laboratory Analyses	DL	Units						
Metals (Method 200 7) + Mercury (Method 245 1)								
Aluminum	0 06	mg/L	194	29 7	41 5	32 8	NS	37
Arsenic	0 003	mg/L	**0 171**	0 02	0 028	0 028	0 05	0 000045
Barium	0 003	mg/L	1 23	0 299	0 371	0 306	2	2 6
Beryllium	0 002	mg/L	**0 026**	0 003	0 003	0 002	0 004	0 0073
Calcium	0 005	mg/L	25 1	17	23 3	20 1	NS	NS
Cobalt	0 009	mg/L	0 254	0 055	0 057	0 029	NS	2 2
Chromium	0 009	mg/L	**0 443**	0 054	0 088	0 073	0 1	55
Copper	0 008	mg/L	0 16	0 028	0 035	0 019	1 3	1 5
Iron	0 009	mg/L	1050	84 6	137	103	NS	11
Mercury	0 0002	mg/L	**0 003**	ND	0 0004	ND	0 002	NS
Potassium	0 25	mg/L	16 5	5 91	6 39	5 13	NS	NS
Magnesium	0 04	mg/L	14 7	7 92	12 3	9 31	NS	NS
Manganese	0 003	mg/L	4 75	1 12	1 77	1 41	NS	0 73
Sodium	0 05	mg/L	23 5	18 2	24 3	20	NS	NS
Nickel	0 02	mg/L	0 262	0 027	0 041	0 035	NS	0 73
Lead	0 06	mg/L	**0 18**	ND	ND	ND	0 015	NS
Vanadium	0 01	mg/L	0 776	0 089	0 121	0 101	NS	0 26
Zinc	0 01	mg/L	0 905	0 103	0 15	0 087	NS	11
GC/MS Base/Neutral & Acid (SVOCs) (Method 8270C)								
Benzo(A)anthracene	2	ug/L	ND	ND	ND	ND	NS	0 092
Benzo(B)fluoranthene	2	ug/L	ND	ND	ND	ND	NS	0 092
Benzo(K)fluorenthene	2	ug/L	ND	ND	ND	ND	NS	0 92
Benzo(g h,I)perylene	2	ug/L	ND	ND	ND	ND	NS	NS
Benzo(a)pyrene	2	ug/L	ND	ND	ND	ND	0 2	0 0092
Bis(2-ethylhexyl)phthalate	10	ug/L	ND	6 53 B	ND	ND	NS	NS
Chrysene	2	ug/L	ND	ND	ND	ND	NS	9 2
Di-n-butyl phthalate	5	ug/L	ND	ND	7 29	ND	NS	NS
2,4 - Dinitrotoluene	5	ug/L	1 44 J	ND	ND	ND	NS	NS
2 6 - Dinitrotoluene	5	ug/L	2 09 J	ND	ND	ND	NS	NS
Fluoranthene	2	ug/L	ND	ND	ND	ND	NS	1500
Indeno(1,2 3-cd)pyrene	2	ug/L	ND	ND	ND	ND	NS	0 092
Napthalene	2	ug/L	ND	0 32 J	ND	ND	NS	6 5
Phenanthrene	2	ug/L	ND	ND	ND	ND	NS	NS
Pyrene	2	ug/L	ND	ND	ND	ND	NS	180

Only compounds detected are listed

ug/L = micrograms per liter

DL = Detection Limit

TCL = Target Compound List

BDL = Below Detection Limit

MCL = Maximum Contaminant Level - Primary Drinking Water Standards

RBCs = Risk Based Contaminants

NS = no standard NP = not performed

NA = not available

B = Analyte detected in associated method and/or equipment blank

J = Estimated value - presence of the compound was confirmed but less than the reported DL

J* = estimated value - quality control recoveries outside acceptance ranges

E = Concentration exceeds the established method calibration range but is within the working range of the instrument

TABLE 5

Annual Analytical Results for Semi-Volatile Organics, Pesticides/Herbicides and Metals at System Recovery Wells

Sample Identification Number			RW-1A-Y2Q4	RW-1B-Y2Q4	RW-01-Y2Q4	RW-02-Y2Q4	RW-03-Y2Q4	RW-04-Y2Q4	RW-05-Y2Q4	RW-06-Y2Q4	Maximum Contaminant Level (MCL)-Primary Drinking Water Standard	USEPA Region III RBCs-Tap Water (October 7, 1999)
Laboratory & Lab Sample ID No.			0011335-06	0011335-07	0011335-05	0011335-09	0011593-08	0011593-07	0011593-05	0011593-04		
Date Sample Collected			11/9/00	9-Nov-00	09-Nov-00	09-Nov-00	20-Nov-00	20-Nov-00	20-Nov-00	20-Nov-00		
pH			7 1	7 1	7 2	7 1	6 1	6 2	6 2	6 3		
Conductivity (umhos)			119	120	119	106	748	235	222	NP		
Temperature			16 7	16 7	16 3	16 8	18 7	17	17	17 4		
Turbidity (ntu)			NP	NP	NP	NP	NP	NP	NP	NP		
Laboratory Analyses	DL	Units										
Metals (Method 200 7) + Mercury (Method 245 1)												
Aluminum	0 06	mg/L	3 28	0 76	3 44	0 177	ND	0 4	ND	ND	NS	37
Arsenic	0 003	mg/L	ND	ND	0 003	ND	ND	ND	ND	ND	0 05	0 000045
Barium	0 003	mg/L	0 116	0 084	0 163	0 083	0 295	0 108	0 1	0 088	2	2 6
Calcium	0 005	mg/L	20	24 8	20 3	26	72 2	14 6	13 9	15 9	NS	NS
Chromium	0 009	mg/L	0 012	ND	0 065	ND	ND	ND	ND	ND	0 1	55
Iron	0 009	mg/L	7 56	1 18	4 8	0 536	0 065	0 019	0 016	0 031	NS	11
Potassium	0 25	mg/L	1 37	1 26	1 42	0 881	1 02	0 746	0 749	0 783	NS	NS
Magnesium	0 04	mg/L	9 12	9 59	9 49	9 72	23 6	7 15	6 7	7 72	NS	NS
Manganese	0 003	mg/L	0 058	0 017	0 022	0 035	0 542	ND	ND	ND	NS	0 73
Sodium	0 05	mg/L	16 8	24	37 2	22 3	28 1	19 8	18 1	23 6	NS	NS
Nickel	0 02	mg/L	ND	ND	ND	ND	ND	ND	ND	ND	NS	0 73
Vanadium	0 01	mg/L	ND	ND	ND	ND	ND	ND	ND	ND	NS	0 26
Zinc	0 01	mg/L	0 035	ND	0 013	ND	ND	0 011	0 022	0 04	NS	11
GC/MS Base/Neutral & Acid (SVOCs) (Method 8270C)			*There were no detections of Semi-volatiles in any of the Recovery Wells									
Pesticides/Herbicides												
Dieldrin	0 04	ug/L	NP	NP	NP	NP	ND	0 036 J	0 068	ND	NS	0 0042

Only compounds detected are listed

ug/L = micrograms per liter

DL = Detection Limit

TCL = Target Compound List

BDL = Below Detection Limit

MCL = Maximum Contaminant Level - Primary Drinking Water Standards

RBCs = Risk Based Contaminants

NS = no standard NP = not performed

NA = not available

B = Analyte detected in associated method and/or equipment blank

J = Estimated value - presence of the compound was confirmed but less than the reported DL

J* = estimated value - quality control recoveries outside acceptance ranges

NP = Not Performed

Annual Analytical Results for Semi-Volatile Organics, Pesticides/Herbicides and Metals at System Recovery Wells

Sample Identification Number			RW-07-Y2Q4	RW-08-Y2Q4	RW-09-Y2Q4	Maximum Contaminant Level (MCL)-Primary Drinking Water Standard	USEPA Region III RBCs-Tap Water (October 7, 1999)
Laboratory & Lab Sample ID No			0011593-03	0011593-02	0011593-01		
Date Sample Collected			20-Nov-00	20-Nov-00	20-Nov-00		
pH			6 2	6 5	6 6		
Conductivity (umhos)			NP	NP	NP		
Temperature			16 4	16 3	19 4		
Turbidity (ntu)			NP	NP	NP		
Laboratory Analyses	**DL**	**Units**					
Metals (Method 200 7) + Mercury (Method 245 1)							
Aluminum	0 06	mg/L	ND	ND	ND	NS	37
Arsenic	0 003	mg/L	ND	ND	ND	0 05	0 000045
Barium	0 003	mg/L	0 077	0 103	0 127	2	2 6
Calcium	0 005	mg/L	14 5	21 2	27 8	NS	NS
Chromium	0 009	mg/L	ND	ND	ND	0 1	55
Iron	0 009	mg/L	0 015	0 042	0 099	NS	11
Potassium	0 25	mg/L	0 689	0 734	1 09	NS	NS
Magnesium	0 04	mg/L	7 15	10 8	13 6	NS	NS
Manganese	0 003	mg/L	ND	ND	ND	NS	0 73
Sodium	0 05	mg/L	24	23 5	26 4	NS	NS
Nickel	0 02	mg/L	ND	ND	ND	NS	0 73
Vanadium	0 01	mg/L	ND	ND	ND	NS	0 26
Zinc	0 01	mg/L	0 015	0 023	0 023	NS	11
GC/MS Base/Neutral & Acid (SVOCs) (Method 8270C)							
Pesticides/Herbicides							
Dieldrin	0 04	ug/L	ND	ND	ND	NS	0 0042

Only compounds detected are listed

ug/L = micrograms per liter

DL = Detection Limit

TCL = Target Compound List

BDL = Below Detection Limit

MCL = Maximum Contaminant Level - Primary Drinking Water Standards

RBCs = Risk Based Contaminants

NS = no standard NP = not performed

NA = not available

B = Analyte detected in associated method and/or equipment blank

J = Estimated value - presence of the compound was confirmed but less than the reported

J* = estimated value - quality control recoveries outside acceptance ranges

N

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Quarterly Quality Control Samples
Year Two, Quarter Four

Sample Identification Number			RW-5	RW-10		MW-54	MW-54A		MW-71	MW-71B		Maximum	
				duplicate of RW-5	Relative Percent Diff (RPD)		duplicate of MW-54	Relative Percent Diff (RPD)		duplicate of MW-71	Relative Percent Diff (RPD)	Contaminant Level (MCL)-Primary Drinking Water Standard	USEPA Region III RBCs-Tap Water (October 7, 1999)
Laboratory & Lab Sample ID No			0011593-05	0011593-06		0011216-06	0011216-10		0011335-02	0011335-03			
Date Sample Collected			20-Nov-00	11/20/00		07-Nov-00	11/7/00		11/9/00	11/9/00			
Laboratory Analyses	DL	Units											
TCL Volatile Organics (Method 8260B)													
Bromodichloromethane	1	ug/L	ND	ND		ND	19 8	200	ND	ND		NS	0 17
2-Butanone (MEK)	20	ug/L	76 4	51 2	39	ND	ND		ND	ND		NS	1900
Carbon Tetrachlonde	1	ug/L	ND	ND		**12 8**	**8 65**	39	**26 5**	**19 7**	29	5	0 16
Chloroform	1	ug/L	ND	ND		19 8	14 1	34	451	349	26	NS	0 15
Trans 1,2-Dichloroethene	1	ug/L	ND	ND		2 58	1 83	34	2 29	1 58	37	100	120
Cis 1,2-Dichloroethene	1	ug/L	ND	ND		34 6	23 8	37	6 49	4 71	32	70	61
1,1,2 2-Tetrachloroethane	1	ug/L	ND	ND		22 7	20 4	11	106	78 4	30	NS	0 053
Tetrachloroethene	1	ug/L	ND	ND		0 91	0 63	36	4 09	3 15	26	5	1 1
1,1,2-Trichloroethane	1	ug/L	ND	ND		1 24	1	19	2 99	2 03	38	5	0 19
Trichloroethene	1	ug/L	1 89	1 61	16	**29 2**	**22.6**	25	**95 6**	**75 3**	24	5	1 6
Metals (Method 200 7) + Mercury (Method 245 1)													
Aluminum	0 06	mg/L	ND	ND		0 067	0 089	28	32 8	45 1	32	NS	37
Arsenic	0 003	mg/L	ND	ND		ND	ND		0 028	0 02	33	0 05	0 000045
Barium	0 003	mg/L	0 1	0 101	1	0 219	0 223	2	0 306	0 252	19	2	2 6
Beryllium	0 002	mg/L	ND	ND		ND	ND		0 002	ND	200	0 004	0 0073
Calcium	0 005	mg/L	13 9	14	1	25 3	25 6	1	20 1	18 9	6	NS	NS
Cobalt	0 009	mg/L	ND	ND		ND	ND		0 029	0 017	52	NS	2 2
Chromium	0 009	mg/L	ND	ND		ND	ND		0 073	0 064	13	0 1	55
Copper	0 008	mg/L	ND	ND		ND	ND		0 019	0 013	38	1 3	1 5
Iron	0 009	mg/L	0 016	0 027	51	0 573	0 711	21	103	69 8	38	NS	11
Potassium	0 25	mg/L	0 749	0 751	0 3	1 15	1 22	6	5 13	6 09	17	NS	NS
Magnesium	0 04	mg/L	6 7	6 73	0 4	12 1	12 3	2	9 31	9 21	1	NS	NS
Manganese	0 003	mg/L	ND	ND		0 005	0 004	22	1 41	0 794	56	NS	0 73
Sodium	0 05	mg/L	18 1	18 3	1	21 9	22 1	1	20	17 9	11	NS	NS
Nickel	0 02	mg/L	ND	ND		ND	ND		0 035	0 026	30	NS	0 73
Vanadium	0 01	mg/L	ND	ND		ND	ND		0 101	0 086	16	NS	0 26
Zinc	0 01	mg/L	0 022	0 021	5	ND	0 013	200	0 087	0 068	25	NS	11

ug/L = micrograms per liter
DL = Detection Limit
TCL = Target Compound List
BDL = Below Detection Limit
MCL = Maximum Contaminant Level - Primary Drinking Water Standards
RBCs = Risk Based Contaminants
NS = no standard NP = not performed
NA = not available
B = Analyte detected in associated method and/or equipment blank
J = Estimated value - presence of the compound was confirmed but less than the reported DL
J* = estimated value - quality control recoveries outside acceptance ranges

[redacted] 6

Quarterly Quality Control Samples
Year Two, Quarter Four

Sample Identification Number			ERB	ERB	FB	FB	Trip Blank	Trip Blank	Trip Blank	Maximum	
			Equipment Rinsate Blank	Equipment Rinsate Blank	Field Blank	Field Blank				Contaminant Level	USEPA Region III
Laboratory & Lab Sample ID No			0011258-02	0011335-11	0011216-11	0011335-08	0011216-12	0011258-08	0011335-12	(MCL)-Primary Drinking Water	RBCs-Tap Water (October 7, 1999)
Date Sample Collected			11/8/00	11/9/00	11/7/00	11/9/00	11/7/00	11/8/00	11/9/00	Standard	
Laboratory Analyses	DL	Units									
TCL Volatile Organics (Method 8260B)											
Bromodichloromethane	1	ug/L	ND	ND	ND	ND	ND	ND	ND	NS	0 17
2-Butanone (MEK)	20	ug/L	ND	ND	ND	ND	ND	ND	ND		
Carbon Tetrachlonde	1	ug/L	ND	ND	ND	ND	ND	ND	ND	5	0 16
Chloroform	1	ug/L	ND	ND	ND	ND	ND	ND	ND	NS	0 15
Trans 1,2-Dichloroethene	1	ug/L	ND	ND	ND	ND	ND	ND	ND	100	120
Cis 1,2-Dichloroethene	1	ug/L	ND	ND	ND	ND	ND	ND	ND	70	61
1,1,2,2-Tetrachloroethane	1	ug/L	ND	ND	ND	ND	ND	ND	ND	NS	0 053
Tetrachloroethene	1	ug/L	ND	ND	ND	ND	ND	ND	ND	5	1 1
1 1 2-Trichloroethane	1	ug/L	ND	ND	ND	ND	ND	ND	ND	5	0 19
Trichloroethene	1	ug/L	ND	ND	ND	ND	ND	ND	ND	5	1 6
Metals (Method 200 7) + Mercury (Method 245 1)											
Aluminum	0 06	mg/L	NP	NP	ND	ND	NP	NP	NP	NS	37
Arsenic	0 003	mg/L	NP	NP	ND	ND	NP	NP	NP	0 05	0 000045
Barium	0 003	mg/L	NP	NP	ND	ND	NP	NP	NP	2	2 6
Beryllium	0 002	mg/L	NP	NP	ND	ND	NP	NP	NP	0 004	0 0073
Calcium	0 005	mg/L	NP	NP	0 079	0 045	NP	NP	NP	NS	NS
Cobalt	0 009	mg/L	NP	NP	ND	ND	NP	NP	NP	NS	2 2
Chromium	0 009	mg/L	NP	NP	ND	ND	NP	NP	NP	0 1	55
Copper	0 008	mg/L	NP	NP	ND	ND	NP	NP	NP	1 3	1 5
Iron	0 009	mg/L	NP	NP	ND	0 021	NP	NP	NP	NS	11
Potassium	0 25	mg/L	NP	NP	ND	ND	NP	NP	NP	NS	NS
Magnesium	0 04	mg/L	NP	NP	ND	ND	NP	NP	NP	NS	NS
Manganese	0 003	mg/L	NP	NP	ND	ND	NP	NP	NP	NS	0 73
Sodium	0 05	mg/L	NP	NP	2 97	3 57	NP	NP	NP	NS	NS
Nickel	0 02	mg/L	NP	NP	ND	ND	NP	NP	NP	NS	0 73
Vanadium	0 01	mg/L	NP	NP	ND	ND	NP	NP	NP	NS	0 26
Zinc	0 01	mg/L	NP	NP	ND	0 016	NP	NP	NP	NS	11

ug/L = micrograms per liter
DL = Detection Limit
TCL = Target Compound List
BDL = Below Detection Limit
MCL = Maximum Contaminant Level - Primary Drinking Water Stan
RBCs = Risk Based Contaminants
NS = no standard NP = not performed
NA = not available
B = Analyte detected in associated method and/or equipment blank
J = Estimated value - presence of the compound was confirmed bu
J* = estimated value - quality control recovenes outside acceptanc

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TABLE 7
Groundwater Levels Corresponding
to Quarterly Sampled Wells

Sampled Date	**MW-14** GWELEV	**MW-15** GWELEV	**MW-30** GWELEV	**MW-31** GWELEV	**MW-32** GWELEV	**MW-33** GWELEV	**MW-34** GWELEV	**MW-40** GWELEV	**MW-44** GWELEV	**MW-51** GWELEV	**MW-54** GWELEV	**MW-56** GWELEV
3-Feb-99	NA	228 80	228 85	221 80	223.90	227.48	163 51	184 32	217 62	235 32	219 23	NA
25-May-99	NA	237 80	228 36	220 48	222 25	226 52	163 14	183 52	216 89	235 47	217 55	NA
27-Aug-99	NA	227 31	227 66	217 17	222.54	226 17	154 33	178 75	216 16	234 17	216.91	NA
3-Nov-99	NA	227 04	227 07	219 37	222 44	218.16	154 47	175 93	215 45	233 18	216.20	NA
7-Feb-00	228 12	226 92	226 42	218.92	222 04	225 60	160.39	177 98	214 77	232 38	215.46	226 45
16-May-00	227 53	226 79	226.06	218 54	221 67	225 48	160 50	178 53	214 17	230 48	214.81	226 24
22-Aug-00	227 38	226 54	225.89	218 22	221 38	225 20	152 61	172 80	213 62	232 02	214.36	225 98
7-Nov-00	227 83	226 16	225 54	218 02	221 97	224 81	160 98	170 35	213.10	231 44	213.70	225 75

Notes
Groundwater elevations are in feet above mean sea level (msl)
Table contains data corresponding to quarterly sampled groundwater wells only.
NA = not available

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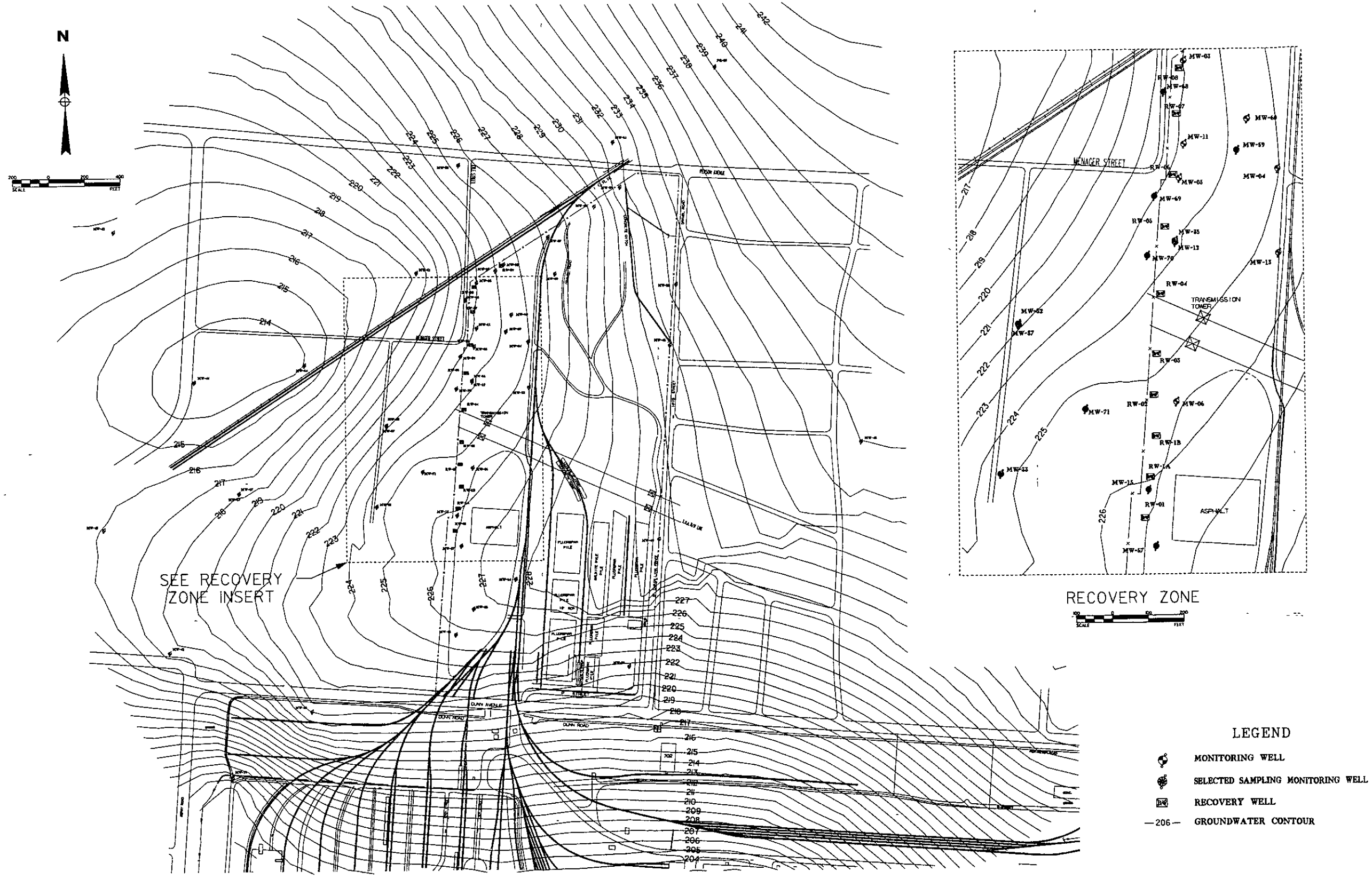
TABLE 7
Groundwater Levels Corresponding to Quarterly Sampled Wells

Sampled Date	**MW-57** GWELEV	**MW-58** GWELEV	**MW-59** GWELEV	**MW-67** GWELEV	**MW-68** GWELEV	**MW-69** GWELEV	**MW-70** GWELEV	**MW-71** GWELEV
3-Feb-99	NA	NA	NA	NA	NA	NA	NA	NA
25-May-99	NA	NA	NA	NA	NA	NA	NA	NA
27-Aug-99	NA	NA	NA	NA	NA	NA	NA	NA
3-Nov-99	NA	NA	NA	NA	NA	NA	NA	NA
7-Feb-00	224.25	227 08	224 24	NA	NA	222.83	223 94	225 49
16-May-00	227 19	226 87	224.13	151 22	NA	222 82	223 71	225.24
22-Aug-00	227 02	226 72	223 87	NA	221 46	222 51	223 11	225 01
7-Nov-00	226 60	226 52	224 16	NA	222 45	223 03	223 58	225.74

Notes.
Groundwater elevations are in feet above mean sea level (msl)
Table contains data corresponding to quarterly sampled groundwater wells only
NA = not available

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FIGURES



NO	DATE	DESCRIPTION	APPROVED

REVISIONS

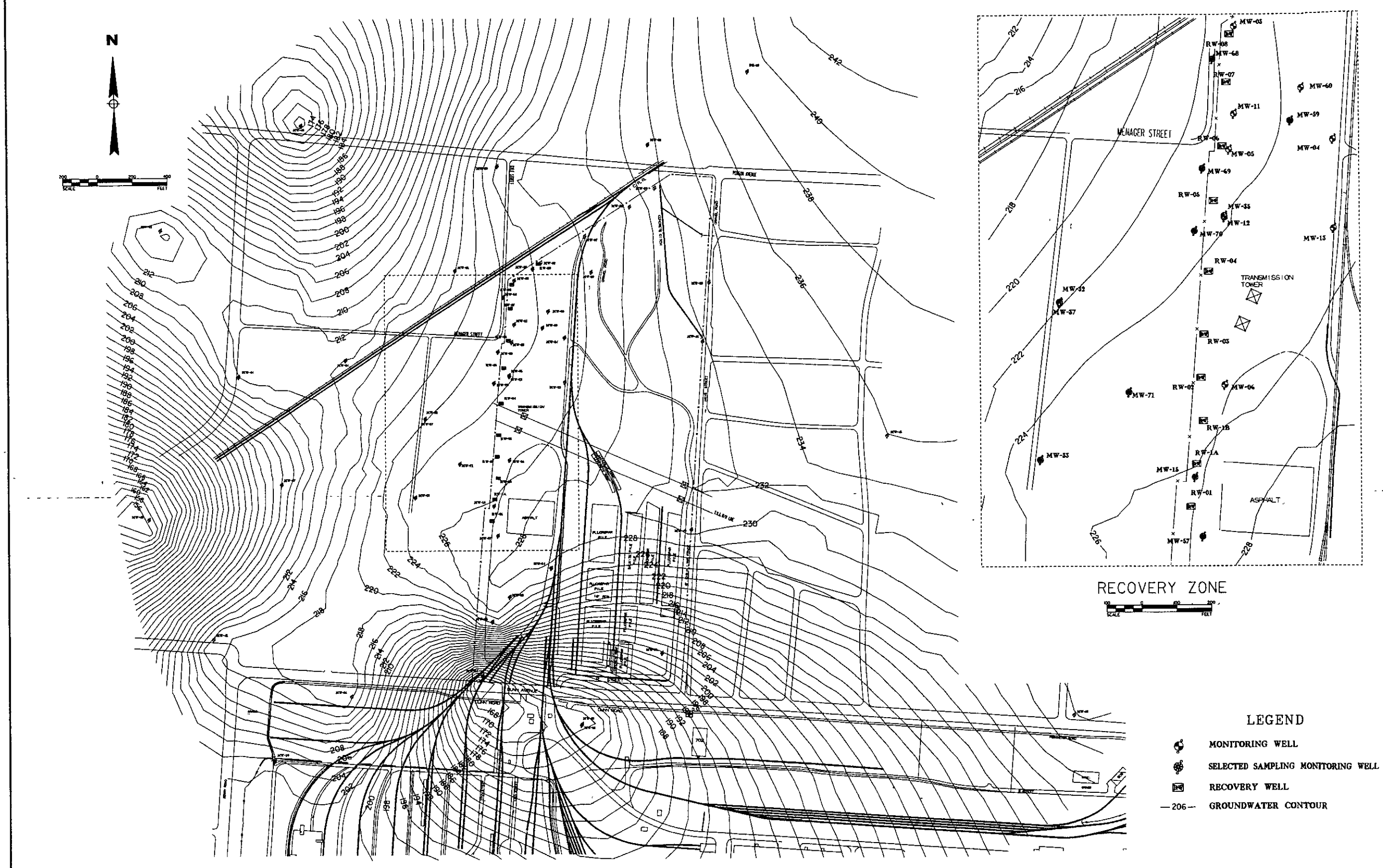
SCALE: 1" = 200'
DESIGNED: K. SMITH
DRAWN: S. M. JESSIE
CHECKED: D. GUYAN
APPROVED: V. JANSEN
DATE: JAN. 28 2001

DUNN FIELD
GROUNDWATER EXTRACTION SYSTEM
MEMPHIS DEFENSE DEPOT, TENNESSEE

JE Sverdrup
A Jacobs Company
NASHVILLE, TENNESSEE
SVERDRUP PROJECT No. 056383

POTENTIOMETRIC SURFACE MAP
Y2Q4 (NOVEMBER 7, 2000)
NOT INCLUDING "DEEPWELLS"
MW-18, 38, 40, 34 AND 43

DRAWING No.
FIG. 4
SHEET No. 4 OF 5



NO.	DATE	DESCRIPTION	APPROVED

REVISIONS

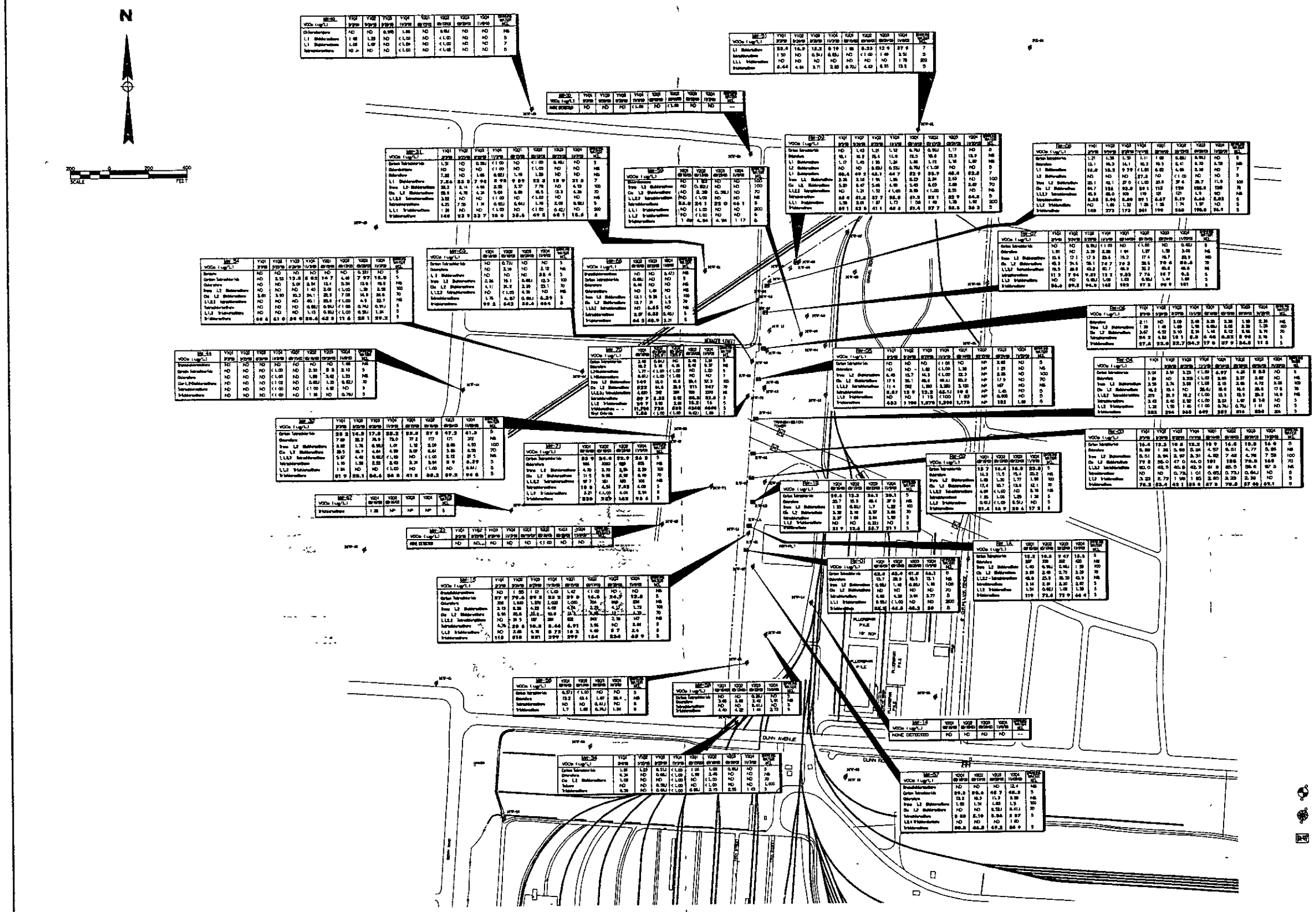
SCALE: 1" = 200'
DESIGNED: R. SMITH
DRAWN: S. M. JESSE
CHECKED: D. GUYAN
APPROVED: V. JANSEN
DATE: JAN. 28, 2001

DUNN FIELD
GROUNDWATER EXTRACTION SYSTEM
MEMPHIS DEFENSE DEPOT, TENNESSEE

JE Sverdrup
A Jacobs Company
NASHVILLE, TENNESSEE
SVERDRUP PROJECT No. CE0350

POTENTIOMETRIC SURFACE MAP
Y2Q4 (NOVEMBER 7, 2000)
INCLUDES "DEEPWELLS"
MW-18, 38, 40, 34 AND 43

DRAWING No.
FIG. 5
SHEET No. 5 OF 5



NO	DATE	DESCRIPTION	APPROVED

REVISIONS

SCALE:	1" = 200'
DESIGNED:	K. SMITH
DRAWN:	S. M. JESSIE
CHECKED:	D. GUYAN
APPROVED:	V. JANSEN
DATE:	JAN. 9, 2001

DUNN FIELD
GROUNDWATER EXTRACTION SYSTEM
MEMPHIS DEFENSE DEPOT, TENNESSEE

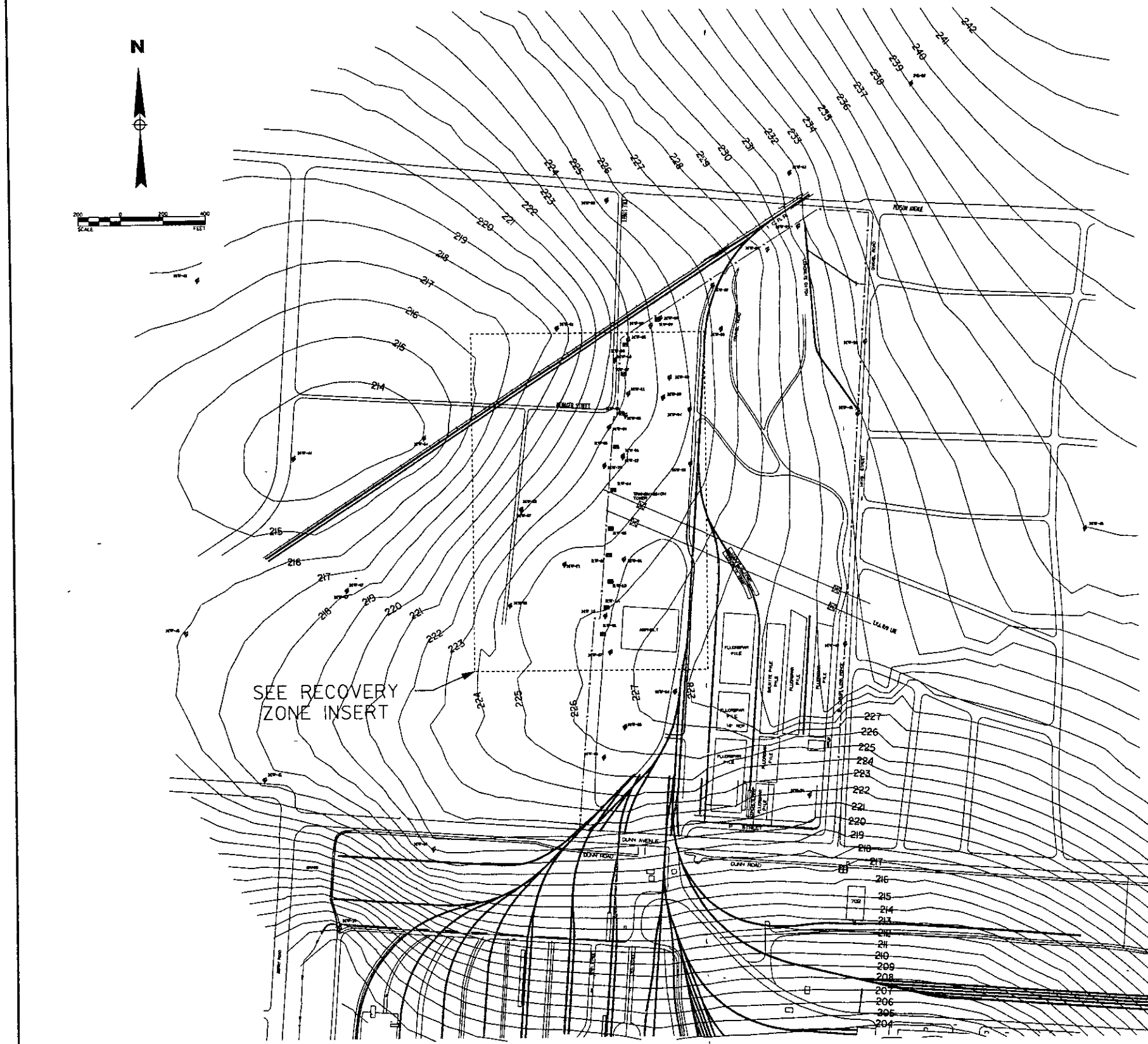
JE Sverdrup
A Jacobs Company
NASHVILLE, TENNESSEE
SVERDRUP PROJECT No. CSX5903

VOC CONCENTRATIONS
IN SELECT MONITORING WELLS
(Y101 - Y204)

DRAWING No.
FIG. 3
SHEET No. 3 OF 5

C:\SVER00\CSX5903\QUARTERLY REPORTS\Y204\VFIG-3.DGN

613 66



RECOVERY ZONE

NO.	DATE	DESCRIPTION	APPROVED

REVISIONS

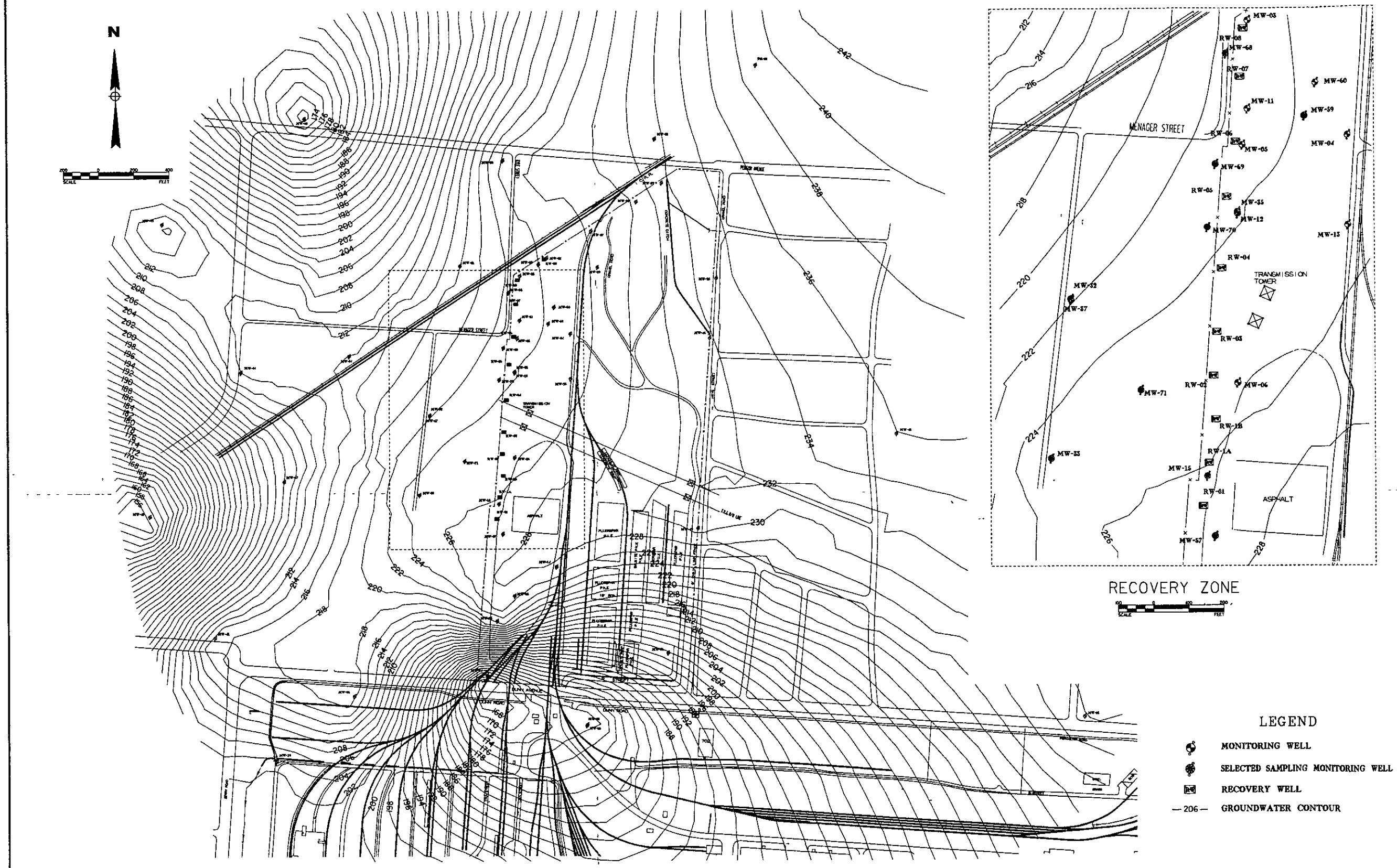
SCALE: 1" = 200'
DESIGNED: K. SMITH
DRAWN: S. M. JESSIE
CHECKED: D. GUYAN
APPROVED: V. JANSEN
DATE: JAN. 28 2001

DUNN FIELD
GROUNDWATER EXTRACTION SYSTEM
MEMPHIS DEFENSE DEPOT, TENNESSEE

JE Sverdrup
A Jacobs Company
NASHVILLE, TENNESSEE
SVERDRUP PROJECT No. CS13801

POTENTIOMETRIC SURFACE MAP
Y2Q4 (NOVEMBER 7, 2000)
NOT INCLUDING "DEEPWELLS"
MW-18, 38, 40, 34 AND 43

DRAWING No.
FIG. 4
SHEET No. 4 OF 5



NO	DATE	DESCRIPTION	APPROVED

REVISIONS

SCALE: 1" = 200'
DESIGNED: K. SMITH
DRAWN: S. M. JESSIE
CHECKED: D. GUYAN
APPROVED: V. JANSEN
DATE: JAN. 26 2001

DUNN FIELD
GROUNDWATER EXTRACTION SYSTEM
MEMPHIS DEFENSE DEPOT, TENNESSEE

JE Sverdrup
A Jacobs Company
NASHVILLE, TENNESSEE
SVERDRUP PROJECT No. CSX5801

POTENTIOMETRIC SURFACE MAP
Y2Q4 (NOVEMBER 7, 2000)
INCLUDES "DEEPWELLS"
MW-18, 38, 40, 34 AND 43

DRAWING No.
FIG. 5
SHEET No. 5 OF 5

APPENDIX A

GROUNDWATER MEASUREMENT DATA

Well ID	MW-31		MW-32		MW-33		MW-34		MW-35		MW-36		MW-37		MW-38		MW-40		MW-41	
TOC Elevation	290 17		284 88		280 56		299 72		300 52		310 24		284 89		307 44		262 45		283 81	
Total Depth (ft)	79 00		67 80		60 00		156 90		90 00		209 00		182 80		155 00		95 00		67 00	
Location	MLGW Facility		Kyle		Off-Site		Depot Field		Dunn Field		Dunn Field		Kyle		Depot		Off-Site		Off-Site	
DATE	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev
1-Nov-99	70 58	219 59	NM	NA	54 60	225 96	NM	NA	78 31	224 21	161 60	148 64	NM	NA	132 05	175 39	85 90	176 55	65 25	218 56
2-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
3-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
4-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
5-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
6-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
7-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
8-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
9-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
10-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
11-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
12-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
13-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
14-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
15-Nov-99	70 75	219 42	62 70	222 18	54 78	225 78	144 58	155 14	76 56	223 96	162 18	148 06	137 17	147 72	136 30	171 14	86 48	175 97	65 40	218 41
16-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
17-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
18-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
19-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
20-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
21-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
22-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
23-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
24-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
25-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
26-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
27-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
28-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
29-Nov-99	70 98	219 19	62 90	221 98	55 05	225 51	144 80	154 92	76 68	223 84	159 81	150 43	135 00	149 89	136 80	170 64	87 10	175 35	65 60	218 21
30-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
1-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
2-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
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10-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
11-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
12-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
13-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
14-Dec-99	71 16	219 01	62 90	221 98	55 00	225 56	143 30	156 42	76 56	223 96	157 75	152 49	134 00	150 89	134 90	172 54	86 28	176 17	65 50	218 31
15-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
16-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
17-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
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19-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
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21-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
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27-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
28-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	

Well ID	MW-31		MW-32		MW-33		MW-34		MW-35		MW-36		MW-37		MW-38		MW-40		MW-41	
TOC Elevation	290 17		284 88		280 56		299 72		300 52		310 24		284 89		307 44		262 45		283 81	
Total Depth (ft)	79 00		87 80		80 00		156 90		90 00		209 00		182 80		155 00		95 00		67 00	
Location	MLGW Facility		Kyle		Off-Site		Depot Field		Dunn Field		Dunn Field		Kyle		Depot		Off-Site		Off-Site	
DATE	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev
29-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
30-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
31-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
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2-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
3-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
4-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
5-Jan-00	71 10	219 07	62 85	222 03	54 99	225 57	141 83	157 89	76 61	223 91	154 77	155 47	129 92	154 97	135 80	171 64	85 75	176 70	65 58	218 23
6-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
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9-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
10-Jan-00	71 10	219 07	62 82	222 06	54 91	225 65	140 65	159 07	76 60	223 92	154 19	156 05	129 37	155 52	135 07	172 37	85 14	177 31	65 41	218 40
11-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
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23-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
24-Jan-00	71 23	218 94	62 88	222 00	55 00	225 56	140 09	159 63	76 53	223 99	153 61	156 63	128 85	156 04	134 30	173 14	84 89	177 56	65 65	218 16
25-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
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2-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
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4-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
5-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
6-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
7-Feb-00	71 25	218 92	62 84	222 04	54 96	225 60	139 33	160 39	76 65	223 87	153 80	156 44	128 76	156 13	134 69	172 75	84 47	177 98	65 60	218 21
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22-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
23-Feb-00	71 26	218 91	62 95	221 93	54 96	225 60	138 58	161 14	76 61	223 91	152 95	157 29	127 48	157 41	134 21	173 23	84 09	178 36	65 60	218 21
24-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
25-[illegible]-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	

Well ID	MW-31		MW-32		MW-33		MW-34		MW-35		MW-36		MW-37		MW-38		MW-40		MW-41	
TOC Elevation	290 17		284 88		280 56		299 72		300 52		310 24		284 89		307 44		262 45		283 81	
Total Depth (ft)	79 00		67 80		60 00		156 90		90 00		209 00		182 80		155 00		95 00		67 00	
Location	MLGW Facility		Kyle		Off-Site		Depot Field		Dunn Field		Dunn Field		Kyle		Depot		Off-Site		Off-Site	
DATE	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev
26-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
27-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
28-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
29-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
1-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
2-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
3-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
4-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
5-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
6-Mar-00	71 41	218 76	63 00	221 88	55 10	225 46	139 25	160 47	76 70	223 82	152 70	157 54	128 80	156 09	133 90	173 54	83 86	178 59	65 66	218 15
7-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
8-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
9-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
10-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
11-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
12-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
13-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
14-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
15-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
16-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
17-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
18-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
19-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
20-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
21-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
22-Mar-00	71 57	218 60	63 07	221 81	55 56	225 00	140 44	159 28	76 50	224 02	154 06	156 18	130 20	154 69	133 70	173 74	83 83	178 62	65 70	218 11
23-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
24-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
25-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
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27-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
28-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
29-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
30-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
31-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
1-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
2-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
3-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
4-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
5-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
6-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
7-Apr-00	71 55	218 62	63 014	221 87	55 09	225 47	139 139	160 58	76 52	224 00	154 55	155 69	128 94	155 95	133 70	173 74	83 51	178 94	65 74	218 07
8-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
9-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
10-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
11-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
12-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
13-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
14-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
15-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
16-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
17-Apr-00	70 68	219 49	63 04	221 84	55 20	225 36	139 29	160 43	77 60	222 92	154 10	156 14	128 791	156 10	133 25	174 19	83 70	178 75	65 87	217 94
18-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
19-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
20-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
21-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
22-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
23-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
24-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	

Well ID	MW-31		MW-32		MW-33		MW-34		MW-35		MW-36		MW-37		MW-38		MW-40		MW-41	
TOC Elevation	290 17		284 88		280 56		299 72		300 52		310 24		284 89		307 44		262 45		283 81	
Total Depth (ft)	79 00		67 80		60 00		156 90		90 00		209 00		182 80		155 00		95 00		67 00	
Location	MLGW Facility		Kyle		Off-Site		Depot Field		Dunn Field		Dunn Field		Kyle		Depot		Off-Site		Off-Site	
DATE	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev
25-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
26-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
27-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
28-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
29-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
30-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
1-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
2-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
3-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
4-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
5-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
6-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
7-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
8-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
9-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
10-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
11-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
12-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
13-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
14-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
15-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
16-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
17-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
18-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
19-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
20-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
21-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
22-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
23-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
24-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
25-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
26-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
27-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
28-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
29-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
30-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
31-May-00	71 53	218 64	62 95	221 93	55 28	225 28	139 365	160 36	76 37	224 15	157 12	153 12	128 998	155 89	133 48	173 96	84 44	178 01	65 87	217 94
1-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
2-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
3-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
4-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
5-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
6-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
7-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
8-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
9-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
10-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
11-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
12-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
13-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
14-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
15-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
16-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
17-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
18-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
19-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
20-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
21-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
22-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	

Well ID	MW-31		MW-32		MW-33		MW-34		MW-35		MW-36		MW-37		MW-38		MW-40		MW-41	
TOC Elevation	290 17		284 88		280 56		299 72		300 52		310 24		284 89		307 44		262 45		283 81	
Total Depth (ft)	79 00		67 80		60 00		156 90		90 00		209 00		182 80		155 00		95 00		67 00	
Location	MLGW Facility		Kyle		Off-Site		Depot Field		Dunn Field		Dunn Field		Kyle		Depot		Off-Site		Off-Site	
DATE	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev
23-Jun-00	71 78	218 39	63 001	221 88	55 21	225 35	141 273	158 45	76 53	223 99	161 63	148 61	132 989	151 90	134 76	172 68	85 49	176 96	65 92	217 89
24-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
25-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
26-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
27-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
28-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
29-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
30-Jun-00	71 84	218 33	63 022	221 86	55 26	225 30	141 912	157 81	76 59	223 93	162 07	148 17	133 609	151 28	134 91	172 53	85 77	176 68	65 93	217 88
1-Jul-00																				
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4-Jul-00																				
5-Jul-00																				
6-Jul-00																				
7-Jul-00																				
8-Jul-00																				
9-Jul-00																				
10-Jul-00	71 87	218 30	62 95	221 93	55 27	225 29	139 72	160 00	76 60	223 92	164 58	145 66	130 41	154 48	135 34	172 10	86 32	176 13	65 95	217 86
11-Jul-00																				
12-Jul-00																				
13-Jul-00																				
14-Jul-00																				
15-Jul-00																				
16-Jul-00																				
17-Jul-00																				
18-Jul-00																				
19-Jul-00	71 92	218 25	62 98	221 91	55 31	225 25	140 97	158 75	76 61	223 91	166 58	143 66	132 75	152 14	135 92	171 52	87 06	175 39	65 97	217 84
20-Jul-00																				
21-Jul-00																				
22-Jul-00																				
23-Jul-00																				
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25-Jul-00																				
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28-Jul-00																				
29-Jul-00																				
30-Jul-00																				
31-Jul-00																				
1-Aug-00																				
2-Aug-00	71 93	218 24	63 01	221 87	55 31	225 25	142 20	157 52	76 60	223 92	166 04	144 20	131 92	152 97	136 61	170 83	88 21	174 24	66 00	217 81
3-Aug-00																				
4-Aug-00																				
5-Aug-00																				
6-Aug-00																				
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19-Aug-00																				
20-Aug-00																				

Well ID	MW-31		MW-32		MW-33		MW-34		MW-35		MW-36		MW-37		MW-38		MW-40		MW-41	
TOC Elevation	290 17		284 86		280 56		299 72		300 52		310 24		284 89		307 44		262 45		283 81	
Total Depth (ft)	79 00		67 80		60 00		156 90		90 00		209 00		182 80		155 00		95 00		67 00	
Location	MLGW Facility		Kyle		Off-Site		Depot Field		Dunn Field		Dunn Field		Kyle		Depot		Off-Site		Off-Site	
DATE	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev
21-Aug-00																				
22-Aug-00																				
23-Aug-00																				
24-Aug-00																				
25-Aug-00																				
26-Aug-00																				
27-Aug-00																				
28-Aug-00																				
29-Aug-00																				
30-Aug-00	71 97	218 20	62 95	221 93	55 36	225 20	140 26	159 46	76 95	223 57	168 19	142 05	131 21	153 68	137 77	169 67	90 12	172 33	66 06	217 75
31-Aug-00																				
1-Sep-00																				
2-Sep-00																				
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13-Sep-00																				
14-Sep-00																				
15-Sep-00																				
16-Sep-00																				
17-Sep-00																				
18-Sep-00	73 76	216 41	62 99	221 89	NM	NM	139 47	160 25	77 05	223 47	NM	NM	128 13	156 76	132 74	174 70	91 37	171 08	63 77	220 04
19-Sep-00																				
20-Sep-00																				
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25-Sep-00																				
26-Sep-00																				
27-Sep-00																				
28-Sep-00																				
29-Sep-00																				
30-Sep-00	73 99	216 18	63 02	221 87	54 01	226 55	139 42	160 30	77 07	223 45	161 58	148 66	127 08	157 81	134 69	172 75	85 35	177 10	65 92	217 89
1-Oct-00																				
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18-[redacted]	68 32	221 85	62 97	221 91	55 67	224 89	138 45	161 27	77 [redacted]	223 40	152 36	157 88	125 44	159 45	139 00	168 44	92 19	170 26	66	217 69

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Well ID	MW-31		MW-32		MW-33		MW-34		MW-35		MW-36		MW-37		MW-38		MW-40		MW-41	
TOC Elevation	290 17		284 88		280 56		299 72		300 52		310 24		284 89		307 44		262 45		283 81	
Total Depth (ft)	79 00		67 80		60 00		156 90		90 00		209 00		182 80		155 00		95 00		67 00	
Location	MLGW Facility		Kyle		Off-Site		Depot Field		Dunn Field*		Dunn Field		Kyle		Depot		Off-Site		Off-Site	
DATE	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev
19-Oct-00																				
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28-Oct-00																				
29-Oct-00																				
30-Oct-00	—	—	62 99	221 90	55 65	224 91	139 21	160 51	77 02	223 50	164 71	145 53	127 17	157 73	—	—	92 21	170 24	66 12	217 69
31-Oct-00	72 28	217 89	62 95	221 94	55 64	224 92	139 21	160 51	76 91	223 61	163 95	146 29	128 74	156 15	139 13	168 31	92 19	170 26	66 12	217 69
1-Nov-00	72 25	217 92	62 97	221 91	55 64	224 92	—	—	76 86	223 66	163 43	146 81	128 77	156 13	139 11	168 33	92 20	170 25	66 10	217 71
2-Nov-00	72 25	217 92	62 99	221 90	55 70	224 86	—	—	76 80	223 72	162 76	147 48	128 15	156 74	139 12	168 32	92 16	170 29	66 12	217 69
3-Nov-00	72 18	217 99	62 94	221 94	55 64	224 92	139 21	160 51	76 79	223 73	162 12	148 12	128 81	156 08	139 20	168 24	92 31	170 14	66 12	217 69
4-Nov-00	—	—	62 94	221 94	—	—	139 03	160 69	76 64	223 88	160 96	149 28	128 14	156 75	138 90	168 54	92 56	169 89	66 14	217 67
5-Nov-00	—	—	62 93	221 95	—	—	138 80	160 92	76 65	223 87	160 90	149 34	127 58	157 31	138 89	168 55	92 50	169 95	66 10	217 71
6-Nov-00	—	—	62 92	221 97	55 45	225 11	138 37	161 35	76 62	223 90	160 32	149 92	127 13	157 77	138 49	168 95	91 62	170 83	65 90	217 91
7-Nov-00	72 15	218 02	62 92	221 97	55 75	224 81	138 74	160 98	76 60	223 92	160 45	149 79	127 10	157 80	139 03	168 41	92 10	170 35	66 16	217 65
8-Nov-00	71 96	218 21	62 90	221 98	55 59	224 97	139 05	160 67	76 54	223 98	160 69	149 55	127 20	157 69	138 64	168 80	92 00	170 45	66 31	217 50
9-Nov-00	72 02	218 15	62 88	222 00	55 65	224 91	138 82	160 90	76 55	223 97	159 69	150 55	126 80	158 09	138 93	168 51	91 75	170 70	66 09	217 72
10-Nov-00	72 17	218 00	62 90	221 99	55 87	224 69	139 27	160 45	76 59	223 93	160 40	149 84	127 11	157 79	139 30	168 14	92 10	170 35	66 24	217 57
11-Nov-00	72 06	218 11	62 88	222 00	55 77	224 79	139 12	160 60	76 52	224 00	160 92	149 32	127 54	157 35	—	—	92 37	170 08	66 32	217 49
12-Nov-00	72 99	217 18	62 88	222 00	55 69	224 87	138 90	160 82	76 48	224 04	160 99	149 25	127 19	157 70	139 00	168 44	92 01	170 44	66 15	217 66
13-Nov-00																				
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27-Nov-00	71 70	218 47	62 99	221 89	55 72	224 84	138 39	161 33	76 18	224 34	157 66	152 58	127 02	157 87	138 70	168 74	91 88	170 57	66 21	217 60
28-Nov-00	71 52	218 65	62 98	221 90	55 60	224 96	138 31	161 41	76 34	224 18	—	—	127 00	157 89	—	—	91 62	170 83	66 14	217 67
29-Nov-00	—	—	62 99	221 90	55 67	224 89	138 41	161 31	76 40	224 12	—	—	127 45	157 44	—	—	91 80	170 65	66 20	217 61
30-Nov-00	71 50	218 67	62 98	221 90	55 60	224 96	138 39	161 34	76 27	224 25	—	—	127 17	157 72	—	—	91 63	170 82	66 15	217 66
1-Dec-00	71 46	218 71	62 96	221 93	55 62	224 94	139 19	160 53	76 15	224 37	—	—	128 72	156 17	—	—	91 50	170 95	66 12	217 69
2-Dec-00	—	—	62 97	221 91	—	—	139 35	160 37	76 34	224 18	—	—	128 60	156 29	—	—	91 63	170 82	66 11	217 70
3-Dec-00	—	—	62 96	221 92	—	—	139 41	160 31	76 36	224 16	—	—	128 44	156 45	—	—	91 87	170 58	66 17	217 64
4-Dec-00																				
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15-Dec-00																				
16-Dec-00																				

Well ID	MW-31		MW-32		MW-33		MW-34		MW-35		MW-36		MW-37		MW-38		MW-40		MW-41	
TOC Elevation	290 17		284 88		280 56		299 72		300 52		310 24		284 89		307 44		262 45		283 81	
Total Depth (ft)	79 00		67 80		60 00		156 90		90 00		209 00		182 80		155 00		95 00		67 00	
Location	MLGW Facility		Kyle		Off-Site		Depot Field		Dunn Field		Dunn Field		Kyle		Depot		Off-Site		Off-Site	
DATE	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev
17-Dec-00																				
18-Dec-00	68 18	221 99	62 94	221 94	55 41	225 15	137 53	162 19	76 03	224 49	NM	NM	128 05	156 84	NM	NM	93 39	169 06	65 96	217 85
19-Dec-00																				
20-Dec-00																				
21-Dec-00																				
22-Dec-00																				
23-Dec-00																				
24-Dec-00																				
25-Dec-00																				
26-Dec-00																				
27-Dec-00																				
28-Dec-00																				
29-Dec-00	71 25	218 92	62 90	221 98	55 55	225 01	137 36	162 36	74 80	225 72	NM	NM	128 69	156 20	NM	NM	96 60	165 85	65 93	217 88
30-Dec-00																				
31-Dec-00																				

Well ID	MW-42		MW-43		MW- 44		MW-45		MW-46		MW-49		MW-51		MW-53		MW-54		MW-55	
TOC Elevation	274 87		284 99		269 07		292 81		287 56		310 49		275 24		306 38		295 36		292 05	
Total Depth (ft)	59 00		173 00		74 00		68 00		72 00		90 00		65 00		82 50		94 50		74 00	
Location	Off-Site		Elementary School		Off-Site		Off-Site		Dunn Field		Dunn Field		Off-Site		Off-Site		MLGW Facility		Depot	
DATE	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev
1-Nov-99	54 40	220 47	135 10	149 89	53 35	215 72	55 10	237 71	54 00	233 56	78 40	232 09	42 00	233 24	73 02	233 36	79 00	216 36	70 55	221 50
2-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
3-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
4-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
5-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
6-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
7-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
8-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
9-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
10-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
11-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
12-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
13-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
14-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
15-Nov-99	54 41	220 46	135 20	149 79	53 61	215 46	55 45	237 36	54 21	233 35	78 41	232 08	42 15	233 09	73 34	233 04	79 20	216 16	70 70	221 35
16-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
17-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
18-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
19-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
20-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
21-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
22-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
23-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
24-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
25-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
26-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
27-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
28-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
29-Nov-99	55 10	219 77	134 59	150 40	54 00	215 07	55 91	236 90	54 45	233 11	79 07	231 42	42 33	232 91	73 80	232 58	79 54	215 82	71 00	221 05
30-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
1-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
2-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
3-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
4-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
5-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
6-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
7-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
8-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
9-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
10-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
11-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
12-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
13-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
14-Dec-99	55 10	219 77	133 20	151 79	54 04	215 03	55 56	237 25	54 40	233 16	78 80	231 69	42 50	232 74	73 47	232 91	79 62	215 74	70 88	221 17
15-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
16-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
17-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
18-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
19-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
20-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
21-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
22-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
23-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
24-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
25-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
26-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
27-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
28-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	

Well ID	MW-42		MW-43		MW- 44		MW-45		MW-46		MW-49		MW-51		MW-53		MW-54		MW-55	
TOC Elevation	274 87		284 99		269 07		282 81		287 56		310 49		275 24		306 38		295 36		292 05	
Total Depth (ft)	59 00		173 00		74 00		68 00		72 00		90 00		65 00		82 50		94 50		74 00	
Location	Off-Site		Elementary School		Off-Site		Off-Site		Dunn Field		Dunn Field		Off-Site		Off-Site		MLGW Facility		Depot	
DATE	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev
29-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
30-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
31-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
1-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
2-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
3-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
4-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
5-Jan-00	55 41	219 46	130 70	154 29	54 15	214 92	56 10	236 71	54 65	232 91	79 12	231 37	42 57	232 67	73 81	232 57	79 70	215 66	71 07	220 98
6-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
7-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
8-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
9-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
10-Jan-00	55 39	219 48	129 78	155 21	54 10	214 97	55 75	237 06	54 57	232 99	78 79	231 70	42 62	232 62	73 27	233 11	79 71	215 65	70 88	221 17
11-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
12-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
13-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
14-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
15-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
16-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
17-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
18-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
19-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
20-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
21-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
22-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
23-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
24-Jan-00	55 61	219 26	129 18	155 81	54 35	214 72	56 10	236 71	54 72	232 84	79 10	231 39	42 72	232 52	73 70	232 68	79 90	215 46	71 10	220 95
25-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
26-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
27-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
28-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
29-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
30-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
31-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
1-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
2-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
3-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
4-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
5-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
6-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
7-Feb-00	55 75	219 12	128 59	156 40	54 30	214 77	56 00	236 81	54 77	232 79	79 00	231 49	42 86	232 38	73 56	232 82	79 90	215 46	71 05	221 00
8-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
9-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
10-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
11-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
12-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
13-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
14-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
15-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
16-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
17-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
18-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
19-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
20-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
21-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
22-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
23-Feb-00	55 80	219 07	127 78	157 21	54 22	214 85	56 00	236 81	54 80	232 76	78 98	231 51	42 98	232 26	73 50	232 88	79 95	215 41	71 05	221 00
24-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
25-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	

Well ID	MW-42		MW-43		MW- 44		MW-45		MW-46		MW-49		MW-51		MW-53		MW-54		MW-55	
TOC Elevation	274 87		284 99		269 07		292 81		287 56		310 49		275 24		306 38		295 36		292 05	
Total Depth (ft)	59 00		173 00		74 00		68 00		72 00		90 00		65 00		82 50		94 50		74 00	
Location	Off-Site		Elementary School		Off-Site		Off-Site		Dunn Field		Dunn Field		Off-Site		Off-Site		MLGW Facility		Depot	
DATE	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.
26-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
27-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
28-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
29-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
1-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
2-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
3-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
4-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
5-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
6-Mar-00	56 10	218 77	127 69	157 30	54 60	214 47	56 31	236 50	55 03	232 53	79 32	231 17	43 04	232 20	73 84	232 54	80 21	215 15	71 22	220 83
7-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
8-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
9-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
10-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
11-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
12-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
13-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
14-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
15-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
16-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
17-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
18-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
19-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
20-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
21-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
22-Mar-00	56 30	218 57	128 38	156 61	58 80	210 27	56 51	236 30	55 09	232 47	79 40	231 09	43 12	232 12	74 09	232 29	80 40	214 96	71 31	220 74
23-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
24-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
25-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
26-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
27-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
28-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
29-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
30-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
31-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
1-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
2-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
3-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
4-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
5-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
6-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
7-Apr-00	56 27	218 60	128 00	156 99	54 42	214 65	56 20	236 61	55 14	232 42	79 26	231 23	43 04	232 20	73 71	232 67	80 33	215 03	71 17	220 88
8-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
9-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
10-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
11-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
12-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
13-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
14-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
15-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
16-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
17-Apr-00	56 41	218 46	128 21	156 78	55 00	214 07	56 36	236 45	55 25	232 31	79 45	231 04	42 98	232 26	73 89	232 49	80 55	214 81	71 27	220 78
18-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
19-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
20-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
21-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
22-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
23-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
24-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	

Well ID	MW-42		MW-43		MW- 44		MW-45		MW-46		MW-49		MW-51		MW-53		MW-54		MW-55	
TOC Elevation	274 87		284 99		289 07		292 81		287 56		310 49		275 24		306 38		295 36		292 05	
Total Depth (ft)	59 00		173 00		74 00		68 00		72 00		90 00		65 00		82 50		94 50		74 00	
Location	Off-Site		Elementary School		Off-Site		Off-Site		Dunn Field		Dunn Field		Off-Site		Off-Site		MLGW Facility		Depot	
DATE	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev.
25-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
26-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
27-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
28-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
29-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
30-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
1-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
2-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
3-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
4-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
5-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
6-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
7-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
8-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
9-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
10-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
11-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
12-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
13-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
14-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
15-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
16-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
17-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
18-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
19-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
20-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
21-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
22-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
23-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
24-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
25-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
26-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
27-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
28-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
29-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
30-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
31-May-00	56 72	218 15	130 63	154 36	55 21	213 86	56 31	236 50	55 35	232 21	79 40	231 09	42 72	232 52	74 03	232 35	80 85	214 51	71 02	221 03
1-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
2-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
3-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
4-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
5-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
6-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
7-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
8-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
9-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
10-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
11-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
12-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
13-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
14-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
15-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
16-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
17-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
18-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
19-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
20-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
21-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
22-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	

Well ID	MW-42		MW-43		MW- 44		MW-45		MW-46		MW-49		MW-51		MW-53		MW-54		MW-55	
TOC Elevation	274 87		284 99		269 07		292 81		287 56		310 49		275 24		306 38		295 36		292 05	
Total Depth (ft)	59 00		173 00		74 00		68 00		72 00		90 00		65 00		82 50		94 50		74 00	
Location	Off-Site		Elementary School		Off-Site		Off-Site		Dunn Field		Dunn Field		Off-Site		Off-Site		MLGW Facility		Depot	
DATE	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev
23-Jun-00	56 71	218 16	133 51	151 48	55 16	213 91	56 18	236 63	55 33	232 23	79 58	230 91	42 85	232 39	73 90	232 48	80 81	214 55	70 71	221 34
24-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
25-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
26-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
27-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
28-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
29-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
30-Jun-00	56 76	218 11	133 81	151 18	55 23	213 84	56 25	236 56	55 36	232 20	79 65	230 84	42 91	232 33	73 97	232 41	80 87	214 49	70 72	221 33
1-Jul-00																				
2-Jul-00																				
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4-Jul-00																				
5-Jul-00																				
6-Jul-00																				
7-Jul-00																				
8-Jul-00																				
9-Jul-00																				
10-Jul-00	56 77	218 10	135 10	149 89	55 24	213 83	56 25	236 56	55 38	232 18	79 64	230 85	42 96	232 28	73 93	232 45	80 89	214 47	70 67	221 38
11-Jul-00																				
12-Jul-00																				
13-Jul-00																				
14-Jul-00																				
15-Jul-00																				
16-Jul-00																				
17-Jul-00																				
18-Jul-00																				
19-Jul-00	56 79	218 08	136 72	148 27	55 31	213 76	56 30	236 51	55 38	232 18	79 65	230 84	43 03	232 21	73 98	232 40	80 94	214 42	70 48	221 57
20-Jul-00																				
21-Jul-00																				
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28-Jul-00																				
29-Jul-00																				
30-Jul-00																				
31-Jul-00																				
1-Aug-00																				
2-Aug-00	56 84	218 03	137 22	147 77	55 31	213 76	56 32	236 49	55 40	232 16	79 68	230 81	43 10	232 14	73 95	232 43	80 96	214 40	70 74	221 31
3-Aug-00																				
4-Aug-00																				
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19-Aug-00																				
20-Aug-00																				

Well ID	MW-42		MW-43		MW- 44		MW-45		MW-46		MW-49		MW-51		MW-53		MW-54		MW-55	
TOC Elevation	274 87		284 99		269 07		292 81		287 56		310 49		275 24		306 38		295 36		292 05	
Total Depth (ft)	59 00		173 00		74 00		68 00		72 00		90 00		65 00		82 50		94 50		74 00	
Location	Off-Site		Elementary School		Off-Site		Off-Site		Dunn Field		Dunn Field		Off-Site		Off-Site		MLGW Facility		Depot	
DATE	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev
21-Aug-00																				
22-Aug-00																				
23-Aug-00																				
24-Aug-00																				
25-Aug-00																				
26-Aug-00																				
27-Aug-00																				
28-Aug-00																				
29-Aug-00																				
30-Aug-00	56 92	217 95	138 75	146 24	55 41	213 66	56 33	236 48	55 42	232 14	79 62	230 87	43 27	231 97	73 89	232 49	81 04	214 32	70 83	221 22
31-Aug-00																				
1-Sep-00																				
2-Sep-00																				
3-Sep-00																				
4-Sep-00																				
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13-Sep-00																				
14-Sep-00																				
15-Sep-00																				
16-Sep-00																				
17-Sep-00																				
18-Sep-00	57 04	217 83	134 07	150 92	55 63	213 44	56 45	236 36	55 53	232 03	NM	N M	42 99	232 25	76 99	229 39	81 16	214 20	71 00	221 05
19-Sep-00																				
20-Sep-00																				
21-Sep-00																				
22-Sep-00																				
23-Sep-00																				
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25-Sep-00																				
26-Sep-00																				
27-Sep-00																				
28-Sep-00																				
29-Sep-00																				
30-Sep-00	56 69	218 18	133 49	151 50	55 09	213 98	56 55	236 26	55 41	232 15	79 57	230 92	42 87	232 37	73 85	232 53	81 09	214 27	70 79	221 26
1-Oct-00																				
2-Oct-00																				
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4-Oct-00																				
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14-Oct-00																				
15-Oct-00																				
16-Oct-00																				
17-Oct-00																				
18-Oct-00	57 20	217 67	137 08	147 91	55 82	213 25	56 75	236 06	55 56	232 00	79 71	230 78	43 66	231 58	74 19	232 19	NM	NM	71 00	221 05

Well ID	MW-42		MW-43		MW- 44		MW-45		MW-46		MW-49		MW-51		MW-53		MW-54		MW-55	
TOC Elevation	274 87		284 99		269 07		292 81		287 56		310 49		275 24		306 38		295 36		292 05	
Total Depth (ft)	59 00		173 00		74 00		68 00		72 00		90 00		65 00		82 50		94 50		74 00	
Location	Off-Site		Elementary School		Off-Site		Off-Site		Dunn Field		Dunn Field		Off-Site		Off-Site		MLGW Facility		Depot	
DATE	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev.
19-Oct-00																				
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27-Oct-00																				
28-Oct-00																				
29-Oct-00																				
30-Oct-00	—	—	137 18	147 81	55 85	213 22	56 81	236 00	55 78	231 78	79 82	230 67	43 76	231 48	74 21	232 17	---	—	71 14	220 91
31-Oct-00	57 20	217 67	137 12	147 87	55 82	213 25	56 69	236 12	55 69	231 87	79 86	230 63	43 74	231 50	74 09	232 29	81 45	213 91	71 25	220 80
1-Nov-00	57 21	217 66	136 98	148 01	55 81	213 26	56 71	236 10	55 65	231 91	79 80	230 69	43 77	231 47	74 70	231 68	81 49	213 87	71 25	220 80
2-Nov-00	57 20	217 67	136 72	148 27	55 85	213 22	56 64	236 17	55 72	231 84	79 89	230 60	43 77	231 47	74 40	231 98	81 47	213 89	71 20	220 85
3-Nov-00	57 19	217 68	136 54	148 45	55 87	213 20	56 81	236 00	55 72	231 84	79 96	230 53	43 76	231 48	74 20	232 18	81 53	213 83	72 90	219 15
4-Nov-00	57 22	217 65	146 27	138 72	55 74	213 33	56 70	236 11	55 63	231 93	79 77	230 72	43 75	231 49	74 12	232 26	81 46	213 90	77 12	214 93
5-Nov-00	57 22	217 65	146 10	138 89	55 71	213 36	55 98	236 83	55 65	231 91	79 74	230 75	43 69	231 55	74 10	232 28	81 45	213 91	76 97	215 08
6-Nov-00	57 10	217 77	135 32	149 67	55 44	213 63	56 32	236 49	55 43	232 13	79 50	230 99	43 72	231 52	73 68	232 70	81 24	214 12	76 10	215 95
7-Nov-00	57 00	217 87	135 52	149 47	55 97	213 10	56 82	235 99	55 76	231 80	79 96	230 53	43 80	231 44	74 12	232 26	81 66	213 70	71 30	220 75
8-Nov-00	56 73	218 14	135 47	149 52	55 81	213 26	56 78	236 03	55 56	232 00	79 67	230 82	43 75	231 49	74 10	232 28	81 40	213 96	71 10	220 95
9-Nov-00	55 91	218 96	135 11	149 88	55 82	213 25	56 47	236 34	55 69	231 87	79 90	230 59	43 79	231 45	73 79	232 59	81 47	213 89	70 82	221 23
10-Nov-00	56 92	217 95	135 60	149 39	56 20	212 87	57 08	235 73	55 81	231 75	80 13	230 36	43 83	231 41	74 45	231 93	81 77	213 59	71 38	220 67
11-Nov-00	57 15	217 72	135 79	149 20	56 00	213 07	56 97	235 84	55 70	231 86	79 98	230 51	43 79	231 45	74 14	232 24	81 61	213 75	71 35	220 70
12-Nov-00	57 21	217 66	135 40	149 59	55 85	213 22	56 75	236 06	55 70	231 86	79 91	230 58	43 72	231 52	74 21	232 17	81 51	213 85	71 22	220 83
13-Nov-00																				
14-Nov-00																				
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27-Nov-00	56 90	217 97	133 73	151 26	56 05	213 02	---	—	55 25	232 31	79 95	230 54	---	—	74 23	232 15	81 64	213 72	71 01	221 04
28-Nov-00	57 14	217 73	—	—	55 90	213 17	56 74	236 07	55 78	231 78	79 88	230 61	43 70	231 54	74 10	232 28	81 50	213 86	70 92	221 13
29-Nov-00	57 15	217 72	—	—	56 08	212 99	57 00	235 81	55 70	231 86	79 95	230 54	43 75	231 49	74 30	232 08	81 64	213 72	71 10	220 95
30-Nov-00	57 27	217 60	—	—	55 87	213 20	56 93	235 88	55 74	231 82	79 97	230 52	43 63	231 61	74 32	232 06	81 44	213 92	71 18	220 87
1-Dec-00	57 30	217 57	—	—	55 82	213 25	56 81	236 00	55 66	231 90	79 84	230 65	43 63	231 61	74 04	232 34	81 45	213 91	71 00	221 05
2-Dec-00	---	---	---	---	56 00	213 07	56 91	235 90	55 78	231 78	80 00	230 49	43 73	231 51	74 02	232 36	81 61	213 75	71 12	220 93
3-Dec-00	—	—	—	—	56 00	213 07	57 00	235 81	55 69	231 87	80 01	230 48	43 65	231 59	74 39	231 99	81 61	213 75	71 31	220 74
4-Dec-00																				
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13-Dec-00																				
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15-Dec-00																				
16-Dec-00																				

Well ID	MW-42		MW-43			MW- 44			MW-45			MW-46			MW-49			MW-51			MW-53			MW-54			MW-55	
TOC Elevation	274 87		284 99			269 07			292 81			287 56			310 49			275 24			306 38			295 36			292 05	
Total Depth (ft)	59 00		173 00			74 00			68 00			72 00			90 00			65 00			82 50			94 50			74 00	
Location	Off-Site		Elementary School			Off-Site			Off-Site			Dunn Field			Dunn Field			Off-Site			Off-Site			MLGW Facility			Depot	
DATE	DTW (BTC)	GW Elev	DTW (BTC)	GW	Elev.	DTW (BTC)	GW	Elev.	DTW (BTC)	GW	Elev	DTW (BTC)	GW	Elev.	DTW (BTC)	GW	Elev.	DTW (BTC)	GW	Elev	DTW (BTC)	GW	Elev	DTW (BTC)	GW	Elev.	DTW (BTC)	GW	Elev
17-Dec-00																												
18-Dec-00	56 85	218 02	NM			58 63		210 44	56 64		236 17	56 85		230 71	80 01		230 48	43 46		231 78	73 93		232 45	73 64		221 72	70 88		221 17
19-Dec-00																												
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27-Dec-00																												
28-Dec-00																												
29-Dec-00	56 87	218 00	NM			55 95		213 12	56 50		236 31	56 88		230 68	79 80		230 69	43 59		231 65	73 93		232 45	81 55		213 81	71 00		221 05
30-Dec-00																												
31-Dec-00																												

Well ID	MW-56		MW-57		MW-58		MW-59		MW-60		MW-62		MW-63		MW-65		MW-67		MW-68	
TOC Elevation	293 80		290 79		290 52		300 12		296 85		293 60		304 58		263 22		278 21		291 68	
Total Depth (ft)	69 50		70 50		67 50		85 00		84 00		112 50		135 00		52 00		275 00		TBD	
Location	Dunn Field		Dunn Field		Dunn Field		Dunn Field		Dunn Field		Depot		Depot		Cloverdale		Off-Site		Off-Site	
DATE	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev
1-Nov-99	NM	NA	63 10	227 69	63 00	227 52	75 40	224 72	72 02	224 83	NM	NA	NM	NM	NM	NA	NM	NA	NM	NA
2-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
3-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
4-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
5-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
6-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
7-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
8-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
9-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
10-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
11-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
12-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
13-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
14-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
15-Nov-99	67 05	226 75	63 25	227 54	63 16	227 36	75 57	224 55	72 20	224 65	94 10	199 50	103 60	200 98	NM	NA	NM	NA	NM	NA
16-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
17-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
18-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
19-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
20-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
21-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
22-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
23-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
24-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
25-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
26-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
27-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
28-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
29-Nov-99	67 40	226 40	63 47	227 32	63 50	227 02	75 70	224 42	72 27	224 58	94 13	199 47	104 29	200 29	NM	NA	NM	NA	NM	NA
30-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
1-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
2-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
3-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
4-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
5-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
6-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
7-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
8-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
9-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
10-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
11-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
12-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
13-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
14-Dec-99	67 25	226 55	63 44	227 35	63 37	227 15	75 70	224 42	72 30	224 55	94 45	199 15	103 91	200 67	NM	NA	NM	NA	NM	NA
15-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
16-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
17-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
18-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
19-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
20-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
21-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
22-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
23-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
24-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
25-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
26-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
27-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
28-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	

Well ID	MW-56		MW-57		MW-58		MW-59		MW-60		MW-62		MW-63		MW-65		MW-67		MW-68	
TOC Elevation	293 80		290 79		290 52		300 12		296 85		293 60		304 58		263 22		278 21		291 68	
Total Depth (ft)	69 50		70 50		67 50		85 00		84 00		112 50		135 00		52 00		275 00		TBD	
Location	Dunn Field		Dunn Field		Dunn Field		Dunn Field		Dunn Field		Depot		Depot		Cloverdale		Off-Site		Off-Site	
DATE	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev
29-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
30-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
31-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
1-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
2-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
3-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
4-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
5-Jan-00	67 42	226 38	63 56	227 23	63 55	226 97	75 75	224 37	72 41	224 44	94 40	199 20	104 43	200 15	13 90	249 32	125 18	153 03	NM	NA
6-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
7-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
8-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
9-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
10-Jan-00	67 14	226 66	63 14	227 65	63 25	227 27	75 77	224 35	72 42	224 43	94 03	199 57	103 87	200 71	13 95	249 27	124 75	153 46	NM	NA
11-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
12-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
13-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
14-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
15-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
16-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
17-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
18-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
19-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
20-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
21-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
22-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
23-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
24-Jan-00	67 40	226 40	63 60	227 19	63 50	227 02	75 75	224 37	72 46	224 39	94 17	199 43	103 34	201 24	14 15	249 07	124 48	153 73	NM	NA
25-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
26-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
27-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
28-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
29-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
30-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
31-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
1-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
2-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
3-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
4-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
5-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
6-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
7-Feb-00	67 35	226 45	63 54	227 25	63 45	227 07	75 88	224 24	72 55	224 30	94 10	199 50	104 16	200 42	13 89	249 33	124 15	154 06	NM	NA
8-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
9-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
10-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
11-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
12-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
13-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
14-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
15-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
16-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
17-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
18-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
19-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
20-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
21-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
22-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
23-Feb-00	67 32	226 48	63 57	227 22	56 40	234 12	75 85	224 27	72 48	224 37	94 10	199 50	104 04	200 54	13 25	249 97	NM	NA	NM	NA
24-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
25-[redacted]-00	NM		NM		NM		NM		N[redacted]		NM		NM		NM		NM		N[redacted]	

Well ID	MW-56		MW-57		MW-58		MW-59		MW-60		MW-62		MW-63		MW-65		MW-67		MW-68	
TOC Elevation	293 80		290 79		290 52		300 12		296 85		293 60		304 58		263 22		278 21		291 68	
Total Depth (ft)	69 50		70 50		67 50		85 00		84 00		112 50		135 00		52 00		275 00		TBD	
Location	Dunn Field		Dunn Field		Dunn Field		Dunn Field		Dunn Field		Depot		Depot		Cloverdale		Off-Site		Off-Site	
DATE	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev.
26-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
27-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
28-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
29-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
1-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
2-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
3-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
4-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
5-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
6-Mar-00	67 54	226 26	63 70	227 09	63 64	226 88	75 93	224 19	72 55	224 30	94 10	199 50	104 39	200 19	10 90	252 32	123 39	139 83	69 68	222 00
7-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
8-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
9-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
10-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
11-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
12-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
13-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
14-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
15-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
16-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
17-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
18-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
19-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
20-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
21-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
22-Mar-00	67 60	226 20	63 73	227 06	63 70	226 82	75 96	224 16	72 64	224 21	94 25	199 35	104 65	199 93	10 05	253 17	125 25	NA	69 22	222 46
23-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
24-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
25-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
26-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
27-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
28-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
29-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
30-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
31-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
1-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
2-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
3-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
4-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
5-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
6-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
7-Apr-00	67 00	226 80	63 67	227 12	63 60	226 92	76 00	224 12	72 69	224 16	94 10	199 50	104 41	200 17	9 00	254 22	125 18	NA	70 17	221 51
8-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
9-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
10-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
11-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
12-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
13-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
14-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
15-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
16-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
17-Apr-00	68 50	225 30	63 23	227 56	67 70	222 82	NM	NM	NM	NM	94 10	199 50	104 41	200 17	9 02	254 20	125 20	NA	70 25	221 43
18-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
19-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
20-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
21-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
22-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
23-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
24-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	

Well ID	MW-56		MW-57		MW-58		MW-59		MW-60		MW-62		MW-63		MW-65		MW-67		MW-68	
TOC Elevation	293 80		290 79		290 52		300 12		296 85		293 60		304 58		263 22		278 21		291 68	
Total Depth (ft)	69 50		70 50		67 50		85 00		84 00		112 50		135 00		52 00		275 00		TBD	
Location	Dunn Field		Dunn Field		Dunn Field		Dunn Field		Dunn Field		Depot		Depot		Cloverdale		Off-Site		Off-Site	
DATE	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev
25-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
26-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
27-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
28-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
29-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
30-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
1-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
2-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
3-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
4-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
5-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
6-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
7-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
8-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
9-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
10-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
11-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
12-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
13-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
14-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
15-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
16-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
17-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
18-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
19-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
20-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
21-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
22-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
23-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
24-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
25-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
26-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
27-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
28-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
29-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
30-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
31-May-00	67 69	226 11	63 58	227 21	63 76	226 76	75 79	224 33	72 39	224 46	94 12	199 48	104 78	199 80	8 64	254 58	NM		69 63	222 05
1-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
2-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
3-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
4-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
5-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
6-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
7-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
8-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
9-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
10-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
11-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
12-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
13-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
14-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
15-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
16-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
17-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
18-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
19-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
20-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
21-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
22-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	

Well ID	MW-56		MW-57		MW-58		MW-59		MW-60		MW-62		MW-63		MW-65		MW-67		MW-68	
TOC Elevation	293 80		290 79		290 52		300 12		296 85		293 60		304 58		263 22		278 21		291 68	
Total Depth (ft)	69 50		70 50		67 50		65 00		84 00		112 50		135 00		52 00		275 00		TBD	
Location	Dunn Field		Dunn Field		Dunn Field		Dunn Field		Dunn Field		Depot		Depot		Cloverdale		Off-Site		Off-Site	
DATE	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev
23-Jun-00	67 65	226 15	63 60	227 19	63 72	226 80	76 11	224 01	72 78	224 07	94 08	199 52	104 88	199 70	10 93	252 29	Not taken	—	70 25	221 43
24-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
25-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
26-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
27-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
28-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
29-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
30-Jun-00	67 68	226 12	63 64	227 15	63 74	226 78	76 21	223 91	72 84	224 01	94 09	199 51	105 00	199 58	10 73	252 49	Not taken	—	70 30	221 38
1-Jul-00																				
2-Jul-00																				
3-Jul-00																				
4-Jul-00																				
5-Jul-00																				
6-Jul-00																				
7-Jul-00																				
8-Jul-00																				
9-Jul-00																				
10-Jul-00	67 66	226 14	63 67	227 12	63 74	226 78	76 19	223 93	72 87	223 98	94 08	199 52	105 05	199 53	11 72	251 50	Not taken	—	70 32	221 36
11-Jul-00																				
12-Jul-00																				
13-Jul-00																				
14-Jul-00																				
15-Jul-00																				
16-Jul-00																				
17-Jul-00																				
18-Jul-00																				
19-Jul-00	67 67	226 13	63 70	227 09	63 75	226 77	76 19	223 93	72 86	223 99	94 09	199 51	105 19	199 39	12 74	250 48	Not taken	—	70 35	221 33
20-Jul-00																				
21-Jul-00																				
22-Jul-00																				
23-Jul-00																				
24-Jul-00																				
25-Jul-00																				
26-Jul-00																				
27-Jul-00																				
28-Jul-00																				
29-Jul-00																				
30-Jul-00																				
31-Jul-00																				
1-Aug-00																				
2-Aug-00	67 69	226 11	63 72	227 07	63 77	226 75	76 20	223 92	72 87	223 98	94 09	199 51	105 35	199 23	13 70	249 52	Not Taken	—	70 25	221 43
3-Aug-00																				
4-Aug-00																				
5-Aug-00																				
6-Aug-00																				
7-Aug-00																				
8-Aug-00																				
9-Aug-00																				
10-Aug-00																				
11-Aug-00																				
12-Aug-00																				
13-Aug-00																				
14-Aug-00																				
15-Aug-00																				
16-Aug-00																				
17-Aug-00																				
18-Aug-00																				
19-Aug-00																				
20-Aug-00																				

Well ID	MW-56		MW-57		MW-58		MW-59		MW-60		MW-62		MW-63		MW-65		MW-67		MW-68	
TOC Elevation	293 80		290 79		290 52		300 12		296 85		293 60		304 58		263 22		278 21		291 68	
Total Depth (ft)	69 50		70 50		67 50		85 00		84 00		112 50		135 00		52 00		275 00		TBD	
Location	Dunn Field		Dunn Field		Dunn Field		Dunn Field		Dunn Field		Depot		Depot		Cloverdale		Off-Site		Off-Site	
DATE	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev
21-Aug-00																				
22-Aug-00																				
23-Aug-00																				
24-Aug-00																				
25-Aug-00																				
26-Aug-00																				
27-Aug-00																				
28-Aug-00																				
29-Aug-00																				
30-Aug-00	67 64	226 16	63 80	226 99	63 74	226 78	76 22	223 90	72 84	224 01	94 07	199 53	105 60	198 98	15 95	247 27	Not Taken	---	70 21	221 47
31-Aug-00																				
1-Sep-00																				
2-Sep-00																				
3-Sep-00																				
4-Sep-00																				
5-Sep-00																				
6-Sep-00																				
7-Sep-00																				
8-Sep-00																				
9-Sep-00																				
10-Sep-00																				
11-Sep-00																				
12-Sep-00																				
13-Sep-00																				
14-Sep-00																				
15-Sep-00																				
16-Sep-00																				
17-Sep-00																				
18-Sep-00	67 75	226 05	NM	NM	63 88	226 64	NM	NM	72 99	223 86	93 74	199 86	101 33	203 25	NM	NM	NM	NM	70 71	220 97
19-Sep-00																				
20-Sep-00																				
21-Sep-00																				
22-Sep-00																				
23-Sep-00																				
24-Sep-00																				
25-Sep-00																				
26-Sep-00																				
27-Sep-00																				
28-Sep-00																				
29-Sep-00																				
30-Sep-00	67 69	226 11	NM	NM	63 72	226 80	76 14	223 98	72 98	223 87	93 95	199 65	103 35	201 23	NM	NM	NM	NM	70 35	221 33
1-Oct-00																				
2-Oct-00																				
3-Oct-00																				
4-Oct-00																				
5-Oct-00																				
6-Oct-00																				
7-Oct-00																				
8-Oct-00																				
9-Oct-00																				
10-Oct-00																				
11-Oct-00																				
12-Oct-00																				
13-Oct-00																				
14-Oct-00																				
15-Oct-00																				
16-Oct-00																				
17-Oct-00																				
18-Oct-00	72 11	221 69	NM	NM	60 87	229 65	NM	NM	72 44	224 44	NM	NM	106 46	198 12	17 40	245 82	NM	NM	70 40	221 28

Well ID	MW-56		MW-57		MW-58		MW-59		MW-60		MW-62		MW-63		MW-65		MW-67		MW-68	
TOC Elevation	293 80		290 79		290 52		300 12		296 85		293 60		304 58		263 22		278 21		291 68	
Total Depth (ft)	69 50		70 50		67 50		85 00		84 00		112 50		135 00		52 00		275 00		TBD	
Location	Dunn Field		Dunn Field		Dunn Field		Dunn Field		Dunn Field		Depot		Depot		Cloverdale		Off-Site		Off-Site	
DATE	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev
19-Oct-00																				
20-Oct-00																				
21-Oct-00																				
22-Oct-00																				
23-Oct-00																				
24-Oct-00																				
25-Oct-00																				
26-Oct-00																				
27-Oct-00																				
28-Oct-00																				
29-Oct-00																				
30-Oct-00	67 80	226 00	—	—	63 88	226 64	—	—	73 09	223 76	94 04	199 56	106 42	198 16	17 42	245 80	—	—	70 45	221 23
31-Oct-00	67 81	225 99	64 11	226 68	63 96	226 56	75 30	224 82	72 97	223 88	94 12	199 48	106 45	198 13	17 77	245 45	---	---	70 16	221 52
1-Nov-00	67 76	226 04	64 08	226 71	63 90	226 62	76 27	223 85	72 87	223 98	96 15	197 45	106 43	198 15	17 82	245 40	—	—	69 83	221 85
2-Nov-00	67 83	225 97	64 08	226 71	63 92	226 60	76 15	223 97	72 76	224 09	94 12	199 48	106 44	198 14	17 83	245 39	—	—	69 80	221 88
3-Nov-00	67 85	225 95	64 12	226 67	63 98	226 54	76 15	223 97	72 74	224 11	94 18	199 42	106 50	198 08	17 80	245 42	---	—	69 60	222 08
4-Nov-00	67 76	226 04	64 00	226 79	—	—	76 00	224 12	72 53	224 32	92 98	200 62	107 37	197 21	17 81	245 41	—	---	69 12	222 56
5-Nov-00	67 75	226 05	64 00	226 79	—	—	75 98	224 14	72 50	224 35	92 94	200 66	107 39	197 19	17 80	245 42	---	—	69 10	222 58
6-Nov-00	67 50	226 30	64 00	226 79	63 74	226 78	75 85	224 27	72 48	224 37	93 71	199 89	107 35	197 23	17 65	245 57	—	---	69 15	222 53
7-Nov-00	67 87	225 93	64 19	226 60	64 00	226 52	75 96	224 16	72 49	224 36	92 96	200 64	106 59	197 99	17 23	245 99	—	---	69 23	222 45
8-Nov-00	67 71	226 09	64 12	226 67	63 83	226 69	75 45	224 67	72 29	224 56	—	—	106 52	198 06	17 17	246 05	---	—	69 05	222 63
9-Nov-00	67 80	226 00	64 13	226 66	63 65	226 87	75 85	224 27	72 41	224 44	91 98	201 62	106 40	198 18	16 79	246 43	---	—	69 10	222 58
10-Nov-00	68 03	225 77	64 39	226 40	64 17	226 35	75 92	224.20	72 36	224 49	93 75	199 85	106 93	197 65	16 75	246 47	---	—	69 13	222 55
11-Nov-00	68 02	225 78	64 30	226 49	64 15	226 37	75 72	224 40	73 24	223 61	94 00	199 60	106 91	197 67	16 94	246 28	---	—	69 00	222 68
12-Nov-00	67 60	226 20	64 19	226 60	64 15	226 37	75 72	224 40	73 25	223 60	94 00	199 60	106 65	197 93	---	---	---	—	68 08	223 60
13-Nov-00																				
14-Nov-00																				
15-Nov-00																				
16-Nov-00																				
17-Nov-00																				
18-Nov-00																				
19-Nov-00																				
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22-Nov-00																				
23-Nov-00																				
24-Nov-00																				
25-Nov-00																				
26-Nov-00																				
27-Nov-00	67 90	225 90	64 14	226 65	64 05	226 47	75 24	224 88	71 79	225 06	93 00	200 60	106 77	197 81	14 23	248 99	---	—	68 65	223 03
28-Nov-00	67 90	225 90	64 20	226 59	64 40	226 12	75 53	224 59	71 89	224 96	93 50	200 10	---	—	14 24	248 98	---	---	68 94	222 74
29-Nov-00	67 88	225 92	64 25	226 54	64 00	226 52	75 34	224 78	72 20	224 65	93 54	200 06	---	---	14 45	248 77	---	—	69 20	222 48
30-Nov-00	67 95	225 85	64 24	226 55	64 04	226 48	75 39	224 73	72 00	224 85	93 77	199 83	---	—	14 55	248 67	---	---	69 02	222 66
1-Dec-00	67 82	225 98	64 12	226 67	63 95	226 57	75 37	224 75	71 98	224 87	93 79	199 81	—	---	14 54	248 68	---	—	68 79	222 89
2-Dec-00	67 95	225 85	64 75	226 04	64 03	226 49	75 44	224 68	72 02	224 83	93 72	199 88	—	---	14 65	248 57	---	—	---	—
3-Dec-00	67 99	225 81	64 25	226 54	64 13	226 39	75 45	224 67	72 10	224 75	93 89	199 71	---	—	14 87	248 35	---	---	---	---
4-Dec-00																				
5-Dec-00																				
6-Dec-00																				
7-Dec-00																				
8-Dec-00																				
9-Dec-00																				
10-Dec-00																				
11-Dec-00																				
12-Dec-00																				
13-Dec-00																				
14-Dec-00																				
15-Dec-00																				
16-Dec-00																				

Well ID	MW-56		MW-57		MW-58		MW-59		MW-60		MW-62		MW-63		MW-65		MW-67		MW-68	
TOC Elevation	293 80		290 79		290 52		300 12		296 85		293 60		304 58		263 22		278 21		291 68	
Total Depth (ft)	69 50		70 50		67 50		85 00		84 00		112 50		135 00		52 00		275 00		TBD	
Location	Dunn Field		Dunn Field		Dunn Field		Dunn Field		Dunn Field		Depot		Depot		Cloverdale		Off-Site		Off-Site	
DATE	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev
17-Dec-00																				
18-Dec-00	67 48	226 32	64 28	226 51	63 34	227 18	NM	NM	69 89	226 96	93 89	199 71	NM	NM	16 81	246 41	NM	NM	69 96	221 72
19-Dec-00																				
20-Dec-00																				
21-Dec-00																				
22-Dec-00																				
23-Dec-00																				
24-Dec-00																				
25-Dec-00																				
26-Dec-00																				
27-Dec-00																				
28-Dec-00																				
29-Dec-00	67 72	226 08	63 88	226 91	63 87	226 65	75 00	225 12	71 55	225 30	93 44	200 16	NM	NM	13 80	249 42	NM	NM	68 00	223 68
30-Dec-00																				
31-Dec-00																				

Well ID	MW-69		MW-70		MW-71		MW-78		MW-79		MW-80		MW-91		MW-95		PZ-02		RW-3	RW-4
TOC Elevation	307 04		305 05		294 39		275 00		285 03		273 81		291 99		259 43		284 39		299 40	305 22
Total Depth (ft)	92 20		91 00		75 40								70 00				54 50		78 50	85 50
Location	Off-Site		Off-Site		Off-Site		Off-Site		Off-Site		Off-Site		Dunn Field		Dunn Field		Off-Site		Dunn Field	Dunn Field
DATE	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev.	Flow Rate (gpm)	Flow Rate (gpm)
1-Nov-99	NM	NA	NM	NA	NM	NA											NM	NA	5 6	4 4
2-Nov-99	NM		NM		NM												NM		4 8	4 6
3-Nov-99	NM		NM		NM												NM		NM	NM
4-Nov-99	NM		NM		NM												NM		5 8	4 2
5-Nov-99	NM		NM		NM												NM		5 3	4 1
6-Nov-99	NM		NM		NM												NM		5 2	4 4
7-Nov-99	NM		NM		NM												NM		5 5	4 2
8-Nov-99	NM		NM		NM												NM		5 4	4 5
9-Nov-99	NM		NM		NM												NM		5 3	4 4
10-Nov-99	NM		NM		NM												NM		5 3	4 4
11-Nov-99	NM		NM		NM												NM		5 0	3 8
12-Nov-99	NM		NM		NM												NM		5 0	4 2
13-Nov-99	NM		NM		NM												NM		5 2	4 2
14-Nov-99	NM		NM		NM												NM		5 1	4 5
15-Nov-99	NM	NA	NM	NA	NM	NA											43 64	240 75	5 1	4 3
16-Nov-99	NM		NM		NM												NM		4 8	4 1
17-Nov-99	NM		NM		NM												NM		7 7	3 9
18-Nov-99	NM		NM		NM												NM		3 5	4 0
19-Nov-99	NM		NM		NM												NM		4 9	4 1
20-Nov-99	NM		NM		NM												NM		4 6	3 9
21-Nov-99	NM		NM		NM												NM		4 8	4 2
22-Nov-99	NM		NM		NM												NM		4 6	3 9
23-Nov-99	NM		NM		NM												NM		4 6	4 0
24-Nov-99	NM		NM		NM												NM		4 4	3 9
25-Nov-99	NM		NM		NM												NM		1 3	4 0
26-Nov-99	NM		NM		NM												NM		0 0	4 1
27-Nov-99	NM		NM		NM												NM		0 0	4 2
28-Nov-99	NM		NM		NM												NM		1 3	3 9
29-Nov-99	NM	NA	NM	NA	NM	NA											40 10	244 29	2 5	4 1
30-Nov-99	NM		NM		NM												NM		1 7	4 2
1-Dec-99	NM		NM		NM												NM		2 0	4 5
2-Dec-99	NM		NM		NM												NM		0 0	4 4
3-Dec-99	NM		NM		NM												NM		1 4	4 6
4-Dec-99	NM		NM		NM												NM		0 0	4 6
5-Dec-99	NM		NM		NM												NM		4 2	4 3
6-Dec-99	NM		NM		NM												NM		3 9	4 4
7-Dec-99	NM		NM		NM												NM		2 3	4 4
8-Dec-99	NM		NM		NM												NM		0 6	4 1
9-Dec-99	NM		NM		NM												NM		2 7	4 9
10-Dec-99	NM		NM		NM												NM		2 8	4 1
11-Dec-99	NM		NM		NM												NM		1 3	4 1
12-Dec-99	NM		NM		NM												NM		2 0	4 6
13-Dec-99	NM		NM		NM												NM		1 5	4 2
14-Dec-99	NM	NA	NM	NA	NM	NA											43 95	240 44	2 3	4 2
15-Dec-99	NM		NM		NM												NM		4 2	4 0
16-Dec-99	NM		NM		NM												NM		1 7	4 0
17-Dec-99	NM		NM		NM												NM		3 6	4 2
18-Dec-99	NM		NM		NM												NM		0 0	4 3
19-Dec-99	NM		NM		NM												NM		1 5	4 3
20-Dec-99	NM		NM		NM												NM		0 0	3 9
21-Dec-99	NM		NM		NM												NM		0 0	4 1
22-Dec-99	NM		NM		NM												NM		0 0	4 3
23-Dec-99	NM		NM		NM												NM		0 0	4 1
24-Dec-99	NM		NM		NM												NM		0 0	4 4
25-Dec-99	NM		NM		NM												NM		0 0	4 4
26-Dec-99	NM		NM		NM												NM		0 0	4 7
27-Dec-99	NM		NM		NM												NM		0 0	4 8
28-Dec-99	NM		NM		NM												NM		0 0	4 4

Well ID	MW-69		MW-70		MW-71		MW-78		MW-79		MW-80		MW-91		MW-95		PZ-02		RW-3	RW-4
TOC Elevation	307 04		305 05		294 39		275 00		285 03		273 81		291 99		259 43		284 39		299 40	305 22
Total Depth (ft)	92 20		91 00		75 40								70 00				54 50		78 50	85 50
Location	Off-Site		Off-Site		Off-Site		Off-Site		Off-Site		Off-Site		Dunn Field		Dunn Field		Off-Site		Dunn Field	Dunn Field
DATE	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev	Flow Rate (gpm)	Flow Rate (gpm)
29-Dec-99	NM		NM		NM												NM		0 0	4 2
30-Dec-99	NM		NM		NM												NM		0 0	4 5
31-Dec-99	NM		NM		NM												NM		0 0	4 2
1-Jan-00	NM		NM		NM												NM		0 0	4 3
2-Jan-00	NM		NM		NM												NM		0 0	4 7
3-Jan-00	NM		NM		NM												NM		0 0	4 7
4-Jan-00	NM		NM		NM												NM		0 0	4 0
5-Jan-00	84 02	223 02	81 40	223 65	68 99	225 40											44 06	240 33	0 0	4 3
6-Jan-00	NM		NM		NM												NM		0 0	4 6
7-Jan-00	NM		NM		NM												NM		0 0	4 5
8-Jan-00	NM		NM		NM												NM		0 0	4 6
9-Jan-00	NM		NM		NM												NM		0 0	5 0
10-Jan-00	84 22	222 82	81 22	223 83	68 93	225 46											44 00	240 39	0 0	4 3
11-Jan-00	NM		NM		NM												NM		0 0	4 2
12-Jan-00	NM		NM		NM												NM		0 0	4 3
13-Jan-00	NM		NM		NM												NM		0 0	3 9
14-Jan-00	NM		NM		NM												NM		0 0	4 8
15-Jan-00	NM		NM		NM												NM		0 0	4 4
16-Jan-00	NM		NM		NM												NM		0 0	4 5
17-Jan-00	NM		NM		NM												NM		0 0	4 8
18-Jan-00	NM		NM		NM												NM		0 0	4 9
19-Jan-00	NM		NM		NM												NM		0 0	5 0
20-Jan-00	NM		NM		NM												NM		0 0	4 7
21-Jan-00	NM		NM		NM												NM		0 0	4 5
22-Jan-00	NM		NM		NM												NM		0 0	4 7
23-Jan-00	NM		NM		NM												NM		0 0	4 6
24-Jan-00	84 00	223 04	81 31	223 74	69 00	225 39											44 24	240 15	0 0	4 1
25-Jan-00	NM		NM		NM												NM		0 0	4 7
26-Jan-00	NM		NM		NM												NM		0 0	4 5
27-Jan-00	NM		NM		NM												NM		0 0	4 4
28-Jan-00	NM		NM		NM												NM		0 0	4 2
29-Jan-00	NM		NM		NM												NM		0 0	4 3
30-Jan-00	NM		NM		NM												NM		0 0	4 5
31-Jan-00	NM		NM		NM												NM		0 0	4 4
1-Feb-00	NM		NM		NM												NM		0 0	4 2
2-Feb-00	NM		NM		NM												NM		0 0	4 2
3-Feb-00	NM		NM		NM												NM		0 0	4 8
4-Feb-00	NM		NM		NM												NM		0 0	4 1
5-Feb-00	NM		NM		NM												NM		0 0	4 0
6-Feb-00	NM		NM		NM												NM		0 0	4 3
7-Feb-00	84 25	222 79	NM	NA	68 96	225 43											44 20	240 19	0 0	4 7
8-Feb-00	NM		NM		NM												NM		0 0	4 3
9-Feb-00	NM		NM		NM												NM		0 0	4 8
10-Feb-00	NM		NM		NM												NM		0 0	0 4
11-Feb-00	NM		NM		NM												NM		0 0	0 0
12-Feb-00	NM		NM		NM												NM		0 0	0 0
13-Feb-00	NM		NM		NM												NM		0 0	0 0
14-Feb-00	NM		NM		NM												NM		2 1	1 3
15-Feb-00	NM		NM		NM												NM		8 6	4 3
16-Feb-00	NM		NM		NM												NM		3 9	3 7
17-Feb-00	NM		NM		NM												NM		4 5	4 2
18-Feb-00	NM		NM		NM												NM		4 4	3 6
19-Feb-00	NM		NM		NM												NM		3 6	3 1
20-Feb-00	NM		NM		NM												NM		5 6	3 6
21-Feb-00	NM		NM		NM												NM		3 9	3 3
22-Feb-00	NM		NM		NM												NM		4 0	4 4
23-Feb-00	84 23	222 81	81 39	223 66	69 05	225 34											44 44	239 95	4 0	3 7
24-Feb-00	NM		NM		NM												NM		3 8	3 4
25-Feb-[illegible]	NM		NM		NM												NM		3 9	3 8

Well ID	MW-69		MW-70		MW-71		MW-78		MW-79		MW-80		MW-91		MW-95		PZ-02		RW-3	RW-4
TOC Elevation	307 04		305 05		294 39		275 00		285 03		273 81		291 99		259 43		284 39		299 40	305 22
Total Depth (ft)	92 20		91 00		75 40								70 00				54 50		78 50	85 50
Location	Off-Site		Off-Site		Off-Site		Off-Site		Off-Site		Off-Site		Dunn Field		Dunn Field		Off-Site		Dunn Field	Dunn Field
DATE	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev.	Flow Rate (gpm)	Flow Rate (gpm)
26-Feb-00	NM		NM		NM												NM		40	36
27-Feb-00	NM		NM		NM												NM		36	36
28-Feb-00	NM		NM		NM												NM		38	46
29-Feb-00	NM		NM		NM												NM		41	39
1-Mar-00	NM		NM		NM												NM		37	37
2-Mar-00	NM		NM		NM												NM		40	35
3-Mar-00	NM		NM		NM												NM		35	39
4-Mar-00	NM		NM		NM												NM		38	34
5-Mar-00	NM		NM		NM												NM		45	38
6-Mar-00	84 25	222 79	81 46	223 59	69 15	225 24											44 00	240 39	37	31
7-Mar-00	NM		NM		NM												NM		38	36
8-Mar-00	NM		NM		NM												NM		38	33
9-Mar-00	NM		NM		NM												NM		38	40
10-Mar-00	NM		NM		NM												NM		38	35
11-Mar-00	NM		NM		NM												NM		38	37
12-Mar-00	NM		NM		NM												NM		33	34
13-Mar-00	NM		NM		NM												NM		43	33
14-Mar-00	NM		NM		NM												NM		38	39
15-Mar-00	NM		NM		NM												NM		40	39
16-Mar-00	NM		NM		NM												NM		40	31
17-Mar-00	NM		NM		NM												NM		36	44
18-Mar-00	NM		NM		NM												NM		40	44
19-Mar-00	NM		NM		NM												NM		42	42
20-Mar-00	NM		NM		NM												NM		37	31
21-Mar-00	NM		NM		NM												NM		36	31
22-Mar-00	84 22	222 82	81 20	223 85	69 30	225 09											43 97	240 42	35	34
23-Mar-00	NM		NM		NM												NM		37	33
24-Mar-00	NM		NM		NM												NM		36	35
25-Mar-00	NM		NM		NM												NM		35	33
26-Mar-00	NM		NM		NM												NM		39	38
27-Mar-00	NM		NM		NM												NM		18	36
28-Mar-00	NM		NM		NM												NM		00	36
29-Mar-00	NM		NM		NM												NM		00	35
30-Mar-00	NM		NM		NM												NM		47	39
31-Mar-00	NM		NM		NM												NM		45	34
1-Apr-00	NM		NM		NM												NM		45	43
2-Apr-00	NM		NM		NM												NM		44	38
3-Apr-00	NM		NM		NM												NM		47	43
4-Apr-00	NM		NM		NM												NM		47	46
5-Apr-00	NM		NM		NM												NM		48	38
6-Apr-00	NM		NM		NM												NM		50	33
7-Apr-00	84 14	222 90	81 12	223 93	69 18	225 21											43 30	241 09	48	38
8-Apr-00	NM		NM		NM												NM		47	15
9-Apr-00	NM		NM		NM												NM		43	37
10-Apr-00	NM		NM		NM												NM		50	38
11-Apr-00	NM		NM		NM												NM		49	34
12-Apr-00	NM		NM		NM												NM		48	35
13-Apr-00	NM		NM		NM												NM		47	41
14-Apr-00	NM		NM		NM												NM		53	36
15-Apr-00	NM		NM		NM												NM		48	37
16-Apr-00	NM		NM		NM												NM		50	33
17-Apr-00	84 20	222 84	81 23	223 82	69 27	225 12											48 80	235 59	43	35
18-Apr-00	NM		NM		NM												NM		47	42
19-Apr-00	NM		NM		NM												NM		57	14
20-Apr-00	NM		NM		NM												NM		00	00
21-Apr-00	NM		NM		NM												NM		00	00
22-Apr-00	NM		NM		NM												NM		00	00
23-Apr-00	NM		NM		NM												NM		00	00
24-Apr-00	NM		NM		NM												NM		00	00

Well ID	MW-69		MW-70		MW-71		MW-78		MW-79		MW-80		MW-91		MW-95		PZ-02		RW-3	RW-4
TOC Elevation	307 04		305 05		294 39		275 00		285 03		273 81		291 99		259 43		284 39		299 40	305 22
Total Depth (ft)	92 20		91 00		75 40								70 00				54 50		78 50	85 50
Location	Off-Site		Off-Site		Off-Site		Off-Site		Off-Site		Off-Site		Dunn Field		Dunn Field		Off-Site		Dunn Field	Dunn Field
DATE	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev	Flow Rate (gpm)	Flow Rate (gpm)
25-Apr-00	NM		NM		NM												NM		0 0	0 0
26-Apr-00	NM		NM		NM												NM		0 0	0 0
27-Apr-00	NM		NM		NM												NM		0 0	0 0
28-Apr-00	NM		NM		NM												NM		0 0	2 8
29-Apr-00	NM		NM		NM												NM		0 0	1 0
30-Apr-00	NM		NM		NM												NM		0 0	2 1
1-May-00	NM		NM		NM												NM		0 0	0 5
2-May-00	NM		NM		NM												NM		0 0	1 3
3-May-00	NM		NM		NM												NM		0 0	0 5
4-May-00	NM		NM		NM												NM		0 0	0 4
5-May-00	NM		NM		NM												NM		0 0	0 5
6-May-00	NM		NM		NM												NM		0 0	1 5
7-May-00	NM		NM		NM												NM		0 0	0 9
8-May-00	NM		NM		NM												NM		0 0	1 8
9-May-00	NM		NM		NM												NM		0 0	2 7
10-May-00	NM		NM		NM												NM		0 0	1 8
11-May-00	NM		NM		NM												NM		0 0	0 6
12-May-00	NM		NM		NM												NM		0 0	2 5
13-May-00	NM		NM		NM												NM		0 0	1 6
14-May-00	NM		NM		NM												NM		0 0	0 3
15-May-00	NM		NM		NM												NM		0 0	0 2
16-May-00	NM		NM		NM												NM		0 0	1 0
17-May-00	NM		NM		NM												NM		0 0	2 9
18-May-00	NM		NM		NM												NM		0 0	2 5
19-May-00	NM		NM		NM												NM		0 0	0 7
20-May-00	NM		NM		NM												NM		0 0	0 3
21-May-00	NM		NM		NM												NM		0 0	2 2
22-May-00	NM		NM		NM												NM		0 0	2 8
23-May-00	NM		NM		NM												NM		0 0	2 1
24-May-00	NM		NM		NM												NM		0 0	2 8
25-May-00	NM		NM		NM												NM		0 0	2 3
26-May-00	NM		NM		NM												NM		0 0	0 4
27-May-00	NM		NM		NM												NM		0 0	2 0
28-May-00	NM		NM		NM												NM		0 0	1 8
29-May-00	NM		NM		NM												NM		0 0	0 6
30-May-00	NM		NM		NM												NM		0 0	2 9
31-May-00	84 05	222 99	81 267	223 78	69 15	225 24											42 96	241 43	0 0	1 3
1-Jun-00	NM		NM		NM												NM		0 0	2 6
2-Jun-00	NM		NM		NM												NM		0 0	2 5
3-Jun-00	NM		NM		NM												NM		0 0	2 3
4-Jun-00	NM		NM		NM												NM		0 0	3 0
5-Jun-00	NM		NM		NM												NM		0 0	2 8
6-Jun-00	NM		NM		NM												NM		0 0	1 9
7-Jun-00	NM		NM		NM												NM		0 0	2 6
8-Jun-00	NM		NM		NM												NM		0 0	2 5
9-Jun-00	NM		NM		NM												NM		0 0	1 9
10-Jun-00	NM		NM		NM												NM		0 0	2 6
11-Jun-00	NM		NM		NM												NM		0 0	1 6
12-Jun-00	NM		NM		NM												NM		0 0	2 1
13-Jun-00	NM		NM		NM												NM		0 0	3 1
14-Jun-00	NM		NM		NM												NM		0 0	1 9
15-Jun-00	NM		NM		NM												NM		0 0	2 2
16-Jun-00	NM		NM		NM												NM		0 0	0 4
17-Jun-00	NM		NM		NM												NM		0 0	0 0
18-Jun-00	NM		NM		NM												NM		0 0	0 1
19-Jun-00	NM		NM		NM												NM		1 3	0 2
20-Jun-00	NM		NM		NM												NM		3 4	0 2
21-Jun-00	NM		NM		NM												NM		4 1	0 1
22-Jun	NM		NM		NM												NM		3 7	0 1

613 97

Well ID	MW-69		MW-70		MW-71		MW-78		MW-79		MW-80		MW-91		MW-95		PZ-02		RW-3	RW-4
TOC Elevation	307 04		305 05		294 39		275 00		285 03		273 81		291 99		259 43		284 39		299 40	305 22
Total Depth (ft)	92 20		91 00		75 40								70 00				54 50		78 50	85 50
Location	Off-Site		Off-Site		Off-Site		Off-Site		Off-Site		Off-Site		Dunn Field		Dunn Field		Off-Site		Dunn Field	Dunn Field
DATE	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev.	Flow Rate (gpm)	Flow Rate (gpm)
23-Jun-00	84 24	222 80	81 421	223 63	69 24	225 15											43 36	241 03	3 4	0 0
24-Jun-00	NM		NM		NM												NM		4 2	0 2
25-Jun-00	NM		NM		NM												NM		4 6	0 0
26-Jun-00	NM		NM		NM												NM		4 2	0 0
27-Jun-00	NM		NM		NM												NM		4 6	0 0
28-Jun-00	NM		NM		NM												NM		4 3	0 0
29-Jun-00	NM		NM		NM												NM		4 3	1 9
30-Jun-00	84 29	222 75	81 461	223 59	69 28	225 11											43 31	241 08	3 8	0 0
1-Jul-00																			4 20	0 4
2-Jul-00																			4 1	0 0
3-Jul-00																			4 1	0 0
4-Jul-00																			3 9	0 1
5-Jul-00																			4 7	0 0
6-Jul-00																			4 1	0 2
7-Jul-00																			3 8	0 1
8-Jul-00																			3 8	0 0
9-Jul-00																			4 4	0 3
10-Jul-00	84 25	222 79	81 46	223 59	69 31	225 08											43 37	241 02	3 6	0 1
11-Jul-00																			3 8	0 1
12-Jul-00																			4 0	0 5
13-Jul-00																			3 3	0 0
14-Jul-00																			2 9	0 1
15-Jul-00																			3 4	0 3
16-Jul-00																			3 8	0 0
17-Jul-00																			3 8	0 0
18-Jul-00																			4 4	0 0
19-Jul-00	84 32	222 72	81 50	223 55	69 34	225 05											43 71	240 68	4 3	0 3
20-Jul-00																			3 7	0 0
21-Jul-00																			4 6	0 0
22-Jul-00																			3 9	0 0
23-Jul-00																			3 0	0 0
24-Jul-00																			4 2	0 0
25-Jul-00																			3 4	0 1
26-Jul-00																			3 8	0 1
27-Jul-00																			2 9	0 0
28-Jul-00																			3 1	0 0
29-Jul-00																			3 2	0 0
30-Jul-00																			4 4	0 0
31-Jul-00																			4 2	0 0
1-Aug-00																			6 45	0 00
2-Aug-00	84 27	222 77	81 43	223 62	69 33	225 06											44 00	240 39	5 59	0 00
3-Aug-00																			5 33	0 00
4-Aug-00																			5 33	0 00
5-Aug-00																			5 91	0 00
6-Aug-00																			5 60	0 00
7-Aug-00																			5 1	4 23
8-Aug-00																			4 8	7 50
9-Aug-00																			4 6	7 41
10-Aug-00																			4 6	7 01
11-Aug-00																			4 49	7 03
12-Aug-00																			4 3	6 83
13-Aug-00																			4 3	6 6
14-Aug-00																			4 2	6 5
15-Aug-00																			4 1	6 7
16-Aug-00																			4 5	5 6
17-Aug-00																			4 4	6 3
18-Aug-00																			4 1	7 1
19-Aug-00																			4 2	7 5
20-Aug-00																			4 1	6 0

Well ID	MW-69		MW-70		MW-71		MW-78		MW-79		MW-80		MW-91		MW-95		PZ-02		RW-3	RW-4
TOC Elevation	307 04		305 05		294 39		275 00		285 03		273 81		291 99		259 43		284 39		299 40	305 22
Total Depth (ft)	92 20		91 00		75 40								70 00				54 50		78 50	85 50
Location	Off-Site		Off-Site		Off-Site		Off-Site		Off-Site		Off-Site		Dunn Field		Dunn Field		Off-Site		Dunn Field	Dunn Field
DATE	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev	Flow Rate (gpm)	Flow Rate (gpm)
21-Aug-00																			40	51
22-Aug-00																			41	79
23-Aug-00																			39	85
24-Aug-00																			41	64
25-Aug-00																			41	52
26-Aug-00																			40	72
27-Aug-00																			39	28
28-Aug-00																			39	46
29-Aug-00																			37	75
30-Aug-00	84 47	222 57	81 87	223 18	69 40	224 99											44 43	239 96	36	55
31-Aug-00																			37	38
1-Sep-00																			36	67
2-Sep-00																			37	64
3-Sep-00																			37	58
4-Sep-00																			35	70
5-Sep-00																			35	54
6-Sep-00																			35	63
7-Sep-00																			37	59
8-Sep-00																			38	68
9-Sep-00																			37	65
10-Sep-00																			36	104
11-Sep-00																			36	62
12-Sep-00																			35	63
13-Sep-00																			35	65
14-Sep-00																			37	58
15-Sep-00																			34	56
16-Sep-00																			40	77
17-Sep-00																			36	61
18-Sep-00	83 84	223 20	81 86	223 19	69 17	225 22											44 04	240 35	32	51
19-Sep-00																			38	57
20-Sep-00																			33	56
21-Sep-00																			24	58
22-Sep-00																			21	59
23-Sep-00																			32	59
24-Sep-00																			43	57
25-Sep-00																			16	53
26-Sep-00																			22	57
27-Sep-00																			32	56
28-Sep-00																			54	57
29-Sep-00																			46	58
30-Sep-00	85 01	222 03	81 89	223 16	69 25	225 14											44 01	240 38	27	60
1-Oct-00																			25	59
2-Oct-00																			30	57
3-Oct-00																			25	60
4-Oct-00																			24	56
5-Oct-00																			33	63
6-Oct-00																			09	63
7-Oct-00																			17	69
8-Oct-00																			22	62
9-Oct-00																			30	49
10-Oct-00																			19	95
11-Oct-00																			35	78
12-Oct-00																			07	44
13-Oct-00																			00	58
14-Oct-00																			00	59
15-Oct-00																			00	50
16-Oct-00																			00	84
17-Oct-00																			00	72
18-Oct-00	84 68	222 36	81 95	223 10	69 62	224 77											45 11	239 28	13	74

Well ID	MW-69		MW-70		MW-71		MW-78		MW-79		MW-80		MW-91		MW-95		PZ-02		RW-3	RW-4
TOC Elevation	307 04		305 05		294 39		275 00		285 03		273 81		291 99		259 43		284 39		299 40	305 22
Total Depth (ft)	92 20		91 00		75 40								70 00				54 50		78 50	85 50
Location	Off-Site		Off-Site		Off-Site		Off-Site		Off-Site		Off-Site		Dunn Field		Dunn Field		Off-Site		Dunn Field	Dunn Field
DATE	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev	Flow Rate (gpm)	Flow Rate (gpm)
19-Oct-00																			3 0	4 8
20-Oct-00																			3 0	5 5
21-Oct-00																			1 9	5 1
22-Oct-00																			2 4	6 5
23-Oct-00																			2 4	5 7
24-Oct-00																			2 7	5 0
25-Oct-00																			0 1	5 8
26-Oct-00																			0 0	6 2
27-Oct-00																			0 0	6 2
28-Oct-00																			0 0	6 2
29-Oct-00																			0 0	6 2
30-Oct-00	84 71	222 33	81 89	223 16	69 65	224 74											45 21	239 18	0 0	2 1
31-Oct-00	84 43	222 61	81 75	223 30	69 62	224 77											45 22	239 17	0 0	0 0
1-Nov-00	84 35	222 69	81 69	223 36	69 61	224 78											45 30	239 09	0 0	0 0
2-Nov-00	84 30	222 74	81 67	223 38	69 16	225 23											45 14	239 25	0 0	0 0
3-Nov-00	84 18	222 86	81 59	223 46	69 16	225 23											45 14	239 25	0 0	0 0
4-Nov-00	—	—	81 53	223 52	—	—											45 14	239 25	0 0	0 0
5-Nov-00	—	—	81 46	223 59	—	—											45 14	239 25	0 0	0 0
6-Nov-00	81 95	225 09	81 39	223 66	69 45	224 94											45 03	239 36	0 0	0 0
7-Nov-00	84 01	223 03	81 48	223 57	68 65	225 74											45 39	239 00	0 0	0 0
8-Nov-00	83 90	223 14	81 35	223 71	69 53	224 86											45 20	239 19	0 0	0 0
9-Nov-00	84 87	222 17	81 41	223 65	—	—											45 20	239 19	0 0	0 0
10-Nov-00	83 66	223 38	81 40	223 65	69 71	224 68											45 51	238 88	0 0	0 0
11-Nov-00	83 87	223 17	81 32	223 74	69 62	224 77											45 32	239 07	0 0	0 0
12-Nov-00	83 72	223 32	81 23	223 82	69 62	224 77											45 23	239 16	0 0	0 0
13-Nov-00																			0 0	0 0
14-Nov-00																			0 0	0 0
15-Nov-00																			0 6	2 0
16-Nov-00																			1 1	3 7
17-Nov-00																			1 1	3 7
18-Nov-00																			0 0	0 0
19-Nov-00																			0 0	0 0
20-Nov-00																			2 5	5 9
21-Nov-00																			3 5	8 3
22-Nov-00																			1 8	4 2
23-Nov-00																			0 0	0 0
24-Nov-00																			0 0	0 0
25-Nov-00																			0 0	0 0
26-Nov-00																			0 0	0 0
27-Nov-00	83 50	223 54	81 12	223 94	69 58	224 81											45 28	239 11	1 5	1 6
28-Nov-00	83 48	223 56	81 14	223 91	69 42	224 97											45 12	239 27	2 5	0 0
29-Nov-00	83 50	223 54	81 18	223 87	69 43	224 96											45 28	239 11	2 5	0 0
30-Nov-00	83 47	223 57	81 17	223 88	69 42	224 97											45 04	239 35	2 5	2 1
1-Dec-00	83 42	223 62	81 05	224 00	69 38	225 01											45 00	239 39	0 0	4 0
2-Dec-00	---	---	81 28	223 77	69 12	225 27											45 17	239 22	0 0	8 0
3-Dec-00	—	—	81 28	223 77	69 21	225 18											45 21	239 18	0 0	8 0
4-Dec-00																			2 2	8 0
5-Dec-00																			2 5	8 0
6-Dec-00																			2 5	8 0
7-Dec-00																			2 5	8 0
8-Dec-00																			2 5	8 0
9-Dec-00																			2 5	8 0
10-Dec-00																			2 5	8 0
11-Dec-00																			2 5	8 0
12-Dec-00																			0 0	2 7
13-Dec-00																			0 0	0 0
14-Dec-00																			0 0	0 0
15-Dec-00																			0 0	0 0
16-Dec-00																			0 0	0 0

613 100

Well ID	MW-69		MW-70		MW-71		MW-78		MW-79		MW-80		MW-91		MW-95		PZ-02		RW-3	RW-4
TOC Elevation	307 04		305 05		294 39		275 00		285 03		273 81		291 99		259 43		284 39		299 40	305 22
Total Depth (ft)	92 20		91 00		75 40								70 00				54 50		78 50	85 50
Location	Off-Site		Off-Site		Off-Site		Off-Site		Off-Site		Off-Site		Dunn Field		Dunn Field		Off-Site		Dunn Field	Dunn Field
DATE	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev	Flow Rate (gpm)	Flow Rate (gpm)
17-Dec-00																			0 0	0 0
18-Dec-00	83 81	223 23	Diff Sampler		69 43	224 96	50 10	224 90	72 44	212 59	61 26	212 55	66 08	225 91	32 05	227 38	44 98	239 41	0 0	0 0
19-Dec-00																			0 0	0 0
20-Dec-00																			0 0	1 0
21-Dec-00																			0 0	0 0
22-Dec-00																			0 0	0 0
23-Dec-00																			0 0	0 0
24-Dec-00																			0 0	0 0
25-Dec-00																			0 0	0 0
26-Dec-00																			0 0	0 0
27-Dec-00																			0 0	0 0
28-Dec-00																			0 0	0 0
29-Dec-00	82 98	224 06	Diff Sampler		69 30	225 09	50 00		72 30		61 20		66 00		32 00		44 91	239 48	0 0	0 0
30-Dec-00																			0 0	0 0
31-Dec-00																			0 0	0 0

Well ID	RW-5	RW-6	RW-7	RW-8	RW-9	Average System Effluent					Rainfall
TOC Elevation	307 25	304 67	297 53	293 09	290 79						24-hr Period
Total Depth (ft)	92 50	87 50	80 00	81 00	75 50						
Location	Dunn Field	Dunn Field	Dunn Field	Dunn Field	Dunn Field						
DATE	Flow Rate (gpm)	Flow Rate (gpm)	Flow Rate (gpm)	Flow Rate (gpm)	Flow Rate (gpm)	Flow Rate (gpm)	Totalized Flow* (gal)		Adjusted Totalized Flow (gallons)	Time	(Inches)
1-Nov-99	4 2	2 0	5 1	22 5	21 7	68 8	53,449,502		53,449,502	12 00	**0.93**
2-Nov-99	4 1	7 8	4 2	22 0	20 8	70 8	53,551,512		53,551,512	12 00	**0 06**
3-Nov-99	NM	NM	NM	NM	NM	NM	132,617	A	53,684,129	12 00	0 00
4-Nov-99	4 1	8 8	4 1	22 0	20 9	73 5	238,414		53,789,925	12 00	0 00
5-Nov-99	4 0	8 6	4 1	22 1	20 9	73 1	343,606		53,895,117	12 00	0 00
6-Nov-99	4 1	8 5	4 3	22 4	21 2	73 6	449,633		54,001,145	12 00	0 00
7-Nov-99	4 1	8 5	4 5	22 4	21 3	73 9	556,035		54,107,546	12 00	0 00
8-Nov-99	4 1	8 4	4 4	22 2	21 2	73 5	661,918		54,213,429	12 00	0 00
9-Nov-99	4 1	8 4	4 2	22 1	21 1	72 7	766,635		54,318,146	12 00	0 00
10-Nov-99	4 1	8 3	4 1	22 2	21 1	72 7	871,380		54,422,892	12 00	0 00
11-Nov-99	4 0	8 3	3 4	21 8	20 7	70 9	973,505		54,525,017	12 00	0 00
12-Nov-99	4 1	8 3	4 2	22 1	21 0	72 0	1,077,156		54,628,668	12 00	0 00
13-Nov-99	4 1	8 3	4 3	22 0	21 0	72 5	1,181,571		54,733,082	12 00	0 00
14-Nov-99	4 1	8 3	4 2	22 0	20 9	72 0	1,285,294		54,836,805	12 00	0 00
15-Nov-99	4 1	8 3	4 1	21 9	20 9	71 5	1,388,239		54,939,751	12 00	0 00
16-Nov-99	4 1	8 2	4 1	22 0	20 8	69 7	1,488,651		55,040,162	12 00	0 00
17-Nov-99	4 0	8 2	4 0	21 8	20 7	71 5	1,591,611		55,143 122	12 00	0 00
18-Nov-99	4 0	8 2	4 1	21 9	20 7	70 1	1,692,612		55,244,124	12 00	0 00
19-Nov-99	4 0	8 2	4 1	22 0	20 7	70 9	1,794,751		55,346,263	12 00	**1 29**
20-Nov-99	4 0	8 2	4 2	22 1	8 5	58 2	1,878,531		55,430,042	12 00	**<0 01**
21-Nov-99	4 1	8 3	4 4	22 4	0 0	50 5	1,951,251		55,502,762	12 00	0 00
22-Nov-99	4 0	8 2	4 2	22 5	13 3	63 6	2,042,849		55,594,361	12 00	0 00
23-Nov-99	4 0	8 2	4 2	22 4	22 1	72 3	2,146,947		55,698,458	12 00	**0 01**
24-Nov-99	4 0	8 2	4 1	21 8	21 2	70 2	2,248,049		55,799,561	12 00	0 00
25-Nov-99	4 1	8 3	4 4	22 2	21 4	69 2	2,347,740		55,899,252	12 00	**0 08**
26-Nov-99	4 0	8 2	4 2	21 8	20 8	67 0	2,444,263		55,995,775	12 00	0 00
27-Nov-99	4 0	8 1	4 0	21 7	8 5	54 3	2,522 441		56,073,953	12 00	0 00
28-Nov-99	4 0	8 1	4 0	22 0	0 0	46 2	2,588,926		56,140,437	12 00	0 00
29-Nov-99	4 0	8 2	4 2	22 2	13 3	61 5	2,677,500		56,229,012	12 00	0 00
30-Nov-99	4 0	8 3	4 3	22 3	22 5	67 3	2,774,441		56,325,953	12 00	0 00
1-Dec-99	4 1	8 3	4 4	22 4	22 0	67 5	2,871,699		56 423,210	12 00	0 00
2-Dec-99	4 0	8 2	4 4	22 3	21 4	64 8	2,964,982		56,516,493	12 00	0 00
3-Dec-99	4 0	8 1	4 3	22 1	21 0	65 5	3,059,331		56 610,842	12 00	**0 36**
4-Dec-99	4 0	8 1	4 1	21 7	20 6	63 2	3,150,281		56,701,793	12 00	**0 26**
5-Dec-99	4 0	8 1	4 0	21 6	16 4	62 7	3,240,497		56,792,009	12 00	**0 69**
6-Dec-99	4 0	8 1	3 9	21 9	0 0	46 1	3,306,924		56,858,436	12 00	0 00
7-Dec-99	4 0	8 2	4 3	22 4	12 5	58 1	3,390,531		56,942,042	12 00	0 00
8-Dec-99	4 0	8 2	4 2	22 0	21 9	65 0	3,484 073		57 035 585	12 00	0 00
9-Dec-99	4 1	8 2	4 4	22 1	21 7	68 0	3,581,979		57,133,490	12 00	**0 45**
10-Dec-99	4 0	8 1	3 8	21 5	12 8	56 9	3 663,886		57,215,397	12 00	**<0 01**
11-Dec-99	4 0	8 1	4 2	21 9	21 5	65 1	3,757,630		57,309,141	12 00	0 00
12-Dec-99	4 0	8 2	4 3	22 0	21 1	66 2	3,852,943		57,404,455	12 00	**2 55**
13-Dec-99	4 0	8 2	4 1	21 7	20 6	64 2	3,945,391		57,496,903	12 00	**0 42**
14-Dec-99	4 0	8 0	3 9	21 4	19 0	62 8	4,035,838		57,587,349	12 00	0 00
15-Dec-99	4 0	8 0	3 6	21 3	14 2	59 2	4,121,028		57,672,540	12 00	0 00
16-Dec-99	4 0	8 0	3 9	21 5	20 6	63 7	4,212,814		57,764,325	12 00	0 00
17-Dec-99	4 0	8 1	3 9	21 5	20 3	65 6	4,307,220		57,858,732	12 00	0 00
18-Dec-99	4 0	8 1	4 1	21 6	20 5	62 6	4,397,350		57,948,861	12 00	0 00
19-Dec-99	4 0	8 0	4 1	21 6	18 7	62 3	4,487,119		58,038,631	12 00	0 00
20-Dec-99	4 0	7 9	3 8	21 5	0 0	41 1	4,546,289		58,097,801	12 00	0 00
21-Dec-99	4 0	8 0	4 1	22 0	0 0	42 2	4,606,999		58,158,511	12 00	0 00
22-Dec-99	4 0	8 1	4 3	22 2	13 1	55 9	4,687,481		58,238,993	12 00	0 00
23-Dec-99	4 2	8 1	4 2	22 1	22 0	64 7	4,780,678		58,332,189	12 00	0 00
24-Dec-99	4 0	8 0	4 1	21 6	21 0	63 1	4,871,499		58,423,010	12 00	0 00
25-Dec-99	4 0	8 1	4 1	21 5	20 7	62 7	4,961,743		58,513,255	12 00	0 00
26-Dec-99	4 1	8 1	4 2	21 8	20 8	63 6	5,053,313		58 604 825	12 00	0 00
27-Dec-99	4 0	8 0	4 2	21 6	20 5	63 2	5,144,249		58,695,761	12 00	**<0 01**
28-Dec-99	4 0	8 0	4 2	21 6	20 5	62 7	5 234,595		58,786,106	12 00	**<0 01**

Well ID	RW-5	RW-6	RW-7	RW-8	RW-9	Average System Effluent				Rainfall
TOC Elevation	307 25	304 67	297 53	293 09	290 79					24-hr Period
Total Depth (ft)	92 50	87 50	80 00	81 00	75 50					
Location	Dunn Field	Dunn Field	Dunn Field	Dunn Field	Dunn Field					
DATE	Flow Rate (gpm)	Flow Rate (gpm)	Flow Rate (gpm)	Flow Rate (gpm)	Flow Rate (gpm)	Flow Rate (gpm)	Totalized Flow* (gal)	Adjusted Totalized Flow (gallons)	Time	(inches)
29-Dec-99	4 0	8 0	4 0	21 2	20 1	61 4	5,323,011	58,874,522	12 00	0 00
30-Dec-99	4 0	8 0	4 1	20 1	21 2	61 9	5,412,089	58,963,601	12 00	0 00
31-Dec-99	3 9	7 8	3 9	21 4	19 7	61 0	5,499,900	59,051,412	12 00	0 00
1-Jan-00	4 0	7 9	3 9	21 3	19 9	63 8	5,591,815	59,143,327	12 00	0 00
2-Jan-00	4 0	8 0	3 9	21 4	20 0	64 5	5,684,710	59,236,221	12 00	0 00
3-Jan-00	4 0	8 0	4 1	21 5	20 1	65 1	5,778,511	59,330,023	12 00	0 01
4-Jan-00	3 9	3 2	2 9	20 6	19 0	54 7	5,857,251	59,408,762	12 00	<0 01
5-Jan-00	4 0	4 0	4 0	21 2	19 7	57 9	5,940,684	59,492,196	12 00	0 00
6-Jan-00	4 0	8 2	3 8	21 1	19 6	61 9	6,029,806	59,581,317	12 00	0 00
7-Jan-00	4 0	8 1	3 9	21 1	19 6	62 0	6,119,071	59,670,583	12 00	0 00
8-Jan-00	4 0	8 1	4 2	21 6	20 2	64 9	6,212,513	59,764,025	12 00	0 05
9-Jan-00	4 1	8 1	4 2	21 7	20 3	65 9	6,307,395	59,858,906	12 00	<0 01
10-Jan-00	4 0	7 9	3 8	21 0	19 5	63 0	6,398,100	59,949,612	12 00	0 00
11-Jan-00	3 9	7 8	3 2	20 7	19 2	61 2	6,486,156	60,037,668	12 00	0 00
12-Jan-00	4 0	7 9	3 9	21 0	19 5	63 0	6,576,905	60,128,417	12 00	<0 01
13-Jan-00	3 9	3 1	1 9	20 2	18 5	54 3	6,655,025	60,206,537	12 00	0 10
14-Jan-00	4 0	0 0	4 1	21 0	19 4	53 0	6,731,273	60,282,785	12 00	0 00
15-Jan-00	4 1	0 0	4 4	21 5	20 1	55 5	6,811,179	60,362,690	12 00	0 00
16-Jan-00	4 1	0 0	4 2	21 3	19 6	56 1	6,892,006	60,443,517	12 00	0 14
17-Jan-00	4 1	0 0	4 4	21 4	19 8	56 8	6,973,827	60,525,338	12 00	0 19
18-Jan-00	4 1	3 4	4 3	21 2	19 5	59 2	7,059,118	60,610,629	12 00	<0 01
19-Jan-00	4 1	8 8	4 3	21 6	20 0	64 5	7,152,055	60,703,567	12 00	0 01
20-Jan-00	4 0	8 2	3 0	20 6	18 8	59 4	7,237,606	60,789,117	12 00	0 00
21-Jan-00	4 0	5 0	3 9	21 0	19 4	58 7	7,322,177	60,873,689	12 00	0 00
22-Jan-00	4 1	0 0	4 3	21 4	20 4	54 0	7,399,879	60 951,391	12 00	0 67
23-Jan-00	4 1	0 0	4 1	20 9	19 1	51 9	7,474,659	61,026,170	12 00	<0 01
24-Jan-00	4 0	4 5	4 1	21 0	19 1	58 4	7,558,798	61,110,309	12 00	<0 01
25-Jan-00	4 0	6 4	4 0	21 0	19 2	62 2	7,648,351	61 199,863	12 00	0 00
26-Jan-00	4 0	8 1	3 8	20 7	19 0	62 1	7,737,718	61,289,229	12 00	0 00
27-Jan-00	4 0	8 0	3 7	20 8	19 0	59 9	7,824,017	61,375,529	12 00	0 02
28-Jan-00	4 0	8 0	3 9	20 9	19 3	61 5	7,912,635	61,464,146	12 00	0 08
29-Jan-00	4 0	8 0	3 9	21 0	19 2	59 2	7,997,883	61,549,394	12 00	0 01
30-Jan-00	4 0	7 9	3 7	20 8	19 1	59 6	8,083,735	61,635,247	12 00	0 00
31-Jan-00	4 0	7 9	3 9	21 0	19 2	62 3	8,173,375	61,724,887	12 00	0 00
1-Feb-00	4 0	7 8	3 6	20 7	18 9	60 1	8,259,977	61,811,489	12 00	0 00
2-Feb-00	4 0	7 8	3 7	20 8	19 1	60 6	8,347,270	61,898,781	12 00	0 00
3-Feb-00	4 0	7 9	4 1	21 3	19 6	63 0	8,438,047	61,989,559	12 00	0 00
4-Feb-00	3 1	7 7	2 4	20 3	18 5	57 4	8,520,646	62,072,157	12 00	0 00
5-Feb-00	3 9	7 8	3 1	20 6	18 7	59 8	8,606,787	62,158 298	12 00	0 00
6-Feb-00	4 0	7 8	3 7	20 8	19 0	60 7	8,694,209	62,245,721	12 00	0 00
7-Feb-00	4 0	7 7	3 8	20 7	18 9	60 2	8,780 897	62,332,409	12 00	0 00
8-Feb-00	3 9	7 7	3 6	20 6	18 7	59 2	8,866,203	62,417,714	12 00	0 00
9-Feb-00	4 0	7 7	4 0	21 0	19 2	61 5	8,954,763	62,506,274	12 00	0 00
10-Feb-00	4 0	7 7	4 0	21 1	19 2	59 2	9,040,068	62,591,580	12 00	0 00
11-Feb-00	3 9	5 1	2 9	20 3	18 4	52 8	9,116,086	62,667,597	12 00	0 08
12-Feb-00	3 6	0 2	3 7	19 4	4 5	31 5	9,161,446	62,712 957	12 00	0 05
13-Feb-00	1 4	0 0	4 3	21 9	4 7	32 3	9,207,943	62,759,455	12 00	0 53
14-Feb-00	3 4	1 5	3 8	20 9	12 2	45 1	9,272,844	62 824,356	12 00	0 00
15-Feb-00	4 1	7 5	4 0	21 5	20 7	70 6	9,374,523	62,926,034	12 00	0 00
16-Feb-00	4 0	7 2	3 6	20 7	19 1	62 1	9,463,990	63,015,501	12 00	0 00
17-Feb-00	4 0	7 1	4 0	21 3	19 8	64 7	9,557,172	63,108,684	12 00	0 65
18-Feb-00	4 0	7 0	3 8	20 9	19 2	62 8	9,647,662	63,199,173	12 00	0 76
19-Feb-00	3 9	6 7	2 5	20 0	18 1	57 8	9,730,865	63,282 377	12 00	0 00
20-Feb-00	3 9	6 7	3 4	20 4	18 7	62 3	9 820,577	63,372,089	12 00	0 00
21-Feb-00	4 0	6 7	3 8	20 7	19 0	61 2	9,908 719	63,460,231	12 00	0 00
22-Feb-00	3 9	6 6	3 6	20 7	19 0	62 2	9,998,316	63,549 828	12 00	0 00
23-Feb-00	4 0	6 5	3 5	20 7	18 9	61 2	10 086,444	63 637,956	12 00	0 21
24-Feb-00	3 9	6 4	3 4	20 5	18 7	60 1	10,173,017	63 724 529	12 00	<0 01
25-Feb-00	3 9	6 5	3 6	20 5	18 8	61 1	10 260,958	63,812,469	12 00	0 00

Well ID	RW-5	RW-6	RW-7	RW-8	RW-9	Average System Effluent				Rainfall
TOC Elevation	307 25	304 67	297 53	293 09	290 79					24-hr Penod
Total Depth (ft)	92 50	87 50	80 00	81 00	75 50					
Location	Dunn Field	Dunn Field	Dunn Field	Dunn Field	Dunn Field					
DATE	Flow Rate (gpm)	Flow Rate (gpm)	Flow Rate (gpm)	Flow Rate (gpm)	Flow Rate (gpm)	Flow Rate (gpm)	Totalized Flow* (gal)	Adjusted Totalized Flow (gallons)	Time	(inches)
26-Feb-00	3 9	6 5	3 6	20 4	18 7	60 7	10,348,337	63,899,849	12 00	3 09
27-Feb-00	3 9	6 4	2 8	20 0	18 1	58 2	10,432,174	63,983,685	12 00	0 00
28-Feb-00	3 9	6 4	3 4	20 4	18 5	61 0	10,520,071	64,071,583	12 00	0 00
29-Feb-00	3 9	6 5	3 7	20 7	19 0	61 9	10,609,150	64,160,661	12 00	0 00
1-Mar-00	3 9	6 5	3 0	20 1	18 3	59 2	10,694,383	64,245,895	12 00	<0 01
2-Mar-00	3 9	6 5	3 6	20 4	18 6	60 4	10,781,345	64,332,857	12 00	0 00
3-Mar-00	3 9	6 6	3 8	20 7	18 9	61 4	10,869,761	64,421,273	12 00	0 09
4-Mar-00	3 9	6 5	3 4	5 7	18 3	45 0	10,934,547	64,486,058	12 00	<0 01
5-Mar-00	3 2	6 6	4 2	0 0	19 0	41 3	10,993,975	64,545,487	12 00	0 00
6-Mar-00	2 6	6 7	4 3	12 3	19 2	51 9	11,068,711	64,620,223	12 00	0 00
7-Mar-00	3 0	6 8	3 9	21 3	18 4	60 7	11,156,148	64,707,660	12 00	0 00
8-Mar-00	2 8	6 7	3 9	21 6	19 1	61 1	11,244,175	64,795,687	12 00	0 00
9-Mar-00	2 4	6 6	3 7	20 9	18 6	59 9	11,330,431	64,881,943	12 00	0 85
10-Mar-00	4 1	6 5	3 6	20 5	18 5	60 5	11,417,566	64,969,077	12 00	0 12
11-Mar-00	3 1	6 5	2 3	20 2	18 1	57 7	11,500,611	65,052,122	12 00	0 05
12-Mar-00	2 8	6 4	3 1	20 2	18 2	57 2	11,582,993	65,134,505	12 00	0 00
13-Mar-00	2 5	6 5	3 8	20 3	18 3	59 0	11,667,895	65,219,407	12 00	0 00
14-Mar-00	0 0	6 6	3 6	20 5	18 5	56 8	11,749,673	65,301,185	12 00	0 00
15-Mar-00	0 0	6 7	3 6	20 4	18 5	57 1	11,831,897	65,383,409	12 00	0.54
16-Mar-00	0 0	6 7	2 9	20 2	18 3	55 1	11,911,299	65,462,810	12 00	0 72
17-Mar-00	0 0	6 5	2 3	19 9	17 8	54 6	11,989,894	65,541,405	12 00	<0 01
18-Mar-00	0 0	6 6	3 7	20 5	18 6	57 8	12,073,155	65,624,666	12 00	0 17
19-Mar-00	0 0	6 8	3 7	20 7	18 6	58 2	12,156,905	65,708,417	12 00	1 56
20-Mar-00	0 0	6 6	3 0	19 8	17 7	54 0	12,234,607	65,786,119	12 00	0 00
21-Mar-00	0 0	6 5	2 5	19 8	17 6	53 0	12 310,855	65 862,367	12 00	0 00
22-Mar-00	0 0	6 6	3 0	20 1	18 0	54 6	12,389,422	65,940,933	12 00	0 00
23-Mar-00	0 0	6 7	3 6	20 3	18 4	56 0	12,470,091	66,021 602	12 00	0 00
24-Mar-00	0 0	6 7	3 5	20 1	18 2	55 5	12,550,068	66,101,580	12 00	0 00
25-Mar-00	0 0	6 6	3 5	20 0	18 0	54 9	12,629,124	66,180,636	12 00	0 09
26-Mar-00	0 0	6 6	3 8	20 4	18 5	56 9	12,711,075	66,262,586	12 00	0 01
27-Mar-00	0 0	6 7	3 7	20 4	18 4	54 7	12,789,785	66,341,297	12 00	<0 01
28-Mar-00	0 0	6 7	3 2	20 0	17 9	51 2	12,863,556	66,415,068	12 00	0 00
29-Mar-00	0 0	6 6	3 2	19 9	17 8	51 0	12,936,939	66,488,450	12 00	0 02
30-Mar-00	0 0	6 6	3 1	19 7	17 6	55 7	13,017,089	66,568,601	12 00	0 19
31-Mar-00	0 0	6 6	3 3	19 7	17 6	55 2	13,096,548	66,648,060	12 00	0 00
1-Apr-00	0 0	6 7	3 6	20 2	18 1	57 4	13,179,175	66,730,687	12 00	0 91
2-Apr-00	0 0	6 7	3 7	20 1	18 0	56 6	13,260,679	66,812,191	12 00	0 18
3-Apr-00	0 0	6 6	3 5	20 0	17 9	56 9	13,342,659	66,894,170	12 00	1 58
4-Apr-00	0 0	6 5	2 0	19 6	17 3	54 7	13,421,398	66,972,909	12 00	0 01
5-Apr-00	0 0	6 6	3 6	20 2	18 1	57 1	13,503,636	67,055,148	12 00	0 00
6-Apr-00	0 0	6 6	3 6	20 0	18 0	56 5	13,585,025	67,136,537	12 00	0 00
7-Apr-00	0 0	6 6	3 6	20 1	17 9	56 8	13,666,745	67,218,257	12 00	0 47
8-Apr-00	0 0	6 5	1 3	19 2	16 8	49 9	13,738,659	67,290,170	12 00	0 00
9-Apr-00	0 0	6 6	3 3	20 0	17 8	55 7	13,818,823	67,370,335	12 00	0 00
10-Apr-00	0 0	6 6	3 6	20 1	17 8	56 9	13,900,817	67,452,329	12 00	<0 01
11-Apr-00	0 0	6 6	3 1	19 9	17 6	55 3	13,980,492	67,532,004	12 00	0 58
12-Apr-00	0 0	6 6	2 8	19 8	17 5	55 0	14,059,620	67,611,132	12 00	<0 01
13-Apr-00	0 0	6 7	3 7	20 2	18 0	57 4	14,142,233	67,693,745	12 00	0 05
14-Apr-00	0 0	6 6	3 7	20 1	17 9	57 1	14,224,471	67 775,983	12 00	0 01
15-Apr-00	0 0	6 5	3 5	20 0	17 7	56 3	14,305,471	67,856,983	12 00	0 00
16-Apr-00	0 0	6 5	3 4	20 1	17 8	56 1	14,386,198	67,937,709	12 00	0 06
17-Apr-00	0 0	6 5	3 4	19 7	17 5	54 9	14,465,268	68 016 780	12 00	0 00
18-Apr-00	0 0	6 6	3 3	19 7	17 7	56 1	14,546,038	68,097,549	12 00	0 00
19-Apr-00	0 0	7 2	3 5	20 1	19 6	57 5	14,628,881	68,180 393	12 00	0 00
20-Apr-00	0 0	8 0	3 1	19 9	20 1	51 1	14,702,422	68,253,933	12 00	<0 01
21-Apr-00	0 0	7 9	2 7	19 5	19 8	49 8	14,774,105	68,325 617	12 00	0 00
22-Apr-00	0 0	7 9	3 2	19 9	20 1	51 1	14,847,660	68,399,172	12 00	0 00
23-Apr-00	0 0	8 0	3 6	20 1	20 4	52 0	14,922,598	68,474,109	12 00	0 35
24-Apr-00	0 0	7 9	3 2	21 7	19 8	52 6	14,998,284	68 549 796	12 00	0 21

Well ID	RW-5	RW-6	RW-7	RW-8	RW-9	Average System Effluent				Rainfall
TOC Elevation	307 25	304 67	297 53	293 09	290 79					24-hr Period
Total Depth (ft)	92 50	87 50	80 00	81 00	75 50					
Location	Dunn Field	Dunn Field	Dunn Field	Dunn Field	Dunn Field					
DATE	Flow Rate (gpm)	Flow Rate (gpm)	Flow Rate (gpm)	Flow Rate (gpm)	Flow Rate (gpm)	Flow Rate (gpm)	Totalized Flow* (gal)	Adjusted Totalized Flow (gallons)	Time	(inches)
25-Apr-00	0 0	7 9	3 6	0 0	19 9	31 4	15,043,515	68,595,026	12 00	0 00
26-Apr-00	0 0	8 1	4 1	0 0	20 5	32 7	15,090,531	68,642,042	12 00	0 00
27-Apr-00	0 0	8 3	4 8	0 0	21 5	34 6	15,140,340	68,691,852	12 00	0 00
28-Apr-00	0 0	8 3	4 5	25 6	21 1	62 3	15,230,009	68,781,521	12 00	<0 01
29-Apr-00	0 0	8 3	3 9	22 5	20 7	56 4	15,311,153	68,862,665	12 00	0 00
30-Apr-00	0 0	8 3	3 8	21 2	20 3	55 6	15,391,260	68,942,772	12 00	0 00
1-May-00	0 0	8 3	3 8	21 2	20 3	54 1	15,469,107	69,020,618	12 00	0 13
2-May-00	0 0	8 2	3 8	21 0	20 6	54 8	15,548,019	69,099,530	12 00	0 30
3-May-00	0 0	8 1	3 3	20 4	20 1	52 4	15,623,503	69,175,015	12 00	0 49
4-May-00	0 0	8 0	3 2	20 3	19 9	51 8	15,698,081	69,249,593	12 00	0 42
5-May-00	0 0	8 0	3 5	19 9	19 9	51 8	15,772,615	69,324,127	12 00	0 87
6-May-00	0 0	7 9	3 5	19 9	19 7	52 5	15,848,244	69,399,756	12 00	0 09
7-May-00	0 0	8 0	3 5	19 9	19 8	52 0	15,923,095	69,474,607	12 00	0 00
8-May-00	0 0	8 0	3 5	19 9	19 9	53 1	15,999,516	69,551,028	12 00	0 00
9-May-00	0 0	7 8	3 4	19 7	19 7	53 2	16,076,081	69,627,593	12 00	0 20
10-May-00	0 0	7 7	3 1	19 6	19 8	51 9	16,150,788	69,702,300	12 00	0 00
11-May-00	0 0	7 7	2 8	19 3	19 5	49 7	16,222,327	69,773,839	12 00	0 00
12-May-00	0 0	7 7	3 6	19 7	19 9	53 4	16,299,252	69 850,764	12 00	0 35
13-May-00	0 0	7 4	3 2	19 6	19 6	51 5	16,373,369	69,924,881	12 00	0 71
14-May-00	0 0	7 5	1 2	18 8	19 1	47 0	16 441,078	69,992,589	12 00	0 00
15-May-00	0 0	8 1	2 0	19 3	19 2	48 8	16,511,292	70,062,804	12 00	0 00
16-May-00	0 0	8 4	3 5	19 7	19 6	52 1	16,586,359	70,137,871	12 00	0 01
17-May-00	0 0	8 5	3 7	7 6	20 0	42 6	16,647,732	70,199,244	12 00	0 00
18-May-00	0 0	8 3	4 1	0 0	20 4	35 2	16,698,478	70,249,989	12 00	0 00
19-May-00	0 0	8 2	4 2	0 0	20 5	33 6	16,746,819	70,298,330	12 00	0 06
20-May-00	0 0	8 3	4 4	0 0	20 8	33 8	16,795,473	70,346,985	12 00	0 05
21-May-00	0 0	8 4	4 7	0 0	21 2	36 6	16,848,177	70,399,689	12 00	0 00
22-May-00	0 0	8 6	4 9	0 0	21 5	37 8	16,902,609	70,454,121	12 00	0 01
23-May-00	0 0	8 6	5 2	0 0	21 6	37 5	16 956,653	70,508,164	12 00	0 02
24-May-00	0 0	8 3	5 3	0 0	21 9	38 3	17,011,862	70,563,374	12 00	0 00
25-May-00	0 0	8 0	5 2	0 0	21 9	37 5	17,065,862	70,617,374	12 00	<0 01
26-May-00	0 0	8 1	5 1	0 0	21 6	35 2	17,116,507	70,668,019	12 00	0 00
27-May-00	0 0	8 4	5 4	0 0	22 1	37 8	17,170,982	70,722 494	12 00	0 30
28-May-00	0 0	8 6	5 3	0 0	21 9	37 6	17,225,069	70,776,580	12 00	0 00
29-May-00	0 0	8 9	5 5	0 0	22 1	37 0	17,278 377	70,829,889	12 00	0 00
30-May-00	0 0	9 1	5 4	0 0	22 0	39 5	17,335,214	70 886 726	12 00	0 00
31-May-00	0 0	9 3	5 5	0 0	22 2	38 3	17,390,409	70,941,921	12 00	0 00
1-Jun-00	0 0	9 6	4 9	24 4	22 0	63 4	17,481,723	71,033,234	12 00	0 00
2-Jun-00	0 0	9 5	4 4	22 6	21 5	60 4	17 568,762	71 120 274	12 00	0 00
3-Jun-00	0 0	9 4	4 2	21 8	21 2	59 0	17,653,727	71,205,239	12 00	TR
4-Jun-00	0 0	9 2	4 0	21 6	21 1	58 9	17,738,525	71,290,037	12 00	0 35
5-Jun-00	0 0	8 9	3 8	21 0	20 8	57 3	17,821,022	71,372,534	12 00	0 01
6-Jun-00	0 0	8 8	3 6	20 6	20 4	55 3	17,900,588	71 452,099	12 00	0 00
7-Jun-00	0 0	8 9	3 7	20 8	20 7	56 6	17,982 160	71,533,672	12 00	0 00
8-Jun-00	0 0	8 8	3 7	20 6	20 7	56 3	18,063,229	71,614,740	12 00	0 00
9-Jun-00	0 0	8 6	3 6	20 4	20 4	55 0	18,142,411	71,693 922	12 00	0 00
10-Jun-00	0 0	8 5	3 4	20 3	20 3	55 1	18,221,683	71,773,195	12 00	0 00
11-Jun-00	0 0	8 4	3 4	20 1	20 1	53 5	18,298,767	71 850,279	12 00	0 00
12-Jun-00	0 0	8 4	3 4	20 1	20 1	54 0	18,376,597	71,928,109	12 00	TR
13-Jun-00	0 0	8 3	3 5	20 1	20 2	55 3	18,456,186	72,007,698	12 00	TR
14-Jun-00	0 0	8 1	3 3	19 9	20 0	53 3	18,532 867	72,084,379	12 00	0 08
15-Jun-00	0 0	7 9	3 5	20 0	20 2	53 8	18,610,339	72,161,851	12 00	0 70
16-Jun-00	0 0	7 6	3 0	19 6	19 7	50 3	18,682,826	72,234 338	12 00	0 00
17-Jun-00	0 0	7 8	2 7	19 4	19 5	49 4	18,753,901	72,305,413	12 00	0 08
18-Jun-00	0 0	8 1	2 9	19 7	19 7	50 5	18,826,620	72 378,132	12 00	0 01
19-Jun-00	0 0	8 4	3 2	19 7	19 7	52 5	18,902,289	72,453,800	12 00	0 00
20-Jun-00	0 0	8 5	3 3	19 8	19 9	55 3	18 981,890	72,533,402	12 00	0 00
21-Jun-00	0 0	8 4	2 9	19 6	19 7	54 9	19,060,930	72 612,441	12 00	0 34
22-Jun-00	0 0	8 2	2 9	19 6	19 6	54 2	19 138 936	72,690 448	12 00	0 00

Well ID	RW-5	RW-6	RW-7	RW-8	RW-9	Average System Effluent				Rainfall
TOC Elevation	307 25	304 67	297 53	293 09	290 79					24-hr Period
Total Depth (ft)	92 50	87 50	80 00	81 00	75 50					
Location	Dunn Field	Dunn Field	Dunn Field	Dunn Field	Dunn Field					
DATE	Flow Rate (gpm)	Flow Rate (gpm)	Flow Rate (gpm)	Flow Rate (gpm)	Flow Rate (gpm)	Flow Rate (gpm)	Totalized Flow* (gal)	Adjusted Totalized Flow (gallons)	Time	(inches)
23-Jun-00	0 0	8 2	3 2	19 5	19 7	54 1	19,216,774	72,768,286	12 00	0 00
24-Jun-00	0 0	8 2	3 2	19 6	19 7	55 0	19,295,965	72,847,476	12 00	TR
25-Jun-00	0 0	8 1	3 2	19 5	19 6	54 9	19,375,072	72,926,583	12 00	0 02
26-Jun-00	0 0	8 0	2 6	19 5	19 1	53 5	19,452,099	73,003,611	12 00	2 05
27-Jun-00	0 0	8 1	2 8	19 4	19 7	54 6	19,530,754	73,082,265	12 00	0 14
28-Jun-00	0 0	8 2	3 4	19 6	19 6	55 1	19,610,093	73,161,605	12 00	0 01
29-Jun-00	0 0	8 3	3 4	19 5	19 6	57 1	19,692,266	73,243,778	12 00	0 00
30-Jun-00	0 0	8 3	3 1	19 5	19 5	54 2	19,770,325	73,321,836	12 00	0 00
1-Jul-00	0 0	8 3	2 9	19 5	19 6	54 8	19,849,252	73,400,764	12 00	0 00
2-Jul-00	0 0	8 2	3 3	19 4	19 6	54 7	19,928,039	73,479,551	12 00	0 00
3-Jul-00	0 0	8 1	3 0	19 4	19 5	54 1	20,005,978	73,557,489	12 00	0 00
4-Jul-00	0 0	8 1	3 1	19 3	19 6	54 1	20,083,896	73,635,408	12 00	0 00
5-Jul-00	0 0	8 1	3 4	19 4	19 6	55 1	20,163,293	73,714,804	12 00	0 00
6-Jul-00	0 0	7 9	2 9	19 5	19 6	54 1	20,241,234	73,792,745	12 00	0 00
7-Jul-00	0 0	7 8	2 6	19 1	19 4	52 8	20,317,310	73,868,822	12 00	TR
8-Jul-00	0 0	8 0	2 9	19 3	19 4	53 3	20,394,128	73,945,640	12 00	0 00
9-Jul-00	0 0	8 1	3 2	19 4	19 2	54 6	20,472,759	74,024,271	12 00	0 00
10-Jul-00	0 0	8 0	3 5	19 4	19 5	54 1	20,550,610	74 102,122	12 00	0 00
11-Jul-00	0 0	7 9	3 0	19 3	19 5	53 5	20,627,716	74,179,227	12 00	0 00
12-Jul-00	0 0	7 8	2 9	19 3	19 4	53 8	20,705,217	74,256,729	12 00	TR
13-Jul-00	0 0	7 7	2 7	19 2	19 3	52 2	20,780,404	74,331,915	12 00	0 00
14-Jul-00	0 0	7 8	2 8	19 3	19 4	52 2	20,855,625	74,407,136	12 00	0 00
15-Jul-00	0 0	7 7	3 2	19 4	19 5	53 5	20,932,720	74,484,231	12 00	0 00
16-Jul-00	0 0	7 6	2 6	19 1	19 2	52 3	21,008,061	74,559,573	12 00	0 00
17-Jul-00	0 0	7 7	1 7	19 0	19 1	51 3	21,081,958	74 633,470	12 00	TR
18-Jul-00	0 0	7 9	2 8	19 3	19 3	53 7	21,159,255	74,710,766	12 00	0 04
19-Jul-00	0 0	8 1	2 9	19 2	19 3	54 0	21,237,068	74,788,579	12 00	0 00
20-Jul-00	0 0	8 1	2 7	19 1	19 2	52 8	21,313,121	74,864 633	12 00	0 33
21-Jul-00	0 0	8 1	1 8	19 1	19 2	52 8	21,389,092	74,940,604	12 00	0 00
22-Jul-00	0 0	8 1	2 0	19 0	19 1	52 3	21,464,388	75 015,899	12 00	0 00
23-Jul-00	0 0	8 2	2 1	19 1	19 1	51 6	21,538,702	75,090,213	12 00	0 00
24-Jul-00	0 0	8 3	2 5	19 1	19 3	53 5	21,615,693	75,167,204	12 00	0 00
25-Jul-00	0 0	8 3	2 8	19 2	19 2	53 0	21,692,062	75 243,573	12 00	0 00
26-Jul-00	0 0	8 2	0 5	19 0	19 1	50 8	21,765,162	75,316,674	12 00	0 00
27-Jul-00	0 0	8 1	0 0	19 1	19 2	49 2	21,835,994	75,387,505	12 00	0 00
28-Jul-00	0 0	8 0	0 1	19 4	19 3	49 9	21,907,863	75,459,375	12 00	0 00
29-Jul-00	0 0	7 7	0 0	19 0	19 2	49 2	21,978,750	75,530,262	12 00	1 85
30-Jul-00	0 0	7 5	-0 2	19 1	19 1	49 8	22,050,477	75,601,988	12 00	0 01
31-Jul-00	0 0	7 5	0 0	19 2	18 9	49 8	22,122,194	75 673,706	12 00	0 00
1-Aug-00	0 00	7 75	0 00	19 19	19 08	52 5	22,197,752	75,749,264	12 00	0 54
2-Aug-00	0 00	7 98	1 19	19 20	19 13	53 1	22,274,210	75 825,722	12 00	0 00
3-Aug-00	0 00	7 93	0 00	19 11	18 99	51 4	22,348,154	75,899,666	12 00	0 00
4-Aug-00	0 00	8 06	0 00	19 03	18 94	51 4	22,422,104	75,973,616	12 00	0 05
5-Aug-00	0 00	8 10	1 55	19 25	19 19	54 0	22,499,852	76,051,364	12 00	0 00
6-Aug-00	0 00	7 98	3 89	19 19	19 08	55 7	22,580,102	76,131,614	12 00	0 00
7-Aug-00	0 00	7 90	2 23	19 03	18 91	57 4	22 662,794	76,214,306	12 00	0 00
8-Aug-00	1 06	7 86	2 28	19 28	18 98	61 7	22,751,666	76,303,178	12 00	0 00
9-Aug-00	2 55	7 87	1 91	17 71	18 96	61 1	22,839,578	76,391,090	12 00	0 00
10-Aug-00	2 55	7 88	2 94	14 93	19 11	59 0	22,924,520	76,476,032	12 00	0 18
11-Aug-00	2 50	7 84	3 41	14 75	19 13	59 2	23,009,702	76,561,214	12 00	0 00
12-Aug-00	2 50	7 84	3 23	14 85	19 31	58 8	23,094,392	76,645,904	12 00	0 00
13-Aug-00	2 5	7 8	3 3	14 7	19 3	58 5	23,178,668	76,730,180	12 00	0 00
14-Aug-00	2 5	7 8	3 0	15 4	19 1	58 5	23,262,938	76 814,450	12 00	0 00
15-Aug-00	2 5	7 9	2 9	15 1	19 1	58 3	23,346,866	76,898,378	12 00	0 00
16-Aug-00	2 5	7 9	3 4	15 1	19 3	58 3	23,430,836	76 982,348	12 00	0 00
17-Aug-00	2 5	7 8	3 6	15 1	19 4	59 2	23,516,018	77,067,530	12 00	0 00
18-Aug-00	2 5	7 6	2 5	15 3	19 1	58 2	23,599,778	77,151,290	12 00	TR
19-Aug-00	2 5	7 8	3 1	15 2	19 1	59 2	23,685,002	77,236,514	12 00	0 00
20-Aug-00	2 5	7 7	2 8	15 2	19 2	57 5	23,767,838	77 319 350	12 00	0 00

Well ID	RW-5	RW-6	RW-7	RW-8	RW-9	Average System Effluent				Rainfall
TOC Elevation	307 25	304 67	297 53	293 09	290 79					24-hr Period
Total Depth (ft)	92 50	87 50	80 00	81 00	75 50					
Location	Dunn Field	Dunn Field	Dunn Field	Dunn Field	Dunn Field					
DATE	Flow Rate (gpm)	Flow Rate (gpm)	Flow Rate (gpm)	Flow Rate (gpm)	Flow Rate (gpm)	Flow Rate (gpm)	Totalized Flow* (gal)	Adjusted Totalized Flow (gallons)	Time	(inches)
21-Aug-00	2 5	7 7	2 9	15 3	19 1	56 6	23,849,390	77,400,902	12 00	0 00
22-Aug-00	2 5	7 7	3 3	15 3	19 2	59 9	23,935,670	77,487,182	12 00	TR
23-Aug-00	2 3	7 7	3 0	15 3	19 2	59 9	24,021,944	77,573,456	12 00	0 00
24-Aug-00	2 5	7 7	3 3	15 3	19 1	58 4	24,106,082	77,657,594	12 00	0 00
25-Aug-00	2 5	7 6	3 3	15 4	19 2	57 4	24,188,666	77,740,178	12 00	0 00
26-Aug-00	2 5	7 3	3 3	15 4	19 2	58 9	24,273,524	77,825,036	12 00	0 00
27-Aug-00	2 5	6 9	3 2	15 3	19 1	53 8	24,350,936	77,902,448	12 00	0 00
28-Aug-00	2 5	6 7	2 7	15 3	18 9	54 5	24,429,440	77,980,952	12 00	0 00
29-Aug-00	2 5	6 8	3 4	15 3	19 0	58 2	24,513,218	78,064,730	12 00	0 00
30-Aug-00	2 5	6 9	3 3	15 3	19 1	56 0	24,593,882	78,145,394	12 00	0 00
31-Aug-00	2 5	6 9	2 9	15 3	19 0	54 0	24,671,676	78,223,187	12 00	0 00
1-Sep-00	9 0	6 9	3 0	11 4	19 0	59 6	24,757,542	78,309,053	12 00	0 00
2-Sep-00	9 0	6 9	3 4	10 9	19 0	59 3	24,842,952	78 394,463	12 00	0 00
3-Sep-00	9 0	7 1	3 4	10 7	19 1	58 8	24,927,672	78,479,183	12 00	0 00
4-Sep-00	9 0	7 1	2 5	10 9	18 9	58 9	25,012,452	78,563,963	12 00	0 00
5-Sep-00	9 0	7 4	2 8	10 9	18 9	57 9	25,095,816	78,647,327	12 00	0 00
6-Sep-00	9 0	7 6	3 5	10 5	19 0	59 4	25,181,388	78,732,899	12 00	0 00
7-Sep-00	9 0	7 7	3 1	10 4	19 1	59 0	25,266,294	78,817,805	12 00	0 00
8-Sep-00	9 0	7 7	3 4	10 3	19 1	60 1	25,352,838	78,904,349	12 00	TR
9-Sep-00	9 0	7 6	2 6	10 2	19 0	58 5	25,437,090	78,988,601	12 00	TR
10-Sep-00	9 0	7 4	2 8	10 0	19 0	62 2	25,526,640	79 078,151	12 00	TR
11-Sep-00	9 0	7 3	3 2	9 8	19 0	58 2	25,610,388	79,161,899	12 00	TR
12-Sep-00	9 0	7 1	2 0	9 4	18 9	56 2	25,691,298	79,242,809	12 00	0 35
13-Sep-00	9 0	7 2	2 8	8 9	18 9	56 8	25,773,072	79,324,583	12 00	0 00
14-Sep-00	9 0	7 2	3 0	8 5	19 0	58 3	25,854,078	79,405 589	12 00	0 00
15-Sep-00	9 0	7 3	1 7	8 2	18 7	53 9	25,931,622	79,483,133	12 00	0 00
16-Sep-00	9 0	7 4	3 0	8 6	18 9	58 5	26,015,904	79,567,415	12 00	0 00
17-Sep-00	9 0	7 6	2 7	9 1	18 9	56 9	26,097,858	79 649,369	12 00	0 00
18-Sep-00	9 0	1 6	2 2	8 9	19 0	48 9	26,168,334	79 719,845	12 00	0 00
19-Sep-00	9 0	0 0	3 1	8 9	18 9	49 4	26,239,446	79,790,957	12 00	0 00
20-Sep-00	9 0	0 0	2 7	8 6	18 8	48 0	26,308,512	79,860 023	12 00	0 00
21-Sep-00	9 0	3 7	3 2	8 8	18 8	51 6	26,382,864	79,934,375	12 00	0 00
22-Sep-00	9 0	8 1	3 2	8 8	19 0	56 1	26,463 708	80,015,219	12 00	0 00
23-Sep-00	9 0	7 7	2 1	8 6	18 8	55 1	26,543,106	80,094 617	12 00	0 06
24-Sep-00	9 0	7 5	1 5	8 7	18 8	55 4	26,622,948	80,174,459	12 00	0 36
25-Sep-00	9 0	7 4	0 7	8 6	18 4	51 1	26,696,556	80,248,067	12 00	0 23
26-Sep-00	9 0	7 8	0 7	8 8	18 5	52 6	26,772,342	80 323,853	12 00	0 00
27-Sep-00	9 0	8 1	1 3	8 7	18 7	54 5	26,850,828	80,402,339	12 00	0 00
28-Sep-00	9 0	8 2	1 5	8 2	18 7	56 6	26,932,284	80,483,795	12 00	0 00
29-Sep-00	9 0	8 2	0 8	7 6	18 8	54 9	27,011,268	80,562,779	12 00	0 00
30-Sep-00	9 0	8 1	0 8	8 1	18 9	53 7	27,088,548	80,640,059	12 00	0 00
1-Oct-00	9 0	7 8	1 2	8 4	18 9	53 8	27,165,966	80,717,477	12 00	0 00
2-Oct-00	9 0	7 4	1 1	8 0	18 6	52 9	27,242,070	80,793,581	12 00	0 00
3-Oct-00	9 0	7 3	0 8	8 4	18 6	52 6	27,317,880	80,869,391	12 00	0 00
4-Oct-00	9 0	7 3	0 8	8 3	18 6	52 0	27,392,712	80,944 223	12 00	0 00
5-Oct-00	9 0	7 3	0 7	8 2	18 5	53 2	27,469,368	81,020 879	12 00	0 00
6-Oct-00	9 0	7 4	0 0	8 2	18 0	49 8	27,541 032	81,092,543	12 00	0 45
7-Oct-00	9 0	8 0	0 0	8 1	15 2	48 9	27,611,382	81,162 893	12 00	0 00
8-Oct-00	9 0	8 3	0 3	8 0	14 3	48 3	27 680,910	81,232,421	12 00	0 00
9-Oct-00	9 0	8 5	0 7	8 1	14 3	48 4	27,750,582	81,302,093	12 00	0 00
10-Oct-00	9 0	8 3	0 7	7 9	14 1	51 4	27,824,628	81,376 139	12 00	0 00
11-Oct-00	9 0	8 1	0 3	8 4	14 1	51 1	27,898,224	81,449,735	12 00	0 00
12-Oct-00	9 0	7 9	0 5	8 8	14 1	45 5	27,963,738	81,515,249	12 00	0 00
13-Oct-00	9 0	7 7	0 6	8 9	13 9	45 8	28,029,624	81,581,135	12 00	0 00
14-Oct-00	9 0	7 5	0 4	9 1	13 5	45 4	28,094,964	81,646 475	12 00	0 00
15-Oct-00	9 0	7 2	0 2	9 0	13 0	43 4	28,157,490	81,709,001	12 00	0 00
16-Oct-00	9 0	7 0	0 5	9 0	12 8	46 7	28,224,750	81,776,261	12 00	0 00
17-Oct-00	9 0	6 9	0 0	9 1	12 6	44 9	28,289,334	81 840,845	12 00	TR
18-Oct-00	9 0	7 2	0 1	9 1	12 8	46 8	28,356,666	81,908,177	12 00	0 00

Well ID	RW-5	RW-6	RW-7	RW-8	RW-9	Average System Effluent				Rainfall
TOC Elevation	307 25	304 87	297 53	293 09	290 79					24-hr Penod
Total Depth (ft)	92 50	87 50	80 00	81 00	75 50					
Location	Dunn Field	Dunn Field	Dunn Field	Dunn Field	Dunn Field					
DATE	Flow Rate (gpm)	Flow Rate (gpm)	Flow Rate (gpm)	Flow Rate (gpm)	Flow Rate (gpm)	Flow Rate (gpm)	Totalized Flow* (gal)	Adjusted Totalized Flow (gallons)	Time	(inches)
19-Oct-00	9 0	7 3	0 3	9 2	12 8	46 4	28,423,536	81,975,047	12 00	0 00
20-Oct-00	9 0	7 3	0 1	8.2	13 0	46 2	28,490,016	82,041,527	12 00	0 00
21-Oct-00	9 0	7 3	0 2	8 7	13 0	45 2	28,555,068	82,106,579	12 00	0 00
22-Oct-00	9 0	7 4	0 0	8 5	12 0	45 7	28,620,894	82,172,405	12 00	TR
23-Oct-00	9 0	7 6	0 0	7 8	11 8	44 5	28,684,908	82,236,419	12 00	0 00
24-Oct-00	9 0	7 8	0 3	7 4	13 3	45 6	28,750,526	82,302,038	12 00	0 00
25-Oct-00	9 0	7 6	0 4	8 3	14 5	45 7	28,816,344	82,367,856	12 00	0 00
26-Oct-00	9 0	7 6	0 4	8 4	14 5	46 0	28,882,599	82,434,110	12 00	0 00
27-Oct-00	9 0	7 6	0 4	8 4	14 5	46 0	28,948,867	82,500,379	12 00	0 00
28-Oct-00	9 0	7 6	0 4	8 4	14 5	46 0	29,015,136	82,566,648	12 00	0 00
29-Oct-00	9 0	7 6	0 4	8 4	14 5	46 0	29,081,405	82,632,917	12 00	0 00
30-Oct-00	3 0	2 5	0 1	2 8	4 8	15 3	29,103,495	82,655,006	12 00	0 00
31-Oct-00	0 0	0 0	0 0	0 0	0 0	0 0	29,103,495	82,655,006	12 00	0 00
1-Nov-00	0 0	0 0	0 0	0 0	0 0	0 0	29,103,495	82,655,006	12 00	0 00
2-Nov-00	0 0	0 0	0 0	0 0	0 0	0 0	29,103,495	82,655,006	12 00	**0 12**
3-Nov-00	0 0	0 0	0 0	0 0	0 0	0 0	29,103,495	82,655,006	12 00	**0.04**
4-Nov-00	0 0	0 0	0 0	0 0	0 0	0 0	29,103,495	82,655,006	12 00	**0 51**
5-Nov-00	0 0	0 0	0 0	0 0	0 0	0 0	29,103,495	82,655,006	12 00	0 00
6-Nov-00	0 0	0 0	0 0	0 0	0 0	0 0	29,103,495	82,655,006	12 00	**1 38**
7-Nov-00	0 0	0 0	0 0	0 0	0 0	0 0	29,103,495	82,655,006	12 00	**0 04**
8-Nov-00	0 0	0 0	0 0	0 0	0 0	0 0	29,103,495	82,655,006	12 00	**0 69**
9-Nov-00	0 0	0 0	0 0	0 0	0 0	0 0	29,103,495	82,655,006	12 00	**0 10**
10-Nov-00	0 0	0 0	0 0	0 0	0 0	0 0	29,103,495	82,655,006	12 00	0 00
11-Nov-00	0 0	0 0	0 0	0 0	0 0	0 0	29,103,495	82,655,006	12 00	0 00
12-Nov-00	0 0	0 0	0 0	0 0	0 0	0 0	29,103,495	82,655,006	12 00	**0 06**
13-Nov-00	0 0	0 0	0 0	0 0	0 0	0 0	29,103,495	82,655,006	12 00	**0 16**
14-Nov-00	0 0	0 0	0 0	3 1	3 0	6 1	29,112,255	82,663,766	12 00	0 00
15-Nov-00	1 0	0 0	1 6	3 6	3 5	12 4	29,130,039	82,681,550	12 00	0 00
16-Nov-00	1 9	0 0	4 0	6 7	6 6	24 1	29,164,689	82,716,200	12 00	**0 72**
17-Nov-00	1 9	0 0	4 0	6 7	6 6	24 1	29,199,339	82,750,850	12 00	0 00
18-Nov-00	0 0	0 0	0 0	0 0	0 0	0 0	29,199,339	82,750,850	12 00	0 00
19-Nov-00	0 0	0 0	0 0	0 0	0 0	0 0	29,199,339	82,750,850	12 00	0 00
20-Nov-00	2 7	3 9	6 2	10 4	10 3	41 8	29,259,489	82,811,000	12 00	0 00
21-Nov-00	3 8	0 0	8 7	14 7	14 5	53 5	29,336,529	82,888,040	12 00	0 00
22-Nov-00	1 9	0 0	3 1	7 4	7 3	25 5	29,373,249	82,924,760	12 00	0 00
23-Nov-00	0 0	0 0	0 0	0 0	0 0	0 0	29,373,249	82,924,760	12 00	**0 32**
24-Nov-00	0 0	0 0	0 0	0 0	0 0	0 0	29,373,249	82,924,760	12 00	**2 75**
25-Nov-00	0 0	0 0	0 0	0 0	0 0	0 0	29,373,249	82,924,760	12 00	**0 01**
26-Nov-00	0 0	0 0	0 0	0 0	0 0	0 0	29,373,249	82,924,760	12 00	0 00
27-Nov-00	2 9	0 0	4 4	10 3	10 0	30 6	29,417,367	82,968,878	12 00	0 00
28-Nov-00	4 1	0 0	6 2	14 5	14 1	41 4	29,476,983	83,028,494	12 00	**0 03**
29-Nov-00	4 1	0 0	6 2	14 5	14 1	41 4	29,536,599	83,088,110	12 00	0 00
30-Nov-00	4 1	0 0	6 2	14 5	14 1	43 5	29,599,257	83,150,768	12 00	0 00
1-Dec-00	2 1	0 0	3 1	7 3	7 1	23 5	29,633,025	83 184,536	12 00	0 00
2-Dec-00	4 1	0 0	6 2	14 5	14 1	46 9	29,700 561	83,252,072	12 00	TR
3-Dec-00	4 1	0 0	6 2	14 5	14 1	46 9	29,768,097	83 319,608	12 00	0 00
4-Dec-00	4 1	0 0	6 2	14 5	14 1	49 1	29,838,833	83,390,344	12 00	0 00
5-Dec-00	1 4	0 0	6 2	14 5	14 1	46 7	29,906,033	83,457,544	12 00	0 00
6-Dec-00	0 0	0 0	6 2	14 5	14 1	45 3	29,971,265	83 522,776	12 00	0 00
7-Dec-00	0 0	0 0	6 2	14 5	14 1	45 3	30,036,497	83,588,008	12 00	0 00
8-Dec-00	0 0	0 0	6 2	14 5	14 1	45 3	30,101,729	83,653,240	12 00	0 00
9-Dec-00	0 0	0 0	6 2	14 5	14 1	45 3	30,166,961	83,718 472	12 00	TR
10-Dec-00	0 0	0 0	6 2	14 5	14 1	45 3	30,232,193	83,783,704	12 00	TR
11-Dec-00	1 5	0 0	6 2	14 5	14 1	46 8	30,299,639	83,851,150	12 00	**0 14**
12-Dec-00	0 8	0 0	0 0	4 8	4 7	13 0	30,318,407	83,869,918	12 00	0 00
13-Dec-00	0 0	0 0	0 0	0 0	0 0	0 0	30,318,407	83,869,918	12 00	**0 92**
14-Dec-00	0 0	0 0	0 0	0 0	0 0	0 0	30,318,407	83,869,918	12 00	0 00
15-Dec-00	0 0	0 0	0 0	0 0	0 0	0 0	30,318,407	83,869,918	12 00	**0 56**
16-Dec-00	0 0	0 0	0 0	0 0	0 0	0 0	30,318,407	83,869,918	12 00	**0 57**

Well ID	RW-5	RW-6	RW-7	RW-8	RW-9	Average System Effluent				Rainfall
TOC Elevation	307 25	304 67	297 53	293 09	290 79					24-hr Period
Total Depth (ft)	92 50	87 50	80 00	81 00	75 50					
Location	Dunn Field	Dunn Field	Dunn Field	Dunn Field	Dunn Field					
DATE	Flow Rate (gpm)	Flow Rate (gpm)	Flow Rate (gpm)	Flow Rate (gpm)	Flow Rate (gpm)	Flow Rate (gpm)	Totalized Flow* (gal)	Adjusted Totalized Flow (gallons)	Time	(inches)
17-Dec-00	0 0	0 0	0 0	0 0	0 0	0 0	30,318,407	83,869,918	12 00	TR
18-Dec-00	0 0	0 0	0 0	0 0	0 0	0 0	30,318,407	83,869,918	12 00	0 02
19-Dec-00	0 0	0 0	0 0	0 0	0 0	0 0	30,318,407	83,869,918	12 00	TR
20-Dec-00	0 5	0 0	0 0	1 8	1 8	5 1	30,325,733	83,877,244	12 00	0 02
21-Dec-00	0 0	0 0	0 0	0 0	0 0	0 0	30,325,733	83,877,244	12 00	0 00
22-Dec-00	0 0	0 0	0 0	0 0	0 0	0 0	30,325,733	83,877,244	12 00	0 00
23-Dec-00	0 0	0 0	0 0	0 0	0 0	0 0	30,325,733	83,877,244	12 00	TR
24-Dec-00	0 0	0 0	0 0	0 0	0 0	0 0	30,325,733	83,877,244	12 00	0 00
25-Dec-00	0 0	0 0	0 0	0 0	0 0	0 0	30,325,733	83 877,244	12 00	0 00
26-Dec-00	0 0	0 0	0 0	0 0	0 0	0 0	30,325,733	83,877,244	12 00	0 17
27-Dec-00	0 0	0 0	0 0	0 0	0 0	0 0	30,325,733	83 877,244	12 00	0 02
28-Dec-00	0 0	0 0	0 0	0 0	0 0	0 0	30,325,733	83,877,244	12 00	0 00
29-Dec-00	0 0	0 0	0 0	0 0	0 0	0 0	30,325,733	83,877,244	12 00	0 00
30-Dec-00	0 0	0 0	0 0	0 0	0 0	0 0	30 325,733	83,877,244	12 00	0 00
31-Dec-00	0 0	0 0	0 0	0 0	0 0	0 0	30,325,733	83,877,244	12 00	0 04

Well ID	MW-2		MW-3		MW-4		MW-5		MW-6		MW-7		MW-8		MW-9		MW-10		MW-11	
TOC Elevation	292 04		292 35		301 61		304 64		289 11		295 1		292 59		304 32		288 83		299 47	
Total Depth (ft)	35 00		77 00		81 80		79 25		70 24		77 20		69 00		82 50		71 00		85 00	
Location	Dunn Field		Dunn Field		Dunn Field		Dunn Field		Dunn Field		Dunn Field		Dunn Field		Dunn Field		Dunn Field		Dunn Field	
DATE	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev
1-Nov-99	DRY	--	70 89	221 46	75 87	225 74	DRY	--	62 90	226 21	67 85	227 25	63 15	229 44	77 10	227 22	65 59	223 24	76 09	223 38
2-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
3-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
4-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
5-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
6-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
7-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
8-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
9-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
10-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
11-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
12-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
13-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
14-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
15-Nov-99	DRY	--	71 05	221 30	76 06	225 55	DRY	--	63 10	226 01	68 03	227 07	63 29	229 30	77 23	227 09	65 67	223 16	76 47	223 00
16-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
17-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
18-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
19-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
20-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
21-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
22-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
23-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
24-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
25-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
26-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
27-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
28-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
29-Nov-99	31 50	260 54	70 95	221 40	76 20	225 41	DRY	--	63 12	225 99	68 08	227 02	63 40	229 19	77 25	227 07	65 85	222 98	76 55	222 92
30-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
1-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
2-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
3-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
4-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
5-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
6-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
7-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
8-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
9-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
10-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
11-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
12-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
13-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
14-Dec-99	DRY	--	71 10	221 25	76 12	225 49	DRY	--	63 00	226 11	68 17	226 93	63 50	229 09	77 35	226 97	65 56	223 27	76 64	222 83
15-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
16-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
17-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
18-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
19-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
20-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
21-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
22-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
23-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
24-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
25-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
26-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
27-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
28-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	

Well ID	MW-2		MW-3		MW-4		MW-5		MW-6		MW-7		MW-8		MW-9		MW-10		MW-11	
TOC Elevation	292 04		292 35		301 61		304 64		289 11		295 1		292 59		304 32		288 83		299 47	
Total Depth (ft)	35 00		77 00		81 80		79 25		70 24		77 20		69 00		82 50		71 00		85 00	
Location	Dunn Field		Dunn Field		Dunn Field		Dunn Field		Dunn Field		Dunn Field		Dunn Field		Dunn Field		Dunn Field		Dunn Field	
DATE	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev
29-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
30-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
31-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
1-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
2-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
3-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
4-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
5-Jan-00	DRY	--	71 16	221 19	76 24	225 37	DRY	--	63 00	226 11	68 31	226 79	63 65	228 94	77 48	226 84	65 79	223 04	76 43	223 04
6-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
7-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
8-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
9-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
10-Jan-00	DRY	--	71 17	221 18	76 23	225 38	DRY	--	62 86	226 25	68 31	226 79	63 69	228 90	76 46	227 86	65 84	222 99	76 60	222 87
11-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
12-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
13-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
14-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
15-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
16-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
17-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
18-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
19-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
20-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
21-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
22-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
23-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
24-Jan-00	DRY	--	71 19	221 16	70 22	231 39	DRY	--	63 01	226 10	68 39	226 71	63 78	228 81	77 58	226 74	65 85	222 98	76 40	223 07
25-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
26-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
27-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
28-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
29-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
30-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
31-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
1-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
2-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
3-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
4-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
5-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
6-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
7-Feb-00	DRY	--	71 26	221 09	76 30	225 31	DRY	--	62 94	226 17	68 48	226 62	63 88	228 71	77 64	226 68	65 91	222 92	76 67	222 80
8-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
9-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
10-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
11-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
12-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
13-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
14-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
15-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
16-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
17-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
18-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
19-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
20-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
21-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
22-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
23-Feb-00	DRY	--	71 22	221 13	76 45	225 16	DRY	--	63 64	225 47	68 47	226 63	63 95	228 64	77 73	226 59	65 95	222 88	76 60	222 87
24-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
25-Fe[redacted]	NM		NM		NM		NM				NM		NM		NM		NM		N[redacted]	

Well ID	MW-2		MW-3		MW-4		MW-5		MW-6		MW-7		MW-8		MW-9		MW-10		MW-11	
TOC Elevation	292 04		292 35		301 61		304 64		289 11		295 1		292 59		304 32		288 83		299 47	
Total Depth (ft)	35 00		77 00		81 80		79 25		70 24		77 20		69 00		82 50		71 00		85 00	
Location	Dunn Field		Dunn Field		Dunn Field		Dunn Field		Dunn Field		Dunn Field		Dunn Field		Dunn Field		Dunn Field		Dunn Field	
DATE	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev
26-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
27-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
28-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
29-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
1-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
2-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
3-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
4-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
5-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
6-Mar-00	DRY	–	69 95	222 40	76 46	225 15	DRY	–	63 30	225 81	68 65	226 45	64 07	228 52	77 77	226 55	65 75	223 08	76 61	222 86
7-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
8-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
9-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
10-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
11-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
12-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
13-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
14-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
15-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
16-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
17-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
18-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
19-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
20-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
21-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
22-Mar-00	DRY	–	71 40	220 95	76 46	225 15	DRY	–	63 29	225 82	68 65	226 45	64 10	228 49	77 85	226 47	66 02	222 81	76 67	222 80
23-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
24-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
25-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
26-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
27-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
28-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
29-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
30-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
31-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
1-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
2-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
3-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
4-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
5-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
6-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
7-Apr-00	DRY	–	71 38	220 97	76 50	225 11	DRY	–	63 27	225 84	68 42	226 68	64 18	228 41	77 91	226 41	66 07	222 76	76 71	222 76
8-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
9-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
10-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
11-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
12-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
13-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
14-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
15-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
16-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
17-Apr-00	DRY	–	71 42	220 93	NM	NM	DRY	–	63 38	225 73	68 80	226 30	64 21	228 38	78 00	226 32	66 07	222 76	76 77	222 70
18-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
19-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
20-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
21-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
22-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
23-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
24-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	

Well ID	MW-2		MW-3		MW-4		MW-5		MW-6		MW-7		MW-8		MW-9		MW-10		MW-11	
TOC Elevation	292 04		292 35		301 61		304 64		289 11		295 1		292 59		304 32		288 83		299 47	
Total Depth (ft)	35 00		77 00		81 80		79 25		70 24		77 20		69 00		82 50		71 00		85 00	
Location	Dunn Field		Dunn Field		Dunn Field		Dunn Field		Dunn Field		Dunn Field		Dunn Field		Dunn Field		Dunn Field		Dunn Field	
DATE	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev
25-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
26-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
27-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
28-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
29-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
30-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
1-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
2-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
3-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
4-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
5-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
6-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
7-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
8-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
9-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
10-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
11-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
12-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
13-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
14-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
15-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
16-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
17-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
18-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
19-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
20-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
21-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
22-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
23-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
24-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
25-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
26-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
27-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
28-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
29-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
30-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
31-May-00	DRY	—	69 58	222 77	76 40	225 21	DRY	—	63 07	226 04	68 53	226 57	64 03	228 56	77 79	226 53	65 64	223 19	76 41	223 06
1-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
2-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
3-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
4-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
5-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
6-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
7-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
8-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
9-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
10-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
11-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
12-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
13-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
14-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
15-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
16-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
17-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
18-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
19-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
20-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
21-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
22-Ju[redacted]	NM		NM		NM		NM				NM		NM		NM		NM		NM	

Well ID	MW-2		MW-3		MW-4		MW-5		MW-6		MW-7		MW-8		MW-9		MW-10		MW-11	
TOC Elevation	292 04		292 35		301 61		304 64		289 11		295 1		292 59		304 32		288 83		299 47	
Total Depth (ft)	35 00		77 00		81 80		79 25		70 24		77 20		69 00		82 50		71 00		85 00	
Location	Dunn Field		Dunn Field		Dunn Field		Dunn Field		Dunn Field		Dunn Field		Dunn Field		Dunn Field		Dunn Field		Dunn Field	
DATE	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev.
23-Jun-00	DRY	—	71 46	220 89	76 62	224 99	DRY	—	63 30	225 81	68 77	226 33	64 19	228 40	78 01	226 31	66 19	222 64	76 82	222 65
24-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
25-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
26-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
27-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
28-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
29-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
30-Jun-00	DRY	—	71 49	220 86	76 66	224 95	DRY	—	63 37	225 74	68 82	226 28	64 22	228 37	78 03	226 29	66 27	222 56	76 86	222 61
1-Jul-00																				
2-Jul-00																				
3-Jul-00																				
4-Jul-00																				
5-Jul-00																				
6-Jul-00																				
7-Jul-00																				
8-Jul-00																				
9-Jul-00																				
10-Jul-00	DRY	—	71 52	220 83	76 69	224 92	Dry	—	63 38	225 73	68 84	226 26	64 24	228 35	78 05	226 27	66 29	222 54	76 88	222 59
11-Jul-00																				
12-Jul-00																				
13-Jul-00																				
14-Jul-00																				
15-Jul-00																				
16-Jul-00																				
17-Jul-00																				
18-Jul-00																				
19-Jul-00	DRY	—	71 51	220 84	76 70	224 91	Dry	—	63 40	225 71	68 84	226 26	64 25	228 34	78 03	226 29	66 31	222 52	76 89	222 58
20-Jul-00																				
21-Jul-00																				
22-Jul-00																				
23-Jul-00																				
24-Jul-00																				
25-Jul-00																				
26-Jul-00																				
27-Jul-00																				
28-Jul-00																				
29-Jul-00																				
30-Jul-00																				
31-Jul-00																				
1-Aug-00																				
2-Aug-00	DRY	—	71 51	220 84	76 73	224 88	DRY	—	63 39	225 72	68 88	226 22	64 30	228 29	78 11	226 21	66 19	222 64	76 84	222 63
3-Aug-00																				
4-Aug-00																				
5-Aug-00																				
6-Aug-00																				
7-Aug-00																				
8-Aug-00																				
9-Aug-00																				
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15-Aug-00																				
16-Aug-00																				
17-Aug-00																				
18-Aug-00																				
19-Aug-00																				
20-Aug-00																				

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613 115

Well ID	MW-2		MW-3		MW-4		MW-5		MW-6		MW-7		MW-8		MW-9		MW-10		MW-11	
TOC Elevation	292 04		292 35		301 61		304 64		289 11		295 1		292 59		304 32		288 83		299 47	
Total Depth (ft)	35 00		77 00		81 80		79 25		70 24		77 20		69 00		82 50		71 00		85 00	
Location	Dunn Field		Dunn Field		Dunn Field		Dunn Field		Dunn Field		Dunn Field		Dunn Field		Dunn Field		Dunn Field		Dunn Field	
DATE	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev
21-Aug-00																				
22-Aug-00																				
23-Aug-00																				
24-Aug-00																				
25-Aug-00																				
26-Aug-00																				
27-Aug-00																				
28-Aug-00																				
29-Aug-00																				
30-Aug-00	DRY	---	71 20	221 15	76 79	224 82	DRY	---	63 52	225 59	69 00	226 10	NA	NA	78 18	226 14	66 31	222 52	76 90	222 57
31-Aug-00																				
1-Sep-00																				
2-Sep-00																				
3-Sep-00																				
4-Sep-00																				
5-Sep-00																				
6-Sep-00																				
7-Sep-00																				
8-Sep-00																				
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10-Sep-00																				
11-Sep-00																				
12-Sep-00																				
13-Sep-00																				
14-Sep-00																				
15-Sep-00																				
16-Sep-00																				
17-Sep-00																				
18-Sep-00	DRY	---	71 27	221 08	76 88	224 73	DRY	---	63 66	225 45	69 00	226 10	64 47	228 12	78 22	226 10	66 34	222 49	76 90	222 57
19-Sep-00																				
20-Sep-00																				
21-Sep-00																				
22-Sep-00																				
23-Sep-00																				
24-Sep-00																				
25-Sep-00																				
26-Sep-00																				
27-Sep-00																				
28-Sep-00																				
29-Sep-00																				
30-Sep-00	DRY	---	71 25	221 10	76 75	224 86	DRY	---	63 35	225 76	69 01	226 09	64 18	228 41	78 03	226 29	66 27	222 56	76 81	222 66
1-Oct-00																				
2-Oct-00																				
3-Oct-00																				
4-Oct-00																				
5-Oct-00																				
6-Oct-00																				
7-Oct-00																				
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11-Oct-00																				
12-Oct-00																				
13-Oct-00																				
14-Oct-00																				
15-Oct-00																				
16-Oct-00																				
17-Oct-00																				
18-O[redacted]	DRY	---	67 41	224 94	73 21	228 40	DRY	---	[redacted]	228 36	69 04	226 06	NM	NM	78 28	226 04	61 46	227 37	74[redacted]	225 06

Well ID	MW-2		MW-3		MW-4		MW-5		MW-6		MW-7		MW-8		MW-9		MW-10		MW-11	
TOC Elevation	292 04		292 35		301 61		304 64		289 11		295 1		292 59		304 32		288 83		299 47	
Total Depth (ft)	35 00		77 00		81 80		79 25		70 24		77 20		69 00		82 50		71 00		85 00	
Location	Dunn Field		Dunn Field		Dunn Field		Dunn Field		Dunn Field		Dunn Field		Dunn Field		Dunn Field		Dunn Field		Dunn Field	
DATE	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev.
19-Oct-00																				
20-Oct-00																				
21-Oct-00																				
22-Oct-00																				
23-Oct-00																				
24-Oct-00																				
25-Oct-00																				
26-Oct-00																				
27-Oct-00																				
28-Oct-00																				
29-Oct-00																				
30-Oct-00	DRY	—	71 13	221 22	76 98	224 63	DRY	—	65 81	223 50	69 13	225 97	—	—	78 30	226 02	66 35	222 48	77 11	222 36
31-Oct-00	DRY	—	70 51	221 84	76 96	224 65	DRY	—	63 80	225 31	69 18	225 92	64 97	227 62	78 24	226 08	65 78	223 05	76 84	222 63
1-Nov-00	DRY	—	70 18	222 17	76 90	224 71	DRY	—	63 63	225 48	69 04	226 06	64 63	227 96	78 26	226 06	65 46	223 37	76 77	222 70
2-Nov-00	DRY	—	70 04	222 31	76 82	224 79	DRY	—	63 60	225 51	69 05	226 05	64 64	227 95	78 23	226 09	65 38	223 45	76 70	222 77
3-Nov-00	DRY	—	68 82	223 53	76 80	224 81	DRY	—	63 64	225 47	69 00	226 10	64 63	227 96	78 15	226 17	65 21	223 62	76 61	222 86
4-Nov-00	DRY	—	69 53	222 82	76 69	224 92	DRY	—	63 58	225 53	68 85	226 25	64 58	228 01	78 10	226 22	64 92	223 91	76 45	223 02
5-Nov-00	DRY	—	69 50	222 85	76 65	224 96	DRY	—	63 56	225 55	68 85	226 25	64 54	228 05	78 00	226 32	64 90	223 93	76 50	222 97
6-Nov-00	DRY	—	—	—	76 58	225 03	DRY	—	63 39	225 72	68 75	226 35	64 48	228 11	78 00	226 32	—	—	76 27	223 20
7-Nov-00	DRY	—	69 31	223 04	76 68	224 93	DRY	—	63 61	225 50	68 90	226 20	64 57	228 02	78 00	226 32	64 86	223 97	76 33	223 14
8-Nov-00	DRY	—	69 17	223 18	76 53	225 08	DRY	—	63 40	225 71	68 67	226 43	64 47	228 12	78 00	226 32	—	—	76 14	223 33
9-Nov-00	DRY	—	69 30	223 05	76 62	224 99	DRY	—	63 55	225 56	68 83	226 27	64 32	228 27	77 64	226 68	64 67	224 16	76 20	223 27
10-Nov-00	DRY	—	69 31	223 04	76 58	225 03	DRY	—	63 38	225 73	68 83	226 27	64 54	228 05	78 10	226 22	64 71	224 12	76 23	223 24
11-Nov-00	DRY	—	69 12	223 23	76 50	225 11	DRY	—	63 56	225 55	68 73	226 37	64 50	228 09	77 84	226 48	64 56	224 27	76 07	223 40
12-Nov-00	DRY	—	69 11	223 24	76 50	225 11	DRY	—	63 51	225 60	68 07	227 03	64 50	228 09	77 87	226 45	64 47	224 36	76 00	223 47
13-Nov-00																				
14-Nov-00																				
15-Nov-00																				
16-Nov-00																				
17-Nov-00																				
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22-Nov-00																				
23-Nov-00																				
24-Nov-00																				
25-Nov-00																				
26-Nov-00																				
27-Nov-00	DRY	—	69 15	223 20	76 14	225 47	Dry	—	63 45	225 66	68 36	226 74	64 33	228 26	77 55	226 77	—	—	75 61	223 86
28-Nov-00	DRY	—	69 56	222 79	—	—	Dry	—	63 44	225 67	68 46	226 64	64 28	228 31	77 58	226 74	64 72	224 11	75 74	223 73
29-Nov-00	DRY	—	69 85	222 50	76 15	225 46	DRY	—	63 45	225 66	68 44	226 66	64 22	228 37	77 59	226 73	64 87	223 96	75 83	223 64
30-Nov-00	DRY	—	69 83	222 52	76 16	225 45	DRY	—	63 41	225 70	68 47	226 63	64 28	228 31	77 59	226 73	64 97	223 86	76 92	222 55
1-Dec-00	DRY	—	69 13	223 22	76 13	225 48	DRY	—	63 36	225 75	68 42	226 68	64 25	228 34	77 59	226 73	64 50	224 33	75 73	223 74
2-Dec-00	DRY	—	69 81	222 54	76 15	225 46	DRY	—	63 42	225 69	68 51	226 59	64 03	228 56	77 68	226 64	64 68	224 15	75 89	223 58
3-Dec-00	DRY	—	69 09	223 26	76 15	225 46	DRY	—	63 39	225 72	68 47	226 63	64 28	228 31	77 63	226 69	65 00	223 83	75 96	223 51
4-Dec-00																				
5-Dec-00																				
6-Dec-00																				
7-Dec-00																				
8-Dec-00																				
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12-Dec-00																				
13-Dec-00																				
14-Dec-00																				
15-Dec-00																				
16-Dec-00																				

Well ID	MW-2		MW-3		MW-4		MW-5		MW-6		MW-7		MW-8		MW-9		MW-10		MW-11	
TOC Elevation	292 04		292 35		301 61		304 64		289 11		295 1		292 59		304 32		288 83		299 47	
Total Depth (ft)	35 00		77 00		81 80		79 25		70 24		77 20		69 00		82 50		71 00		85 00	
Location	Dunn Field		Dunn Field		Dunn Field		Dunn Field		Dunn Field		Dunn Field		Dunn Field		Dunn Field		Dunn Field		Dunn Field	
DATE	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev
17-Dec-00																				
18-Dec-00	DRY	---	68 72	223 63	76 11	225 50	Dry	—	63 41	225 70	68 44	226 66	64 33	228 26	77 58	226 74	64 24	224 59	75 59	223 88
19-Dec-00																				
20-Dec-00																				
21-Dec-00																				
22-Dec-00																				
23-Dec-00																				
24-Dec-00																				
25-Dec-00																				
26-Dec-00																				
27-Dec-00																				
28-Dec-00																				
29-Dec-00	DRY	---	68 31	224 04	75 90	225 71	Dry	---	63 21	225 90	68 20	226 90	64 15	228 44	77 33	226 99	63 80	225 03	75 23	224 24
30-Dec-00																				
31-Dec-00																				

Note* - The 200' tape was damaged and is being replaced for the January events, so none of the wells greater than 100' were gaged in December

NOTES

Year One O&M is a separate data set.

Baseline water levels were recorded 03-Nov-98 thru 04-Nov-98

All elevations are in feet All depths are in feet, Below Top of Casing (BTC)

Rainfall for the 24-hr period is recorded by the National Weather Service at Memphis International Airport.

Exhibit 5-1 of the O&M Plan identifies 54 monitoring wells requiring water level measurements - the following wells have monitoring record gaps the reasons listed

MW-65 gauging required as of year two O&M, location unknown until 05-Jan-00

MW-67 gauging required as of year two O&M, location unknown until 05-Jan-00

PZ-02 gauging required as of year two O&M, location unknown until 15-Nov-99

MW-67 Has obstruction since May and cannot be gauged

TOC = top of casing

DTW = depth to water

NM = not measured

NA = not available

* = this value obtained from an average daily flow rate (gpm * 60 *24) and does not represent the instantaneous field totalized volume

A = Effluent totalizing meter zeroed on 03-Nov 99

Well ID	MW-12		MW-13		MW-14		MW-15		MW-16		MW-19		MW-27		MW-28		MW-29		MW-30	
TOC Elevation	301 35		299 73		302 22		295 12		308 02		290 57		303 86		294 79		273 22		274 87	
Total Depth (ft)	87 00		83 00		80 00		81 00		140 00		98 40		93 60		69 00		54 00		59 00	
Location	Dunn Field		Dunn Field		Dunn Field		Dunn Field		Dunn Field		Depot		Depot		Dunn Field		Dunn Field		MLGW Facility	
DATE	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev.
1-Nov-99	77 20	224 15	73 56	226 17	73 70	228 52	67 95	227 17	136 20	171 82	NM	NA	NM	NA	59 66	235 13	39 80	233 42	47 74	227 13
2-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
3-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
4-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
5-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
6-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
7-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
8-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
9-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
10-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
11-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
12-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
13-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
14-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
15-Nov-99	77 39	223 96	73 64	226 09	73 85	228 37	68 15	226 97	136 60	171 42	87 06	203 51	91 15	212 71	59 90	234 89	40 09	233 13	47 85	227 02
16-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
17-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
18-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
19-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
20-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
21-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
22-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
23-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
24-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
25-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
26-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
27-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
28-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
29-Nov-99	77 44	223 91	73 70	226 03	74 15	228 07	68 35	226 77	135 00	173 02	87 50	203 07	90 75	213 11	60 10	234 69	40 30	232 92	48 00	226 87
30-Nov-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
1-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
2-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
3-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
4-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
5-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
6-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
7-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
8-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
9-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
10-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
11-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
12-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
13-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
14-Dec-99	77 45	223 90	73 71	226 02	74 00	228 22	68 25	226 87	132 00	176 02	87 20	203 37	88 00	215 86	60 10	234 69	40 15	233 07	48 15	226 72
15-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
16-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
17-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
18-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
19-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
20-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
21-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
22-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
23-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
24-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
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26-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
27-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
28-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	

Well ID	MW-12		MW-13		MW-14		MW-15		MW-18		MW-19		MW-27		MW-28		MW-29		MW-30	
TOC Elevation	301 35		299 73		302 22		295 12		308 02		290 57		303 86		294 79		273 22		274 87	
Total Depth (ft)	87 00		83 00		80 00		81 00		140 00		96 40		93 60		69 00		54 00		59 00	
Location	Dunn Field		Dunn Field		Dunn Field		Dunn Field		Dunn Field		Depot		Depot		Dunn Field		Dunn Field		MLGW Facility	
DATE	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev
29-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
30-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
31-Dec-99	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
1-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
2-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
3-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
4-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
5-Jan-00	77 41	223 94	73 81	225 92	74 18	228 04	68 33	226 79	135 42	172 60	87 48	203 09	91 30	212 56	60 33	234 46	40 57	232 65	48 22	226 65
6-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
7-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
8-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
9-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
10-Jan-00	77 43	223 92	73 80	225 93	73 96	228 26	68 15	226 97	135 42	172 60	87 12	203 45	91 44	212 42	60 30	234 49	40 35	232 87	48 27	226 60
11-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
12-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
13-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
14-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
15-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
16-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
17-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
18-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
19-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
20-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
21-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
22-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
23-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
24-Jan-00	77 35	224 00	73 84	225 89	74 22	228 00	68 36	226 76	135 25	172 77	87 43	203 14	91 85	212 01	60 42	234 37	40 49	232 73	48 36	226 51
25-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
26-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
27-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
28-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
29-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
30-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
31-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
1-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
2-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
3-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
4-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
5-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
6-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
7-Feb-00	77 50	223 85	74 04	225 69	74 10	228 12	68 20	226 92	135 26	172 76	87 31	203 26	92 17	211 69	60 49	234 30	40 73	232 49	48 45	226 42
8-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
9-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
10-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
11-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
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13-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
14-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
15-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
16-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
17-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
18-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
19-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
20-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
21-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
22-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
23-Feb-00	77 50	223 85	73 53	226 20	74 05	228 17	68 20	226 92	135 10	172 92	87 30	203 27	92 51	211 35	60 56	234 23	40 79	232 43	48 52	226 35
24-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
25-[redacted]	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	

Well ID	MW-12		MW-13		MW-14		MW-15		MW-18		MW-19		MW-27		MW-28		MW-29		MW-30	
TOC Elevation	301 35		299 73		302 22		295 12		308 02		290 57		303 86		294 79		273 22		274 87	
Total Depth (ft)	87 00		83 00		80 00		81 00		140 00		96 40		93 60		69 00		54 00		59 00	
Location	Dunn Field		Dunn Field		Dunn Field		Dunn Field		Dunn Field		Depot		Depot		Dunn Field		Dunn Field		MLGW Facility	
DATE	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev
26-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
27-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
28-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
29-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
1-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
2-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
3-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
4-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
5-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
6-Mar-00	77 52	223 83	73 81	225 92	74 31	227 91	68 44	226 68	134 81	173 21	87 53	203 04	91 32	212 54	60 78	234 01	40 89	232 33	48 62	226 25
7-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
8-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
9-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
10-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
11-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
12-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
13-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
14-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
15-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
16-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
17-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
18-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
19-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
20-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
21-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
22-Mar-00	77 35	224 00	73 45	226 28	74 35	227 87	68 46	226 66	134 50	173 52	87 70	202 87	91 55	212 31	60 80	233 99	40 94	232 28	48 71	226 16
23-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
24-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
25-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
26-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
27-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
28-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
29-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
30-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
31-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
1-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
2-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
3-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
4-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
5-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
6-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
7-Apr-00	77 36	223 99	74 07	225 66	74 24	227 98	68 41	226 71	134 26	173 76	87 42	203 15	90 48	213 38	60 86	233 93	40 94	232 28	48 77	226 10
8-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
9-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
10-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
11-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
12-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
13-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
14-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
15-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
16-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
17-Apr-00	76 40	224 95	74 11	225 62	74 309	227 91	68 52	226 60	130 05	177 97	87 60	202 97	91 11	212 75	60 98	233 81	40 79	232 43	48 82	226 05
18-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
19-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
20-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
21-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
22-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
23-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
24-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	

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Well ID	MW-12		MW-13		MW-14		MW-15		MW-18		MW-19		MW-27		MW-28		MW-29		MW-30	
TOC Elevation	301 35		299 73		302 22		295 12		308 02		290 57		303 86		294 79		273 22		274 87	
Total Depth (ft)	87 00		83 00		80 00		81 00		140 00		96 40		93 60		69 00		54 00		59 00	
Location	Dunn Field		Dunn Field		Dunn Field		Dunn Field		Dunn Field		Depot		Depot		Dunn Field		Dunn Field		MLGW Facility	
DATE	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev
25-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
26-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
27-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
28-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
29-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
30-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
1-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
2-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
3-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
4-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
5-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
6-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
7-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
8-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
9-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
10-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
11-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
12-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
13-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
14-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
15-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
16-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
17-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
18-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
19-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
20-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
21-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
22-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
23-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
24-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
25-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
26-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
27-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
28-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
29-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
30-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
31-May-00	77 21	224 14	74 064	225 67	74 37	227 85	68 37	226 75	131 91	176 11	87 82	202 75	91 23	212 63	NM		40 67	232 55	48 73	226 14
1-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
2-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
3-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
4-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
5-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
6-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
7-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
8-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
9-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
10-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
11-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
12-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
13-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
14-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
15-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
16-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
17-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
18-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
19-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
20-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
21-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
22-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	

Well ID	MW-12		MW-13		MW-14		MW-15		MW-18		MW-19		MW-27		MW-28		MW-29		MW-30	
TOC Elevation	301 35		299 73		302.22		295 12		308 02		290 57		303 86		294 79		273 22		274 87	
Total Depth (ft)	87 00		83 00		80 00		81 00		140 00		96 40		93 60		69 00		54 00		59 00	
Location	Dunn Field		Dunn Field		Dunn Field		Dunn Field		Dunn Field		Depot		Depot		Dunn Field		Dunn Field		MLGW Facility	
DATE	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev
23-Jun-00	77 39	223 96	74 198	225 53	74 382	227 84	68 45	226 67	134 52	173 50	87 88	202 69	92 04	211 82	60 90	233 89	40 17	233 05	48 82	226 05
24-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
25-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
26-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
27-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
28-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
29-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
30-Jun-00	77 42	223 93	74 228	225 50	74 4	227 82	68 51	226 61	134 69	173 33	87 96	202 61	89 60	214 26	60 93	233 86	40 82	232 40	48 86	226 01
1-Jul-00																				
2-Jul-00																				
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4-Jul-00																				
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8-Jul-00																				
9-Jul-00																				
10-Jul-00	77 45	223 90	74 24	225 49	74 40	227 82	68 51	226 61	135 00	173 02	87 88	202 69	90 99	212 87	60 96	233 83	40 87	232 35	48 87	226 00
11-Jul-00																				
12-Jul-00																				
13-Jul-00																				
14-Jul-00																				
15-Jul-00																				
16-Jul-00																				
17-Jul-00																				
18-Jul-00																				
19-Jul-00	77 48	223 87	74 27	225 46	74 43	227 80	68 53	226 59	135 25	172 77	88 05	202 52	91 35	212 51	60 98	233 81	40 93	232 29	48 89	225 98
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21-Jul-00																				
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28-Jul-00																				
29-Jul-00																				
30-Jul-00																				
31-Jul-00																				
1-Aug-00																				
2-Aug-00	77 45	223 90	74 29	225 44	74 45	227 77	68 59	226 53	135 67	172 35	88 16	202 41	90 29	213 57	60 99	233 80	41 01	232 21	48 93	225 94
3-Aug-00																				
4-Aug-00																				
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15-Aug-00																				
16-Aug-00																				
17-Aug-00																				
18-Aug-00																				
19-Aug-00																				
20-Aug-00																				

Well ID	MW-12		MW-13		MW-14		MW-15		MW-18		MW-19		MW-27		MW-28		MW-29		MW-30	
TOC Elevation	301 35		299 73		302 22		295 12		308 02		290 57		303 86		294 79		273 22		274 87	
Total Depth (ft)	87 00		83 00		80 00		81 00		140 00		96 40		93 60		69 00		54 00		59 00	
Location	Dunn Field		Dunn Field		Dunn Field		Dunn Field		Dunn Field		Depot		Depot		Dunn Field		Dunn Field		MLGW Facility	
DATE	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev
21-Aug-00																				
22-Aug-00																				
23-Aug-00																				
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25-Aug-00																				
26-Aug-00																				
27-Aug-00																				
28-Aug-00																				
29-Aug-00																				
30-Aug-00	77 81	223 54	74 42	225 31	73 87	228 35	68 33	226 79	136 83	171 19	88 30	202 27	91 73	212 13	61 03	233 76	41 10	232 12	49 01	225 86
31-Aug-00																				
1-Sep-00																				
2-Sep-00																				
3-Sep-00																				
4-Sep-00																				
5-Sep-00																				
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15-Sep-00																				
16-Sep-00																				
17-Sep-00																				
18-Sep-00	77 87	223 48	74 49	225 24	74 42	227 80	NM	NM	132 06	175 96	89 89	200 68	89 88	213 98	61 47	233 32	41 07	232 15	49 08	225 79
19-Sep-00																				
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28-Sep-00																				
29-Sep-00																				
30-Sep-00	77 37	223 98	74 51	225 22	74 46	227 76	NM	NM	134 41	173 61	88 01	202 56	NM	NM	61 24	233 55	40 25	232 97	49 16	225 71
1-Oct-00																				
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15-Oct-00																				
16-Oct-00																				
17-Oct-00																				
18-Oct-00	77 94	223 41	74 57	225 16	74 43	227 79	65 89	229 23	[redacted]	---	NM	NM	92 99	210 87	61 21	233 58	41 33	231 89	[redacted]	230 22

Well ID	MW-12		MW-13		MW-14		MW-15		MW-16		MW-19		MW-27		MW-28		MW-29		MW-30	
TOC Elevation	301 35		299 73		302 22		295 12		306 02		290 57		303 86		294 79		273 22		274 87	
Total Depth (ft)	87 00		83 00		80 00		81 00		140 00		96 40		93 60		69 00		54 00		59 00	
Location	Dunn Field		Dunn Field		Dunn Field		Dunn Field		Dunn Field		Depot		Depot		Dunn Field		Dunn Field		MLGW Facility	
DATE	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev.
19-Oct-00																				
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28-Oct-00																				
29-Oct-00																				
30-Oct-00	77 80	223 55	74 60	225 14	74 38	227 85	—	—	DRY	—	88 68	201 89	—	—	61 37	233 42	41 38	231 84	—	—
31-Oct-00	77 86	223 49	74 63	225 11	74 38	227 86	68 92	226 20	DRY	—	88 74	201 83	DRY	—	61 31	233 48	41 46	231 76	49 37	225 50
1-Nov-00	77 69	223 66	74 58	225 15	74 40	227 83	68 86	226 26	DRY	—	88 77	201 80	DRY	—	61 31	233 48	41 41	231 81	49 30	225 57
2-Nov-00	77 62	223 73	74 57	225 16	74 41	227 82	68 86	226 26	DRY	—	88 76	201 81	DRY	—	61 36	233 43	41 43	231 79	49 31	225 56
3-Nov-00	77 63	223 72	74 50	225 23	74 33	227 89	68 96	226 16	DRY	—	88 82	201 75	DRY	—	61 35	233 44	41 44	231 78	49 30	225 57
4-Nov-00	77 51	223 84	74 47	225 26	74 32	227 90	68 89	226 23	DRY	—	88 66	201 91	DRY	—	61 27	233 52	41 48	231 74	49 28	225 59
5-Nov-00	77 50	223 85	74 44	225 29	74 32	227 91	68 86	226 26	DRY	—	88 40	202 17	DRY	—	61 25	233 54	41 48	231 74	49 25	225 62
6-Nov-00	77 41	223 94	74 41	225 33	74 31	227 92	68 72	226 40	DRY	—	88 40	202 17	DRY	—	61 20	233 59	41 38	231 84	49 20	225 67
7-Nov-00	77 46	223 89	74 40	225 33	74 39	227 83	68 96	226 16	132 38	175 64	88 87	201 70	DRY	—	61 36	233 43	41 40	231 82	49 33	225 54
8-Nov-00	77 38	223 97	74 36	225 37	74 38	227 84	68 86	226 26	DRY	—	88 81	201 76	DRY	—	61 23	233 56	41 37	231 85	—	—
9-Nov-00	77 40	223 95	74 35	225 38	74 38	227 84	68 61	226 51	DRY	—	88 99	201 58	DRY	—	61 45	233 34	41 41	231 81	49 20	225 67
10-Nov-00	77 46	223 89	74 34	225 39	74 41	227 81	69 01	226 11	DRY	—	89 12	201 45	DRY	—	61 43	233 36	41 48	231 74	49 40	225 47
11-Nov-00	77 38	223 97	74 31	225 42	74 41	227 81	69 10	226 02	139 31	168 71	89 12	201 45	DRY	—	61 37	233 42	41 43	231 79	49 39	225 48
12-Nov-00	77 33	224 02	74 29	225 44	74 40	227 83	68 61	226 51	133 71	174 31	88 87	201 70	DRY	—	61 37	233 42	41 43	231 79	49 29	225 58
13-Nov-00																				
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25-Nov-00																				
26-Nov-00																				
27-Nov-00	77 01	224 34	74 00	225 73	74 24	227 98	—	—	137 00	171 02	88 97	201 60	Dry	—	61 34	233 45	41 41	231 81	49 20	225 67
28-Nov-00	77 18	224 17	73 99	225 74	74 24	227 98	68 86	226 26	—	—	88 83	201 74	Dry	—	61 36	233 43	41 40	231 82	49 11	225 76
29-Nov-00	77 18	224 17	73 98	225 75	74 24	227 98	68 90	226 22	—	—	89 00	201 57	DRY	—	61 40	233 39	41 36	231 86	49 15	225 72
30-Nov-00	77 14	224 21	73 97	225 76	74 25	227 98	68 92	226 20	—	—	89 00	201 57	DRY	—	61 39	233 40	41 38	231 84	49 08	225 79
1-Dec-00	77 00	224 35	73 96	225 77	74 39	227 83	68 77	226 35	—	—	88 83	201 74	DRY	—	61 33	233 46	41 37	231 85	49 04	225 83
2-Dec-00	76 73	224 62	73 97	225 76	74 41	227 81	68 62	226 50	—	—	88 89	201 68	DRY	—	61 43	233 36	41 41	231 81	—	—
3-Dec-00	—	—	73 96	225 77	74 41	227 81	—	—	—	—	89 11	201 46	DRY	—	61 42	233 37	41 36	231 86	—	—
4-Dec-00																				
5-Dec-00																				
6-Dec-00																				
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15-Dec-00																				
16-Dec-00																				

Well ID	MW-12		MW-13		MW-14		MW-15		MW-18		MW-19		MW-27		MW-28		MW-29		MW-30	
TOC Elevation	301 35		299 73		302 22		295 12		308 02		290 57		303 86		294 79		273 22		274 87	
Total Depth (ft)	87 00		83 00		80 00		81 00		140 00		96 40		93 60		69 00		54 00		59 00	
Location	Dunn Field		Dunn Field		Dunn Field		Dunn Field		Dunn Field		Depot		Depot		Dunn Field		Dunn Field		MLGW Facility	
DATE	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev.	DTW (BTC)	GW Elev
17-Dec-00																				
18-Dec-00	76 93	224 42	Drff Sampler		74 40	227 82	68 92	226 20	NM	NM	88 41	202 16	87 45	216 41	61 49	233 30	41 48	231 74	49 01	225 86
19-Dec-00																				
20-Dec-00																				
21-Dec-00																				
22-Dec-00																				
23-Dec-00																				
24-Dec-00																				
25-Dec-00																				
26-Dec-00																				
27-Dec-00																				
28-Dec-00																				
29-Dec-00	76 53	224 82	Drff Sampler		74 42	227 80	68 69	226 43	NM	NM	88 40	202 17	Dry	---	61 35	233 44	41 35	231 87	49 25	225 62
30-Dec-00																				
31-Dec-00																				

APPENDIX B

QUARTERLY MONITORING WELL SAMPLES ANALYTICAL LABORATORY DATA

ENVIRONMENTAL TESTING & CONSULTING, INC.
2924 Walnut Grove Road • M[illegible]phis, TN 38111 • (901) 327-2750 • FAX (901) 327-6334
...nded 1972

November 20, 2000

Mr. Kraig Smith
Sverdrup/Jacobs Eng.
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Ref: Analytical Testing
ETC Order # 0011258
Project Description Memphis Depot

The above referenced project has been analyzed per your instructions. The analyses were performed in our laboratory in accordance with Standard Methods, The Solid Waste Manual SW-846, EPA Methods for Chemical Analysis of Water and Wastes and/or 40 CFR part 136.

The results are shown on the attached analysis sheet(s).

Please do not hesitate to contact our office if you have any questions.

Sincerely,

Chet Scheibel
Laboratory Project Manager

rt
Attachment

SVE_MHDDMT

Certifications

Tennessee	*#TN02027*	*Mississippi*	
Arkansas	*#40730*	*Oklahoma*	*#9311*
Kentucky	*#90047*	*Virginia*	*#00106*
North Carolina	*#415*	*Washington*	*#C248*
South Carolina	*#84002002*	*US Army Corps of Engineers*	

Environmental Testing & Consulting, Inc.

Data Qualifiers for Organic Reporting

Within the attached report, some analytical data may be reported as "Qualified Data" as indicated by a "Data Qualifier" next to the result This table summarizes the possible "Data Qualifiers" that may be associated with this report These qualifiers do not apply for TIC reports

Q	Surrogate Recovery Outside QC Limits
J	Estimated Value. Presence of the compound was confirmed but less than the reported detection limit.
E	Concentration exceeds the established method calibration range but is within the working range of the instrument.
B	Analyte detected in the associated Method Blank.
U	Reported result was unconfirmed. Refer to Case Narrative.
N	Non-Compliance Report associated with this sample or project.
C	Result reported from GC/MS confirmation analysis.
M	Result reported represents a minimum value. Refer to Case Narrative.
NC	Result reported from Primary Column. Result did not confirm.
*	QC Data (percent recovery/RPD for a particular analyte was outside QC Limits)

ENVIRONMENTAL TESTING AND CONSULTING, INC.
CASE NARRATIVE
INORGANICS – AQUEOUS

Client Name Sverdrup/Jacobs Engineering
Project Name Memphis Depot

ETC Order # 0011-258

HOLDING TIMES

Sample Analysis — All samples analyzed within Method Specified Holding Times.

METHOD

Preparation/Analysis: 335.2

QUALITY CONTROL

QC Batch
CY111301

Method Blank
No Target Analytes detected above Detection Limit.

Laboratory Control Sample
Spike Recovery — All analytes within QC limits

Matrix Spike/Matrix Spike Duplicate
RPD — All analytes within QC limits
Spike Recovery — All analytes within QC limits

CALIBRATION

All acceptance criteria met.

SAMPLE ANALYSIS

Dilutions Required — No dilutions required.

Project Manager

613 130

ENVIRONMENTAL TESTING AND CONSULTING, INC.
CASE NARRATIVE
METALS - AQUEOUS

Client Name Sverdrup/Jacobs Engineering
Project Name Memphis Depot

ETC Order # 0011-258

HOLDING TIMES

QC Batch(s) for this order	ICP Metals	V23-AQ-16
	Mercury	V7-AQ-64

Sample Preparation/Analysis	All samples digested/ analyzed within holding time.
Mercury Preparation/Analysis	All samples analyzed within 28 days of collection.

METHOD

Preparation:	SW-846 245.1/3030K
Analysis:	SW-846 200.7/245.1

CALIBRATION

Initial Calibration	All criteria met.
Continuing Calibration	All criteria met.

SAMPLE ANALYSIS

Instrumentation: Thermo Jarrell Ash Enviro-I ICP
CETAC M-6000A Mercury Analyzer
Dilutions Required Dilutions required on one sample. Refer to the Dilutions Table.

QUALITY CONTROL

0011-258.MQCBLANK
Method Blank

V23-AQ-16BLK	ICP Metals
V7-AQ-64BLK	Mercury

Calcium was detected in V23-AQ-17BLK at 0.028 mg/L. Sample concentration less than 5 times the method blank value (0.14 mg/L) should be attributed to Lab contamination. This analyte was detected in the associated project samples at concentrations greater than 5 times the method blank value.

0011-258.MQCLCS
Laboratory Control Sample(s)

V23-AQ-16LCS	ICP Metals
V7-AQ-64LCS	Mercury

All acceptance criteria met.

0011-258.MQCMSMSD
Matrix Spike / Matrix Spike Dup - ICP Metals

0011-258-07	RPD	All analytes within QC limits, except as listed below.
MW-59-Y2Q4	Spike Recovery	All analytes within QC limits, except as listed below.

ENVIRONMENTAL TESTING AND CONSULTING, INC.
CASE NARRATIVE
METALS - AQUEOUS

Client Name Sverdrup/Jacobs Engineering
Project Name Memphis Depot

ETC Order # 0011-258

QUALITY CONTROL

Antimony was flagged as outside QC Limits in the Matrix Spike Duplicate. A Post Digestion Spike was performed for verification.

Aluminum and Iron were flagged as outside QC Limits due to the level of these analytes present relative to the spike amounts. Dilution Tests were performed for verification.

Silver and Antimony were flagged for slightly low recovery in the MSD. MS recoveries were within control limits.

RPD for Silver was flagged for high recovery due to variances in the MS/MSD recoveries.

Refer to Form 5B, Post Digest Spike, and Form 9, Serial Dilutions. All Criteria were met.

Refer to Laboratory Control Sample(s) for system verification.

Matrix Spike / Matrix Spike Dup - Hg

0011-258-07	RPD	All analytes within QC limits.
MW-59-Y2Q4	Spike Recovery	All analytes within QC limits.

Refer to Laboratory Control Sample(s) for system verification.

Dilution Test — Dilution result must agree within 10% of original result when sample is diluted by a factor of 5.

Post Digestion Spike — Recovery must be +/-25% of expected value for ICP.

Project Manager

613 132

ENVIRONMENTAL TESTING AND CONSULTING, INC.
CASE NARRATIVE
GC/MS VOLATILE COMPOUNDS - AQUEOUS

Client Name Sverdrup/Jacobs Engineering
Project Name Memphis Depot

ETC Order # 0011-258

SAMPLE PRESERVATION (Verified at time of analysis)

All aqueous samples preserved to pH < 2.

METHOD

Preparation: SW-846 5030B
Analysis: SW-846 8260B

HOLDING TIMES

Sample Analysis — All samples analyzed within 14 days of collection.

QUALITY CONTROL

QC Batch	Form 4 Summary
V4111001	V4111011LB
V4111301	V4111311LB

System Monitoring Compounds FORM 2
Surrogate recoveries within QC limits.

Method Blank FORM 4
V4111011LB
V4111311LB

Target Analytes were not detected in the Method Blanks, except as listed below.

V4111011LB

Methylene Chloride was detected at a concentration of 3.04J ug/L. This analyte was not identified in associated project samples. There is no effect on the data.

V4111311LB

Methylene Chloride was detected at a concentration of 1.16J ug/L. This analyte was not identified in associated project samples. There is no effect on the data.

Laboratory Control Sample FORM 3
V4111011LCS
V4111311LCS

All acceptance criteria met, except as listed below.

ENVIRONMENTAL TESTING AND CONSULTING, INC.
CASE NARRATIVE
GC/MS VOLATILE COMPOUNDS - AQUEOUS

Client Name Sverdrup/Jacobs Engineering
Project Name Memphis Depot

ETC Order # 0011-258

QUALITY CONTROL

V4111011LCS

Bromochloromethane (non-target analyte), Furan (non-target analyte), and 2-Methyl-4-Pentanone were flagged for high recovery in the LCS. 2-Methyl-4-Pentanone was not detected in associated samples. There is no effect on the data.

V4111311LCS

Bromochloromethane and Furan, which were both non-target analytes, were flagged for high recovery in the LCS. There is no effect on the data.

Matrix Spike / Matrix Spike Dup. FORM 3
Batch V4111001

0011-216-11	RPD	All analytes within QC limits.
FB-Y2Q4	Spike Recovery	All analytes within QC limits.

Refer to Laboratory Control Sample(s) for system verification.

Matrix Spike / Matrix Spike Dup. FORM 3
Batch V4111301

0011-216-03	RPD	All analytes within QC limits.
MW-15-Y2Q4	Spike Recovery	All analytes within QC limits.

Refer to Laboratory Control Sample(s) for system verification.

CALIBRATION

BFB Daily 12-Hour Tune	All criteria met. FORM 5
Initial Calibration	All criteria met. FORM 6
Calibration Verification	All criteria met. FORM 7, except as listed below.

Calibration Verification (CV): Date 11/10/00 Time: 1004

Analyte	%Diff(30% Max)	Response
4-Methyl-2-Pentanone	+58.9	High

Samples affected by this CV include V4111011LB, V4111011LCS, 0011-216-11MS/MSD, 0011-258-01 through 0011-258-06. High response indicates that reported levels for this analyte may be biased high. This analyte was not identified in associated project samples. There is no effect on the data.

Volatile Internal Standard Area and RT FORM 8
Daily Check Standard(s) Internal Standard Areas and Retention Times within QC limits

SAMPLE ANALYSIS

Instrumentation	HP 5890 Series II GC, 5971MSD
Dilutions Required	No dilutions required.

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ENVIRONMENTAL TESTING AND CONSULTING, INC.
CASE NARRATIVE
GC/MS VOLATILE COMPOUNDS - AQUEOUS

Client Name Sverdrup/Jacobs Engineering
Project Name Memphis Depot

ETC Order # 0011-258

OTHER

Sample 0011-216-11MSD was analyzed outside the 12-hour tune time There is no effect on the data

CS

Project Manager

ENVIRONMENTAL TESTING AND CONSULTING, INC.
CASE NARRATIVE
GC/MS SEMI-VOLATILE COMPOUNDS - AQUEOUS

Client Name Sverdrup/Jacobs Engineering
Project Name Memphis Defense Depot

ETC Order # 0011-258

HOLDING TIMES

Sample Extraction — All aqueous samples extracted within 7 days.
Sample Analysis — All samples analyzed within 40 days of extraction.

METHOD

Sample Preparation: SW-836 3510C

Sample Analysis: SW-846 8270C

QUALITY CONTROL

QC Batch	Form 4 Summary
P06008	P06008LB
P06009	P06009LB

System Monitoring Compounds FORM 2
Surrogate recoveries within QC limits.

Method Blank FORM 4
P06008LB
P06009LB

Target analytes were not detected in the Method Blank, except as listed below.

P06008LB

Bis(2-ethylhexyl)phthalate was detected in the Method Blank at 1.10J ug/L. This analyte was not identified in associated project samples. There is no effect on the data.

P06009LB

Bis(2-ethylhexyl)phthalate, Di-n-butylphthalate, and Nitrobenzene was detected in the Method Blank at 1.01J ug/L, 0.592J ug/L, and 0.288J ug/L, respectively. These analytes were not identified in associated project sample. There is no effect on the data.

Laboratory Control Sample FORM 3
P06008LCS
P06009LCS/LCSD

All acceptance criteria met, except as listed below.

P06009LCS/LCSD

Benzidine, non-target analyte, was flagged for a low recovery in the LCS/LCSD. 3,3-Dimthylbenzidine, non-target analyte, was flagged for no recovery in the MSD. There is no effect on the data.

RPD was flagged for high recovery for six analytes due to variances in the LCS and LCSD recoveries

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ENVIRONMENTAL TESTING AND CONSULTING, INC.
CASE NARRATIVE
GC/MS SEMI-VOLATILE COMPOUNDS - AQUEOUS

Client Name Sverdrup/Jacobs Engineering
Project Name Memphis Defense Depot

ETC Order # 0011-258

Matrix Spike / Matrix Spike Dup FORM 3
Batch P06008

0011-091-01	RPD	All analytes within QC limits, except as listed below
ST-EFF-029	Spike Recovery	All analytes within QC limits, except as listed below.

Three analytes exceed control limits in the MS/MSD. Eight analytes exceed control limits in the MSD. The sample selected for the batch spike was not from this project. There is no effect on the data.

RPD exceeds control limits for 10 of 12 compounds due to variances in the MS and MSD.

Refer to Laboratory Control Sample(s) for system verification.

Matrix Spike / Matrix Spike Dup. FORM 3
Batch P06009

Due to limited sample volume, no MS/MSD were analyzed.

Refer to Laboratory Control Samples(s) for system verification.

CALIBRATION

DFTPP Daily 12-Hour Tune	All criteria met. FORM 5
Initial Calibration	All criteria met. FORM 6
Calibration Verification	All criteria met. FORM 7

Semi-Volatile Internal Standard Area and RT FORM 8
Daily Check Standard(s) Internal Standard Areas and Retention Times within QC limits

SAMPLE ANALYSIS

Instrumentation	HP 5890 Series II GC, 5971MSD
Dilutions Required	No dilutions required.

( )
Project Manager

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

ANALYTICAL SUMMARY/CROSS REFERENCE TABLE

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Client Name **Sverdrup/Jacobs Eng.** ETC Order #0011258

Site ID **Memphis Depot**

ETC Sample ID	Field ID	Matrix	Method	Method Description
001125801	MW-51-Y2Q4	AQUEOUS	335.2	Cyanide
001125801	MW-51-Y2Q4	AQUEOUS	200.7	Silver
001125801	MW-51-Y2Q4	AQUEOUS	200.7	Aluminum
001125801	MW-51-Y2Q4	AQUEOUS	200.7	Arsenic
001125801	MW-51-Y2Q4	AQUEOUS	200.7	Barium
001125801	MW-51-Y2Q4	AQUEOUS	200.7	Beryllium
001125801	MW-51-Y2Q4	AQUEOUS	200.7	Calcium
001125801	MW-51-Y2Q4	AQUEOUS	200.7	Cadmium
001125801	MW-51-Y2Q4	AQUEOUS	200.7	Cobalt
001125801	MW-51-Y2Q4	AQUEOUS	200.7	Chromium
001125801	MW-51-Y2Q4	AQUEOUS	200.7	Copper
001125801	MW-51-Y2Q4	AQUEOUS	200.7	Iron
001125801	MW-51-Y2Q4	AQUEOUS	245.1	Mercury
001125801	MW-51-Y2Q4	AQUEOUS	200.7	Potassium
001125801	MW-51-Y2Q4	AQUEOUS	200.7	Magnesium
001125801	MW-51-Y2Q4	AQUEOUS	200.7	Manganese
001125801	MW-51-Y2Q4	AQUEOUS	200.7	Sodium
001125801	MW-51-Y2Q4	AQUEOUS	200.7	Nickel
001125801	MW-51-Y2Q4	AQUEOUS	200.7	Lead
001125801	MW-51-Y2Q4	AQUEOUS	200.7	Antimony
001125801	MW-51-Y2Q4	AQUEOUS	200.7	Selenium
001125801	MW-51-Y2Q4	AQUEOUS	200.7	Thallium
001125801	MW-51-Y2Q4	AQUEOUS	200.7	Vanadium
001125801	MW-51-Y2Q4	AQUEOUS	200.7	Zinc
001125801	MW-51-Y2Q4	AQUEOUS	8260B	GC/MS Volatile Organics
001125801	MW-51-Y2Q4	AQUEOUS	8270C	GC/MS Base/Neutral & Acid
001125802	RB-Y2Q4	AQUEOUS	335.2	Cyanide
001125802	RB-Y2Q4	AQUEOUS	200.7	Silver
001125802	RB-Y2Q4	AQUEOUS	200.7	Aluminum
001125802	RB-Y2Q4	AQUEOUS	200.7	Arsenic
001125802	RB-Y2Q4	AQUEOUS	200.7	Barium
001125802	RB-Y2Q4	AQUEOUS	200.7	Beryllium
001125802	RB-Y2Q4	AQUEOUS	200.7	Calcium
001125802	RB-Y2Q4	AQUEOUS	200.7	Cadmium
001125802	RB-Y2Q4	AQUEOUS	200.7	Cobalt
001125802	RB-Y2Q4	AQUEOUS	200.7	Chromium
001125802	RB-Y2Q4	AQUEOUS	200.7	Copper
001125802	RB-Y2Q4	AQUEOUS	200.7	Iron
001125802	RB-Y2Q4	AQUEOUS	245.1	Mercury
001125802	RB-Y2Q4	AQUEOUS	200.7	Potassium
001125802	RB-Y2Q4	AQUEOUS	200.7	Magnesium
001125802	RB-Y2Q4	AQUEOUS	200.7	Manganese
001125802	RB-Y2Q4	AQUEOUS	200.7	Sodium
001125802	RB-Y2Q4	AQUEOUS	200.7	Nickel
001125802	RB-Y2Q4	AQUEOUS	200.7	Lead
001125802	RB-Y2Q4	AQUEOUS	200.7	Antimony
001125802	RB-Y2Q4	AQUEOUS	200.7	Selenium
001125802	RB-Y2Q4	AQUEOUS	200.7	Thallium
001125802	RB-Y2Q4	AQUEOUS	200.7	Vanadium
001125802	RB-Y2Q4	AQUEOUS	200.7	Zinc
001125802	RB-Y2Q4	AQUEOUS	8260B	GC/MS Volatile Organics
001125802	RB-Y2Q4	AQUEOUS	8270C	GC/MS Base/Neutral & Acid
001125803	MW-40-Y2Q4	AQUEOUS	335.2	Cyanide
001125803	MW-40-Y2Q4	AQUEOUS	200.7	Silver
001125803	MW-40-Y2Q4	AQUEOUS	200.7	Aluminum

ENVIRONMENTAL TESTING & CONSULTING, INC.

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ANALYTICAL SUMMARY/CROSS REFERENCE TABLE

Client Name Sverdrup/Jacobs Eng.
Site ID Memphis Depot

ETC Order #0011258

ETC Sample ID	Field ID	Matrix	Method	Method Description
001125803	MW-40-Y2Q4	AQUEOUS	200 7	Arsenic
001125803	MW-40-Y2Q4	AQUEOUS	200.7	Barium
001125803	MW-40-Y2Q4	AQUEOUS	200 7	Beryllium
001125803	MW-40-Y2Q4	AQUEOUS	200.7	Calcium
001125803	MW-40-Y2Q4	AQUEOUS	200 7	Cadmium
001125803	MW-40-Y2Q4	AQUEOUS	200.7	Cobalt
001125803	MW-40-Y2Q4	AQUEOUS	200.7	Chromium
001125803	MW-40-Y2Q4	AQUEOUS	200.7	Copper
001125803	MW-40-Y2Q4	AQUEOUS	200.7	Iron
001125803	MW-40-Y2Q4	AQUEOUS	245.1	Mercury
001125803	MW-40-Y2Q4	AQUEOUS	200.7	Potassium
001125803	MW-40-Y2Q4	AQUEOUS	200.7	Magnesium
001125803	MW-40-Y2Q4	AQUEOUS	200.7	Manganese
001125803	MW-40-Y2Q4	AQUEOUS	200.7	Sodium
001125803	MW-40-Y2Q4	AQUEOUS	200.7	Nickel
001125803	MW-40-Y2Q4	AQUEOUS	200.7	Lead
001125803	MW-40-Y2Q4	AQUEOUS	200.7	Antimony
001125803	MW-40-Y2Q4	AQUEOUS	200.7	Selenium
001125803	MW-40-Y2Q4	AQUEOUS	200.7	Thallium
001125803	MW-40-Y2Q4	AQUEOUS	200.7	Vanadium
001125803	MW-40-Y2Q4	AQUEOUS	200.7	Zinc
001125803	MW-40-Y2Q4	AQUEOUS	8260B	GC/MS Volatile Organics
		AQUEOUS	8270C	GC/MS Base/Neutral & Acid
001125804	MW-44-Y2Q4	AQUEOUS	335.2	Cyanide
001125804	MW-44-Y2Q4	AQUEOUS	200.7	Silver
001125804	MW-44-Y2Q4	AQUEOUS	200.7	Aluminum
001125804	MW-44-Y2Q4	AQUEOUS	200.7	Arsenic
001125804	MW-44-Y2Q4	AQUEOUS	200.7	Barium
001125804	MW-44-Y2Q4	AQUEOUS	200.7	Beryllium
001125804	MW-44-Y2Q4	AQUEOUS	200.7	Calcium
001125804	MW-44-Y2Q4	AQUEOUS	200.7	Cadmium
001125804	MW-44-Y2Q4	AQUEOUS	200.7	Cobalt
001125804	MW-44-Y2Q4	AQUEOUS	200.7	Chromium
001125804	MW-44-Y2Q4	AQUEOUS	200.7	Copper
001125804	MW-44-Y2Q4	AQUEOUS	200.7	Iron
001125804	MW-44-Y2Q4	AQUEOUS	245.1	Mercury
001125804	MW-44-Y2Q4	AQUEOUS	200.7	Potassium
001125804	MW-44-Y2Q4	AQUEOUS	200.7	Magnesium
001125804	MW-44-Y2Q4	AQUEOUS	200.7	Manganese
001125804	MW-44-Y2Q4	AQUEOUS	200.7	Sodium
001125804	MW-44-Y2Q4	AQUEOUS	200.7	Nickel
001125804	MW-44-Y2Q4	AQUEOUS	200.7	Lead
001125804	MW-44-Y2Q4	AQUEOUS	200.7	Antimony
001125804	MW-44-Y2Q4	AQUEOUS	200.7	Selenium
001125804	MW-44-Y2Q4	AQUEOUS	200.7	Thallium
001125804	MW-44-Y2Q4	AQUEOUS	200.7	Vanadium
001125804	MW-44-Y2Q4	AQUEOUS	200.7	Zinc
001125804	MW-44-Y2Q4	AQUEOUS	8260B	GC/MS Volatile Organics
001125804	MW-44-Y2Q4	AQUEOUS	8270C	GC/MS Base/Neutral & Acid
001125805	MW-33-Y2Q4	AQUEOUS	335 2	Cyanide
001125805	MW-33-Y2Q4	AQUEOUS	200.7	Silver
001125805	MW-33-Y2Q4	AQUEOUS	200.7	Aluminum
001125805	MW-33-Y2Q4	AQUEOUS	200.7	Arsenic
001125805	MW-33-Y2Q4	AQUEOUS	200.7	Barium
001125805	MW-33-Y2Q4	AQUEOUS	200.7	Beryllium
001125805	MW-33-Y2Q4	AQUEOUS	200.7	Calcium

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

ANALYTICAL SUMMARY/CROSS REFERENCE TABLE

Client Name **Sverdrup/Jacobs Eng.** ETC Order #0011258

Site ID **Memphis Depot**

ETC Sample ID	Field ID	Matrix	Method	Method Description
001125805	MW-33-Y2Q4	AQUEOUS	200.7	Cadmium
001125805	MW-33-Y2Q4	AQUEOUS	200.7	Cobalt
001125805	MW-33-Y2Q4	AQUEOUS	200.7	Chromium
001125805	MW-33-Y2Q4	AQUEOUS	200.7	Copper
001125805	MW-33-Y2Q4	AQUEOUS	200.7	Iron
001125805	MW-33-Y2Q4	AQUEOUS	245.1	Mercury
001125805	MW-33-Y2Q4	AQUEOUS	200.7	Potassium
001125805	MW-33-Y2Q4	AQUEOUS	200.7	Magnesium
001125805	MW-33-Y2Q4	AQUEOUS	200.7	Manganese
001125805	MW-33-Y2Q4	AQUEOUS	200.7	Sodium
001125805	MW-33-Y2Q4	AQUEOUS	200.7	Nickel
001125805	MW-33-Y2Q4	AQUEOUS	200.7	Lead
001125805	MW-33-Y2Q4	AQUEOUS	200.7	Antimony
001125805	MW-33-Y2Q4	AQUEOUS	200.7	Selenium
001125805	MW-33-Y2Q4	AQUEOUS	200.7	Thallium
001125805	MW-33-Y2Q4	AQUEOUS	200.7	Vanadium
001125805	MW-33-Y2Q4	AQUEOUS	200.7	Zinc
001125805	MW-33-Y2Q4	AQUEOUS	8260B	GC/MS Volatile Organics
001125805	MW-33-Y2Q4	AQUEOUS	8270C	GC/MS Base/Neutral & Acid
001125806	MW-68-Y2Q4	AQUEOUS	335.2	Cyanide
001125806	MW-68-Y2Q4	AQUEOUS	200.7	Silver
001125806	MW-68-Y2Q4	AQUEOUS	200.7	Aluminum
001125806	MW-68-Y2Q4	AQUEOUS	200.7	Arsenic
001125806	MW-68-Y2Q4	AQUEOUS	200.7	Barium
001125806	MW-68-Y2Q4	AQUEOUS	200.7	Beryllium
001125806	MW-68-Y2Q4	AQUEOUS	200.7	Calcium
001125806	MW-68-Y2Q4	AQUEOUS	200.7	Cadmium
001125806	MW-68-Y2Q4	AQUEOUS	200.7	Cobalt
001125806	MW-68-Y2Q4	AQUEOUS	200.7	Chromium
001125806	MW-68-Y2Q4	AQUEOUS	200.7	Copper
001125806	MW-68-Y2Q4	AQUEOUS	200.7	Iron
001125806	MW-68-Y2Q4	AQUEOUS	245.1	Mercury
001125806	MW-68-Y2Q4	AQUEOUS	200.7	Potassium
001125806	MW-68-Y2Q4	AQUEOUS	200.7	Magnesium
001125806	MW-68-Y2Q4	AQUEOUS	200.7	Manganese
001125806	MW-68-Y2Q4	AQUEOUS	200.7	Sodium
001125806	MW-68-Y2Q4	AQUEOUS	200.7	Nickel
001125806	MW-68-Y2Q4	AQUEOUS	200.7	Lead
001125806	MW-68-Y2Q4	AQUEOUS	200.7	Antimony
001125806	MW-68-Y2Q4	AQUEOUS	200.7	Selenium
001125806	MW-68-Y2Q4	AQUEOUS	200.7	Thallium
001125806	MW-68-Y2Q4	AQUEOUS	200.7	Vanadium
001125806	MW-68-Y2Q4	AQUEOUS	200.7	Zinc
001125806	MW-68-Y2Q4	AQUEOUS	8260B	GC/MS Volatile Organics
001125806	MW-68-Y2Q4	AQUEOUS	8270C	GC/MS Base/Neutral & Acid
001125807	MW-59-Y2Q4	AQUEOUS	335.2	Cyanide
001125807	MW-59-Y2Q4	AQUEOUS	200.7	Silver
001125807	MW-59-Y2Q4	AQUEOUS	200.7	Aluminum
001125807	MW-59-Y2Q4	AQUEOUS	200.7	Arsenic
001125807	MW-59-Y2Q4	AQUEOUS	200.7	Barium
001125807	MW-59-Y2Q4	AQUEOUS	200.7	Beryllium
001125807	MW-59-Y2Q4	AQUEOUS	200.7	Calcium
001125807	MW-59-Y2Q4	AQUEOUS	200 7	Cadmium
001125807	MW-59-Y2Q4	AQUEOUS	200 7	Cobalt
001125807	MW-59-Y2Q4	AQUEOUS	200.7	Chromium
001125807	MW-59-Y2Q4	AQUEOUS	200.7	Copper

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

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ANALYTICAL SUMMARY/CROSS REFERENCE TABLE

Client Name **Sverdrup/Jacobs Eng.**
Site ID **Memphis Depot**

ETC Order #0011258

ETC Sample ID	Field ID	Matrix	Method	Method Description
001125807	MW-59-Y2Q4	AQUEOUS	200.7	Iron
001125807	MW-59-Y2Q4	AQUEOUS	245 1	Mercury
001125807	MW-59-Y2Q4	AQUEOUS	200.7	Potassium
001125807	MW-59-Y2Q4	AQUEOUS	200.7	Magnesium
001125807	MW-59-Y2Q4	AQUEOUS	200 7	Manganese
001125807	MW-59-Y2Q4	AQUEOUS	200 7	Sodium
001125807	MW-59-Y2Q4	AQUEOUS	200.7	Nickel
001125807	MW-59-Y2Q4	AQUEOUS	200 7	Lead
001125807	MW-59-Y2Q4	AQUEOUS	200.7	Antimony
001125807	MW-59-Y2Q4	AQUEOUS	200.7	Selenium
001125807	MW-59-Y2Q4	AQUEOUS	200.7	Thallium
001125807	MW-59-Y2Q4	AQUEOUS	200.7	Vanadium
001125807	MW-59-Y2Q4	AQUEOUS	200.7	Zinc
001125807	MW-59-Y2Q4	AQUEOUS	8260B	GC/MS Volatile Organics
		AQUEOUS	8270C	GC/MS Base/Neutral & Acid
001125808	TB-02	AQUEOUS	8260B	GC/MS Volatile Organics

Environmental Testing & Consulting, Inc.

Sample Reports

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

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Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

Date Arrived **11/08/00**
ETC Order Number **0011258**

ETC Lab ID : **0011258-01**
Field ID : **MW-51-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/08/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	BY	METHOD	QC BATCH
Cyanide	<0.010	mg/L	0.010	11/13/00	GD	335.2	CY111301

CS

Data Validator

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.
2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

Date Arrived **11/08/00**
ETC Order Number **0011258**

ETC Lab ID : **0011258-02**
Field ID : **RB-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/08/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	BY	METHOD	QC BATCH
Cyanide	<0.010	mg/L	0.010	11/13/00	GD	335.2	CY111301

CS
Data Validator

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

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Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

Date Arrived **11/08/00**
ETC Order Number **0011258**

ETC Lab ID : **0011258-03**
Field ID : **MW-40-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/08/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	BY	METHOD	QC BATCH
Cyanide	<0.010	mg/L	0.010	11/13/00	GD	335.2	CY111301

CS
Data Validator

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.
2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

Date Arrived **11/08/00**
ETC Order Number **0011258**

ETC Lab ID : **0011258-04**
Field ID : **MW-44-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/08/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	BY	METHOD	QC BATCH
Cyanide	<0.010	mg/L	0.010	11/13/00	GD	335.2	CY111301

Data Validator

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

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Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

Date Arrived **11/08/00**
ETC Order Number **0011258**

ETC Lab ID : **0011258-05**
Field ID : **MW-33-Y2Q4**

Matrix : **AQUEOUS**
Sample Date . **11/08/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	BY	METHOD	QC BATCH
Cyanide	<0.010	mg/L	0.010	11/13/00	GD	335.2	CY111301

Data Validator

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 147

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

Date Arrived **11/08/00**
ETC Order Number **0011258**

ETC Lab ID : **0011258-06**
Field ID : **MW-68-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/08/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	BY	METHOD	QC BATCH
Cyanide	<0.010	mg/L	0.010	11/13/00	GD	335.2	CY111301

CS
Data Validator

ND - Not Detected

613 148

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

Date Arrived **11/08/00**
ETC Order Number **0011258**

ETC Lab ID : **0011258-07**
Field ID : **MW-59-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/08/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	BY	METHOD	QC BATCH
Cyanide	<0.010	mg/L	0.010	11/13/00	GD	335.2	CY111301

CS
Data Validator

ND - Not Detected

Environmental Testing & Consulting, Inc.

Quality Control Reports
Level III
Inorganics

313 150

METHOD BLANK
INORGANICS

Lab Name. Environmental Testing and Consulting, Inc

Analyte	QC Sample No	QC Batch	Result	Detection Limit	Units	Date Analyzed	Method
Cyanide	CY1113011 BLK	CY111301	ND	0 010	mg/L	11/13/00	335 2

NA - Not Applicable per Method
ND - Not Detected

Reviewed by:

LABORATORY CONTROL SAMPLE
INORGANICS

Lab Name. Environmental Testing and Consulting, Inc

Analyte	QC Sample No.	QC Batch	Spike Added	Found	Units	% Rec #	QC Limits	
Cyanide	CY1113011 CS	CY111301	0.200	0 194	mg/L	97	90	110

ND - Not Detected
Column to be used to flag recovery values with an asterisk
* Values outside of QC limits

Reviewed by _____

613 152

MATRIX SPIKE / MATRIX SPIKE DUPLICATE
INORGANICS

Lab Name: Environmental Testing and Consulting, Inc

Analyte	QC Sample No	QC Batch	SPIKE Added	SAMPLE Result	MS Result	Units	MS % Rec #	QC Limits	
Cyanide	0011-258-01 MS	CY111301	0 200	ND	0 184	mg/L	92	64	114

Analyte	QC Sample No	QC Batch	SPIKE Added	SAMPLE Result	MSD Result	Units	MSD % Rec #	QC Limits	
Cyanide	0011-258-01 MSD	CY111301	0.200	ND	0 189	mg/L	95	64	114

ND - Not Detected
Column to be used to flag recovery values with an asterisk
* Values outside of QC limits

Reviewed by:

ENVIRONMENTAL TESTING & CONSULTING, INC.
2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 153

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

Date Arrived **11/08/00**
ETC Order Number **0011258**

ETC Lab ID : **0011258-01**
Field ID : **MW-51-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/08/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE PREPARED	BY	METHOD
Mercury Digestion Batch	V7-AQ-63			11/13/00	11/13/00	JF	245.1
Metals Digestion Batch	V23-AQ-16			11/10/00	11/10/00	NR	3030K
Silver	<0.009	mg/L	0.009	11/14/00	11/10/00	SH	200.7
Aluminum	1.78	mg/L	0.060	11/14/00	11/10/00	SH	200.7
Arsenic	<0.003	mg/L	0.003	11/14/00	11/10/00	SH	200.7
Barium	0.102	mg/L	0.003	11/14/00	11/10/00	SH	200.7
Beryllium	<0.002	mg/L	0.002	11/14/00	11/10/00	SH	200.7
Calcium	23.8	mg/L	0.015	11/14/00	11/10/00	SH	200.7
Cadmium	<0.005	mg/L	0.005	11/14/00	11/10/00	SH	200.7
Cobalt	<0.009	mg/L	0.009	11/14/00	11/10/00	SH	200.7
Chromium	<0.009	mg/L	0.009	11/14/00	11/10/00	SH	200.7
Copper	<0.008	mg/L	0.008	11/14/00	11/10/00	SH	200.7
Iron	2.30	mg/L	0.009	11/14/00	11/10/00	SH	200.7
Mercury	<0.0002	mg/L	0.0002	11/13/00	11/13/00	JF	245.1
Potassium	1.32	mg/L	0.250	11/14/00	11/10/00	SH	200.7
[illegible]esium	11.0	mg/L	0.040	11/14/00	11/10/00	SH	200.7
[illegible]nese	0.026	mg/L	0.003	11/14/00	11/10/00	SH	200.7
[illegible]n	20.9	mg/L	0.050	11/14/00	11/10/00	SH	200.7
Nickel	<0.020	mg/L	0.020	11/14/00	11/10/00	SH	200.7
Lead	<0.060	mg/L	0.060	11/14/00	11/10/00	SH	200.7
Antimony	<0.040	mg/L	0.040	11/14/00	11/10/00	SH	200.7
Selenium	<0.100	mg/L	0.100	11/14/00	11/10/00	SH	200.7
Thallium	<0.065	mg/L	0.065	11/14/00	11/10/00	SH	200.7
Vanadium	<0.010	mg/L	0.010	11/14/00	11/10/00	SH	200.7
Zinc	0.010	mg/L	0.010	11/14/00	11/10/00	SH	200.7

CS
Data Validator

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 154

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

Date Arrived **11/08/00**
ETC Order Number **0011258**

ETC Lab ID : **0011258-02**
Field ID : **RB-Y2Q4**

Matrix : AQUEOUS
Sample Date : **11/08/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE PREPARED	BY	METHOD
Mercury Digestion Batch	V7-AQ-63			11/13/00	11/13/00	JF	245.1
Metals Digestion Batch	V23-AQ-16			11/10/00	11/10/00	NR	3030K
Silver	<0.009	mg/L	0.009	11/14/00	11/10/00	SH	200.7
Aluminum	<0.060	mg/L	0.060	11/14/00	11/10/00	SH	200.7
Arsenic	<0.003	mg/L	0.003	11/14/00	11/10/00	SH	200.7
Barium	<0.003	mg/L	0.003	11/14/00	11/10/00	SH	200.7
Beryllium	<0.002	mg/L	0.002	11/14/00	11/10/00	SH	200.7
Calcium	0.100	mg/L	0.015	11/14/00	11/10/00	SH	200.7
Cadmium	<0.005	mg/L	0.005	11/14/00	11/10/00	SH	200.7
Cobalt	<0.009	mg/L	0.009	11/14/00	11/10/00	SH	200.7
Chromium	<0.009	mg/L	0.009	11/14/00	11/10/00	SH	200.7
Copper	<0.008	mg/L	0.008	11/14/00	11/10/00	SH	200.7
Iron	0.027	mg/L	0.009	11/14/00	11/10/00	SH	200.7
Mercury	<0.0002	mg/L	0.0002	11/13/00	11/13/00	JF	245.1
Potassium	<0.250	mg/L	0.250	11/14/00	11/10/00	SH	200.7
Magnesium	<0.040	mg/L	0.040	11/14/00	11/10/00	SH	200.7
Manganese	<0.003	mg/L	0.003	11/14/00	11/10/00	SH	200.7
Sodium	4.16	mg/L	0.050	11/14/00	11/10/00	SH	200.7
Nickel	<0.020	mg/L	0.020	11/14/00	11/10/00	SH	200.7
Lead	<0.060	mg/L	0.060	11/14/00	11/10/00	SH	200.7
Antimony	<0.040	mg/L	0.040	11/14/00	11/10/00	SH	200.7
Selenium	<0.100	mg/L	0.100	11/14/00	11/10/00	SH	200.7
Thallium	<0.065	mg/L	0.065	11/14/00	11/10/00	SH	200.7
Vanadium	<0.010	mg/L	0.010	11/14/00	11/10/00	SH	200.7
Zinc	0.014	mg/L	0.010	11/14/00	11/10/00	SH	200.7

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Data Validator

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 155

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

Date Arrived **11/08/00**
ETC Order Number **0011258**

ETC Lab ID : **0011258-03**
Field ID : **MW-40-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/08/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE PREPARED	BY	METHOD
Mercury Digestion Batch	V7-AQ-63			11/13/00	11/13/00	JF	245.1
Metals Digestion Batch	V23-AQ-16			11/10/00	11/10/00	NR	3030K
Silver	<0.009	mg/L	0.009	11/14/00	11/10/00	SH	200.7
Aluminum	3.83	mg/L	0.060	11/14/00	11/10/00	SH	200.7
Arsenic	<0.003	mg/L	0.003	11/14/00	11/10/00	SH	200.7
Barium	0.387	mg/L	0.003	11/14/00	11/10/00	SH	200.7
Beryllium	<0.002	mg/L	0.002	11/14/00	11/10/00	SH	200.7
Calcium	69.7	mg/L	0.015	11/14/00	11/10/00	SH	200.7
Cadmium	<0.005	mg/L	0.005	11/14/00	11/10/00	SH	200.7
Cobalt	0.009	mg/L	0.009	11/14/00	11/10/00	SH	200.7
Chromium	0.011	mg/L	0.009	11/14/00	11/10/00	SH	200.7
Copper	0.025	mg/L	0.008	11/14/00	11/10/00	SH	200.7
Iron	4.15	mg/L	0.009	11/14/00	11/10/00	SH	200.7
Mercury	0.0003	mg/L	0.0002	11/13/00	11/13/00	JF	245.1
Potassium	6.81	mg/L	0.250	11/14/00	11/10/00	SH	200.7
[illegible]esium	34.6	mg/L	0.040	11/14/00	11/10/00	SH	200.7
[illegible]nese	1.27	mg/L	0.003	11/14/00	11/10/00	SH	200.7
[illegible]n	87.6	mg/L	0.050	11/14/00	11/10/00	SH	200.7
Nickel	<0.020	mg/L	0.020	11/14/00	11/10/00	SH	200.7
Lead	<0.060	mg/L	0.060	11/14/00	11/10/00	SH	200.7
Antimony	<0.040	mg/L	0.040	11/14/00	11/10/00	SH	200.7
Selenium	<0.100	mg/L	0.100	11/14/00	11/10/00	SH	200.7
Thallium	<0.065	mg/L	0.065	11/14/00	11/10/00	SH	200.7
Vanadium	<0.010	mg/L	0.010	11/14/00	11/10/00	SH	200.7
Zinc	0.038	mg/L	0.010	11/14/00	11/10/00	SH	200.7

CS

Data Validator

ND - Not Detected

613 156

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name: **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID: **Memphis Depot**

Date Arrived: **11/08/00**
ETC Order Number: **0011258**

ETC Lab ID : **0011258-04**
Field ID : **MW-44-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/08/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE PREPARED	BY	METHOD
Mercury Digestion Batch	V7-AQ-63			11/13/00	11/13/00	JF	245.1
Metals Digestion Batch	V23-AQ-16			11/10/00	11/10/00	NR	3030K
Silver	<0.009	mg/L	0.009	11/14/00	11/10/00	SH	200.7
Aluminum	0.739	mg/L	0.060	11/14/00	11/10/00	SH	200.7
Arsenic	0.017	mg/L	0.003	11/14/00	11/10/00	SH	200.7
Barium	0.047	mg/L	0.003	11/14/00	11/10/00	SH	200.7
Beryllium	<0.002	mg/L	0.002	11/14/00	11/10/00	SH	200.7
Calcium	15.8	mg/L	0.015	11/14/00	11/10/00	SH	200.7
Cadmium	<0.005	mg/L	0.005	11/14/00	11/10/00	SH	200.7
Cobalt	<0.009	mg/L	0.009	11/14/00	11/10/00	SH	200.7
Chromium	<0.009	mg/L	0.009	11/14/00	11/10/00	SH	200.7
Copper	<0.008	mg/L	0.008	11/14/00	11/10/00	SH	200.7
Iron	0.868	mg/L	0.009	11/14/00	11/10/00	SH	200.7
Mercury	<0.0002	mg/L	0.0002	11/13/00	11/13/00	JF	245.1
Potassium	7.45	mg/L	0.250	11/14/00	11/10/00	SH	200.7
Magnesium	6.23	mg/L	0.040	11/14/00	11/10/00	SH	200.7
Manganese	0.011	mg/L	0.003	11/14/00	11/10/00	SH	200.7
Sodium	11.6	mg/L	0.050	11/14/00	11/10/00	SH	200.7
Nickel	<0.020	mg/L	0.020	11/14/00	11/10/00	SH	200.7
Lead	<0.060	mg/L	0.060	11/14/00	11/10/00	SH	200.7
Antimony	<0.040	mg/L	0.040	11/14/00	11/10/00	SH	200.7
Selenium	<0.100	mg/L	0.100	11/14/00	11/10/00	SH	200.7
Thallium	<0.065	mg/L	0.065	11/14/00	11/10/00	SH	200.7
Vanadium	<0.010	mg/L	0.010	11/14/00	11/10/00	SH	200.7
Zinc	0.027	mg/L	0.010	11/14/00	11/10/00	SH	200.7

CS

Data Validator

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 157

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

Date Arrived **11/08/00**
ETC Order Number **0011258**

ETC Lab ID : **0011258-05**
Field ID : **MW-33-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/08/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE PREPARED	BY	METHOD
Mercury Digestion Batch	V7-AQ-63			11/13/00	11/13/00	JF	245.1
Metals Digestion Batch	V23-AQ-16			11/10/00	11/10/00	NR	3030K
Silver	<0.009	mg/L	0.009	11/14/00	11/10/00	SH	200.7
Aluminum	25.7	mg/L	0.060	11/14/00	11/10/00	SH	200.7
Arsenic	0.020	mg/L	0.003	11/14/00	11/10/00	SH	200.7
Barium	0.211	mg/L	0.003	11/14/00	11/10/00	SH	200.7
Beryllium	<0.002	mg/L	0.002	11/14/00	11/10/00	SH	200.7
Calcium	14.8	mg/L	0.015	11/14/00	11/10/00	SH	200.7
Cadmium	<0.005	mg/L	0.005	11/14/00	11/10/00	SH	200.7
Cobalt	<0.009	mg/L	0.009	11/14/00	11/10/00	SH	200.7
Chromium	0.036	mg/L	0.009	11/14/00	11/10/00	SH	200.7
Copper	0.011	mg/L	0.008	11/14/00	11/10/00	SH	200.7
Iron	47.5	mg/L	0.009	11/14/00	11/10/00	SH	200.7
Mercury	<0.0002	mg/L	0.0002	11/13/00	11/13/00	JF	245.1
Potassium	3.70	mg/L	0.250	11/14/00	11/10/00	SH	200.7
[illegible]esium	7.77	mg/L	0.040	11/14/00	11/10/00	SH	200.7
[illegible]nese	0.441	mg/L	0.003	11/14/00	11/10/00	SH	200.7
So[illegible]m	16.9	mg/L	0.050	11/14/00	11/10/00	SH	200.7
Nickel	<0.020	mg/L	0.020	11/14/00	11/10/00	SH	200.7
Lead	<0.060	mg/L	0.060	11/14/00	11/10/00	SH	200.7
Antimony	<0.040	mg/L	0.040	11/14/00	11/10/00	SH	200.7
Selenium	<0.100	mg/L	0.100	11/14/00	11/10/00	SH	200.7
Thallium	<0.065	mg/L	0.065	11/14/00	11/10/00	SH	200.7
Vanadium	0.059	mg/L	0.010	11/14/00	11/10/00	SH	200.7
Zinc	0.037	mg/L	0.010	11/14/00	11/10/00	SH	200.7

CS

Data Validator

ND - Not Detected

613 158

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Wainut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name: **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID: **Memphis Depot**

Date Arrived: **11/08/00**
ETC Order Number: **0011258**

ETC Lab ID : **0011258-06**
Field ID : **MW-68-Y2Q4**

Matrix : AQUEOUS
Sample Date : **11/08/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE PREPARED	BY	METHOD
Mercury Digestion Batch	V7-AQ-63			11/13/00	11/13/00	JF	245.1
Metals Digestion Batch	V23-AQ-16			11/10/00	11/10/00	NR	3030K
Silver	<0.009	mg/L	0.009	11/14/00	11/10/00	SH	200.7
Aluminum	194	mg/L	0.060	11/14/00	11/10/00	SH	200.7
Arsenic	0.171	mg/L	0.003	11/14/00	11/10/00	SH	200.7
Barium	1.23	mg/L	0.003	11/14/00	11/10/00	SH	200.7
Beryllium	0.026	mg/L	0.002	11/14/00	11/10/00	SH	200.7
Calcium	25.1	mg/L	0.015	11/14/00	11/10/00	SH	200.7
Cadmium	<0.005	mg/L	0.005	11/14/00	11/10/00	SH	200.7
Cobalt	0.254	mg/L	0.009	11/14/00	11/10/00	SH	200.7
Chromium	0.443	mg/L	0.009	11/14/00	11/10/00	SH	200.7
Copper	0.160	mg/L	0.008	11/14/00	11/10/00	SH	200.7
Iron	1,050	mg/L	0.009	11/15/00	11/10/00	SH	200.7
Mercury	0.0030	mg/L	0.0002	11/13/00	11/13/00	JF	245.1
Potassium	16.5	mg/L	0.250	11/14/00	11/10/00	SH	200.7
Magnesium	14.7	mg/L	0.040	11/14/00	11/10/00	SH	200.7
Manganese	4.75	mg/L	0.003	11/14/00	11/10/00	SH	200.7
Sodium	23.5	mg/L	0.050	11/14/00	11/10/00	SH	200.7
Nickel	0.262	mg/L	0.020	11/14/00	11/10/00	SH	200.7
Lead	0.180	mg/L	0.060	11/14/00	11/10/00	SH	200.7
Antimony	<0.040	mg/L	0.040	11/14/00	11/10/00	SH	200.7
Selenium	<0.100	mg/L	0.100	11/14/00	11/10/00	SH	200.7
Thallium	<0.065	mg/L	0.065	11/14/00	11/10/00	SH	200.7
Vanadium	0.776	mg/L	0.010	11/14/00	11/10/00	SH	200.7
Zinc	0.905	mg/L	0.010	11/14/00	11/10/00	SH	200.7

C S

Data Validator

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 159

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

Date Arrived **11/08/00**
ETC Order Number **0011258**

ETC Lab ID : **0011258-07**
Field ID : **MW-59-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/08/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE PREPARED	BY	METHOD
Mercury Digestion Batch	V7-AQ-63			11/13/00	11/13/00	JF	245.1
Metals Digestion Batch	V23-AQ-16			11/10/00	11/10/00	NR	3030K
Silver	<0.009	mg/L	0.009	11/14/00	11/10/00	SH	200.7
Aluminum	59.0	mg/L	0.060	11/14/00	11/10/00	SH	200.7
Arsenic	0.031	mg/L	0.003	11/14/00	11/10/00	SH	200.7
Barium	0.245	mg/L	0.003	11/14/00	11/10/00	SH	200.7
Beryllium	0.004	mg/L	0.002	11/14/00	11/10/00	SH	200.7
Calcium	15.0	mg/L	0.015	11/14/00	11/10/00	SH	200.7
Cadmium	<0.005	mg/L	0.005	11/14/00	11/10/00	SH	200.7
Cobalt	0.075	mg/L	0.009	11/14/00	11/10/00	SH	200.7
Chromium	0.066	mg/L	0.009	11/14/00	11/10/00	SH	200.7
Copper	0.032	mg/L	0.008	11/14/00	11/10/00	SH	200.7
Iron	108	mg/L	0.009	11/14/00	11/10/00	SH	200.7
Mercury	0.0003	mg/L	0.0002	11/13/00	11/13/00	JF	245.1
Potassium	5.67	mg/L	0.250	11/14/00	11/10/00	SH	200.7
[illegible]esium	8.98	mg/L	0.040	11/14/00	11/10/00	SH	200.7
[illegible]anese	0.897	mg/L	0.003	11/14/00	11/10/00	SH	200.7
S[illegible]n	22.8	mg/L	0.050	11/14/00	11/10/00	SH	200.7
Nickel	0.039	mg/L	0.020	11/14/00	11/10/00	SH	200.7
Lead	<0.060	mg/L	0.060	11/14/00	11/10/00	SH	200.7
Antimony	<0.040	mg/L	0.040	11/14/00	11/10/00	SH	200.7
Selenium	<0.100	mg/L	0.100	11/14/00	11/10/00	SH	200.7
Thallium	<0.065	mg/L	0.065	11/14/00	11/10/00	SH	200.7
Vanadium	0.104	mg/L	0.010	11/14/00	11/10/00	SH	200.7
Zinc	0.138	mg/L	0.010	11/14/00	11/10/00	SH	200.7

CS

Data Validator

ND - Not Detected

613 160

Environmental Testing & Consulting, Inc.

Quality Control Reports
Level III
Metals (ICP/GFAA/CV)

FORM 3A
WATER METHOD BLANK
METALS

Lab Name: Environmental Testing and Consulting, Inc

		QC Batch
Laboratory ID ICP/GFAA Metals	V23-AQ-16 BLK	V23-AQ-16
Laboratory ID Mercury	V7-AQ-64 BLK	V7-AQ-64

Date Sample Prepared	11/10/00 ICP/GFAA Metals
	11/13/00 Mercury

Metals	Concentration mg/L	Detection Limit mg/L	Date Analyzed	Method
Silver	ND	0.009	11/14/00	200.7
Aluminum	ND	0.060	11/14/00	200.7
Arsenic	ND	0.003	11/14/00	200.7
Barium	ND	0.003	11/14/00	200.7
Beryllium	ND	0 002	11/14/00	200.7
Calcium	0.028	0.015	11/14/00	200.7
Cadmium	ND	0.005	11/14/00	200.7
Cobalt	ND	0.009	11/14/00	200.7
Chromium	ND	0.009	11/14/00	200.7
Copper	ND	0.008	11/14/00	200.7
Iron	ND	0.009	11/14/00	200 7
Potassium	ND	0.250	11/14/00	200.7
Magnesium	ND	0.040	11/14/00	200.7
Manganese	ND	0.003	11/14/00	200.7
Sodium	ND	0.050	11/14/00	200 7
Nickel	ND	0 020	11/14/00	200 7
Lead	ND	0.060	11/14/00	200.7
Antimony	ND	0.040	11/14/00	200.7
Selenium	ND	0.100	11/14/00	200.7
Thallium	ND	0.065	11/14/00	200.7
Vanadium	ND	0.010	11/14/00	200.7
Zinc	ND	0.010	11/14/00	200.7
Mercury	ND	0.0002	11/13/00	245.1

ND - Not Detected

Reviewed by CJ

613 162

FORM 7
WATER LABORATORY CONTROL SAMPLE
METALS

Lab Name Environmental Testing and Consulting, Inc

			QC Batch
Laboratory Control ID	ICP/GFAA Metals	V23-AQ-16 LCS	V23-AQ-16
	Mercury	V7-AQ-64 LCS	V7-AQ-64
Date Prepared	ICP/GFAA Metals	11/10/00	
	Mercury	11/13/00	

Metals	Spike Added mg/L	Found mg/L	% R	#	QC Limits	
Silver	0.250	0.262	105		80	120
Aluminum	2.50	2.50	100		80	120
Arsenic	0.100	0 104	104		80	120
Barium	2.50	2.71	108		80	120
Beryllium	0.250	0 268	107		80	120
Calcium	5.00	5.40	108		80	120
Cadmium	0.020	0.022	110		80	120
Cobalt	1.25	1.32	106		80	120
Chromium	0.500	0.532	106		80	120
Copper	0.500	0.526	105		80	120
Iron	2.50	2.67	107		80	120
Potassium	5.00	5 36	107		80	120
Magnesium	5.00	4.93	99		80	120
Manganese	0.250	0.271	108		80	120
Sodium	5.00	5.46	109		80	120
Nickel	1.25	1.32	106		80	120
Lead	0.100	0 108	108		80	120
Antimony	0.200	0.213	107		80	120
Selenium	0.100	0.105	105		80	120
Thallium	0.100	0.105	105		80	120
Vanadium	1.25	1.33	106		80	120
Zinc	0.250	0.272	109		80	120
Mercury	0.0050	0.0047	94		80	120

Column to be used to flag recovery values with an asterisk
* Values outside of QC limits

Reviewed by CS

FORM 6
WATER MATRIX SPIKE / MATRIX SPIKE DUPLICATE
METALS

Lab Name. Environmental Testing and Consulting, Inc

		QC Batch
Laboratory ID MS ICP/GFAA Metals	0011-258-07	V23-AQ-16
Laboratory ID MS Mercury	0011-258-07	V7-AQ-64

Date Sample Prepared	11/10/00	ICP/GFAA Metals
	11/13/00	Mercury

Metals	SPIKE Added mg/L	SAMPLE Conc mg/L	MS Conc mg/L	RPD <20% #	MS % Rec #	QC Limits	
Silver	0.250	ND	0.227	21 *	91	75	125
Aluminum	2.50	59.0	63.9	7	196 *	75	125
Arsenic	0.100	0.031	0.132	0	101	75	125
Barium	2.50	0.245	2.84	1	104	75	125
Beryllium	0.250	0.004	0.266	0	105	75	125
Calcium	5.00	15.0	20.0	0	100	75	125
Cadmium	0.020	ND	0.019	0	95	75	125
Cobalt	1.25	0.075	1.34	1	101	75	125
Chromium	0.500	0.066	0.577	1	102	75	125
Copper	0.500	0.032	0 545	1	103	75	125
Iron	2.50	108	111	3	120	75	125
Potassium	5.00	5 67	10.4	4	95	75	125
Magnesium	5.00	8 98	13.7	1	94	75	125
Manganese	0.250	0.897	1.16	2	105	75	125
Sodium	5.00	22.8	27.9	1	102	75	125
Nickel	1 25	0.039	1.30	1	101	75	125
Lead	0 100	0.056	0.161	2	105	75	125
Antimony	0.200	ND	0.149	2	75	75	125
Selenium	0.100	ND	0.107	2	107	75	125
Thallium	0.100	ND	0.104	1	104	75	125
Vanadium	1.25	0.104	1.38	1	102	75	125
Zinc	0.250	0.138	0.396	2	103	75	125
Mercury	0.0050	0.0003	0 0055	0	104	75	125

ND - Not Detected
Column to be used to flag recovery values with an asterisk
* Values outside of QC limits

Reviewed by_____

613 164

FORM 6
WATER MATRIX SPIKE / MATRIX SPIKE DUPLICATE
METALS

Lab Name: Environmental Testing and Consulting, Inc

		QC Batch
Laboratory ID MS ICP/GFAA Metals	0011-258-07	V23-AQ-16
Laboratory ID MS Mercury	0011-258-07	V7-AQ-64

Date Sample Prepared	11/10/00	ICP/GFAA Metals
	11/13/00	Mercury

Metals	SPIKE Added mg/L	SAMPLE Conc mg/L	MSD Conc mg/L		MSD % Rec #		QC Limits	
Silver	0.250	ND	0.183		73	*	75	125
Aluminum	2.50	59.0	68.7		388	*	75	125
Arsenic	0.100	0.031	0.132		101		75	125
Barium	2.50	0.245	2.86		105		75	125
Beryllium	0 250	0.004	0.267		105		75	125
Calcium	5.00	15 0	20.1		102		75	125
Cadmium	0.020	ND	0.019		95		75	125
Cobalt	1.25	0.075	1.35		102		75	125
Chromium	0.500	0.066	0.583		103		75	125
Copper	0.500	0.032	0.553		104		75	125
Iron	2.50	108	114		240	*	75	125
Potassium	5.00	5.67	10.8		103		75	125
Magnesium	5.00	8.98	13.8		96		75	125
Manganese	0.250	0.897	1.18		113		75	125
Sodium	5.00	22.8	28.2		108		75	125
Nickel	1.25	0.039	1.31		102		75	125
Lead	0.100	0.056	0.164		108		75	125
Antimony	0.200	ND	0.146		73	*	75	125
Selenium	0.100	ND	0.105		105		75	125
Thallium	0.100	ND	0.103		103		75	125
Vanadium	1.25	0.104	1.39		103		75	125
Zinc	0.250	0.138	0.405		107		75	125
Mercury	0.0050	0.0003	0.0055		104		75	125

ND - Not Detected
Column to be used to flag recovery values with an asterisk
* Values outside of QC limits

Reviewed by CJ

WATER
DILUTIONS
METALS

Lab Name: Enviornmental Testing and Consulting, Inc.

QC Batch ICP/GFAA Metals V23-AQ-16

Date Sample Prepared 11/10/00 ICP/GFAA Metals

Analyte	Dilution	Code	Sample ID
Iron	1:5	C	0011-258-06

Dilutions were performed on several samples to bring the Target Analyte(s) within calibration range (C) or to remove spectral interference (I) as indicated.

Reviewed by: CS

613 166

FORM 5B
POST DIGESTION SPIKE
METALS

Lab Name Enviornmental Testing and Consulting, Inc

QC Batch ICP/GFAA Metals V23-AQ-16

Date Sample Prepared 11/10/00 ICP/GFAA Metals

Metals	Spike Expected ug/L	Spike Found ug/L	% Recovery	QC Limits	
Antimony	0 050	0 049	98	75	125

Post Digestion Spikes (PDS) were performed on those analytes with recoveries outside QC limits for both the MS and MSD that are less than 25 times the method detection limit.

Reviewed by CJ

FORM 9
SERIAL DILUTIONS
METALS

Lab Name Enviornmental Testing and Consulting, Inc.

QC Batch ICP/GFAA Metals V23-AQ-16

Date Sample Prepared 11/10/00 ICP/GFAA Metals

Analyte	Initial Sample Result	Serial Dilution Result	Serial Dilution	% Difference
Aluminum	59.0	59.2	1:5	0
Iron	108	105	1:5	3

ND - Not Detected
% Difference should be within 10% of the undiluted/lowest dilution result

Reviewed by ( )

Serial Dilution 0011-258 mqc

613 168

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name: **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID: **Memphis Depot**

FID #

Date Arrived: **11/08/00**
ETC Order Number: **0011258**

ETC Lab ID: **0011258-01**
Field ID : **MW-51-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/08/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
GC/MS Volatile Organics				11/10/00	EM	8260B
QC Batch	**V4111001**					5030B
Dilution Factor	**1**					
Acetone	ND	ug/L	20.0			
Benzene	ND	ug/L	1.00			
Bromodichloromethane	ND	ug/L	1.00			
Bromoform	ND	ug/L	1.00			
Bromomethane	ND	ug/L	1.00			
2-Butanone (MEK)	ND	ug/L	20.0			
Carbon Disulfide	ND	ug/L	1.00			
Carbon Tetrachloride	ND	ug/L	1.00			
Chlorobenzene	ND	ug/L	1.00			
Chlorodibromomethane	ND	ug/L	1.00			
Chloroethane	ND	ug/L	1.00			
Chloroform	ND	ug/L	1.00			
Chloromethane	ND	ug/L	1.00			
1,1-Dichloroethane	ND	ug/L	1.00			
1,2-Dichloroethane	ND	ug/L	1.00			
1,1-Dichloroethene	57.9	ug/L	1.00			
trans-1,2-Dichloroethene	ND	ug/L	1.00			
1,2-Dichloropropane	ND	ug/L	1.00			
cis-1,3-Dichloropropene	ND	ug/L	1.00			
trans-1,3-Dichloropropene	ND	ug/L	1.00			
Ethylbenzene	ND	ug/L	1.00			
2-Hexanone (MBK)	ND	ug/L	5.00			
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.00			
Methylene Chloride	ND	ug/L	5.00			
Styrene	ND	ug/L	1.00			
1,1,2,2-Tetrachloroethane	ND	ug/L	1.00			
Tetrachloroethene	3.51	ug/L	1.00			
Toluene	ND	ug/L	1.00			
1,1,1-Trichloroethane	1.79	ug/L	1.00			
1,1,2-Trichloroethane	ND	ug/L	1.00			
Trichloroethene	13.2	ug/L	1.00			
Vinyl Acetate	ND	ug/L	20.0			
Vinyl Chloride	ND	ug/L	1.00			
Xylenes-m,p	ND	ug/L	1.00			
Xylenes-o	ND	ug/L	1.00			
cis-1,2-Dichloroethene	ND	ug/L	1.00			

Surrogate Standard	% Recovery	QC Limits
S1 - Dibromofluoromethane	98	74 - 123
S2 - Toluene-d8	104	86 - 112
S3 - 4-Bromofluorobenzene	101	81 - 115
S4 - 1,2-Dichloroethane-d4	108	80 - 120

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

FORM 1
VOA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.
~~613 169~~
0011-258-1

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-258

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 1601017

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/10/00

GC Column: ID: 2.00 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

613 170

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name: **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID: **Memphis Depot**

FID #

Date Arrived: **11/08/00**
ETC Order Number: **0011258**

ETC Lab ID: **0011258-02**
Field ID : **RB-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/08/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
GC/MS Volatile Organics				11/10/00	EM	8260B 5030B
QC Batch	**V4111001**					
Dilution Factor	**1**					
Acetone	ND	ug/L	20.0			
Benzene	ND	ug/L	1.00			
Bromodichloromethane	ND	ug/L	1.00			
Bromoform	ND	ug/L	1.00			
Bromomethane	ND	ug/L	1.00			
2-Butanone (MEK)	ND	ug/L	20.0			
Carbon Disulfide	ND	ug/L	1.00			
Carbon Tetrachloride	ND	ug/L	1.00			
Chlorobenzene	ND	ug/L	1.00			
Chlorodibromomethane	ND	ug/L	1.00			
Chloroethane	ND	ug/L	1.00			
Chloroform	ND	ug/L	1.00			
Chloromethane	ND	ug/L	1.00			
1,1-Dichloroethane	ND	ug/L	1.00			
1,2-Dichloroethane	ND	ug/L	1.00			
1,1-Dichloroethene	ND	ug/L	1.00			
trans-1,2-Dichloroethene	ND	ug/L	1.00			
1,2-Dichloropropane	ND	ug/L	1 00			
cis-1,3-Dichloropropene	ND	ug/L	1.00			
trans-1,3-Dichloropropene	ND	ug/L	1.00			
Ethylbenzene	ND	ug/L	1.00			
2-Hexanone (MBK)	ND	ug/L	1.00			
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.00			
Methylene Chloride	ND	ug/L	5.00			
Styrene	ND	ug/L	5.00			
1,1,2,2-Tetrachloroethane	ND	ug/L	1.00			
Tetrachloroethene	ND	ug/L	1.00			
Toluene	ND	ug/L	1.00			
1,1,1-Trichloroethane	ND	ug/L	1.00			
1,1,2-Trichloroethane	ND	ug/L	1.00			
Trichloroethene	ND	ug/L	1.00			
Vinyl Acetate	ND	ug/L	1.00			
Vinyl Chloride	ND	ug/L	20.0			
Xylenes-m,p	ND	ug/L	1.00			
Xylenes-o	ND	ug/L	1.00			
cis-1,2-Dichloroethene	ND	ug/L	1.00			

Surrogate Standard	% Recovery	QC Limits
S1 - Dibromofluoromethane	96	74 ; 123
S2 - Toluene-d8	104	86 112
S3 - 4-Bromofluorobenzene	102	81 115
S4 - 1,2-Dichloroethane-d4	106	80 120

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

FORM 1
VOA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.
613 171
0011-258-2

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-258

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 1701018

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/10/00

GC Column: ID: 2.00 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
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28.					
29.					
30.					

613 172

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name: **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID: **Memphis Depot**

FID #

Date Arrived: **11/08/00**
ETC Order Number: **0011258**

ETC Lab ID: **0011258-03**
Field ID : **MW-40-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/08/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Volatile Organics				11/10/00		EM	8260B 5030B
QC Batch	V4111001						
Dilution Factor	1						
Acetone	ND	ug/L	20.0				
Benzene	ND	ug/L	1.00				
Bromodichloromethane	ND	ug/L	1.00				
Bromoform	ND	ug/L	1.00				
Bromomethane	ND	ug/L	1.00				
2-Butanone (MEK)	ND	ug/L	20.0				
Carbon Disulfide	ND	ug/L	1.00				
Carbon Tetrachloride	ND	ug/L	1.00				
Chlorobenzene	ND	ug/L	1.00				
Chlorodibromomethane	ND	ug/L	1.00				
Chloroethane	ND	ug/L	1.00				
Chloroform	ND	ug/L	1.00				
Chloromethane	ND	ug/L	1.00				
1,1-Dichloroethane	ND	ug/L	1.00				
1,2-Dichloroethane	ND	ug/L	1.00				
1,1-Dichloroethene	ND	ug/L	1.00				
trans-1,2-Dichloroethene	ND	ug/L	1.00				
1,2-Dichloropropane	ND	ug/L	1.00				
cis-1,3-Dichloropropene	ND	ug/L	1.00				
trans-1,3-Dichloropropene	ND	ug/L	1.00				
Ethylbenzene	ND	ug/L	1.00				
2-Hexanone (MBK)	ND	ug/L	1.00				
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.00				
Methylene Chloride	ND	ug/L	5.00				
Styrene	ND	ug/L	5.00				
1,1,2,2-Tetrachloroethane	ND	ug/L	1.00				
Tetrachloroethene	ND	ug/L	1.00				
Toluene	ND	ug/L	1.00				
1,1,1-Trichloroethane	ND	ug/L	1.00				
1,1,2-Trichloroethane	ND	ug/L	1.00				
Trichloroethene	ND	ug/L	1.00				
Vinyl Acetate	ND	ug/L	1.00				
Vinyl Chloride	ND	ug/L	20.0				
Xylenes-m,p	ND	ug/L	1.00				
Xylenes-o	ND	ug/L	1.00				
cis-1,2-Dichloroethene	ND	ug/L	1.00				

Surrogate Standard	% Recovery	QC Limits
S1 - Dibromofluoromethane	94	74 ; 123
S2 - Toluene-d8	101	86 112
S3 - 4-Bromofluorobenzene	101	81 115
S4 - 1,2-Dichloroethane-d4	94	80 120

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

FORM 1
VOA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.
613 173
0011-258-3

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-258

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 1801019

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/10/00

GC Column: ID: 2.00 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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613 174

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name: **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID: **Memphis Depot**

FID #

Date Arrived: **11/08/00**
ETC Order Number: **0011258**

ETC Lab ID: **0011258-04**
Field ID : **MW-44-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/08/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
GC/MS Volatile Organics				11/10/00	EM	8260B 5030B
QC Batch	**V4111001**					
Dilution Factor	**1**					
Acetone	ND	ug/L	20.0			
Benzene	ND	ug/L	1.00			
Bromodichloromethane	1.66	ug/L	1.00			
Bromoform	ND	ug/L	1.00			
Bromomethane	ND	ug/L	1.00			
2-Butanone (MEK)	ND	ug/L	20.0			
Carbon Disulfide	ND	ug/L	1.00			
Carbon Tetrachloride	2.10	ug/L	1.00			
Chlorobenzene	ND	ug/L	1.00			
Chlorodibromomethane	ND	ug/L	1.00			
Chloroethane	ND	ug/L	1.00			
Chloroform	1.23	ug/L	1.00			
Chloromethane	ND	ug/L	1.00			
1,1-Dichloroethane	ND	ug/L	1.00			
1,2-Dichloroethane	ND	ug/L	1.00			
1,1-Dichloroethene	ND	ug/L	1.00			
trans-1,2-Dichloroethene	ND	ug/L	1.00			
1,2-Dichloropropane	ND	ug/L	1.00			
cis-1,3-Dichloropropene	ND	ug/L	1.00			
trans-1,3-Dichloropropene	ND	ug/L	1.00			
Ethylbenzene	ND	ug/L	1.00			
2-Hexanone (MBK)	ND	ug/L	5.00			
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.00			
Methylene Chloride	ND	ug/L	5.00			
Styrene	ND	ug/L	1.00			
1,1,2,2-Tetrachloroethane	ND	ug/L	1.00			
Tetrachloroethene	ND	ug/L	1.00			
Toluene	ND	ug/L	1.00			
1,1,1-Trichloroethane	ND	ug/L	1.00			
1,1,2-Trichloroethane	ND	ug/L	1.00			
Trichloroethene	0.79J	ug/L	1.00			
Vinyl Acetate	ND	ug/L	20.0			
Vinyl Chloride	ND	ug/L	1.00			
Xylenes-m,p	ND	ug/L	1.00			
Xylenes-o	ND	ug/L	1.00			
cis-1,2-Dichloroethene	0.622J	ug/L	1.00			

Surrogate Standard	% Recovery	QC Limits
S1 - Dibromofluoromethane	100	74 - 123
S2 - Toluene-d8	104	86 - 112
S3 - 4-Bromofluorobenzene	99	81 - 115
S4 - 1,2-Dichloroethane-d4	110	80 - 120

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

FORM 1
VOA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO. 613 175

0011-258-4

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-258

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 1901020

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/10/00

GC Column: ID: 2.00 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 176

Client Name: Sverdrup/Jacobs Eng.
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID: Memphis Depot

FID #

Date Arrived: 11/08/00
ETC Order Number: 0011258

ETC Lab ID: 0011258-05
Field ID: MW-33-Y2Q4

Matrix: AQUEOUS
Sample Date: 11/08/00

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Volatile Organics				11/10/00		EM	8260B
QC Batch	V4111001						5030B
Dilution Factor	1						
Acetone	ND	ug/L	20.0				
Benzene	ND	ug/L	1.00				
Bromodichloromethane	ND	ug/L	1.00				
Bromoform	ND	ug/L	1.00				
Bromomethane	ND	ug/L	1.00				
2-Butanone (MEK)	ND	ug/L	20.0				
Carbon Disulfide	ND	ug/L	1.00				
Carbon Tetrachloride	ND	ug/L	1.00				
Chlorobenzene	ND	ug/L	1.00				
Chlorodibromomethane	ND	ug/L	1.00				
Chloroethane	ND	ug/L	1.00				
Chloroform	ND	ug/L	1.00				
Chloromethane	ND	ug/L	1.00				
1,1-Dichloroethane	ND	ug/L	1.00				
1,2-Dichloroethane	ND	ug/L	1.00				
1,1-Dichloroethene	ND	ug/L	1.00				
trans-1,2-Dichloroethene	ND	ug/L	1.00				
1,2-Dichloropropane	ND	ug/L	1.00				
cis-1,3-Dichloropropene	ND	ug/L	1.00				
trans-1,3-Dichloropropene	ND	ug/L	1.00				
Ethylbenzene	ND	ug/L	1.00				
2-Hexanone (MBK)	ND	ug/L	1.00				
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.00				
Methylene Chloride	ND	ug/L	5.00				
Styrene	ND	ug/L	5.00				
1,1,2,2-Tetrachloroethane	ND	ug/L	1.00				
Tetrachloroethene	ND	ug/L	1.00				
Toluene	ND	ug/L	1.00				
1,1,1-Trichloroethane	ND	ug/L	1.00				
1,1,2-Trichloroethane	ND	ug/L	1.00				
Trichloroethene	ND	ug/L	1.00				
Vinyl Acetate	ND	ug/L	1.00				
Vinyl Chloride	ND	ug/L	20.0				
Xylenes-m,p	ND	ug/L	1.00				
Xylenes-o	ND	ug/L	1.00				
cis-1,2-Dichloroethene	ND	ug/L	1.00				

Surrogate Standard	% Recovery	QC Limits
S1 - Dibromofluoromethane	98	74 ; 123
S2 - Toluene-d8	103	86 112
S3 - 4-Bromofluorobenzene	101	81 115
S4 - 1,2-Dichloroethane-d4	106	80 120

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

FORM 1
VOA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.
613 177
0011-258-5

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-258

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 2001021

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/10/00

GC Column: ID: 2.00 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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613 178

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name: **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID: **Memphis Depot**

FID #

Date Arrived: **11/08/00**
ETC Order Number: **0011258**

ETC Lab ID: **0011258-06**
Field ID : **MW-68-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/08/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
GC/MS Volatile Organics				11/10/00	EM	8260B
QC Batch	**V4111001**					5030B
Dilution Factor	**1**					
Acetone	ND	ug/L	20.0			
Benzene	ND	ug/L	1.00			
Bromodichloromethane	0.47J	ug/L	1.00			
Bromoform	ND	ug/L	1.00			
Bromomethane	ND	ug/L	1.00			
2-Butanone (MEK)	ND	ug/L	20.0			
Carbon Disulfide	ND	ug/L	1.00			
Carbon Tetrachloride	ND	ug/L	1.00			
Chlorobenzene	ND	ug/L	1.00			
Chlorodibromomethane	ND	ug/L	1.00			
Chloroethane	ND	ug/L	1.00			
Chloroform	ND	ug/L	1.00			
Chloromethane	ND	ug/L	1.00			
1,1-Dichloroethane	ND	ug/L	1.00			
1,2-Dichloroethane	ND	ug/L	1.00			
1,1-Dichloroethene	ND	ug/L	1.00			
trans-1,2-Dichloroethene	1.40	ug/L	1.00			
1,2-Dichloropropane	ND	ug/L	1.00			
cis-1,3-Dichloropropene	ND	ug/L	1.00			
trans-1,3-Dichloropropene	ND	ug/L	1.00			
Ethylbenzene	ND	ug/L	1.00			
2-Hexanone (MBK)	ND	ug/L	5.00			
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.00			
Methylene Chloride	ND	ug/L	5.00			
Styrene	ND	ug/L	1.00			
1,1,2,2-Tetrachloroethane	ND	ug/L	1.00			
Tetrachloroethene	0.40J	ug/L	1.00			
Toluene	ND	ug/L	1.00			
1,1,1-Trichloroethane	ND	ug/L	1.00			
1,1,2-Trichloroethane	ND	ug/L	1.00			
Trichloroethene	3.21	ug/L	1.00			
Vinyl Acetate	ND	ug/L	20.0			
Vinyl Chloride	ND	ug/L	1.00			
Xylenes-m,p	ND	ug/L	1.00			
Xylenes-o	ND	ug/L	1.00			
cis-1,2-Dichloroethene	1.90	ug/L	1.00			

Surrogate Standard	% Recovery	QC Limits
S1 - Dibromofluoromethane	95	74 - 123
S2 - Toluene-d8	103	86 - 112
S3 - 4-Bromofluorobenzene	102	81 - 115
S4 - 1,2-Dichloroethane-d4	93	80 - 120

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

FORM 1
VOA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO. 613 179

0011-258-6

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-258

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 2101022

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/10/00

GC Column: ID: 2.00 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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613 180

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name: Sverdrup/Jacobs Eng.
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID: Memphis Depot

FID #

Date Arrived: 11/08/00
ETC Order Number: 0011258

ETC Lab ID: 0011258-07
Field ID : MW-59-Y2Q4

Matrix : AQUEOUS
Sample Date : 11/08/00

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
GC/MS Volatile Organics				11/13/00	EM	8260B 5030B
QC Batch	**V4111301**					
Acetone	ND	ug/L	20.0			
Benzene	ND	ug/L	1.00			
Bromodichloromethane	ND	ug/L	1.00			
Bromoform	ND	ug/L	1.00			
Bromomethane	ND	ug/L	1.00			
2-Butanone (MEK)	ND	ug/L	20.0			
Carbon Disulfide	ND	ug/L	1.00			
Carbon Tetrachloride	ND	ug/L	1.00			
Chlorobenzene	ND	ug/L	1.00			
Chlorodibromomethane	ND	ug/L	1.00			
Chloroethane	ND	ug/L	1.00			
Chloroform	1.04	ug/L	1.00			
Chloromethane	ND	ug/L	1.00			
1,1-Dichloroethane	ND	ug/L	1.00			
1,2-Dichloroethane	ND	ug/L	1.00			
1,1-Dichloroethene	ND	ug/L	1.00			
trans-1,2-Dichloroethene	ND	ug/L	1.00			
1,2-Dichloropropane	ND	ug/L	1.00			
cis-1,3-Dichloropropene	ND	ug/L	1.00			
trans-1,3-Dichloropropene	ND	ug/L	1.00			
Ethylbenzene	ND	ug/L	1.00			
2-Hexanone (MBK)	ND	ug/L	5.00			
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.00			
Methylene Chloride	ND	ug/L	5.00			
Styrene	ND	ug/L	1.00			
1,1,2,2-Tetrachloroethane	ND	ug/L	1.00			
Tetrachloroethene	46.1	ug/L	1.00			
Toluene	ND	ug/L	1.00			
1,1,1-Trichloroethane	ND	ug/L	1.00			
1,1,2-Trichloroethane	ND	ug/L	1.00			
Trichloroethene	1.17	ug/L	1.00			
Vinyl Acetate	ND	ug/L	20.0			
Vinyl Chloride	ND	ug/L	1.00			
Xylenes-m,p	ND	ug/L	1.00			
Xylenes-o	ND	ug/L	1.00			
cis-1,2-Dichloroethene	ND	ug/L	1.00			

Surrogate Standard	% Recovery	QC Limits
S1 - Dibromofluoromethane	93	74 123
S2 - Toluene-d8	103	86 112
S3 - 4-Bromofluorobenzene	93	81 115
S4 - 1,2-Dichloroethane-d4	87	80 120

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

FORM 1
VOA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.
613 181
0011-258-7

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-258

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 1301013

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/13/00

GC Column: ID: 2.00 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 182

Client Name: Sverdrup/Jacobs Eng.
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID: Memphis Depot

FID #

Date Arrived: 11/08/00
ETC Order Number: 0011258

ETC Lab ID: 0011258-08
Field ID : TB-02

Matrix : AQUEOUS
Sample Date : 11/08/00

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Volatile Organics				11/13/00		EM	8260B
QC Batch	V4111301						5030B
Acetone	ND	ug/L	20.0				
Benzene	ND	ug/L	1.00				
Bromodichloromethane	ND	ug/L	1.00				
Bromoform	ND	ug/L	1.00				
Bromomethane	ND	ug/L	1.00				
2-Butanone (MEK)	ND	ug/L	20.0				
Carbon Disulfide	ND	ug/L	1.00				
Carbon Tetrachloride	ND	ug/L	1.00				
Chlorobenzene	ND	ug/L	1.00				
Chlorodibromomethane	ND	ug/L	1.00				
Chloroethane	ND	ug/L	1.00				
Chloroform	ND	ug/L	1.00				
Chloromethane	ND	ug/L	1.00				
1,1-Dichloroethane	ND	ug/L	1.00				
1,2-Dichloroethane	ND	ug/L	1.00				
1,1-Dichloroethene	ND	ug/L	1.00				
trans-1,2-Dichloroethene	ND	ug/L	1.00				
1,2-Dichloropropane	ND	ug/L	1.00				
cis-1,3-Dichloropropene	ND	ug/L	1.00				
trans-1,3-Dichloropropene	ND	ug/L	1.00				
Ethylbenzene	ND	ug/L	1.00				
2-Hexanone (MBK)	ND	ug/L	1.00				
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.00				
Methylene Chloride	ND	ug/L	5.00				
Styrene	ND	ug/L	5.00				
1,1,2,2-Tetrachloroethane	ND	ug/L	1.00				
Tetrachloroethene	ND	ug/L	1.00				
Toluene	ND	ug/L	1.00				
1,1,1-Trichloroethane	ND	ug/L	1.00				
1,1,2-Trichloroethane	ND	ug/L	1.00				
Trichloroethene	ND	ug/L	1.00				
Vinyl Acetate	ND	ug/L	1.00				
Vinyl Chloride	ND	ug/L	20.0				
Xylenes-m,p	ND	ug/L	1.00				
Xylenes-o	ND	ug/L	1.00				
cis-1,2-Dichloroethene	ND	ug/L	1.00				

Surrogate Standard	% Recovery	QC Limits
S1 - Dibromofluoromethane	93	74 123
S2 - Toluene-d8	104	86 ; 112
S3 - 4-Bromofluorobenzene	93	81 115
S4 - 1,2-Dichloroethane-d4	88	80 120

Data Validator

ND - Not Detected

.Q - Recovery Outside QC Limits

FORM 1
VOA-GCMS ORGANICS ANALYSIS DATA SHEET
- TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.
613 183
0011-258-8

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-258

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 1201012

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/13/00

GC Column: ID: 2.00 (mm) Dilution Factor: 1.0

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

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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Environmental Testing & Consulting, Inc.

Quality Control Reports
Level III
GC/MS Volatiles

FORM 2
WATER VOA-GCMS SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-258

	CLIENT SAMPLE NO.	SMC1 (DCE) #	SMC2 (DFM) #	SMC3 (TOL) #	OTHER (BFB) #	TOT OUT
01	V4111011LCS	109	89	103	82	0
02	V4111011LB	104	94	102	99	0
03	0011-258-1	108	98	104	101	0
04	0011-258-2	106	96	104	102	0
05	0011-258-3	94	94	101	101	0
06	0011-258-4	110	100	104	99	0
07	0011-258-5	106	98	103	101	0
08	0011-258-6	93	95	103	102	0
09	V4111311LCS	108	92	99	86	0
10	V4111311LB	101	96	100	94	0
11	0011-258-8	88	93	104	93	0
12	0011-258-7	87	93	103	93	0
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		QC LIMITS
SMC1 (DCE)	= 1,2-Dichloroethane-d4	(80-120)
SMC2 (DFM)	= Dibromofluoromethane	(74-123)
SMC3 (TOL)	= Toluene-d8	(86-112)
OTHER(BFB)	= Bromofluorobenzene	(81-115)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

613 186

FORM 4
VOA-GCMS METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

V4111011LB

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-258

Lab File ID: 0302004 Lab Prep Batch: V4111001

Date Analyzed: 11/10/00 Time Analyzed: 1142

GC Column: ID: 2 (mm) Heated Purge: (Y/N) Y

Instrument ID: VOC4

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

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	V4111011LCS	V4111001	0201002LCS	1004
02	0011-216-11	V4111001	1501016	1752
03	0011-258-1	V4111001	1601017	1822
04	0011-258-2	V4111001	1701018	1852
05	0011-258-3	V4111001	1801019	1923
06	0011-258-4	V4111001	1901020	1954
07	0011-258-5	V4111001	2001021	2024
08	0011-258-6	V4111001	2101022	2055
09	0011-216-11M	V4111001	2201023	2125
10	0011-216-11M	V4111001	2301024	2156
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COMMENTS:

FORM 1
VOA-GCMS ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO. 613 187

V4111011LB

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-258

Matrix: (soil/water) WATER Lab Prep Batch: V4111001

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 0302004

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/10/00

GC Column: ID: 2.00 (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
67-64-1	Acetone	20.00	U
75-05-8	Acetonitrile	20.00	U
107-02-8	Acrolein	20.00	U
107-13-1	Acrylonitrile	20.00	U
107-05-1	Allyl chloride	1.00	U
71-43-2	Benzene	1.00	U
108-86-1	Bromobenzene	1.00	U
74-97-5	Bromochloromethane	1.00	U
75-27-4	Bromodichloromethane	1.00	U
75-25-2	Bromoform	1.00	U
78-93-3	2-Butanone	20.00	U
74-83-9	Bromomethane	1.00	U
104-51-8	n-Butylbenzene	1.00	U
135-98-8	sec-Butylbenzene	1.00	U
98-06-6	tert-Butylbenzene	1.00	U
75-15-0	Carbon Disulfide	1.00	U
56-23-5	Carbon Tetrachloride	1.00	U
108-90-7	Chlorobenzene	1.00	U
124-48-1	Chlorodibromomethane	1.00	U
75-00-3	Chloroethane	1.00	U
110-75-0	2-Chloroethyl vinyl ether	20.00	U
67-66-3	Chloroform	1.00	U
74-87-3	Chloromethane	1.00	U
126-99-8	Chloroprene	1.00	U
95-49-8	2-Chlorotoluene	1.00	U
106-43-4	4-Chlorotoluene	1.00	U
96-12-8	1,2-Dibromo-3-chloropropane	1.00	U
106-93-4	1,2-Dibromoethane	1.00	U
74-95-3	Dibromomethane	1.00	U
95-50-1	1,2-Dichlorobenzene	1.00	U
541-73-1	1,3-Dichlorobenzene	1.00	U
106-46-7	1,4-Dichlorobenzene	1.00	U
110-57-6	trans-1,4-Dichloro-2-butene	1.00	U

613 188

FORM 1
VOA-GCMS ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.
V4111011LB

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-258

Matrix: (soil/water) WATER Lab Prep Batch: V4111001

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 0302004

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/10/00

GC Column: ID: 2.00 (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
1868-53-7	Dichlorodifluoromethane	1.00	U
75-34-3	1,1-Dichloroethane	1.00	U
107-06-2	1,2-Dichloroethane	1.00	U
75-35-4	1,1-Dichloroethene	1.00	U
156-59-4	cis-1,2-Dichloroethene	1.00	U
156-60-5	trans-1,2-Dichloroethene	1.00	U
78-87-5	1,2-Dichloropropane	1.00	U
142-28-9	1,3-Dichloropropane	1.00	U
590-20-7	2,2-Dichloropropane	1.00	U
563-58-6	1,1-Dichloropropene	1.00	U
10061-01-5	cis-1,3-Dichloropropene	1.00	U
10061-02-6	trans-1,3-Dichloropropene	1.00	U
108-20-3	Di isopropyl ether	5.00	U
123-91-1	1,4-Dioxane	100.0	U
141-78-6	Ethyl Acetate	5.00	U
100-41-4	Ethylbenzene	1.00	U
97-63-2	Ethyl methacrylate	1.00	U
110-00-9	Furan	1.00	U
87-63-3	Hexachlorobutadiene	1.00	U
110-54-3	Hexane	1.00	U
591-78-6	2-Hexanone	5.00	U
74-88-4	Iodomethane	1.00	U
78-83-1	Isobutyl Alcohol	100.0	U
98-82-8	Isopropylbenzene	1.00	U
99-87-6	4-Isopropyltoluene	1.00	U
126-98-7	Methacrylonitrile	10.00	U
75-09-2	Methylene Chloride	3.04	J
80-62-6	Methyl methacrylate	1.00	U
108-10-1	4-Methyl-2-Pentanone	5.00	U
1634-04-4	Methyl-tertbutyl-Ether	5.00	U
91-20-3	Naphthalene	1.00	U
76-01-7	Pentachloroethane	1.00	U
107-12-0	Propionitrile	10.00	U

FORM 1
VOA-GCMS ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO. 613 189

V4111011LB

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-258

Matrix: (soil/water) WATER Lab Prep Batch: V4111001

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 0302004

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/10/00

GC Column: ID: 2.00 (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
109-60-4	n-Propyl Acetate	1.00	U
103-65-1	n-Propylbenzene	1.00	U
100-42-5	Styrene	1.00	U
630-20-6	1,1,1,2-Tetrachloroethane	1.00	U
79-34-5	1,1,2,2-Tetrachloroethane	1.00	U
127-18-4	Tetrachloroethene	1.00	U
109-99-9	Tetrahydrofuran	1.00	U
87-61-6	1,2,3-Trichlorobenzene	1.00	U
108-88-3	Toluene	1.00	U
71-55-6	1,1,1-Trichloroethane	1.00	U
79-00-5	1,1,2-Trichloroethane	1.00	U
76-13-1	1,1,2-trichloro-1,2,2-triflu	1.00	U
79-01-6	Trichloroethene	1.00	U
75-69-4	Trichlorofluoromethane	1.00	U
96-18-4	1,2,3-Trichloropropane	1.00	U
120-82-1	1,2,4-Trichlorobenzene	1.00	U
95-63-6	1,2,4-Trimethylbenzene	1.00	U
108-67-8	1,3,5-Trimethylbenzene	1.00	U
108-05-4	Vinyl Acetate	20.00	U
75-01-4	Vinyl Chloride	1.00	U
1330-20-7	Xylene-mp	1.00	U
95-47-6	Xylene-o	1.00	U
1476-11-5	cis-1,4-Dichloro-2-butene	1.00	U

613 190

FORM 1
VOA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

V4111011LB

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-258

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 0302004

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/10/00

GC Column: ID: 2.00 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
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FORM 3
WATER VOA-GCMS LAB CONTROL SAMPLE

Lab Name: ETC, INC. Lab Prep Batch: V4111001

Lab Code: Case No.: SAS No.: SDG No.: 0011-258

Matrix Spike - Sample No.: V4111011LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Acetone	100.0		128.2	128	59-151
Acetonitrile	1000		1261	126	57-143
Acrolein	100.0		121.3	121	59-134
Acrylonitrile	100.0		122.5	122	60-146
Allyl chloride	100.0		104.0	104	74-120
Benzene	100.0		110.1	110	72-124
Bromobenzene	100.0		93.75	94	77-120
Bromochloromethane	100.0		139.3	139*	74-120
Bromodichloromethane	100.0		111.8	112	68-119
Bromoform	100.0		96.23	96	66-136
2-Butanone	100.0		120.9	121	55-151
Bromomethane	100.0		106.2	106	40-134
n-Butylbenzene	100.0		107.9	108	69-129
sec-Butylbenzene	100.0		89.50	90	72-127
tert-Butylbenzene	100.0		86.81	87	73-126
Carbon Disulfide	100.0		110.0	110	60-133
Carbon Tetrachloride	100.0		109.9	110	64-123
Chlorobenzene	100.0		94.57	94	77-112
Chlorodibromomethane	100.0		109.5	110	72-118
Chloroethane	100.0		113.9	114	64-142
2-Chloroethyl vinyl eth	100.0		123.8	124	22-165
Chloroform	100.0		85.31	85	70-115
Chloromethane	100.0		101.9	102	58-139
Chloroprene	100.0		92.81	93	73-118
2-Chlorotoluene	100.0		95.33	95	65-132
4-Chlorotoluene	100.0		94.28	94	67-127
1,2-Dibromo-3-chloropro	100.0		112.7	113	56-134
1,2-Dibromoethane	100.0		109.0	109	74-118

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER VOA-GCMS LAB CONTROL SAMPLE

613 192

Lab Name: ETC, INC. Lab Prep Batch: V4111001

Lab Code: Case No.: SAS No.: SDG No.: 0011-258

Matrix Spike - Sample No.: V4111011LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Dibromomethane	100.0		92.64	93	75-114
1,2-Dichlorobenzene	100.0		112.2	112	80-113
1,3-Dichlorobenzene	100.0		110.2	110	77-119
1,4-Dichlorobenzene	100.0		113.7	114	78-116
trans-1,4-Dichloro-2-bu	100.0		100.2	100	62-138
Dichlorodifluoromethane	100.0		95.48	95	48-145
1,1-Dichloroethane	100.0		95.51	96	76-118
1,2-Dichloroethane	100.0		103.9	104	62-124
1,1-Dichloroethene	100.0		109.1	109	69-121
cis-1,2-Dichloroethene	100.0		107.2	107	76-114
trans-1,2-Dichloroethen	100.0		107.6	108	72-121
1,2-Dichloropropane	100.0		102.3	102	64-133
1,3-Dichloropropane	100.0		102.2	102	68-128
2,2-Dichloropropane	100.0		94.22	94	67-132
1,1-Dichloropropene	100.0		108.2	108	76-117
cis-1,3-Dichloropropene	100.0		102.9	103	77-120
trans-1,3-Dichloroprope	100.0		104.8	105	73-124
Di isopropyl ether	100.0		96.64	97	62-160
1,4-Dioxane	2000		2425	121	56-13
Ethyl Acetate	100.0		108.1	108	52-15
Ethylbenzene	100.0		89.68	90	77-111
Ethyl methacrylate	200.0		224.2	112	57-140
Furan	100.0		150.6	151*	52-124
Hexachlorobutadiene	100.0		107.4	107	69-137
Hexane	100.0		127.3	127	70-130
2-Hexanone	100.0		121.4	121	53-144
Iodomethane	100.0		126.2	126	51-153
Isobutyl Alcohol	2000		2449	122	60-134

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER VOA-GCMS LAB CONTROL SAMPLE

Lab Name: ETC, INC. Lab Prep Batch: V4111001

Lab Code: Case No.: SAS No.: SDG No.: 0011-258

Matrix Spike - Sample No.: V4111011LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Isopropylbenzene	100.0		87.21	87	74-125
4-Isopropyltoluene	100.0		88.68	89	72-127
Methacrylonitrile	1000		971.0	97	70-125
Methylene Chloride	100.0		112.3	112	76-115
Methyl methacrylate	200.0		227.5	114	57-147
4-Methyl-2-Pentanone	100.0		158.9	159*	42-144
Methyl-tertbutyl-Ether	100.0		107.9	108	62-122
Naphthalene	100.0		123.9	124	53-124
Pentachloroethane	100.0		124.4	124	78-126
Propionitrile	1000		1281	128	58-139
n-Propyl Acetate	100.0		163.2	163	88-170
n-Propylbenzene	100.0		90.95	91	75-125
Styrene	100.0		93.70	94	77-117
1,1,1,2-Tetrachloroetha	100.0		90.12	90	79-113
1,1,2,2-Tetrachloroetha	100.0		112.2	112	67-126
Tetrachloroethene	100.0		102.0	102	77-115
Tetrahydrofuran	100.0		115.0	115	76-181
1,2,3-Trichlorobenzene	100.0		126.5	126	62-132
Toluene	100.0		94.70	95	77-115
1,1,1-Trichloroethane	100.0		100.2	100	63-122
1,1,2-Trichloroethane	100.0		109.6	110	69-117
1,1,2-trichloro-1,2,2-t	100.0		110.3	110	70-130
Trichloroethene	100.0		95.83	96	75-113
Trichlorofluoromethane	100.0		99.06	99	55-130
1,2,3-Trichloropropane	100.0		97.32	97	62-130
1,2,4-Trichlorobenzene	100.0		128.4	128	68-132
1,2,4-Trimethylbenzene	100.0		86.62	87	69-126
1,3,5-Trimethylbenzene	100.0		85.15	85	69-128

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER VOA-GCMS LAB CONTROL SAMPLE

Lab Name: ETC, INC. Lab Prep Batch: V4111001

Lab Code: Case No.: SAS No.: SDG No.: 0011-258

Matrix Spike - Sample No.: V4111011LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Vinyl Acetate	100.0		127.4	127	28-146
Vinyl Chloride	100.0		107.0	107	65-134
Xylene-mp	200.0		185.7	93	77-115
Xylene-o	100.0		90.38	90	77-115

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 3 out of 88 outside limits

COMMENTS: _____

FORM 3
WATER VOA-GCMS MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: ETC, INC. Lab Prep Batch: V4111001

Lab Code: Case No.: SAS No.: SDG No.: 0011-258

Matrix Spike - Sample No.: 0011-216-11

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
Benzene	100.0	0.000	110.8	111	72-124
Chlorobenzene	100.0	0.000	99.62	100	77-112
1,1-Dichloroethene	100.0	0.000	105.2	105	69-121
Toluene	100.0	0.000	95.34	95	77-115
Trichloroethene	100.0	0.000	98.46	98	75-113

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Benzene	100.0	118.5	118	6	20	72-124
Chlorobenzene	100.0	95.01	95	5	20	77-112
1,1-Dichloroethene	100.0	111.3	111	6	20	69-121
Toluene	100.0	97.04	97	2	20	77-115
Trichloroethene	100.0	98.48	98	0	20	75-113

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

COMMENTS: _____

613 196

FORM 4
VOA-GCMS METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

V4111311LB

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-258

Lab File ID: 0302004 Lab Prep Batch: V4111301

Date Analyzed: 11/13/00 Time Analyzed: 1138

GC Column: ID: 2 (mm) Heated Purge: (Y/N) Y

Instrument ID: VOC4

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

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	V4111311LCS	V4111301	0201002LCS	0946
02	0011-258-8	V4111301	1201012	1723
03	0011-258-7	V4111301	1301013	1754
04	0011-216-3	V4111301	1601016	1927
05	0011-216-3MS	V4111301	1801018	2029
06	0011-216-3MS	V4111301	1901019	2100
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COMMENTS:

FORM 1
VOA-GCMS ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.
613 197
V4111311LB

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-258

Matrix: (soil/water) WATER Lab Prep Batch: V4111301

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 0302004

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/13/00

GC Column: ID: 2.00 (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
67-64-1	Acetone	20.00	U
75-05-8	Acetonitrile	20.00	U
107-02-8	Acrolein	20.00	U
107-13-1	Acrylonitrile	20.00	U
107-05-1	Allyl chloride	1.00	U
71-43-2	Benzene	1.00	U
108-86-1	Bromobenzene	1.00	U
74-97-5	Bromochloromethane	1.00	U
75-27-4	Bromodichloromethane	1.00	U
75-25-2	Bromoform	1.00	U
78-93-3	2-Butanone	20.00	U
74-83-9	Bromomethane	1.00	U
104-51-8	n-Butylbenzene	1.00	U
135-98-8	sec-Butylbenzene	1.00	U
98-06-6	tert-Butylbenzene	1.00	U
75-15-0	Carbon Disulfide	1.00	U
56-23-5	Carbon Tetrachloride	1.00	U
108-90-7	Chlorobenzene	1.00	U
124-48-1	Chlorodibromomethane	1.00	U
75-00-3	Chloroethane	1.00	U
110-75-0	2-Chloroethyl vinyl ether	20.00	U
67-66-3	Chloroform	1.00	U
74-87-3	Chloromethane	1.00	U
126-99-8	Chloroprene	1.00	U
95-49-8	2-Chlorotoluene	1.00	U
106-43-4	4-Chlorotoluene	1.00	U
96-12-8	1,2-Dibromo-3-chloropropane	1.00	U
106-93-4	1,2-Dibromoethane	1.00	U
74-95-3	Dibromomethane	1.00	U
95-50-1	1,2-Dichlorobenzene	1.00	U
541-73-1	1,3-Dichlorobenzene	1.00	U
106-46-7	1,4-Dichlorobenzene	1.00	U
110-57-6	trans-1,4-Dichloro-2-butene	1.00	U

613 198

FORM 1
VOA-GCMS ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

V4111311LB

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-258

Matrix: (soil/water) WATER Lab Prep Batch: V4111301

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 0302004

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/13/00

GC Column: ID: 2.00 (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
1868-53-7	Dichlorodifluoromethane	1.00	U
75-34-3	1,1-Dichloroethane	1.00	U
107-06-2	1,2-Dichloroethane	1.00	U
75-35-4	1,1-Dichloroethene	1.00	U
156-59-4	cis-1,2-Dichloroethene	1.00	U
156-60-5	trans-1,2-Dichloroethene	1.00	U
78-87-5	1,2-Dichloropropane	1.00	U
142-28-9	1,3-Dichloropropane	1.00	U
590-20-7	2,2-Dichloropropane	1.00	U
563-58-6	1,1-Dichloropropene	1.00	U
10061-01-5	cis-1,3-Dichloropropene	1.00	U
10061-02-6	trans-1,3-Dichloropropene	1.00	U
108-20-3	Di isopropyl ether	5.00	U
123-91-1	1,4-Dioxane	100.0	U
141-78-6	Ethyl Acetate	5.00	U
100-41-4	Ethylbenzene	1.00	U
97-63-2	Ethyl methacrylate	1.00	U
110-00-9	Furan	1.00	U
87-63-3	Hexachlorobutadiene	1.00	U
110-54-3	Hexane	1.00	U
591-78-6	2-Hexanone	5.00	U
74-88-4	Iodomethane	1.00	U
78-83-1	Isobutyl Alcohol	100.0	U
98-82-8	Isopropylbenzene	1.00	U
99-87-6	4-Isopropyltoluene	1.00	U
126-98-7	Methacrylonitrile	10.00	U
75-09-2	Methylene Chloride	1.16	J
80-62-6	Methyl methacrylate	1.00	U
108-10-1	4-Methyl-2-Pentanone	5.00	U
1634-04-4	Methyl-tertbutyl-Ether	5.00	U
91-20-3	Naphthalene	1.00	U
76-01-7	Pentachloroethane	1.00	U
107-12-0	Propionitrile	10.00	U

FORM 1
VOA-GCMS ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO. 613 199

V4111311LB

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-258

Matrix: (soil/water) WATER Lab Prep Batch: V4111301

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 0302004

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/13/00

GC Column: ID: 2.00 (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
109-60-4	n-Propyl Acetate	1.00	U
103-65-1	n-Propylbenzene	1.00	U
100-42-5	Styrene	1.00	U
630-20-6	1,1,1,2-Tetrachloroethane	1.00	U
79-34-5	1,1,2,2-Tetrachloroethane	1.00	U
127-18-4	Tetrachloroethene	1.00	U
109-99-9	Tetrahydrofuran	1.00	U
87-61-6	1,2,3-Trichlorobenzene	1.00	U
108-88-3	Toluene	1.00	U
71-55-6	1,1,1-Trichloroethane	1.00	U
79-00-5	1,1,2-Trichloroethane	1.00	U
76-13-1	1,1,2-trichloro-1,2,2-triflu	1.00	U
79-01-6	Trichloroethene	1.00	U
75-69-4	Trichlorofluoromethane	1.00	U
96-18-4	1,2,3-Trichloropropane	1.00	U
120-82-1	1,2,4-Trichlorobenzene	1.00	U
95-63-6	1,2,4-Trimethylbenzene	1.00	U
108-67-8	1,3,5-Trimethylbenzene	1.00	U
108-05-4	Vinyl Acetate	20.00	U
75-01-4	Vinyl Chloride	1.00	U
1330-20-7	Xylene-mp	1.00	U
95-47-6	Xylene-o	1.00	U
1476-11-5	cis-1,4-Dichloro-2-butene	1.00	U

FORM 1
VOA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

613 200

CLIENT SAMPLE NO.

V4111311LB

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-258

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 0302004

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/13/00

GC Column: ID: 2.00 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
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FORM 3
WATER VOA-GCMS LAB CONTROL SAMPLE

613 201

Lab Name: ETC, INC. Lab Prep Batch: V4111301

Lab Code: Case No.: SAS No.: SDG No.: 0011-258

Matrix Spike - Sample No.: V4111311LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Acetone	100.0		115.6	116	59-151
Acetonitrile	1000		1273	127	57-143
Acrolein	100.0		110.7	111	59-134
Acrylonitrile	100.0		114.6	115	60-146
Allyl chloride	100.0		112.0	112	74-120
Benzene	100.0		114.1	114	72-124
Bromobenzene	100.0		88.26	88	77-120
Bromochloromethane	100.0		142.1	142*	74-120
Bromodichloromethane	100.0		106.9	107	68-119
Bromoform	100.0		87.15	87	66-136
2-Butanone	100.0		109.6	110	55-151
Bromomethane	100.0		127.2	127	40-134
n-Butylbenzene	100.0		94.16	94	69-129
sec-Butylbenzene	100.0		83.65	84	72-127
tert-Butylbenzene	100.0		79.62	80	73-126
Carbon Disulfide	100.0		120.9	121	60-133
Carbon Tetrachloride	100.0		100.8	101	64-123
Chlorobenzene	100.0		89.06	89	77-112
Chlorodibromomethane	100.0		97.54	98	72-118
Chloroethane	100.0		127.4	127	64-142
2-Chloroethyl vinyl eth	100.0		108.3	108	22-165
Chloroform	100.0		86.92	87	70-115
Chloromethane	100.0		120.7	121	58-139
Chloroprene	100.0		89.68	90	73-118
2-Chlorotoluene	100.0		85.38	85	65-132
4-Chlorotoluene	100.0		86.11	86	67-127
1,2-Dibromo-3-chloropro	100.0		90.12	90	56-134
1,2-Dibromoethane	100.0		97.18	97	74-118

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER VOA-GCMS LAB CONTROL SAMPLE

Lab Name: ETC, INC. Lab Prep Batch: V4111301

Lab Code: Case No.: SAS No.: SDG No.: 0011-258

Matrix Spike - Sample No.: V4111311LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Dibromomethane	100.0		86.19	86	75-114
1,2-Dichlorobenzene	100.0		98.31	98	80-113
1,3-Dichlorobenzene	100.0		100.6	101	77-119
1,4-Dichlorobenzene	100.0		96.13	96	78-116
trans-1,4-Dichloro-2-bu	100.0		90.04	90	62-138
Dichlorodifluoromethane	100.0		94.16	94	48-145
1,1-Dichloroethane	100.0		98.33	98	76-118
1,2-Dichloroethane	100.0		99.14	99	62-124
1,1-Dichloroethene	100.0		119.0	119	69-121
cis-1,2-Dichloroethene	100.0		113.1	113	76-114
trans-1,2-Dichloroethen	100.0		114.9	115	72-121
1,2-Dichloropropane	100.0		95.83	96	64-133
1,3-Dichloropropane	100.0		93.11	93	68-128
2,2-Dichloropropane	100.0		93.66	94	67-132
1,1-Dichloropropene	100.0		106.2	106	76-117
cis-1,3-Dichloropropene	100.0		92.98	93	77-120
trans-1,3-Dichloroprope	100.0		96.39	96	73-124
Di isopropyl ether	100.0		97.31	97	62-160
1,4-Dioxane	2000		2296	115	56-13
Ethyl Acetate	100.0		100.4	100	52-15
Ethylbenzene	100.0		81.01	81	77-111
Ethyl methacrylate	200.0		197.2	99	57-140
Furan	100.0		168.3	168*	52-124
Hexachlorobutadiene	100.0		87.74	88	69-137
Hexane	100.0		130.0	130	70-130
2-Hexanone	100.0		102.2	102	53-144
Iodomethane	100.0		141.6	142	51-153
Isobutyl Alcohol	2000		2188	109	60-134

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER VOA-GCMS LAB CONTROL SAMPLE

613 203

Lab Name: ETC, INC. Lab Prep Batch: V4111301

Lab Code: Case No.: SAS No.: SDG No.: 0011-258

Matrix Spike - Sample No.: V4111311LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Isopropylbenzene	100.0		81.24	81	74-125
4-Isopropyltoluene	100.0		81.14	81	72-127
Methacrylonitrile	1000		923.7	92	70-125
Methylene Chloride	100.0		114.4	114	76-115
Methyl methacrylate	200.0		195.8	98	57-147
4-Methyl-2-Pentanone	100.0		100.5	100	42-144
Methyl-tertbutyl-Ether	100.0		102.7	103	62-122
Naphthalene	100.0		104.5	104	53-124
Pentachloroethane	100.0		121.0	121	78-126
Propionitrile	1000		1178	118	58-139
n-Propyl Acetate	100.0		152.8	153	88-170
n-Propylbenzene	100.0		83.47	83	75-125
Styrene	100.0		88.75	89	77-117
1,1,1,2-Tetrachloroetha	100.0		84.53	84	79-113
1,1,2,2-Tetrachloroetha	100.0		100.1	100	67-126
Tetrachloroethene	100.0		82.72	83	77-115
Tetrahydrofuran	100.0		126.2	126	76-181
1,2,3-Trichlorobenzene	100.0		102.9	103	62-132
Toluene	100.0		86.69	87	77-115
1,1,1-Trichloroethane	100.0		95.81	96	63-122
1,1,2-Trichloroethane	100.0		100.6	101	69-117
1,1,2-trichloro-1,2,2-t	100.0		110.2	110	70-130
Trichloroethene	100.0		87.90	88	75-113
Trichlorofluoromethane	100.0		100.5	100	55-130
1,2,3-Trichloropropane	100.0		87.40	87	62-130
1,2,4-Trichlorobenzene	100.0		108.1	108	68-132
1,2,4-Trimethylbenzene	100.0		78.93	79	69-126
1,3,5-Trimethylbenzene	100.0		79.08	79	69-128

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER VOA-GCMS LAB CONTROL SAMPLE

613 204

Lab Name: ETC, INC. Lab Prep Batch: V4111301

Lab Code: Case No.: SAS No.: SDG No.: 0011-258

Matrix Spike - Sample No.: V4111311LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Vinyl Acetate	100.0		127.4	127	28-146
Vinyl Chloride	100.0		123.3	123	65-134
Xylene-mp	200.0		174.4	87	77-115
Xylene-o	100.0		84.94	85	77-115

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 2 out of 88 outside limits

COMMENTS: _____

FORM 3
WATER VOA-GCMS MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

613 205

Lab Name: ETC, INC. Lab Prep Batch: V4111301

Lab Code: Case No.: SAS No.: SDG No.: 0011-258

Matrix Spike - Sample No.: 0011-216-3

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
Benzene	100.0	0.000	115.0	115	72-124
Chlorobenzene	100.0	0.000	99.80	100	77-112
1,1-Dichloroethene	100.0	0.000	113.9	114	69-121
Toluene	100.0	0.000	98.06	98	77-115
Trichloroethene	100.0	1.81	96.60	95	75-113

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Benzene	100.0	106.0	106	8	20	72-124
Chlorobenzene	100.0	96.01	96	4	20	77-112
1,1-Dichloroethene	100.0	108.8	109	4	20	69-121
Toluene	100.0	93.75	94	4	20	77-115
Trichloroethene	100.0	90.30	88	8	20	75-113

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

COMMENTS: _____

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 206

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

FID #

Date Arrived **11/08/00**
ETC Order Number **0011258**

ETC Lab ID **0011258-01**
Field ID : **MW-51-Y2Q4**

Matrix : AQUEOUS
Sample Date : **11/08/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Base/Neutral & Acid				11/16/00		PF	8270C
QC Batch	**P06008**				11/09/00		3510C
Dilution Factor	**1**						
Acenaphthene	ND	ug/L	2.00				
Acenaphthylene	ND	ug/L	2.00				
Anthracene	ND	ug/L	2.00				
Benzo(a)anthracene	ND	ug/L	2.00				
Benzo(b)fluoranthene	ND	ug/L	2.00				
Benzo(k)fluoranthene	ND	ug/L	2.00				
Benzo(g,h,i)perylene	ND	ug/L	2.00				
Benzo(a)pyrene	ND	ug/L	2.00				
Benzoic Acid	ND	ug/L	50.0				
Benzyl Alcohol	ND	ug/L	10.0				
Bis(2-chloroethoxy)methane	ND	ug/L	5.00				
Bis(2-chloroethyl)ether	ND	ug/L	5.00				
Bis(2-chloroisopropyl)ether	ND	ug/L	5.00				
Bis(2-ethylhexyl)phthalate	ND	ug/L	10.0				
4-Bromophenyl phenyl ether	ND	ug/L	5.00				
Butyl benzyl phthalate	ND	ug/L	5.00				
4-Chloroaniline	ND	ug/L	5.00				
2-Chloronaphthalene	ND	ug/L	5.00				
4-Chloro-3-methylphenol	ND	ug/L	5.00				
2-Chlorophenol	ND	ug/L	5.00				
4-Chlorophenyl phenyl ether	ND	ug/L	5.00				
Chrysene	ND	ug/L	2.00				
Dibenzo(a,h)anthracene	ND	ug/L	2.00				
Dibenzofuran	ND	ug/L	5.00				
Di-n-butyl phthalate	ND	ug/L	5.00				
3,3'-Dichlorobenzidine	ND	ug/L	10.0				
2,4-Dichlorophenol	ND	ug/L	5.00				
Diethyl phthalate	ND	ug/L	5.00				
2,4-Dimethylphenol	ND	ug/L	5.00				
Dimethyl phthalate	ND	ug/L	5.00				
4,6-Dinitro-2-methylphenol	ND	ug/L	10.0				
2,4-Dinitrophenol	ND	ug/L	50.0				
2,4-Dinitrotoluene	ND	ug/L	5.00				
2,6-Dinitrotoluene	ND	ug/L	5.00				
Di-n-octyl phthalate	ND	ug/L	5.00				
Fluoranthene	ND	ug/L	2.00				
Fluorene	ND	ug/L	2.00				
Hexachlorobenzene	ND	ug/L	5.00				
Hexachlorobutadiene	ND	ug/L	5.00				
Hexachlorocyclopentadiene	ND	ug/L	5 00				
Hexachloroethane	ND	ug/L	5.00				
Indeno(1,2,3-cd)pyrene	ND	ug/L	2.00				
Isophorone	ND	ug/L	5.00				
2-Methylnaphthalene	ND	ug/L	2.00				
2-Methylphenol (o-cresol)	ND	ug/L	5.00				

CS
Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

FID #

Date Arrived **11/08/00**
ETC Order Number **0011258**

ETC Lab ID **0011258-01**
Field ID : **MW-51-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/08/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Base/Neutral & Acid				11/16/00	11/09/00	PF	8270C 3510C
4-Methylphenol (p-cresol)	ND	ug/L	5.00				
Naphthalene	ND	ug/L	2.00				
Nitrobenzene	ND	ug/L	5.00				
2-Nitroaniline	ND	ug/L	5.00				
3-Nitroaniline	ND	ug/L	10.0				
4-Nitroaniline	ND	ug/L	5.00				
2-Nitrophenol	ND	ug/L	5.00				
4-Nitrophenol	ND	ug/L	5.00				
N-Nitrosodiphenylamine	ND	ug/L	5.00				
N-Nitrosodipropylamine	ND	ug/L	5.00				
Pentachlorophenol	ND	ug/L	10.0				
Phenanthrene	ND	ug/L	2.00				
Phenol	ND	ug/L	5.00				
[illegible]ene	ND	ug/L	2.00				
[illegible]-Trichlorphenol	ND	ug/L	5.00				
[illegible]-Trichlorophenol	ND	ug/L	5.00				

Surrogate Standard	% Recovery	QC Limits	
S1 - Nitrobenzene-d5	55	29	110
S2 - 2-Fluorobiphenyl	57	38	107
S3 - 4-Terphenyl-d14	72	33	122
S4 - Phenol-d6	21	7	58
S5 - 2,4,6-Tribromophenol	72	16	138
S6 - 2-Fluorophenol	30	8	88

( )
Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

613 208

FORM 1
BNA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

0011-258-1

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-258

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 1701017

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/16/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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FORM I BNA-GCMS-TIC

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

FID #

Date Arrived **11/08/00**
ETC Order Number **0011258**

ETC Lab ID **0011258-02**
Field ID : **RB-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/08/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Base/Neutral & Acid				11/16/00		PF	8270C
					11/09/00		3510C
QC Batch	**P06008**						
Dilution Factor	**1**						
Acenaphthene	ND	ug/L	2.00				
Acenaphthylene	ND	ug/L	2.00				
Anthracene	ND	ug/L	2.00				
Benzo(a)anthracene	ND	ug/L	2.00				
Benzo(b)fluoranthene	ND	ug/L	2.00				
Benzo(k)fluoranthene	ND	ug/L	2.00				
Benzo(g,h,i)perylene	ND	ug/L	2.00				
Benzo(a)pyrene	ND	ug/L	2.00				
Benzoic Acid	ND	ug/L	50.0				
Benzyl Alcohol	ND	ug/L	10.0				
Bis(2-chloroethoxy)methane	ND	ug/L	5.00				
(2-chloroethyl)ether	ND	ug/L	5.00				
[redacted]2-chloroisopropyl)ether	ND	ug/L	5.00				
[redacted]2-ethylhexyl)phthalate	ND	ug/L	10.0				
4-Bromophenyl phenyl ether	ND	ug/L	5.00				
Butyl benzyl phthalate	ND	ug/L	5.00				
4-Chloroaniline	ND	ug/L	5.00				
2-Chloronaphthalene	ND	ug/L	5.00				
4-Chloro-3-methylphenol	ND	ug/L	5.00				
2-Chlorophenol	ND	ug/L	5.00				
4-Chlorophenyl phenyl ether	ND	ug/L	5.00				
Chrysene	ND	ug/L	2.00				
Dibenzo(a,h)anthracene	ND	ug/L	2.00				
Dibenzofuran	ND	ug/L	5.00				
Di-n-butyl phthalate	ND	ug/L	5.00				
3,3'-Dichlorobenzidine	ND	ug/L	10.0				
2,4-Dichlorophenol	ND	ug/L	5.00				
Diethyl phthalate	ND	ug/L	5.00				
2,4-Dimethylphenol	ND	ug/L	5.00				
Dimethyl phthalate	ND	ug/L	5.00				
4,6-Dinitro-2-methylphenol	ND	ug/L	10.0				
2,4-Dinitrophenol	ND	ug/L	50.0				
2,4-Dinitrotoluene	ND	ug/L	5.00				
2,6-Dinitrotoluene	ND	ug/L	5.00				
Di-n-octyl phthalate	ND	ug/L	5.00				
Fluoranthene	ND	ug/L	2.00				
Fluorene	ND	ug/L	2 00				
Hexachlorobenzene	ND	ug/L	5 00				
Hexachlorobutadiene	ND	ug/L	5.00				
Hexachlorocyclopentadiene	ND	ug/L	5.00				
Hexachloroethane	ND	ug/L	5.00				
[redacted]eno(1,2,3-cd)pyrene	ND	ug/L	2 00				
[redacted]horone	ND	ug/L	5 00				
[redacted]hylnaphthalene	ND	ug/L	2.00				
2-[redacted]ethylphenol (o-cresol)	ND	ug/L	5.00				

CS
Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 210

Client Name: Sverdrup/Jacobs Eng.
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID: Memphis Depot

FID #

Date Arrived: 11/08/00
ETC Order Number: 0011258

ETC Lab ID: 0011258-02
Field ID : RB-Y2Q4

Matrix . AQUEOUS
Sample Date : 11/08/00

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Base/Neutral & Acid				11/16/00		PF	8270C
4-Methylphenol (p-cresol)	ND	ug/L	5.00		11/09/00		3510C
Naphthalene	ND	ug/L	2.00				
Nitrobenzene	ND	ug/L	5.00				
2-Nitroaniline	ND	ug/L	5.00				
3-Nitroaniline	ND	ug/L	10.0				
4-Nitroaniline	ND	ug/L	5.00				
2-Nitrophenol	ND	ug/L	5.00				
4-Nitrophenol	ND	ug/L	5.00				
N-Nitrosodiphenylamine	ND	ug/L	5.00				
N-Nitrosodipropylamine	ND	ug/L	5.00				
Pentachlorophenol	ND	ug/L	10.0				
Phenanthrene	0.55J	ug/L	2.00				
Phenol	ND	ug/L	5.00				
Pyrene	ND	ug/L	2.00				
2,4,5-Trichlorphenol	ND	ug/L	5.00				
2,4,6-Trichlorophenol	ND	ug/L	5.00				

Surrogate Standard	% Recovery	QC Limits	
S1 - Nitrobenzene-d5	73	29	110
S2 - 2-Fluorobiphenyl	94	38	107
S3 - 4-Terphenyl-d14	58	33	122
S4 - Phenol-d6	23	7	58
S5 - 2,4,6-Tribromophenol	87	16	138
S6 - 2-Fluorophenol	34	8	88

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

FORM 1
BNA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.
613 211
0011-258-2

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-258

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 1801018

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/16/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

Number TICs found: 14

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	120-92-3	CYCLOPENTANONE	3.34	8.64	NJ
2.	149-57-5	HEXANOIC ACID, 2-ETHYL-	5.52	4.33	NJ
3.	4884-24-6	[1,1'-BICYCLOPENTYL]-2-ONE	6.83	4.03	NJ
4.	13126-67-5	DECANOIC ACID, SILVER(1+) SA	7.26	4.49	NJ
5.	629-59-4	TETRADECANE	7.59	6.46	NJ
6.	96-76-4	PHENOL, 2,4-BIS(1,1-DIMETHYL	8.50	4.08	NJ
7.	120-40-1	DODECANAMIDE, N,N-BIS(2-HYDR	8.93	6.82	NJ
8.	544-76-3	HEXADECANE	9.31	4.07	NJ
9.	629-78-7	HEPTADECANE	10.18	10.68	NJ
10.	13049-35-9	1,1'-BIPHENYL, 2,2'-DIETHYL-	10.37	9.54	NJ
11.	60-33-3	9,12-OCTADECADIENOIC ACID (Z	13.23	5.81	NJ
12.	7704-34-9	SULFUR	13.40	5.78	NJ
13.	112-62-9	9-OCTADECENOIC ACID (Z)-, ME	13.46	8.04	NJ
14.	2599-11-3	1,3,5-TRIAZIN-2(1H)-ONE, 4,6	20.44	41.96	NJ
15.					
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ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 212

Client Name: Sverdrup/Jacobs Eng.
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID: Memphis Depot

FID #

Date Arrived: 11/08/00
ETC Order Number: 0011258

ETC Lab ID: 0011258-03
Field ID : MW-40-Y2Q4

Matrix : AQUEOUS
Sample Date : 11/08/00

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Base/Neutral & Acid				11/16/00		PF	8270C
QC Batch	P06008				11/09/00		3510C
Dilution Factor	1						
Acenaphthene	ND	ug/L	2.00				
Acenaphthylene	ND	ug/L	2.00				
Anthracene	ND	ug/L	2.00				
Benzo(a)anthracene	ND	ug/L	2.00				
Benzo(b)fluoranthene	ND	ug/L	2.00				
Benzo(k)fluoranthene	ND	ug/L	2.00				
Benzo(g,h,i)perylene	ND	ug/L	2.00				
Benzo(a)pyrene	ND	ug/L	2.00				
Benzoic Acid	ND	ug/L	50.0				
Benzyl Alcohol	ND	ug/L	10.0				
Bis(2-chloroethoxy)methane	ND	ug/L	5.00				
Bis(2-chloroethyl)ether	ND	ug/L	5.00				
Bis(2-chloroisopropyl)ether	ND	ug/L	5.00				
Bis(2-ethylhexyl)phthalate	ND	ug/L	10.0				
4-Bromophenyl phenyl ether	ND	ug/L	5.00				
Butyl benzyl phthalate	ND	ug/L	5.00				
4-Chloroaniline	ND	ug/L	5.00				
2-Chloronaphthalene	ND	ug/L	5.00				
4-Chloro-3-methylphenol	ND	ug/L	5.00				
2-Chlorophenol	ND	ug/L	5.00				
4-Chlorophenyl phenyl ether	ND	ug/L	5.00				
Chrysene	ND	ug/L	2.00				
Dibenzo(a,h)anthracene	ND	ug/L	2.00				
Dibenzofuran	ND	ug/L	5.00				
Di-n-butyl phthalate	ND	ug/L	5.00				
3,3'-Dichlorobenzidine	ND	ug/L	10.0				
2,4-Dichlorophenol	ND	ug/L	5.00				
Diethyl phthalate	ND	ug/L	5.00				
2,4-Dimethylphenol	ND	ug/L	5.00				
Dimethyl phthalate	ND	ug/L	5.00				
4,6-Dinitro-2-methylphenol	ND	ug/L	10.0				
2,4-Dinitrophenol	ND	ug/L	50.0				
2,4-Dinitrotoluene	ND	ug/L	5.00				
2,6-Dinitrotoluene	ND	ug/L	5.00				
Di-n-octyl phthalate	ND	ug/L	5.00				
Fluoranthene	ND	ug/L	2.00				
Fluorene	ND	ug/L	2.00				
Hexachlorobenzene	ND	ug/L	5.00				
Hexachlorobutadiene	ND	ug/L	5.00				
Hexachlorocyclopentadiene	ND	ug/L	5.00				
Hexachloroethane	ND	ug/L	5.00				
Indeno(1,2,3-cd)pyrene	ND	ug/L	2.00				
Isophorone	ND	ug/L	5.00				
2-Methylnaphthalene	ND	ug/L	2.00				
2-Methylphenol (o-cresol)	ND	ug/L	5.00				

C S
Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

ENVIRONMENTAL TESTING & CONSULTING, INC.
2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

FID #

Date Arrived **11/08/00**
ETC Order Number **0011258**

ETC Lab ID **0011258-03**
Field ID : **MW-40-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/08/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Base/Neutral & Acid				11/16/00		PF	8270C
					11/09/00		3510C
4-Methylphenol (p-cresol)	ND	ug/L	5.00				
Naphthalene	ND	ug/L	2.00				
Nitrobenzene	ND	ug/L	5.00				
2-Nitroaniline	ND	ug/L	5.00				
3-Nitroaniline	ND	ug/L	10.0				
4-Nitroaniline	ND	ug/L	5.00				
2-Nitrophenol	ND	ug/L	5.00				
4-Nitrophenol	ND	ug/L	5.00				
N-Nitrosodiphenylamine	ND	ug/L	5.00				
N-Nitrosodipropylamine	ND	ug/L	5.00				
Pentachlorophenol	ND	ug/L	10.0				
Phenanthrene	ND	ug/L	2.00				
[illegible]henol	ND	ug/L	5.00				
[illegible]ene	ND	ug/L	2.00				
[illegible]5-Trichlorphenol	ND	ug/L	5.00				
[illegible]6-Trichlorophenol	ND	ug/L	5.00				

Surrogate Standard	% Recovery	QC Limits	
S1 - Nitrobenzene-d5	68	29	110
S2 - 2-Fluorobiphenyl	71	38	107
S3 - 4-Terphenyl-d14	57	33	122
S4 - Phenol-d6	26	7	58
S5 - 2,4,6-Tribromophenol	82	16	138
S6 - 2-Fluorophenol	42	8	88

Data Validator

ND - Not Detected Q - Recovery Outside QC Limits

613 214

FORM 1
BNA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.
0011-258-3

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-258

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 940.0 (g/mL) ML Lab File ID: 1901019

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/16/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

Number TICs found: 4

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	122-34-9	1,3,5-TRIAZINE-2,4-DIAMINE,	10.61	55.88	NJ
2.		UNKNOWN	13.72	4.67	J
3.		UNKNOWN	18.35	6.55	J
4.	1678-45-1	DODECANOIC ACID, 2-HYDROXY-1	21.82	28.94	NJ
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FORM I BNA-GCMS-TIC

ENVIRONMENTAL TESTING & CONSULTING, INC.
2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

FID #

Date Arrived **11/08/00**
ETC Order Number **0011258**

ETC Lab ID **0011258-04**
Field ID : **MW-44-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/08/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Base/Neutral & Acid				11/16/00	11/09/00	PF	8270C 3510C
QC Batch	**P06008**						
Dilution Factor	**1**						
Acenaphthene	ND	ug/L	2.00				
Acenaphthylene	ND	ug/L	2.00				
Anthracene	ND	ug/L	2.00				
Benzo(a)anthracene	ND	ug/L	2.00				
Benzo(b)fluoranthene	ND	ug/L	2.00				
Benzo(k)fluoranthene	ND	ug/L	2.00				
Benzo(g,h,i)perylene	ND	ug/L	2.00				
Benzo(a)pyrene	ND	ug/L	2.00				
Benzoic Acid	ND	ug/L	50.0				
Benzyl Alcohol	ND	ug/L	10.0				
Bis(2-chloroethoxy)methane	ND	ug/L	5.00				
(2-chloroethyl)ether	ND	ug/L	5.00				
-chloroisopropyl)ether	ND	ug/L	5.00				
-ethylhexyl)phthalate	ND	ug/L	10.0				
4-Bromophenyl phenyl ether	ND	ug/L	5.00				
Butyl benzyl phthalate	ND	ug/L	5.00				
4-Chloroaniline	ND	ug/L	5.00				
2-Chloronaphthalene	ND	ug/L	5.00				
4-Chloro-3-methylphenol	ND	ug/L	5.00				
2-Chlorophenol	ND	ug/L	5.00				
4-Chlorophenyl phenyl ether	ND	ug/L	5.00				
Chrysene	ND	ug/L	2.00				
Dibenzo(a,h)anthracene	ND	ug/L	2.00				
Dibenzofuran	ND	ug/L	5.00				
Di-n-butyl phthalate	ND	ug/L	5.00				
3,3'-Dichlorobenzidine	ND	ug/L	10.0				
2,4-Dichlorophenol	ND	ug/L	5.00				
Diethyl phthalate	ND	ug/L	5.00				
2,4-Dimethylphenol	ND	ug/L	5.00				
Dimethyl phthalate	ND	ug/L	5.00				
4,6-Dinitro-2-methylphenol	ND	ug/L	10.0				
2,4-Dinitrophenol	ND	ug/L	50.0				
2,4-Dinitrotoluene	ND	ug/L	5.00				
2,6-Dinitrotoluene	ND	ug/L	5.00				
Di-n-octyl phthalate	ND	ug/L	5.00				
Fluoranthene	ND	ug/L	2.00				
Fluorene	ND	ug/L	2.00				
Hexachlorobenzene	ND	ug/L	5 00				
Hexachlorobutadiene	ND	ug/L	5.00				
Hexachlorocyclopentadiene	ND	ug/L	5.00				
Hexachloroethane	ND	ug/L	5.00				
eno(1,2,3-cd)pyrene	ND	ug/L	2.00				
orone	ND	ug/L	5.00				
ylnaphthalene	ND	ug/L	2.00				
thylphenol (o-cresol)	ND	ug/L	5.00				

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

613 216

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name: Sverdrup/Jacobs Eng.
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID: Memphis Depot

FID #

Date Arrived: 11/08/00
ETC Order Number: 0011258

ETC Lab ID: 0011258-04
Field ID : MW-44-Y2Q4

Matrix : AQUEOUS
Sample Date : 11/08/00

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Base/Neutral & Acid				11/16/00	11/09/00	PF	8270C 3510C
4-Methylphenol (p-cresol)	ND	ug/L	5.00				
Naphthalene	ND	ug/L	2.00				
Nitrobenzene	ND	ug/L	5.00				
2-Nitroaniline	ND	ug/L	5.00				
3-Nitroaniline	ND	ug/L	10.0				
4-Nitroaniline	ND	ug/L	5.00				
2-Nitrophenol	ND	ug/L	5.00				
4-Nitrophenol	ND	ug/L	5.00				
N-Nitrosodiphenylamine	ND	ug/L	5.00				
N-Nitrosodipropylamine	ND	ug/L	5.00				
Pentachlorophenol	ND	ug/L	10 0				
Phenanthrene	ND	ug/L	2.00				
Phenol	ND	ug/L	5.00				
Pyrene	ND	ug/L	2.00				
2,4,5-Trichlorphenol	ND	ug/L	5.00				
2,4,6-Trichlorophenol	ND	ug/L	5.00				

Surrogate Standard	% Recovery	QC Limits	
S1 - Nitrobenzene-d5	70	29	110
S2 - 2-Fluorobiphenyl	74	38	107
S3 - 4-Terphenyl-d14	70	33	122
S4 - Phenol-d6	27	7	58
S5 - 2,4,6-Tribromophenol	82	16	138
S6 - 2-Fluorophenol	41	8	88

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

FORM 1
BNA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO. 613 217

0011-258-4

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-258

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 960.0 (g/mL) ML Lab File ID: 2001020

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/16/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

Number TICs found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	21.26	28.88	J
2.		UNKNOWN	21.36	48.09	J
3.					
4.					
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ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 218

Client Name: Sverdrup/Jacobs Eng.
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID: Memphis Depot

FID #

Date Arrived: 11/08/00
ETC Order Number: 0011258

ETC Lab ID: 0011258-05
Field ID : MW-33-Y2Q4

Matrix : AQUEOUS
Sample Date : 11/08/00

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Base/Neutral & Acid				11/17/00			
					11/09/00	PF	8270C 3510C
QC Batch	P06008						
Dilution Factor	1						
Acenaphthene	ND	ug/L	2.00				
Acenaphthylene	ND	ug/L	2.00				
Anthracene	ND	ug/L	2.00				
Benzo(a)anthracene	ND	ug/L	2.00				
Benzo(b)fluoranthene	ND	ug/L	2.00				
Benzo(k)fluoranthene	ND	ug/L	2.00				
Benzo(g,h,i)perylene	ND	ug/L	2.00				
Benzo(a)pyrene	ND	ug/L	2.00				
Benzoic Acid	ND	ug/L	50.0				
Benzyl Alcohol	ND	ug/L	10.0				
Bis(2-chloroethoxy)methane	ND	ug/L	5.00				
Bis(2-chloroethyl)ether	ND	ug/L	5.00				
Bis(2-chloroisopropyl)ether	ND	ug/L	5.00				
Bis(2-ethylhexyl)phthalate	ND	ug/L	10.0				
4-Bromophenyl phenyl ether	ND	ug/L	5.00				
Butyl benzyl phthalate	ND	ug/L	5.00				
4-Chloroaniline	ND	ug/L	5.00				
2-Chloronaphthalene	ND	ug/L	5.00				
4-Chloro-3-methylphenol	ND	ug/L	5.00				
2-Chlorophenol	ND	ug/L	5.00				
4-Chlorophenyl phenyl ether	ND	ug/L	5.00				
Chrysene	ND	ug/L	2.00				
Dibenzo(a,h)anthracene	ND	ug/L	2.00				
Dibenzofuran	ND	ug/L	5.00				
Di-n-butyl phthalate	ND	ug/L	5.00				
3,3'-Dichlorobenzidine	ND	ug/L	10.0				
2,4-Dichlorophenol	ND	ug/L	5.00				
Diethyl phthalate	ND	ug/L	5.00				
2,4-Dimethylphenol	ND	ug/L	5.00				
Dimethyl phthalate	ND	ug/L	5.00				
4,6-Dinitro-2-methylphenol	ND	ug/L	10.0				
2,4-Dinitrophenol	ND	ug/L	50.0				
2,4-Dinitrotoluene	ND	ug/L	5.00				
2,6-Dinitrotoluene	ND	ug/L	5.00				
Di-n-octyl phthalate	ND	ug/L	5.00				
Fluoranthene	ND	ug/L	2.00				
Fluorene	ND	ug/L	2.00				
Hexachlorobenzene	ND	ug/L	5.00				
Hexachlorobutadiene	ND	ug/L	5.00				
Hexachlorocyclopentadiene	ND	ug/L	5.00				
Hexachloroethane	ND	ug/L	5.00				
Indeno(1,2,3-cd)pyrene	ND	ug/L	2.00				
Isophorone	ND	ug/L	5.00				
2-Methylnaphthalene	ND	ug/L	2.00				
2-Methylphenol (o-cresol)	ND	ug/L	5.00				

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

ENVIRONMENTAL TESTING & CONSULTING, INC.
2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

FID #

Date Arrived **11/08/00**
ETC Order Number **0011258**

ETC Lab ID **0011258-05**
Field ID : **MW-33-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/08/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Base/Neutral & Acid				11/17/00	11/09/00	PF	8270C 3510C
4-Methylphenol (p-cresol)	ND	ug/L	5.00				
Naphthalene	ND	ug/L	2.00				
Nitrobenzene	ND	ug/L	5.00				
2-Nitroaniline	ND	ug/L	5.00				
3-Nitroaniline	ND	ug/L	10.0				
4-Nitroaniline	ND	ug/L	5.00				
2-Nitrophenol	ND	ug/L	5.00				
4-Nitrophenol	ND	ug/L	5.00				
N-Nitrosodiphenylamine	ND	ug/L	5.00				
N-Nitrosodipropylamine	ND	ug/L	5.00				
Pentachlorophenol	ND	ug/L	10.0				
Phenanthrene	ND	ug/L	2.00				
Phenol	ND	ug/L	5.00				
ene	ND	ug/L	2.00				
-Trichlorphenol	ND	ug/L	5.00				
-Trichlorophenol	ND	ug/L	5.00				

Surrogate Standard	% Recovery	QC Limits	
S1 - Nitrobenzene-d5	67	29	110
S2 - 2-Fluorobiphenyl	70	38	107
S3 - 4-Terphenyl-d14	71	33	122
S4 - Phenol-d6	24	7	58
S5 - 2,4,6-Tribromophenol	75	16	138
S6 - 2-Fluorophenol	36	8	88

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

FORM 1

613 220

BNA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

0011-258-5

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-258

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 990.0 (g/mL) ML Lab File ID: 2101021

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/17/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	3.45	4.83	J
2.					
3.					
4.					
5.					
6.					
7.					
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FORM I BNA-GCMS-TIC

ENVIRONMENTAL TESTING & CONSULTING, INC.
2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 221

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

FID #

Date Arrived **11/08/00**
ETC Order Number **0011258**

ETC Lab ID **0011258-06**
Field ID : **MW-68-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/08/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Base/Neutral & Acid				11/17/00		PF	8270C
					11/09/00		3510C
QC Batch	**P06008**						
Dilution Factor	**1**						
Acenaphthene	ND	ug/L	2.00				
Acenaphthylene	ND	ug/L	2.00				
Anthracene	ND	ug/L	2.00				
Benzo(a)anthracene	ND	ug/L	2.00				
Benzo(b)fluoranthene	ND	ug/L	2.00				
Benzo(k)fluoranthene	ND	ug/L	2.00				
Benzo(g,h,i)perylene	ND	ug/L	2.00				
Benzo(a)pyrene	ND	ug/L	2.00				
Benzoic Acid	ND	ug/L	50.0				
Benzyl Alcohol	ND	ug/L	10.0				
Bis(2-chloroethoxy)methane	ND	ug/L	5.00				
(2-chloroethyl)ether	ND	ug/L	5.00				
[illegible]2-chloroisopropyl)ether	ND	ug/L	5.00				
[illegible]2-ethylhexyl)phthalate	ND	ug/L	10.0				
4-Bromophenyl phenyl ether	ND	ug/L	5.00				
Butyl benzyl phthalate	ND	ug/L	5.00				
4-Chloroaniline	ND	ug/L	5.00				
2-Chloronaphthalene	ND	ug/L	5.00				
4-Chloro-3-methylphenol	ND	ug/L	5.00				
2-Chlorophenol	ND	ug/L	5.00				
4-Chlorophenyl phenyl ether	ND	ug/L	5.00				
Chrysene	ND	ug/L	2.00				
Dibenzo(a,h)anthracene	ND	ug/L	2.00				
Dibenzofuran	ND	ug/L	5.00				
Di-n-butyl phthalate	ND	ug/L	5.00				
3,3'-Dichlorobenzidine	ND	ug/L	10.0				
2,4-Dichlorophenol	ND	ug/L	5.00				
Diethyl phthalate	ND	ug/L	5.00				
2,4-Dimethylphenol	ND	ug/L	5.00				
Dimethyl phthalate	ND	ug/L	5.00				
4,6-Dinitro-2-methylphenol	ND	ug/L	10.0				
2,4-Dinitrophenol	ND	ug/L	50.0				
2,4-Dinitrotoluene	1.44J	ug/L	5.00				
2,6-Dinitrotoluene	2.09J	ug/L	5.00				
Di-n-octyl phthalate	ND	ug/L	5.00				
Fluoranthene	ND	ug/L	2 00				
Fluorene	ND	ug/L	2 00				
Hexachlorobenzene	ND	ug/L	5.00				
Hexachlorobutadiene	ND	ug/L	5.00				
Hexachlorocyclopentadiene	ND	ug/L	5.00				
Hexachloroethane	ND	ug/L	5.00				
[illegible]eno(1,2,3-cd)pyrene	ND	ug/L	2.00				
[illegible]horone	ND	ug/L	5 00				
[illegible]thylnaphthalene	ND	ug/L	2.00				
2-[illegible]ethylphenol (o-cresol)	ND	ug/L	5.00				

CS
Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

006094

613 222

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name: **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID: **Memphis Depot**

FID #

Date Arrived: **11/08/00**
ETC Order Number: **0011258**

ETC Lab ID: **0011258-06**
Field ID : **MW-68-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/08/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Base/Neutral & Acid				11/17/00		PF	8270C
					11/09/00		3510C
4-Methylphenol (p-cresol)	ND	ug/L	5.00				
Naphthalene	ND	ug/L	2.00				
Nitrobenzene	ND	ug/L	5.00				
2-Nitroaniline	ND	ug/L	5.00				
3-Nitroaniline	ND	ug/L	10.0				
4-Nitroaniline	ND	ug/L	5.00				
2-Nitrophenol	ND	ug/L	5.00				
4-Nitrophenol	ND	ug/L	5.00				
N-Nitrosodiphenylamine	ND	ug/L	5.00				
N-Nitrosodipropylamine	ND	ug/L	5.00				
Pentachlorophenol	ND	ug/L	10.0				
Phenanthrene	ND	ug/L	2.00				
Phenol	ND	ug/L	5.00				
Pyrene	ND	ug/L	2.00				
2,4,5-Trichlorphenol	ND	ug/L	5.00				
2,4,6-Trichlorophenol	ND	ug/L	5.00				

Surrogate Standard	% Recovery	QC Limits	
S1 - Nitrobenzene-d5	62	29	110
S2 - 2-Fluorobiphenyl	67	38	107
S3 - 4-Terphenyl-d14	64	33	122
S4 - Phenol-d6	24	7	58
S5 - 2,4,6-Tribromophenol	71	16	138
S6 - 2-Fluorophenol	38	8	88

CS

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

FORM 1
BNA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.
613 223
0011-258-6

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-258

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 980.0 (g/mL) ML Lab File ID: 2201022

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/17/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
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613 224

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name: Sverdrup/Jacobs Eng.
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID: Memphis Depot

FID #

Date Arrived: 11/08/00
ETC Order Number: 0011258

ETC Lab ID: 0011258-07
Field ID : MW-59-Y2Q4

Matrix : AQUEOUS
Sample Date : 11/08/00

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Base/Neutral & Acid				11/17/00		PF	8270C
QC Batch	P06009				11/10/00		3510C
Dilution Factor	1						
Acenaphthene	ND	ug/L	2.00				
Acenaphthylene	ND	ug/L	2.00				
Anthracene	ND	ug/L	2.00				
Benzo(a)anthracene	ND	ug/L	2.00				
Benzo(b)fluoranthene	ND	ug/L	2.00				
Benzo(k)fluoranthene	ND	ug/L	2.00				
Benzo(g,h,i)perylene	ND	ug/L	2.00				
Benzo(a)pyrene	ND	ug/L	2.00				
Benzoic Acid	ND	ug/L	50.0				
Benzyl Alcohol	ND	ug/L	10.0				
Bis(2-chloroethoxy)methane	ND	ug/L	5.00				
Bis(2-chloroethyl)ether	ND	ug/L	5.00				
Bis(2-chloroisopropyl)ether	ND	ug/L	5.00				
Bis(2-ethylhexyl)phthalate	ND	ug/L	10.0				
4-Bromophenyl phenyl ether	ND	ug/L	5.00				
Butyl benzyl phthalate	ND	ug/L	5.00				
4-Chloroaniline	ND	ug/L	5.00				
2-Chloronaphthalene	ND	ug/L	5.00				
4-Chloro-3-methylphenol	ND	ug/L	5.00				
2-Chlorophenol	ND	ug/L	5.00				
4-Chlorophenyl phenyl ether	ND	ug/L	5.00				
Chrysene	ND	ug/L	5.00				
Dibenzo(a,h)anthracene	ND	ug/L	2.00				
Dibenzofuran	ND	ug/L	2.00				
Di-n-butyl phthalate	ND	ug/L	5.00				
3,3'-Dichlorobenzidine	ND	ug/L	5.00				
2,4-Dichlorophenol	ND	ug/L	10.0				
Diethyl phthalate	ND	ug/L	5.00				
2,4-Dimethylphenol	ND	ug/L	5.00				
Dimethyl phthalate	ND	ug/L	5.00				
4,6-Dinitro-2-methylphenol	ND	ug/L	5.00				
2,4-Dinitrophenol	ND	ug/L	10.0				
2,4-Dinitrotoluene	ND	ug/L	50.0				
2,6-Dinitrotoluene	ND	ug/L	5.00				
Di-n-octyl phthalate	ND	ug/L	5.00				
Fluoranthene	ND	ug/L	5.00				
Fluorene	ND	ug/L	2.00				
Hexachlorobenzene	ND	ug/L	2.00				
Hexachlorobutadiene	ND	ug/L	5.00				
Hexachlorocyclopentadiene	ND	ug/L	5.00				
Hexachloroethane	ND	ug/L	5.00				
Indeno(1,2,3-cd)pyrene	ND	ug/L	5.00				
Isophorone	ND	ug/L	2.00				
2-Methylnaphthalene	ND	ug/L	5.00				
2-Methylphenol (o-cresol)	ND	ug/L	2.00				
	ND	ug/L	5.00				

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

FID #

Date Arrived **11/08/00**
ETC Order Number **0011258**

ETC Lab ID **0011258-07**
Field ID : **MW-59-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/08/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Base/Neutral & Acid				11/17/00		PF	8270C
					11/10/00		3510C
4-Methylphenol (p-cresol)	ND	ug/L	5.00				
Naphthalene	ND	ug/L	2.00				
Nitrobenzene	ND	ug/L	5.00				
2-Nitroaniline	ND	ug/L	5.00				
3-Nitroaniline	ND	ug/L	10.0				
4-Nitroaniline	ND	ug/L	5.00				
2-Nitrophenol	ND	ug/L	5.00				
4-Nitrophenol	ND	ug/L	5.00				
N-Nitrosodiphenylamine	ND	ug/L	5.00				
N-Nitrosodipropylamine	ND	ug/L	5.00				
Pentachlorophenol	ND	ug/L	10.0				
Phenanthrene	ND	ug/L	2.00				
Phenol	ND	ug/L	5.00				
ene	ND	ug/L	2.00				
5-Trichlorphenol	ND	ug/L	5.00				
6-Trichlorophenol	ND	ug/L	5.00				

Surrogate Standard	% Recovery	QC Limits	
S1 - Nitrobenzene-d5	61	29	110
S2 - 2-Fluorobiphenyl	67	38	107
S3 - 4-Terphenyl-d14	79	33	122
S4 - Phenol-d6	22	7	58
S5 - 2,4,6-Tribromophenol	59	16	138
S6 - 2-Fluorophenol	33	8	88

( )
Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

613 226

FORM 1
BNA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

0011-258-7

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-258

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 970.0 (g/mL) ML Lab File ID: 2301023

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/17/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
2.				
3.				
4.				
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30.				

FORM 2
WATER BNA-GCMS SURROGATE RECOVERY

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-258

	CLIENT SAMPLE NO.	S1 (NBZ) #	S2 (FBP) #	S3 (TPH) #	S4 (PHL) #	S5 (TBP) #	S6 (2FP) #	S7 #	S8 #	TOT OUT
01	P06008LB	66	61	81	28	86	41			0
02	P06008LCS	58	64	64	24	71	35			0
03	P06009LB	65	52	58	24	70	37			0
04	P06009LCS	73	68	77	26	85	41			0
05	P06009LCSD	69	66	68	24	86	39			0
06	0011-258-1	55	57	72	21	72	30			0
07	0011-258-2	73	94	58	23	87	34			0
08	0011-258-3	68	71	57	26	82	42			0
09	0011-258-4	70	74	70	27	82	41			0
10	0011-258-5	67	70	71	24	75	36			0
11	0011-258-6	62	67	64	24	71	38			0
12	0011-258-7	61	67	79	22	59	33			0
13										
14										
15										
16										
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24										
25										
26										
27										
28										
29										
30										

		QC LIMITS
S1 (NBZ)	= Nitrobenzene-d5	(29-110)
S2 (FBP)	= 2-Fluorobiphenyl	(38-107)
S3 (TPH)	= Terphenyl-d14	(33-122)
S4 (PHL)	= Phenol-d6	(7- 58)
S5 (TBP)	= 2,4,6-Tribromophenol	(16-138)
S6 (2FP)	= 2-Fluorophenol	(8- 88)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogate diluted out

613 228

FORM 4
BNA-GCMS METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

P06008LB

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-258

Lab File ID: 1101011

Lab Prep Batch: P06008

Instrument ID: BNA1

Date Extracted:

Matrix: (soil/water) WATER

Date Analyzed: 11/15/00

Level: (low/med) LOW

Time Analyzed: 1726

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

	SAMPLE NO.	TIME ANALYZED	LAB FILE ID	DATE ANALYZED
01	P06008LCS	1803	1201012	11/15/00
02	0011-091-1	1841	1301013	11/15/00
03	0011-091-1MS	2340	2101021	11/15/00
04	0011-091-1MS	0017	2201022	11/16/00
05	0011-258-1	2222	1701017	11/16/00
06	0011-258-2	2252	1801018	11/16/00
07	0011-258-3	2322	1901019	11/16/00
08	0011-258-4	2352	2001020	11/16/00
09	0011-258-5	0022	2101021	11/17/00
10	0011-258-6	0052	2201022	11/17/00
11				
12				
13				
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COMMENTS:

FORM 1
BNA-GCMS ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.
613 229
P06008LB

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-258

Matrix: (soil/water) WATER Lab Prep Batch: P06008

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 1101011

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/15/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
83-32-9	Acenaphthene	2.00	U
208-96-8	Acenaphthylene	2.00	U
98-86-2	Acetophenone	5.00	U
62-53-3	Aniline	5.00	U
120-12-7	Anthracene	2.00	U
92-87-5	Benzidine	20.00	U
56-55-3	Benz(a)Anthracene	2.00	U
205-99-2	Benzo(b)fluoranthene	2.00	U
207-08-9	Benzo(k)fluoranthene	2.00	U
191-24-2	Benzo(ghi)perylene	2.00	U
50-32-8	Benzo(a)pyrene	2.00	U
65-85-0	Benzoic acid	50.00	U
100-51-6	Benzyl alcohol	5.00	U
111-91-1	Bis(2-chloroethoxy)methane	5.00	U
111-44-4	Bis(2-chloroethyl)ether	5.00	U
108-60-1	Bis(2-chloroisopropyl)ether	5.00	U
117-81-7	Bis(2-ethylhexyl)phthalate	1.10	J
101-55-3	4-Bromophenyl phenyl ether	5.00	U
85-68-7	Butyl benzyl phthalate	5.00	U
86-74-8	Carbazole	2.00	U
106-47-8	4-Chloroaniline	5.00	U
510-15-6	Chlorobenzilate	5.00	U
59-50-7	4-Chloro-3-methylphenol	5.00	U
91-58-7	2-Chloronaphthalene	2.00	U
95-57-8	2-Chlorophenol	5.00	U
7005-72-3	4-Chlorophenyl phenyl ether	5.00	U
218-01-9	Chrysene	2.00	U
53-70-3	Dibenz(a,h)anthracene	2.00	U
132-64-9	Dibenzofuran	5.00	U
84-74-2	Di-n-butyl phthalate	5.00	U
95-50-1	1,2-Dichlorobenzene	5.00	U
541-73-1	1,3-Dichlorobenzene	5.00	U
106-46-7	1,4-Dichlorobenzene	5.00	U

613 230

FORM 1
BNA-GCMS ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.
P06008LB

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-258

Matrix: (soil/water) WATER Lab Prep Batch: P06008

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 1101011

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/15/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-94-1	3,3'-Dichlorobenzidine	10.00	U
120-83-2	2,4-Dichlorophenol	5.00	U
87-65-0	2,6-Dichlorophenol	5.00	U
84-66-2	Diethyl phthalate	5.00	U
119-93-7	3,3-Dimethylbenzidine	10.00	U
105-67-9	2,4-Dimethyphenol	5.00	U
131-11-3	Dimethyl phthalate	5.00	U
534-52-1	4,6-Dinitro-2-methylphenol	10.00	U
51-28-5	2,4-Dinitrophenol	20.00	U
121-14-2	2,4-Dinitrotoluene	5.00	U
606-20-2	2,6-Dinitrotoluene	5.00	U
122-39-4	N-Nitrsdiphylam/Diphenylamin	5.00	U
117-84-0	Di-n-octyl phthalate	5.00	U
62-50-0	Ethyl methanesulfonate	5.00	U
206-44-0	Fluoranthene	2.00	U
86-73-7	Fluorene	2.00	U
118-74-1	Hexachlorobenzene	5.00	U
87-68-3	Hexachlorobutadiene	5.00	U
77-47-4	Hexachlorocyclopentadiene	5.00	U
67-72-1	Hexachloroethane	5.00	U
193-39-5	Indeno(1,2,3-cd)pyrene	2.00	U
78-59-1	Isophorone	5.00	U
66-27-3	Methyl methanesulfonate	5.00	U
91-57-6	2-Methylnaphthalene	2.00	U
95-48-7	2-Methylphenol	5.00	U
108-39-4	3&4-Methylphenol	5.00	U
91-20-3	Naphthalene	2.00	U
88-74-4	2-Nitroaniline	10.00	U
99-09-2	3-Nitroaniline	10.00	U
100-01-6	4-Nitroaniline	10.00	U
98-95-3	Nitrobenzene	5.00	U
88-75-5	2-Nitrophenol	10.00	U
100-02-7	4-Nitrophenol	5.00	U

FORM 1
BNA-GCMS ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.
613 231
P06008LB

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-258

Matrix: (soil/water) WATER Lab Prep Batch: P06008

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 1101011

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/15/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
924-16-3	N-Nitrosodibutylamine	5.00	U
55-18-5	N-Nitrosodiethylamine	5.00	U
129-00-0	N-Nitrosodimethylamine	5.00	U
621-64-7	N-Nitrosodi-n-propylamine	5.00	U
82-68-8	Pentachloronitrobenzene	10.00	U
87-86-5	Pentachlorophenol	5.00	U
62-44-2	Phenacetin	5.00	U
85-01-8	Phenanthrene	2.00	U
108-95-2	Phenol	5.00	U
129-00-0	Pyrene	2.00	U
110-86-1	Pyridine	5.00	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.00	U
58-90-2	2,3,4,6-Tetrachlorophenol	5.00	U
120-82-1	1,2,4-Trichlorobenzene	5.00	U
95-95-4	2,4,5-Trichlorophenol	5.00	U
88-06-2	2,4,6-Trichlorophenol	5.00	U
103-33-3	1,2-Dphnylhydrzine/Azobenzen	5.00	U

613 232

FORM 1
BNA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

P06008LB

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-258

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 1101011

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/15/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
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FORM I BNA-GCMS-TIC

FORM 3
WATER BNA-GCMS LAB CONTROL SAMPLE

613 233

Lab Name: ETC, INC. Lab Prep Batch: P06008

Lab Code: Case No.: SAS No.: SDG No.: 0011-258

Matrix Spike - Sample No.: P06008LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Acenaphthene	50.00		27.57	55	38-117
Acenaphthylene	50.00		27.78	56	37-114
Acetophenone	50.00		28.39	57	32-108
Aniline	50.00		32.03	64	16-133
Anthracene	50.00		30.93	62	34-128
Benzidine	50.00		27.21	54	22-176
Benz(a)Anthracene	50.00		28.35	57	36-127
Benzo(b)fluoranthene	50.00		29.47	59	36-131
Benzo(k)fluoranthene	50.00		29.52	59	32-132
Benzo(ghi)perylene	50.00		31.71	63	26-123
Benzo(a)pyrene	50.00		28.22	56	34-131
Benzoic acid	50.00		10.98	22	11- 58
Benzyl alcohol	50.00		26.49	53	20-109
Bis(2-chloroethoxy)meth	50.00		28.31	57	20-126
Bis(2-chloroethyl)ether	50.00		26.29	52	16-122
Bis(2-chloroisopropyl)e	50.00		28.66	57	28-108
Bis(2-ethylhexyl)phthal	50.00		26.58	53	21-162
4-Bromophenyl phenyl et	50.00		28.53	57	31-124
Butyl benzyl phthalate	50.00		27.76	56	33-142
Carbazole	50.00		32.95	66	20-147
4-Chloroaniline	50.00		30.79	62	24-127
Chlorobenzilate	50.00		28.58	57	35-118
4-Chloro-3-methylphenol	50.00		25.94	52	35-117
2-Chloronaphthalene	50.00		31.85	64	29-137
2-Chlorophenol	50.00		28.60	57	27-102
4-Chlorophenyl phenyl e	50.00		27.14	54	39-110
Chrysene	50.00		28.74	57	30-124
Dibenz(a,h)anthracene	50.00		30.89	62	27-124

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER BNA-GCMS LAB CONTROL SAMPLE

Lab Name: ETC, INC. Lab Prep Batch: P06008

Lab Code: Case No.: SAS No.: SDG No.: 0011-258

Matrix Spike - Sample No.: P06008LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Dibenzofuran	50.00		27.70	55	40-108
Di-n-butyl phthalate	50.00		32.81	66	19-158
1,2-Dichlorobenzene	50.00		25.54	51	26-100
1,3-Dichlorobenzene	50.00		25.60	51	21-102
1,4-Dichlorobenzene	50.00		25.27	50	24- 99
3,3'-Dichlorobenzidine	50.00		35.67	71	6-192
2,4-Dichlorophenol	50.00		26.74	53	32-110
2,6-Dichlorophenol	50.00		26.92	54	31-112
Diethyl phthalate	50.00		28.12	56	36-130
3,3-Dimethylbenzidine	50.00		22.17	44	6-192
2,4-Dimethyphenol	50.00		20.18	40	34-105
Dimethyl phthalate	50.00		28.93	58	34-123
4,6-Dinitro-2-methylphe	50.00		31.13	62	27-128
2,4-Dinitrophenol	50.00		27.24	54	10-132
2,4-Dinitrotoluene	50.00		28.63	57	24-147
2,6-Dinitrotoluene	50.00		28.27	56	36-125
N-NitrsdiphylAm/Dipheny	100.0		58.40	58	35-116
Di-n-octyl phthalate	50.00		32.40	65	29-13
Ethyl methanesulfonate	50.00		31.55	63	20-12
Fluoranthene	50.00		33.91	68	28-127
Fluorene	50.00		26.86	54	41-116
Hexachlorobenzene	50.00		30.04	60	18-136
Hexachlorobutadiene	50.00		23.85	48	22-109
Hexachlorocyclopentadie	50.00		23.93	48	10-102
Hexachloroethane	50.00		25.34	51	16-107
Indeno(1,2,3-cd)pyrene	50.00		32.66	65	22-126
Isophorone	50.00		26.70	53	31-116
Methyl methanesulfonate	50.00		15.44	31	15- 82

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER BNA-GCMS LAB CONTROL SAMPLE

613 235

Lab Name: ETC, INC. Lab Prep Batch: P06008

Lab Code: Case No.: SAS No.: SDG No.: 0011-258

Matrix Spike - Sample No.: P06008LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
2-Methylnaphthalene	50.00		24.92	50	34-108
2-Methylphenol	50.00		25.00	50	22- 97
3&4-Methylphenol	50.00		23.23	46	21- 96
Naphthalene	50.00		26.62	53	33-108
2-Nitroaniline	50.00		28.65	57	32-127
3-Nitroaniline	50.00		32.94	66	28-142
4-Nitroaniline	50.00		33.86	68	23-139
Nitrobenzene	50.00		26.13	52	27-117
2-Nitrophenol	50.00		27.35	55	25-114
4-Nitrophenol	50.00		28.04	56	1- 76
N-Nitrosodibutylamine	50.00		26.59	53	31-126
N-Nitrosodiethylamine	50.00		25.69	51	28-107
N-Nitrosodimethylamine	50.00		21.29	42	14- 84
N-Nitrosodi-n-propylami	50.00		28.57	57	29-114
Pentachloronitrobenzene	50.00		31.35	63	34-135
Pentachlorophenol	50.00		26.28	52	17-142
Phenacetin	50.00		33.44	67	29-141
Phenanthrene	50.00		29.72	59	40-120
Phenol	50.00		12.06	24	11- 55
Pyrene	50.00		25.08	50	20-154
Pyridine	50.00		16.92	34	10- 71
1,2,4,5-Tetrachlorobenz	50.00		29.59	59	28-110
2,3,4,6-Tetrachlorophen	50.00		29.09	58	28-118
1,2,4-Trichlorobenzene	50.00		24.80	50	23-106
2,4,5-Trichlorophenol	50.00		28.61	57	26-118
2,4,6-Trichlorophenol	50.00		31.38	63	26-115
1,2-Dphnylhydrzine/Azob	50.00		29.11	58	45-135

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 0 out of 83 outside limits

COMMENTS: _____

FORM 3
WATER BNA-GCMS MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: ETC, INC. Lab Prep Batch: P06008

Lab Code: Case No.: SAS No.: SDG No.: 0011-258

Matrix Spike - Sample No.: 0011-091-1

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
1,4-Dichlorobenzene	200.0	0.000	181.4	91	31- 97
2,4-Dinitrotoluene	200.0	0.000	320.2	160*	34-130
Hexachlorobenzene	200.0	0.000	272.9	136*	65-133
Hexachlorobutadiene	200.0	0.000	182.6	91	50-112
Hexachloroethane	200.0	0.000	171.2	86	37-100
2-Methylphenol	200.0	0.000	230.4	115	48-117
3&4-Methylphenol	200.0	0.000	461.1	230*	46- 99
Nitrobenzene	200.0	0.000	229.4	115	57-120
Pentachlorophenol	200.0	0.000	253.5	127	22-171
Pyridine	200.0	0.000	98.77	49	10- 82
2,4,5-Trichlorophenol	200.0	0.000	290.5	145	31-147
2,4,6-Trichlorophenol	200.0	0.000	271.8	136	31-147

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,4-Dichlorobenzene	200.0	244.9	122*	29*	20	31- 97
2,4-Dinitrotoluene	200.0	406.9	203*	24*	20	34-130
Hexachlorobenzene	200.0	342.6	171*	23*	20	65-133
Hexachlorobutadiene	200.0	245.5	123*	30*	20	50-112
Hexachloroethane	200.0	223.9	112*	26*	20	37-100
2-Methylphenol	200.0	276.6	138*	18	20	48-117
3&4-Methylphenol	200.0	549.6	275*	18	20	46- 99
Nitrobenzene	200.0	288.9	144*	22*	20	57-120
Pentachlorophenol	200.0	329.2	165	26*	20	22-171
Pyridine	200.0	179.0	90*	59*	20	10- 82
2,4,5-Trichlorophenol	200.0	362.6	181*	22*	20	31-147
2,4,6-Trichlorophenol	200.0	340.1	170*	22*	20	31-147

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 10 out of 12 outside limits
Spike Recovery: 14 out of 24 outside limits

COMMENTS: _____

FORM 4
BNA-GCMS METHOD BLANK SUMMARY

CLIENT SAMPLE NO.
613 237
P06009LB

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-258

Lab File ID: 1201012 Lab Prep Batch: P06009

Instrument ID: BNA2 Date Extracted:

Matrix: (soil/water) WATER Date Analyzed: 11/16/00

Level: (low/med) LOW Time Analyzed: 1951

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

	SAMPLE NO.	TIME ANALYZED	LAB FILE ID	DATE ANALYZED
01	P06009LCS	2021	1301013	11/16/00
02	P06009LCSD	2051	1401014	11/16/00
03	0011-258-7	0122	2301023	11/17/00
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COMMENTS:

613 238

FORM 1
BNA-GCMS ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.
P06009LB

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-258

Matrix: (soil/water) WATER Lab Prep Batch: P06009

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 1201012

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/16/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
83-32-9	Acenaphthene	2.00	U
208-96-8	Acenaphthylene	2.00	U
98-86-2	Acetophenone	5.00	U
62-53-3	Aniline	5.00	U
120-12-7	Anthracene	2.00	U
92-87-5	Benzidine	20.00	U
56-55-3	Benz(a)Anthracene	2.00	U
205-99-2	Benzo(b)fluoranthene	2.00	U
207-08-9	Benzo(k)fluoranthene	2.00	U
191-24-2	Benzo(ghi)perylene	2.00	U
50-32-8	Benzo(a)pyrene	2.00	U
65-85-0	Benzoic acid	50.00	U
100-51-6	Benzyl alcohol	5.00	U
111-91-1	Bis(2-chloroethoxy)methane	5.00	U
111-44-4	Bis(2-chloroethyl)ether	5.00	U
108-60-1	Bis(2-chloroisopropyl)ether	5.00	U
117-81-7	Bis(2-ethylhexyl)phthalate	1.01	J
101-55-3	4-Bromophenyl phenyl ether	5.00	U
85-68-7	Butyl benzyl phthalate	5.00	U
86-74-8	Carbazole	2.00	U
106-47-8	4-Chloroaniline	5.00	U
510-15-6	Chlorobenzilate	5.00	U
59-50-7	4-Chloro-3-methylphenol	5.00	U
91-58-7	2-Chloronaphthalene	2.00	U
95-57-8	2-Chlorophenol	5.00	U
7005-72-3	4-Chlorophenyl phenyl ether	5.00	U
218-01-9	Chrysene	2.00	U
53-70-3	Dibenz(a,h)anthracene	2.00	U
132-64-9	Dibenzofuran	5.00	U
84-74-2	Di-n-butyl phthalate	0.592	J
95-50-1	1,2-Dichlorobenzene	5.00	U
541-73-1	1,3-Dichlorobenzene	5.00	U
106-46-7	1,4-Dichlorobenzene	5.00	U

FORM 1
BNA-GCMS ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.
613 239
P06009LB

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-258

Matrix: (soil/water) WATER Lab Prep Batch: P06009

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 1201012

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/16/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-94-1	3,3'-Dichlorobenzidine	10.00	U
120-83-2	2,4-Dichlorophenol	5.00	U
87-65-0	2,6-Dichlorophenol	5.00	U
84-66-2	Diethyl phthalate	5.00	U
119-93-7	3,3-Dimethylbenzidine	10.00	U
105-67-9	2,4-Dimethyphenol	5.00	U
131-11-3	Dimethyl phthalate	5.00	U
534-52-1	4,6-Dinitro-2-methylphenol	10.00	U
51-28-5	2,4-Dinitrophenol	20.00	U
121-14-2	2,4-Dinitrotoluene	5.00	U
606-20-2	2,6-Dinitrotoluene	5.00	U
122-39-4	N-NitrsdiphylAm/Diphenylamin	5.00	U
117-84-0	Di-n-octyl phthalate	5.00	U
62-50-0	Ethyl methanesulfonate	5.00	U
206-44-0	Fluoranthene	2.00	U
86-73-7	Fluorene	2.00	U
118-74-1	Hexachlorobenzene	5.00	U
87-68-3	Hexachlorobutadiene	5.00	U
77-47-4	Hexachlorocyclopentadiene	5.00	U
67-72-1	Hexachloroethane	5.00	U
193-39-5	Indeno(1,2,3-cd)pyrene	2.00	U
78-59-1	Isophorone	5.00	U
66-27-3	Methyl methanesulfonate	5.00	U
91-57-6	2-Methylnaphthalene	2.00	U
95-48-7	2-Methylphenol	5.00	U
108-39-4	3&4-Methylphenol	5.00	U
91-20-3	Naphthalene	2.00	U
88-74-4	2-Nitroaniline	10.00	U
99-09-2	3-Nitroaniline	10.00	U
100-01-6	4-Nitroaniline	10.00	U
98-95-3	Nitrobenzene	0.288	J
88-75-5	2-Nitrophenol	10.00	U
100-02-7	4-Nitrophenol	5.00	U

FORM 1

613 240 BNA-GCMS ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

P06009LB

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-258

Matrix: (soil/water) WATER Lab Prep Batch: P06009

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 1201012

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/16/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
924-16-3	N-Nitrosodibutylamine	5.00	U
55-18-5	N-Nitrosodiethylamine	5.00	U
129-00-0	N-Nitrosodimethylamine	5.00	U
621-64-7	N-Nitrosodi-n-propylamine	5.00	U
82-68-8	Pentachloronitrobenzene	10.00	U
87-86-5	Pentachlorophenol	5.00	U
62-44-2	Phenacetin	5.00	U
85-01-8	Phenanthrene	2.00	U
108-95-2	Phenol	5.00	U
129-00-0	Pyrene	2.00	U
110-86-1	Pyridine	5.00	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.00	U
58-90-2	2,3,4,6-Tetrachlorophenol	5.00	U
120-82-1	1,2,4-Trichlorobenzene	5.00	U
95-95-4	2,4,5-Trichlorophenol	5.00	U
88-06-2	2,4,6-Trichlorophenol	5.00	U
103-33-3	1,2-Dphnylhydrzine/Azobenzen	5.00	U

FORM 1
BNA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO. 613 241

P06009LB

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-258

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 1201012

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/16/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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2.					
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23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

613 242

FORM 3
WATER BNA-GCMS LAB CONTROL SAMPLE

Lab Name: ETC, INC. Lab Prep Batch: P06009

Lab Code: Case No.: SAS No.: SDG No.: 0011-258

Matrix Spike - Sample No.: P06009LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Acenaphthene	50.00		30.25	60	38-117
Acenaphthylene	50.00		29.97	60	37-114
Acetophenone	50.00		32.53	65	32-108
Aniline	50.00		30.01	60	16-133
Anthracene	50.00		33.41	67	34-128
Benzidine	50.00		10.55	21*	22-176 NA
Benz(a)Anthracene	50.00		29.91	60	36-127
Benzo(b)fluoranthene	50.00		30.88	62	36-131
Benzo(k)fluoranthene	50.00		31.24	62	32-132
Benzo(ghi)perylene	50.00		25.05	50	26-123
Benzo(a)pyrene	50.00		27.39	55	34-131
Benzoic acid	50.00		14.48	29	11- 58
Benzyl alcohol	50.00		29.75	60	20-109
Bis(2-chloroethoxy)meth	50.00		32.04	64	20-126
Bis(2-chloroethyl)ether	50.00		33.28	66	16-122
Bis(2-chloroisopropyl)e	50.00		32.08	64	28-108
Bis(2-ethylhexyl)phthal	50.00		26.29	52	21-162
4-Bromophenyl phenyl et	50.00		30.81	62	31-12
Butyl benzyl phthalate	50.00		30.03	60	33-14
Carbazole	50.00		33.15	66	20-147
4-Chloroaniline	50.00		33.49	67	24-127
Chlorobenzilate	50.00		30.33	61	35-118
4-Chloro-3-methylphenol	50.00		35.20	70	35-117
2-Chloronaphthalene	50.00		37.59	75	29-137
2-Chlorophenol	50.00		32.74	65	27-102
4-Chlorophenyl phenyl e	50.00		32.90	66	39-110
Chrysene	50.00		30.93	62	30-124
Dibenz(a,h)anthracene	50.00		24.52	49	27-124

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER BNA-GCMS LAB CONTROL SAMPLE

613 243

Lab Name: ETC, INC. Lab Prep Batch: P06009

Lab Code: Case No.: SAS No.: SDG No.: 0011-258

Matrix Spike - Sample No.: P06009LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Dibenzofuran	50.00		32.59	65	40-108
Di-n-butyl phthalate	50.00		32.43	65	19-158
1,2-Dichlorobenzene	50.00		29.48	59	26-100
1,3-Dichlorobenzene	50.00		28.32	57	21-102
1,4-Dichlorobenzene	50.00		28.64	57	24- 99
3,3'-Dichlorobenzidine	50.00		28.77	58	6-192
2,4-Dichlorophenol	50.00		32.52	65	32-110
2,6-Dichlorophenol	50.00		31.80	64	31-112
Diethyl phthalate	50.00		33.29	66	36-130
3,3-Dimethylbenzidine	50.00		11.43	23	6-192
2,4-Dimethyphenol	50.00		23.48	47	34-105
Dimethyl phthalate	50.00		32.69	65	34-123
4,6-Dinitro-2-methylphe	50.00		35.44	71	27-128
2,4-Dinitrophenol	50.00		30.40	61	10-132
2,4-Dinitrotoluene	50.00		32.65	65	24-147
2,6-Dinitrotoluene	50.00		31.49	63	36-125
N-NitrsdiphylAm/Dipheny	100.0		62.28	62	35-116
Di-n-octyl phthalate	50.00		29.09	58	29-136
Ethyl methanesulfonate	50.00		36.58	73	20-121
Fluoranthene	50.00		33.92	68	28-127
Fluorene	50.00		32.25	64	41-116
Hexachlorobenzene	50.00		33.35	67	18-136
Hexachlorobutadiene	50.00		30.01	60	22-109
Hexachlorocyclopentadie	50.00		24.10	48	10-102
Hexachloroethane	50.00		30.89	62	16-107
Indeno(1,2,3-cd)pyrene	50.00		26.45	53	22-126
Isophorone	50.00		31.16	62	31-116
Methyl methanesulfonate	50.00		18.67	37	15- 82

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER BNA-GCMS LAB CONTROL SAMPLE

Lab Name: ETC, INC. Lab Prep Batch: P06009

Lab Code: Case No.: SAS No.: SDG No.: 0011-258

Matrix Spike - Sample No.: P06009LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
2-Methylnaphthalene	50.00		29.95	60	34-108
2-Methylphenol	50.00		29.99	60	22- 97
3&4-Methylphenol	50.00		27.51	55	21- 96
Naphthalene	50.00		30.77	62	33-108
2-Nitroaniline	50.00		33.59	67	32-127
3-Nitroaniline	50.00		33.43	67	28-142
4-Nitroaniline	50.00		34.44	69	23-139
Nitrobenzene	50.00		30.16	60	27-117
2-Nitrophenol	50.00		30.76	62	25-114
4-Nitrophenol	50.00		34.09	68	1- 76
N-Nitrosodibutylamine	50.00		34.35	69	31-126
N-Nitrosodiethylamine	50.00		28.22	56	28-107
N-Nitrosodimethylamine	50.00		25.54	51	14- 84
N-Nitrosodi-n-propylami	50.00		33.32	67	29-114
Pentachloronitrobenzene	50.00		33.93	68	34-135
Pentachlorophenol	50.00		28.91	58	17-142
Phenacetin	50.00		34.40	69	29-141
Phenanthrene	50.00		33.90	68	40-120
Phenol	50.00		14.04	28	11- 55
Pyrene	50.00		30.64	61	20-154
Pyridine	50.00		16.65	33	10- 71
1,2,4,5-Tetrachlorobenz	50.00		30.22	60	28-110
2,3,4,6-Tetrachlorophen	50.00		34.16	68	28-118
1,2,4-Trichlorobenzene	50.00		29.92	60	23-106
2,4,5-Trichlorophenol	50.00		35.28	70	26-118
2,4,6-Trichlorophenol	50.00		32.01	64	26-115
1,2-Dphnylhydrzine/Azob	50.00		31.97	64	45-135

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER BNA-GCMS LAB CONTROL SAMPLE

613 245

Lab Name: ETC, INC. Lab Prep Batch: P06009

Lab Code: Case No.: SAS No.: SDG No.: 0011-258

Matrix Spike - Sample No.: P06009LCS

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Acenaphthene	50.00	29.75	60	0	20	38-117
Acenaphthylene	50.00	28.92	58	3	20	37-114
Acetophenone	50.00	30.27	60	8	20	32-108
Aniline	50.00	24.75	50	18	20	16-133
Anthracene	50.00	34.36	69	3	20	34-128
Benzidine	50.00	3.12	6*	111*	20	22-176
Benz(a)Anthracene	50.00	30.00	60	0	20	36-127
Benzo(b)fluoranthene	50.00	31.48	63	2	20	36-131
Benzo(k)fluoranthene	50.00	30.96	62	0	20	32-132
Benzo(ghi)perylene	50.00	33.53	67	29*	20	26-123
Benzo(a)pyrene	50.00	30.18	60	9	20	34-131
Benzoic acid	50.00	5.61	11	90*	20	11- 58
Benzyl alcohol	50.00	28.14	56	7	20	20-109
Bis(2-chloroethoxy)meth	50.00	31.40	63	2	20	20-126
Bis(2-chloroethyl)ether	50.00	30.50	61	8	20	16-122
Bis(2-chloroisopropyl)e	50.00	30.80	62	3	20	28-108
Bis(2-ethylhexyl)phthal	50.00	27.61	55	6	20	21-162
4-Bromophenyl phenyl et	50.00	31.45	63	2	20	31-124
Butyl benzyl phthalate	50.00	28.16	56	7	20	33-142
Carbazole	50.00	33.94	68	3	20	20-147
4-Chloroaniline	50.00	28.74	57	16	20	24-127
Chlorobenzilate	50.00	28.67	57	7	20	35-118
4-Chloro-3-methylphenol	50.00	32.61	65	7	20	35-117
2-Chloronaphthalene	50.00	36.85	74	1	20	29-137
2-Chlorophenol	50.00	31.36	63	3	20	27-102
4-Chlorophenyl phenyl e	50.00	32.15	64	3	20	39-110
Chrysene	50.00	31.30	63	2	20	30-124
Dibenz(a,h)anthracene	50.00	33.54	67	31*	20	27-124

NA

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS: _____

613 246

FORM 3
WATER BNA-GCMS LAB CONTROL SAMPLE

Lab Name: ETC, INC. Lab Prep Batch: P06009

Lab Code: Case No.: SAS No.: SDG No.: 0011-258

Matrix Spike - Sample No.: P06009LCS

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Dibenzofuran	50.00	31.77	64	2	20	40-108
Di-n-butyl phthalate	50.00	32.87	66	2	20	19-158
1,2-Dichlorobenzene	50.00	26.74	53	11	20	26-100
1,3-Dichlorobenzene	50.00	26.12	52	9	20	21-102
1,4-Dichlorobenzene	50.00	25.73	51	11	20	24- 99
3,3'-Dichlorobenzidine	50.00	32.93	66	13	20	6-192
2,4-Dichlorophenol	50.00	31.07	62	5	20	32-110
2,6-Dichlorophenol	50.00	30.15	60	6	20	31-112
Diethyl phthalate	50.00	33.75	68	3	20	36-130
3,3-Dimethylbenzidine					20	6-192 NA
2,4-Dimethyphenol	50.00	23.73	47	0	20	34-105
Dimethyl phthalate	50.00	33.06	66	2	20	34-123
4,6-Dinitro-2-methylphe	50.00	40.03	80	12	20	27-128
2,4-Dinitrophenol	50.00	36.51	73	18	20	10-132
2,4-Dinitrotoluene	50.00	32.21	64	2	20	24-147
2,6-Dinitrotoluene	50.00	31.54	63	0	20	36-125
N-NitrsdiphylAm/Dipheny	100.0	63.55	64	3	20	35-116
Di-n-octyl phthalate	50.00	35.48	71	20	20	29-13
Ethyl methanesulfonate	50.00	34.21	68	7	20	20-12
Fluoranthene	50.00	34.10	68	0	20	28-127
Fluorene	50.00	31.06	62	3	20	41-116
Hexachlorobenzene	50.00	34.26	68	1	20	18-136
Hexachlorobutadiene	50.00	27.52	55	9	20	22-109
Hexachlorocyclopentadie	50.00	24.11	48	0	20	10-102
Hexachloroethane	50.00	27.76	56	10	20	16-107
Indeno(1,2,3-cd)pyrene	50.00	34.46	69	26*	20	22-126
Isophorone	50.00	29.94	60	3	20	31-116
Methyl methanesulfonate	50.00	17.15	34	8	20	15- 82

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER BNA-GCMS LAB CONTROL SAMPLE

Lab Name: ETC, INC. Lab Prep Batch: P06009

Lab Code: Case No.: SAS No.: SDG No.: 0011-258

Matrix Spike - Sample No.: P06009LCS

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
2-Methylnaphthalene	50.00	28.35	57	5	20	34-108
2-Methylphenol	50.00	27.59	55	9	20	22- 97
3&4-Methylphenol	50.00	26.94	54	2	20	21- 96
Naphthalene	50.00	29.16	58	7	20	33-108
2-Nitroaniline	50.00	31.70	63	6	20	32-127
3-Nitroaniline	50.00	32.45	65	3	20	28-142
4-Nitroaniline	50.00	33.58	67	3	20	23-139
Nitrobenzene	50.00	28.28	56	7	20	27-117
2-Nitrophenol	50.00	29.38	59	5	20	25-114
4-Nitrophenol	50.00	32.23	64	6	20	1- 76
N-Nitrosodibutylamine	50.00	33.37	67	3	20	31-126
N-Nitrosodiethylamine	50.00	27.96	56	0	20	28-107
N-Nitrosodimethylamine	50.00	21.77	44	15	20	14- 84
N-Nitrosodi-n-propylami	50.00	32.26	64	4	20	29-114
Pentachloronitrobenzene	50.00	34.98	70	3	20	34-135
Pentachlorophenol	50.00	32.83	66	13	20	17-142
Phenacetin	50.00	32.76	66	4	20	29-141
Phenanthrene	50.00	34.04	68	0	20	40-120
Phenol	50.00	13.44	27	4	20	11- 55
Pyrene	50.00	26.93	54	12	20	20-154
Pyridine	50.00	12.37	25	28*	20	10- 71
1,2,4,5-Tetrachlorobenz	50.00	29.06	58	3	20	28-110
2,3,4,6-Tetrachlorophen	50.00	35.42	71	4	20	28-118
1,2,4-Trichlorobenzene	50.00	27.55	55	9	20	23-106
2,4,5-Trichlorophenol	50.00	34.74	69	1	20	26-118
2,4,6-Trichlorophenol	50.00	32.01	64	0	20	26-115
1,2-Dphnylhydrzine/Azob	50.00	31.93	64	0	20	45-135

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 6 out of 83 outside limits
Spike Recovery: 2 out of 166 outside limits

COMMENTS: _____

613 248

Environmental Testing & Consulting, Inc.

Login
Chain-of-Custody

CHAIN OF CUSTODY RECORD

Environmental Testing & Consulting, Inc.
2924 Walnut Grove Rd.
Memphis, TN 38111
(901)327-2750 FAX (901)327-6334

ETC Work Order : 0011258

0011222

Company Name	Phone # :	Fax Results
JEG	Fax # :	RUSH
Project/Site: Memphis Depot	FID # :	Ice
Project #	PO # :	
Project Manager/Contact: Craig Smith	Matrix: 1 Wastewater, 2 Aqueous, 3 Soil/Sediment, 4 Sludge, 5 Oil/Solvent, 6 Other	

# of cont.	Sample ID/ Number	Depth	Sample Date	Sample Time	Matrix	Type Grab/Comp	VOC	SVOC	TAL Metals	Cyanide	Comments
7	MW-51-Y2Q4		11-8-00	950	W		3	2	1	1	
7	RB - Y2Q4		11-8-00	1000	W		3	2	1	1	
7	MW-40-Y2Q4		11-8-00	1050	W		3	2	1	1	
7	MW-44-Y2Q4		11-8-00	1315	W		3	2	1	1	
3	MW-33-Y2Q4		11-8-00	1350	W		3	2	#	# (8)	
3	MW-68-Y2Q4		11-8-00	1410	W		3	2	#	# (8)	
3	MW-59-Y2Q4		11-8-00	1010	W		3	2	#	# (8)	
3	TB-02		11-8-00	1430	W		3				

Analysis Requested (Note special detection limits or methods)

Sampled By	Method of Shipment	Blank/Cooler Temp	Remarks
Ethan Litsey	Drop-off	4 (8)	

RELINQUISHED BY (sign)	DATE	TIME	RECEIVED BY (sign)	DATE	TIME	Sample Delivery Group ID
RELINQUISHED BY (sign)	DATE	TIME	RECEIVED BY (sign)	DATE	TIME	
RELINQUISHED BY (sign) Ethan Litsey	11-8-00 DATE 1640	TIME	RECEIVED BY LAB (print/sign)	11/8/00 DATE	1640 TIME	

Distribution : Original and Yellow accompany samples to the laboratory. Pink copy for Field Crew.
Original copy returned with results Yellow copy for ETC, Inc. files

F:\QAQC\SLOP\COC0896.XLS

613 249

CHAIN OF CUSTODY RECORD

Environmental Testing & Consulting, Inc.
2924 Walnut Grove Rd.
Memphis, TN 38111
(901)327-2750 FAX (901)327-6334

ETC Work Order : 0011258

613 250

Company Name	Phone # :	Fax Results	
JEG	Fax # :	RUSH	
Project/Site: Memphis Depot	FID # :	Ice	
Project #	PO # :		
Project Manager/Contact: Kraig Smith	Matrix: 1 Wastewater, 2 Aqueous, 3 Soil/Sediment, 4 Sludge, 5 Oil/Solvent, 6 Other		

Analysis Requested (Note special detection limits or methods)

# of cont.	Sample ID/ Number	Depth	Sample Date	Sample Time	Matrix	Type Grab/Comp		SVOC	TAL Metal	Cyanide									Comments
4	MW-33-Y204		11-8-00	1350	W			2	1	1									
4	MW-68-Y204		11-8-00	1410	W			2	1	1									
4	MW-59-Y204		11-8-00	1010	W			2	1	1									

Sampled By	Method of Shipment	Blank/Cooler Temp	Remarks
Ethan Litsey	Drop-off	4°C	

RELINQUISHED BY (sign)	DATE	TIME	RECEIVED BY (sign)	DATE	TIME	Sample Delivery Group ID
RELINQUISHED BY (sign)	DATE	TIME	RECEIVED BY (sign)	DATE	TIME	
RELINQUISHED BY (sign) Ethan Litsey	DATE 11-8-00	TIME 1640	RECEIVED BY LAB (print/sign)	DATE 11/8/00	TIME 1640	

Distribution : Original and Yellow accompany samples to the laboratory. Pink copy for Field.
Original copy returned with results. Yellow copy for ETC, Inc files.

F:\QA\QC\SLOP\COC0995.XLS

Environmental Testing & Consulting, Inc.
Cooler Receipt Form

Date Received 11/8/00
Date/Time Checked In 11/8/00-16:40
Carrier/Bill# ____Hand-Delivered

LIMS# 0011-258
Project Memphis Depot
By Rebekah Barger

1.	Custody Seals?/Location-	No
2.	Samples are non-radioactive?	Yes
3.	Chain of Custody in plastic?	Yes
4.	Temperature at receipt (ok = 4 ± 2 °C)<4oC	OK
5.	Ice & Packing-bags, ice bubble wrap	Yes
6.	Chain of Custody filled out properly?	Yes
7.	All containers in separate bags?	Yes
8.	Sample containers intact?	Yes
9.	Label(s) complete and in good condition?	Yes
10.	Label(s) agree with Chain of Custody?	Yes
11.	Correct containers used?	Yes
12.	Sufficient sample?	Yes
13.	VOA vials bubble-free (H_2O) or no head space (soil)?	Yes
14.	Preservation OK? TM pH____; TRPH pH____; TOC pH____; TOX pH____; CN pH____; N/P pH____; Other pH____	Yes

Comments _____

*Validated Date and Time of Sample Receipt (VDTSR)

613 252

ENVIRONMENTAL TESTING & CONSULTING, INC.
2924 Walnut Grove Road • Memphis, TN 38111 • (901) 327-2750 • FAX (901) 327-6334
Founded 1972

November 21, 2000

Mr. Kraig Smith
Sverdrup/Jacobs Eng.
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Ref: Analytical Testing
ETC Order # 0011216
Project Description Memphis Depot

The above referenced project has been analyzed per your instructions. The analyses were performed in our laboratory in accordance with Standard Methods, The Solid Waste Manual SW-846, EPA Methods for Chemical Analysis of Water and Wastes and/or 40 CFR part 136.

The results are shown on the attached analysis sheet(s).

Please do not hesitate to contact our office if you have any questions.

Sincerely,

CD Scheibel

Chet Scheibel
Laboratory Project Manager

rt
Attachment

SVE_MHDDMT

Certifications

Tennessee	*#TN02027*	*Mississippi*	
Arkansas	*#40730*	*Oklahoma*	*#9311*
Kentucky	*#90047*	*Virginia*	*#00106*
North Carolina	*#415*	*Washington*	*#C248*
South Carolina	*#84002002*	*US Army Corps of Engineers*	

Environmental Testing & Consulting, Inc.

Data Qualifiers for Organic Reporting

Within the attached report, some analytical data may be reported as "Qualified Data" as indicated by a "Data Qualifier" next to the result This table summarizes the possible "Data Qualifiers" that may be associated with this report. These qualifiers do not apply for TIC reports.

Q	Surrogate Recovery Outside QC Limits
J	Estimated Value. Presence of the compound was confirmed but less than the
	reported detection limit.
E	Concentration exceeds the established method calibration range but is within
	the working range of the instrument.
B	Analyte detected in the associated Method Blank.
U	Reported result was unconfirmed. Refer to Case Narrative.
N	Non-Compliance Report associated with this sample or project.
C	Result reported from GC/MS confirmation analysis.
M	Result reported represents a minimum value. Refer to Case Narrative.
NC	Result reported from Primary Column. Result did not confirm.
*	QC Data (percent recovery/RPD for a particular analyte was outside QC Limits)

613 254

ENVIRONMENTAL TESTING AND CONSULTING, INC.
CASE NARRATIVE
INORGANICS – AQUEOUS

Client Name Sverdrup/Jacobs Engineering
Project Name Memphis Depot

ETC Order # 0011-216

HOLDING TIMES

Sample Analysis — All samples analyzed within Method Specified Holding Times

METHOD

Preparation/Analysis: 335.2

QUALITY CONTROL

QC Batch
CY110901
CY111001

Method Blank
No Target Analytes detected above Detection Limit.

Laboratory Control Sample
Spike Recovery — All analytes within QC limits

Matrix Spike/Matrix Spike Duplicate
RPD — All analytes within QC limits
Spike Recovery — All analytes within QC limits

CALIBRATION

All acceptance criteria met.

SAMPLE ANALYSIS

Dilutions Required — No dilutions required.

CS
Project Manager

ENVIRONMENTAL TESTING AND CONSULTING, INC.
CASE NARRATIVE
METALS - AQUEOUS

Client Name Sverdrup/Jacobs Engineering
roject Name Memphis Depot

ETC Order # 0011-216

HOLDING TIMES

QC Batch(s) for this order	ICP Metals	V23-AQ-17
	Mercury	V7-AQ-63

Sample Preparation/Analysis	All samples digested/ analyzed within holding time.
Mercury Preparation/Analysis	All samples analyzed within 28 days of collection.

METHOD

Preparation:	SW-846 245.1/3030K
Analysis:	SW-846 200.7/245.1

CALIBRATION

Initial Calibration	All criteria met.
Continuing Calibration	All criteria met.

SAMPLE ANALYSIS

Instrumentation: Thermo Jarrell Ash Enviro-I ICP
CETAC M-6000A Mercury Analyzer
Dilutions Required No dilutions required, except as listed on the Dilution Table.

QUALITY CONTROL

0011-216.MQCBLANK
Method Blank

V23-AQ-17BLK	ICP Metals
V7-AQ-63BLK	Mercury

Calcium was detected in V23-AQ-17BLK at 0.024 mg/L. Sample concentration less than 5 times the method blank value (0.12 mg/L) should be attributed to Lab contamination. This analyte was detected in all associated samples at concentrations greater than 5 times the method blank value.

0011-216.MQCLCS
Laboratory Control Sample(s)

V23-AQ-17LCS	ICP Metals
V7-AQ-63LCS	Mercury

All acceptance criteria met.

0011-216.MQCMSMSD
Matrix Spike / Matrix Spike Dup - ICP Metals

0011-216-10	RPD	All analytes within QC limits.
MW-54A-Y2Q4	Spike Recovery	All analytes within QC limits, except as listed below.

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ENVIRONMENTAL TESTING AND CONSULTING, INC.
CASE NARRATIVE
METALS - AQUEOUS

Client Name Sverdrup/Jacobs Engineering
Project Name Memphis Depot

ETC Order # 0011-216

QUALITY CONTROL

Silver was flagged for slightly low recovery in the MS. MSD recovery for this analyte was within control limits.

Refer to Laboratory Control Sample(s) for system verification.

Matrix Spike / Matrix Spike Dup - Hg

0011-216-10	RPD	All analytes within QC limits.
MW-54A-Y2Q4	Spike Recovery	All analytes within QC limits.

Refer to Laboratory Control Sample(s) for system verification.

Dilution Test Dilution result must agree within 10% of original result when sample is diluted by a factor of 5.

Post Digestion Spike Recovery must be +/-25% of expected value for ICP.

CS

Project Manager

ENVIRONMENTAL TESTING AND CONSULTING, INC.
CASE NARRATIVE
METALS - AQUEOUS

Client Name Sverdrup/Jacobs Engineering
Project Name Memphis Depot

ETC Order # 0011-216

HOLDING TIMES

QC Batch(s) for this order	ICP Metals	V23-AQ-16
	Mercury	V7-AQ-64

Sample Preparation/Analysis All samples digested/ analyzed within holding time.
Mercury Preparation/Analysis All samples analyzed within 28 days of collection.

METHOD

Preparation: SW-846 245.1/3030K
Analysis: SW-846 200.7/245.1

CALIBRATION

Initial Calibration All criteria met.
Continuing Calibration All criteria met.

SAMPLE ANALYSIS

Instrumentation: Thermo Jarrell Ash Enviro-I ICP
CETAC M-6000A Mercury Analyzer
Dilutions Required No dilutions required.

QUALITY CONTROL

0011-216.MQ1BLANK
Method Blank

V23-AQ-16BLK	ICP Metals
V7-AQ-64BLK	Mercury

Calcium was detected in V23-AQ-17BLK at 0.028 mg/L. Sample concentration less than 5 times the method blank value (0.14 mg/L) should be attributed to Lab contamination. This analyte was detected in the associated sample at a concentration greater than 5 times the method blank value.

0011-216.MQ1LCS
Laboratory Control Sample(s)

V23-AQ-16LCS	ICP Metals
V7-AQ-64LCS	Mercury

All acceptance criteria met.

0011-216.MQ1MSMSD
Matrix Spike / Matrix Spike Dup - ICP Metals

0011-258-07	RPD	All analytes within QC limits, except as listed below.
MW-59-Y2Q4	Spike Recovery	All analytes within QC limits, except as listed below.

ENVIRONMENTAL TESTING AND CONSULTING, INC.
CASE NARRATIVE
METALS - AQUEOUS

Client Name Sverdrup/Jacobs Engineering
Project Name Memphis Depot

ETC Order # 0011-216

QUALITY CONTROL

Antimony was flagged as outside QC Limits in the Matrix Spike Duplicate. A Post Digestion Spike was performed for verification.

Aluminum and Iron were flagged as outside QC Limits due to the level of these analytes present relative to the spike amounts. Dilution Tests were performed for verification.

Silver and Antimony were flagged for slightly low recovery in the MSD. MS recoveries were within control limits.

RPD for Silver was flagged for high recovery due to variances in the MS/MSD recoveries.

Refer to Form 5B, Post Digestion Spike, and Form 9, Serial Dilutions. All Criteria were met.

Refer to Laboratory Control Sample(s) for system verification.

Matrix Spike / Matrix Spike Dup - Hg

0011-258-07	RPD	All analytes within QC limits.
MW-59-Y2Q4	Spike Recovery	All analytes within QC limits.

Refer to Laboratory Control Sample(s) for system verification.

Dilution Test Dilution result must agree within 10% of original result when sample is diluted by a factor of 5.

Post Digestion Spike Recovery must be +/-25% of expected value for ICP.

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Project Manager

ENVIRONMENTAL TESTING AND CONSULTING, INC.
CASE NARRATIVE
GC/MS VOLATILE COMPOUNDS - AQUEOUS

Client Name Sverdrup/Jacobs Engineering
Project Name Memphis Depot

ETC Order # 0011-216

SAMPLE PRESERVATION (Verified at time of analysis)

All aqueous samples preserved to pH < 2.

METHOD

Preparation: SW-846 5030B
Analysis: SW-846 8260B

HOLDING TIMES

Sample Analysis All samples analyzed within 14 days of collection.

QUALITY CONTROL

QC Batch	Form 4 Summary
V4111001	V4111011LB
V4111301	V4111311LB

System Monitoring Compounds FORM 2
Surrogate recoveries within QC limits, except as listed below.

Surrogates 1,2-Dichloroethane-d4 and Bromofluorobenzene were flagged for low recovery in sample 0011-216-11MSD (FB-Y2Q4). Surrogate 1,2-Dichloroethane-d4 was flagged for low recovery in the MS. There is no effect on the data.

Surrogates 1,2-Dichloroethane-d4 and Bromofluorobenzene were flagged for low recovery in sample 0011-216-03MS/MSD (MW-15-Y2Q4). There is no effect on the data.

Method Blank FORM 4
V4111011LB
V4111311LB

Target Analytes were not detected in the Method Blanks, except as listed below.

V4111011LB

Methylene Chloride was detected at a concentration of 3.04J ug/L. This analyte was not identified in associated project samples There is no effect on the data.

V4111311LB

Methylene Chloride was detected at a concentration of 1.16J ug/L. This analyte was not identified in associated project samples. There is no effect on the data.

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ENVIRONMENTAL TESTING AND CONSULTING, INC.
CASE NARRATIVE
GC/MS VOLATILE COMPOUNDS - AQUEOUS

Client Name Sverdrup/Jacobs Engineering
Project Name Memphis Depot

ETC Order # 0011-216

QUALITY CONTROL

Laboratory Control Sample FORM 3
V4111011LCS
V4111311LCS

All acceptance criteria met, except as listed below.

V4111011LCS

Bromochloromethane (non-target analyte), Furan (non-target analyte), and 2-Methyl-4-Pentanone were flagged for high recovery in the LCS. 2-Methyl-4-Pentanone was not detected in associated samples There is no effect on the data.

V4111311LCS

Bromochloromethane and Furan, which were both non-target analytes, were flagged for high recovery in the LCS. There is no effect on the data.

Matrix Spike / Matrix Spike Dup. FORM 3
Batch V4111001

0011-216-11	RPD	All analytes within QC limits.
FB-Y2Q4	Spike Recovery	All analytes within QC limits.

Refer to Laboratory Control Sample(s) for system verification.

Matrix Spike / Matrix Spike Dup. FORM 3
Batch V4111301

0011-216-03	RPD	All analytes within QC limits.
MW-15-Y2Q4	Spike Recovery	All analytes within QC limits.

Refer to Laboratory Control Sample(s) for system verification.

CALIBRATION

BFB Daily 12-Hour Tune	All criteria met. FORM 5
Initial Calibration	All criteria met. FORM 6
Calibration Verification	All criteria met. FORM 7, except as listed below.

Calibration Verification (CV): Date 11/10/00 Time: 1004

Analyte	%Diff(30% Max)	Response
4-Methyl-2-Pentanone	+58.9	High

Samples affected by this CV include V4111011LB, V4111011LCS, 0011-216-11MS/MSD, 0011-216-01 through 0011-216-03 and 0011-216-05 through 0011-216-12. High response indicates that reported levels for this analyte may be biased high. This analyte was not identified in associated project samples There is no effect on the data.

ENVIRONMENTAL TESTING AND CONSULTING, INC.
CASE NARRATIVE
GC/MS VOLATILE COMPOUNDS - AQUEOUS

Client Name Sverdrup/Jacobs Engineering
Project Name Memphis Depot

ETC Order # 0011-216

CALIBRATION

Volatile Internal Standard Area and RT FORM 8
Daily Check Standard(s) Internal Standard Areas and Retention Times within QC limits.

SAMPLE ANALYSIS

Instrumentation HP 5890 Series II GC, 5971MSD
Dilutions Required No dilutions required, except as listed below.

Dilution was performed on one sample to bring Target Analyte(s) within calibration range as shown on the Sample Report Form.

OTHER

Sample 0011-216-11MSD was analyzed outside the 12-hour tune time. There is no effect on the data.

CJ

Project Manager

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ENVIRONMENTAL TESTING AND CONSULTING, INC.
CASE NARRATIVE
GC/MS SEMI-VOLATILE COMPOUNDS - AQUEOUS

Client Name Sverdrup/Jacobs Engineering
Project Name Memphis Defense Depot

ETC Order # 0011-216

HOLDING TIMES

Sample Extraction	All aqueous samples extracted within 7 days
Sample Analysis	All samples analyzed within 40 days of extraction

METHOD

Sample Preparation.	SW-836 3510C
Sample Analysis:	SW-846 8270C

QUALITY CONTROL

QC Batch	Form 4 Summary
P06008	P06008LB

System Monitoring Compounds FORM 2
Surrogate recoveries within QC limits.

Method Blank FORM 4
P06008LB

Target analytes were not detected in the Method Blank, except as listed below.

Bis(2-ethylhexyl)phthalate was detected in the Method Blank at 1.10J ug/L. This analyte was not identified in associated project samples. There is no effect on the data.

Laboratory Control Sample FORM 3
P06008LCS

All acceptance criteria met.

Matrix Spike / Matrix Spike Dup FORM 3
Batch P06008

0011-091-01	RPD	All analytes within QC limits, except as listed below.
	Spike Recovery	All analytes within QC limits, except as listed below.

Three analytes exceed control limits in the MS/MSD. Eight analytes exceed control limits in the MSD. The sample selected for the batch spike was not from this project. There is no effect on the data.

RPD exceeds control limits for 10 of 12 compounds due to variances in the MS and MSD.

Refer to Laboratory Control Sample(s) for system verification.

ENVIRONMENTAL TESTING AND CONSULTING, INC.
CASE NARRATIVE
GC/MS SEMI-VOLATILE COMPOUNDS - AQUEOUS

Client Name Sverdrup/Jacobs Engineering
Project Name Memphis Defense Depot

ETC Order # 0011-216

CALIBRATION

DFTPP Daily 12-Hour Tune	All criteria met. FORM 5
Initial Calibration	All criteria met. FORM 6
Calibration Verification	All criteria met. FORM 7

Semi-Volatile Internal Standard Area and RT FORM 8
Daily Check Standard(s) Internal Standard Areas and Retention Times within QC limits

SAMPLE ANALYSIS

Instrumentation	HP 5890 Series II GC, 5971MSD
Dilutions Required	No dilutions required.

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Project Manager

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

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ANALYTICAL SUMMARY/CROSS REFERENCE TABLE

Client Name **Sverdrup/Jacobs Eng.** ETC Order #0011216

Site ID **Memphis Depot**

ETC Sample ID	Field ID	Matrix	Method	Method Description
001121601	MW-57-Y2Q4	AQUEOUS	335.2	Cyanide
001121601	MW-57-Y2Q4	AQUEOUS	200.7	Silver
001121601	MW-57-Y2Q4	AQUEOUS	200.7	Aluminum
001121601	MW-57-Y2Q4	AQUEOUS	200.7	Arsenic
001121601	MW-57-Y2Q4	AQUEOUS	200.7	Barium
001121601	MW-57-Y2Q4	AQUEOUS	200.7	Beryllium
001121601	MW-57-Y2Q4	AQUEOUS	200.7	Calcium
001121601	MW-57-Y2Q4	AQUEOUS	200.7	Cadmium
001121601	MW-57-Y2Q4	AQUEOUS	200.7	Cobalt
001121601	MW-57-Y2Q4	AQUEOUS	200.7	Chromium
001121601	MW-57-Y2Q4	AQUEOUS	200.7	Copper
001121601	MW-57-Y2Q4	AQUEOUS	200.7	Iron
001121601	MW-57-Y2Q4	AQUEOUS	245.1	Mercury
001121601	MW-57-Y2Q4	AQUEOUS	200.7	Potassium
001121601	MW-57-Y2Q4	AQUEOUS	200.7	Magnesium
001121601	MW-57-Y2Q4	AQUEOUS	200.7	Manganese
001121601	MW-57-Y2Q4	AQUEOUS	200.7	Sodium
001121601	MW-57-Y2Q4	AQUEOUS	200.7	Nickel
001121601	MW-57-Y2Q4	AQUEOUS	200.7	Lead
001121601	MW-57-Y2Q4	AQUEOUS	200.7	Antimony
001121601	MW-57-Y2Q4	AQUEOUS	200.7	Selenium
001121601	MW-57-Y2Q4	AQUEOUS	200.7	Thallium
001121601	MW-57-Y2Q4	AQUEOUS	200.7	Vanadium
001121601	MW-57-Y2Q4	AQUEOUS	200.7	Zinc
001121601	MW-57-Y2Q4	AQUEOUS	8260B	GC/MS Volatile Organics
001121601	MW-57-Y2Q4	AQUEOUS	8270C	GC/MS Base/Neutral & Acid
001121602	MW-14-Y2Q4	AQUEOUS	335.2	Cyanide
001121602	MW-14-Y2Q4	AQUEOUS	200.7	Silver
001121602	MW-14-Y2Q4	AQUEOUS	200.7	Aluminum
001121602	MW-14-Y2Q4	AQUEOUS	200.7	Arsenic
001121602	MW-14-Y2Q4	AQUEOUS	200.7	Barium
001121602	MW-14-Y2Q4	AQUEOUS	200.7	Beryllium
001121602	MW-14-Y2Q4	AQUEOUS	200.7	Calcium
001121602	MW-14-Y2Q4	AQUEOUS	200.7	Cadmium
001121602	MW-14-Y2Q4	AQUEOUS	200.7	Cobalt
001121602	MW-14-Y2Q4	AQUEOUS	200.7	Chromium
001121602	MW-14-Y2Q4	AQUEOUS	200.7	Copper
001121602	MW-14-Y2Q4	AQUEOUS	200.7	Iron
001121602	MW-14-Y2Q4	AQUEOUS	245.1	Mercury
001121602	MW-14-Y2Q4	AQUEOUS	200.7	Potassium
001121602	MW-14-Y2Q4	AQUEOUS	200.7	Magnesium
001121602	MW-14-Y2Q4	AQUEOUS	200.7	Manganese
001121602	MW-14-Y2Q4	AQUEOUS	200.7	Sodium
001121602	MW-14-Y2Q4	AQUEOUS	200.7	Nickel
001121602	MW-14-Y2Q4	AQUEOUS	200.7	Lead
001121602	MW-14-Y2Q4	AQUEOUS	200.7	Antimony
001121602	MW-14-Y2Q4	AQUEOUS	200.7	Selenium
001121602	MW-14-Y2Q4	AQUEOUS	200.7	Thallium
001121602	MW-14-Y2Q4	AQUEOUS	200.7	Vanadium
001121602	MW-14-Y2Q4	AQUEOUS	200.7	Zinc
001121602	MW-14-Y2Q4	AQUEOUS	8260B	GC/MS Volatile Organics
001121602	MW-14-Y2Q4	AQUEOUS	8270C	GC/MS Base/Neutral & Acid
001121603	MW-15-Y2Q4	AQUEOUS	335.2	Cyanide
001121603	MW-15-Y2Q4	AQUEOUS	200.7	Silver
001121603	MW-15-Y2Q4	AQUEOUS	200.7	Aluminum

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ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

ANALYTICAL SUMMARY/CROSS REFERENCE TABLE

Client Name **Sverdrup/Jacobs Eng.** ETC Order #0011216
Site ID **Memphis Depot**

ETC Sample ID	Field ID	Matrix	Method	Method Description
001121603	MW-15-Y2Q4	AQUEOUS	200 7	Arsenic
001121603	MW-15-Y2Q4	AQUEOUS	200.7	Barium
001121603	MW-15-Y2Q4	AQUEOUS	200.7	Beryllium
001121603	MW-15-Y2Q4	AQUEOUS	200.7	Calcium
001121603	MW-15-Y2Q4	AQUEOUS	200.7	Cadmium
001121603	MW-15-Y2Q4	AQUEOUS	200.7	Cobalt
001121603	MW-15-Y2Q4	AQUEOUS	200.7	Chromium
001121603	MW-15-Y2Q4	AQUEOUS	200.7	Copper
001121603	MW-15-Y2Q4	AQUEOUS	200.7	Iron
001121603	MW-15-Y2Q4	AQUEOUS	245.1	Mercury
001121603	MW-15-Y2Q4	AQUEOUS	200.7	Potassium
001121603	MW-15-Y2Q4	AQUEOUS	200.7	Magnesium
001121603	MW-15-Y2Q4	AQUEOUS	200.7	Manganese
001121603	MW-15-Y2Q4	AQUEOUS	200.7	Sodium
001121603	MW-15-Y2Q4	AQUEOUS	200.7	Nickel
001121603	MW-15-Y2Q4	AQUEOUS	200.7	Lead
001121603	MW-15-Y2Q4	AQUEOUS	200.7	Antimony
001121603	MW-15-Y2Q4	AQUEOUS	200.7	Selenium
001121603	MW-15-Y2Q4	AQUEOUS	200.7	Thallium
001121603	MW-15-Y2Q4	AQUEOUS	200.7	Vanadium
001121603	MW-15-Y2Q4	AQUEOUS	200.7	Zinc
001121603	MW-15-Y2Q4	AQUEOUS	8260B	GC/MS Volatile Organics
001121603	MW-15-Y2Q4	AQUEOUS	8270C	GC/MS Base/Neutral & Acid
001121604	MW-58-Y2Q4	AQUEOUS	335.2	Cyanide
001121604	MW-58-Y2Q4	AQUEOUS	200.7	Silver
001121604	MW-58-Y2Q4	AQUEOUS	200.7	Aluminum
001121604	MW-58-Y2Q4	AQUEOUS	200.7	Arsenic
001121604	MW-58-Y2Q4	AQUEOUS	200.7	Barium
001121604	MW-58-Y2Q4	AQUEOUS	200.7	Beryllium
001121604	MW-58-Y2Q4	AQUEOUS	200.7	Calcium
001121604	MW-58-Y2Q4	AQUEOUS	200.7	Cadmium
001121604	MW-58-Y2Q4	AQUEOUS	200.7	Cobalt
001121604	MW-58-Y2Q4	AQUEOUS	200.7	Chromium
001121604	MW-58-Y2Q4	AQUEOUS	200.7	Copper
001121604	MW-58-Y2Q4	AQUEOUS	200.7	Iron
001121604	MW-58-Y2Q4	AQUEOUS	245.1	Mercury
001121604	MW-58-Y2Q4	AQUEOUS	200.7	Potassium
001121604	MW-58-Y2Q4	AQUEOUS	200.7	Magnesium
001121604	MW-58-Y2Q4	AQUEOUS	200.7	Manganese
001121604	MW-58-Y2Q4	AQUEOUS	200.7	Sodium
001121604	MW-58-Y2Q4	AQUEOUS	200.7	Nickel
001121604	MW-58-Y2Q4	AQUEOUS	200.7	Lead
001121604	MW-58-Y2Q4	AQUEOUS	200.7	Antimony
001121604	MW-58-Y2Q4	AQUEOUS	200.7	Selenium
001121604	MW-58-Y2Q4	AQUEOUS	200.7	Thallium
001121604	MW-58-Y2Q4	AQUEOUS	200.7	Vanadium
001121604	MW-58-Y2Q4	AQUEOUS	200.7	Zinc
001121604	MW-58-Y2Q4	AQUEOUS	8260B	GC/MS Volatile Organics
001121604	MW-58-Y2Q4	AQUEOUS	8270C	GC/MS Base/Neutral & Acid
001121605	MW-56-Y2Q4	AQUEOUS	335.2	Cyanide
001121605	MW-56-Y2Q4	AQUEOUS	200.7	Silver
001121605	MW-56-Y2Q4	AQUEOUS	200 7	Aluminum
001121605	MW-56-Y2Q4	AQUEOUS	200.7	Arsenic
001121605	MW-56-Y2Q4	AQUEOUS	200.7	Barium
001121605	MW-56-Y2Q4	AQUEOUS	200.7	Beryllium
001121605	MW-56-Y2Q4	AQUEOUS	200.7	Calcium

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ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

ANALYTICAL SUMMARY/CROSS REFERENCE TABLE

Client Name **Sverdrup/Jacobs Eng.** ETC Order #0011216
Site ID **Memphis Depot**

ETC Sample ID	Field ID	Matrix	Method	Method Description
001121605	MW-56-Y2Q4	AQUEOUS	200 7	Cadmium
001121605	MW-56-Y2Q4	AQUEOUS	200 7	Cobalt
001121605	MW-56-Y2Q4	AQUEOUS	200.7	Chromium
001121605	MW-56-Y2Q4	AQUEOUS	200.7	Copper
001121605	MW-56-Y2Q4	AQUEOUS	200.7	Iron
001121605	MW-56-Y2Q4	AQUEOUS	245.1	Mercury
001121605	MW-56-Y2Q4	AQUEOUS	200.7	Potassium
001121605	MW-56-Y2Q4	AQUEOUS	200 7	Magnesium
001121605	MW-56-Y2Q4	AQUEOUS	200.7	Manganese
001121605	MW-56-Y2Q4	AQUEOUS	200.7	Sodium
001121605	MW-56-Y2Q4	AQUEOUS	200.7	Nickel
001121605	MW-56-Y2Q4	AQUEOUS	200.7	Lead
001121605	MW-56-Y2Q4	AQUEOUS	200.7	Antimony
001121605	MW-56-Y2Q4	AQUEOUS	200.7	Selenium
001121605	MW-56-Y2Q4	AQUEOUS	200.7	Thallium
001121605	MW-56-Y2Q4	AQUEOUS	200.7	Vanadium
001121605	MW-56-Y2Q4	AQUEOUS	200.7	Zinc
001121605	MW-56-Y2Q4	AQUEOUS	8260B	GC/MS Volatile Organics
001121605	MW-56-Y2Q4	AQUEOUS	8270C	GC/MS Base/Neutral & Acid
001121606	MW-54-Y2Q4	AQUEOUS	335.2	Cyanide
001121606	MW-54-Y2Q4	AQUEOUS	200.7	Silver
001121606	MW-54-Y2Q4	AQUEOUS	200.7	Aluminum
001121606	MW-54-Y2Q4	AQUEOUS	200.7	Arsenic
001121606	MW-54-Y2Q4	AQUEOUS	200.7	Barium
001121606	MW-54-Y2Q4	AQUEOUS	200.7	Beryllium
001121606	MW-54-Y2Q4	AQUEOUS	200.7	Calcium
001121606	MW-54-Y2Q4	AQUEOUS	200.7	Cadmium
001121606	MW-54-Y2Q4	AQUEOUS	200.7	Cobalt
001121606	MW-54-Y2Q4	AQUEOUS	200.7	Chromium
001121606	MW-54-Y2Q4	AQUEOUS	200.7	Copper
001121606	MW-54-Y2Q4	AQUEOUS	200.7	Iron
001121606	MW-54-Y2Q4	AQUEOUS	245.1	Mercury
001121606	MW-54-Y2Q4	AQUEOUS	200.7	Potassium
001121606	MW-54-Y2Q4	AQUEOUS	200.7	Magnesium
001121606	MW-54-Y2Q4	AQUEOUS	200.7	Manganese
001121606	MW-54-Y2Q4	AQUEOUS	200.7	Sodium
001121606	MW-54-Y2Q4	AQUEOUS	200.7	Nickel
001121606	MW-54-Y2Q4	AQUEOUS	200.7	Lead
001121606	MW-54-Y2Q4	AQUEOUS	200.7	Antimony
001121606	MW-54-Y2Q4	AQUEOUS	200.7	Selenium
001121606	MW-54-Y2Q4	AQUEOUS	200.7	Thallium
001121606	MW-54-Y2Q4	AQUEOUS	200.7	Vanadium
001121606	MW-54-Y2Q4	AQUEOUS	200.7	Zinc
001121606	MW-54-Y2Q4	AQUEOUS	8260B	GC/MS Volatile Organics
001121606	MW-54-Y2Q4	AQUEOUS	8270C	GC/MS Base/Neutral & Acid
001121607	MW-31-Y2Q4	AQUEOUS	335.2	Cyanide
001121607	MW-31-Y2Q4	AQUEOUS	200.7	Silver
001121607	MW-31-Y2Q4	AQUEOUS	200.7	Aluminum
001121607	MW-31-Y2Q4	AQUEOUS	200.7	Arsenic
001121607	MW-31-Y2Q4	AQUEOUS	200.7	Barium
001121607	MW-31-Y2Q4	AQUEOUS	200.7	Beryllium
001121607	MW-31-Y2Q4	AQUEOUS	200 7	Calcium
001121607	MW-31-Y2Q4	AQUEOUS	200.7	Cadmium
001121607	MW-31-Y2Q4	AQUEOUS	200 7	Cobalt
001121607	MW-31-Y2Q4	AQUEOUS	200.7	Chromium
001121607	MW-31-Y2Q4	AQUEOUS	200.7	Copper

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

ANALYTICAL SUMMARY/CROSS REFERENCE TABLE

Client Name **Sverdrup/Jacobs Eng.** ETC Order #0011216
Site ID **Memphis Depot**

ETC Sample ID	Field ID	Matrix	Method	Method Description
001121607	MW-31-Y2Q4	AQUEOUS	200.7	Iron
001121607	MW-31-Y2Q4	AQUEOUS	245.1	Mercury
001121607	MW-31-Y2Q4	AQUEOUS	200.7	Potassium
001121607	MW-31-Y2Q4	AQUEOUS	200.7	Magnesium
001121607	MW-31-Y2Q4	AQUEOUS	200.7	Manganese
001121607	MW-31-Y2Q4	AQUEOUS	200.7	Sodium
001121607	MW-31-Y2Q4	AQUEOUS	200.7	Nickel
001121607	MW-31-Y2Q4	AQUEOUS	200.7	Lead
001121607	MW-31-Y2Q4	AQUEOUS	200.7	Antimony
001121607	MW-31-Y2Q4	AQUEOUS	200.7	Selenium
001121607	MW-31-Y2Q4	AQUEOUS	200.7	Thallium
001121607	MW-31-Y2Q4	AQUEOUS	200.7	Vanadium
001121607	MW-31-Y2Q4	AQUEOUS	200.7	Zinc
001121607	MW-31-Y2Q4	AQUEOUS	8260B	GC/MS Volatile Organics
001121607	MW-31-Y2Q4	AQUEOUS	8270C	GC/MS Base/Neutral & Acid
001121608	MW-30-Y2Q4	AQUEOUS	335.2	Cyanide
001121608	MW-30-Y2Q4	AQUEOUS	200.7	Silver
001121608	MW-30-Y2Q4	AQUEOUS	200.7	Aluminum
001121608	MW-30-Y2Q4	AQUEOUS	200.7	Arsenic
001121608	MW-30-Y2Q4	AQUEOUS	200.7	Barium
001121608	MW-30-Y2Q4	AQUEOUS	200.7	Beryllium
001121608	MW-30-Y2Q4	AQUEOUS	200.7	Calcium
001121608	MW-30-Y2Q4	AQUEOUS	200.7	Cadmium
001121608	MW-30-Y2Q4	AQUEOUS	200.7	Cobalt
001121608	MW-30-Y2Q4	AQUEOUS	200.7	Chromium
001121608	MW-30-Y2Q4	AQUEOUS	200.7	Copper
001121608	MW-30-Y2Q4	AQUEOUS	200.7	Iron
001121608	MW-30-Y2Q4	AQUEOUS	245.1	Mercury
001121608	MW-30-Y2Q4	AQUEOUS	200.7	Potassium
001121608	MW-30-Y2Q4	AQUEOUS	200.7	Magnesium
001121608	MW-30-Y2Q4	AQUEOUS	200.7	Manganese
001121608	MW-30-Y2Q4	AQUEOUS	200.7	Sodium
001121608	MW-30-Y2Q4	AQUEOUS	200.7	Nickel
001121608	MW-30-Y2Q4	AQUEOUS	200.7	Lead
001121608	MW-30-Y2Q4	AQUEOUS	200.7	Antimony
001121608	MW-30-Y2Q4	AQUEOUS	200.7	Selenium
001121608	MW-30-Y2Q4	AQUEOUS	200.7	Thallium
001121608	MW-30-Y2Q4	AQUEOUS	200.7	Vanadium
001121608	MW-30-Y2Q4	AQUEOUS	200.7	Zinc
001121608	MW-30-Y2Q4	AQUEOUS	8260B	GC/MS Volatile Organics
001121608	MW-30-Y2Q4	AQUEOUS	8270C	GC/MS Base/Neutral & Acid
001121609	MW-34-Y2Q4	AQUEOUS	335.2	Cyanide
001121609	MW-34-Y2Q4	AQUEOUS	200.7	Silver
001121609	MW-34-Y2Q4	AQUEOUS	200.7	Aluminum
001121609	MW-34-Y2Q4	AQUEOUS	200.7	Arsenic
001121609	MW-34-Y2Q4	AQUEOUS	200.7	Barium
001121609	MW-34-Y2Q4	AQUEOUS	200.7	Beryllium
001121609	MW-34-Y2Q4	AQUEOUS	200.7	Calcium
001121609	MW-34-Y2Q4	AQUEOUS	200.7	Cadmium
001121609	MW-34-Y2Q4	AQUEOUS	200.7	Cobalt
001121609	MW-34-Y2Q4	AQUEOUS	200.7	Chromium
001121609	MW-34-Y2Q4	AQUEOUS	200.7	Copper
001121609	MW-34-Y2Q4	AQUEOUS	200.7	Iron
001121609	MW-34-Y2Q4	AQUEOUS	245.1	Mercury
001121609	MW-34-Y2Q4	AQUEOUS	200.7	Potassium
001121609	MW-34-Y2Q4	AQUEOUS	200.7	Magnesium

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 268

ANALYTICAL SUMMARY/CROSS REFERENCE TABLE

Client Name Sverdrup/Jacobs Eng.
Site ID Memphis Depot

ETC Order #0011216

ETC Sample ID	Field ID	Matrix	Method	Method Description
001121609	MW-34-Y2Q4	AQUEOUS	200 7	Manganese
001121609	MW-34-Y2Q4	AQUEOUS	200.7	Sodium
001121609	MW-34-Y2Q4	AQUEOUS	200 7	Nickel
001121609	MW-34-Y2Q4	AQUEOUS	200.7	Lead
001121609	MW-34-Y2Q4	AQUEOUS	200 7	Antimony
001121609	MW-34-Y2Q4	AQUEOUS	200.7	Selenium
001121609	MW-34-Y2Q4	AQUEOUS	200.7	Thallium
001121609	MW-34-Y2Q4	AQUEOUS	200.7	Vanadium
001121609	MW-34-Y2Q4	AQUEOUS	200.7	Zinc
001121609	MW-34-Y2Q4	AQUEOUS	8260B	GC/MS Volatile Organics
001121609	MW-34-Y2Q4	AQUEOUS	8270C	GC/MS Base/Neutral & Acid
001121610	MW-54A-Y2Q4	AQUEOUS	335.2	Cyanide
001121610	MW-54A-Y2Q4	AQUEOUS	200.7	Silver
001121610	MW-54A-Y2Q4	AQUEOUS	200.7	Aluminum
001121610	MW-54A-Y2Q4	AQUEOUS	200.7	Arsenic
001121610	MW-54A-Y2Q4	AQUEOUS	200.7	Barium
001121610	MW-54A-Y2Q4	AQUEOUS	200.7	Beryllium
001121610	MW-54A-Y2Q4	AQUEOUS	200.7	Calcium
001121610	MW-54A-Y2Q4	AQUEOUS	200.7	Cadmium
001121610	MW-54A-Y2Q4	AQUEOUS	200.7	Cobalt
001121610	MW-54A-Y2Q4	AQUEOUS	200.7	Chromium
001121610	MW-54A-Y2Q4	AQUEOUS	200.7	Copper
001121610	MW-54A-Y2Q4	AQUEOUS	200.7	Iron
001121610	MW-54A-Y2Q4	AQUEOUS	245.1	Mercury
001121610	MW-54A-Y2Q4	AQUEOUS	200.7	Potassium
001121610	MW-54A-Y2Q4	AQUEOUS	200.7	Magnesium
001121610	MW-54A-Y2Q4	AQUEOUS	200.7	Manganese
001121610	MW-54A-Y2Q4	AQUEOUS	200.7	Sodium
001121610	MW-54A-Y2Q4	AQUEOUS	200.7	Nickel
001121610	MW-54A-Y2Q4	AQUEOUS	200.7	Lead
001121610	MW-54A-Y2Q4	AQUEOUS	200.7	Antimony
001121610	MW-54A-Y2Q4	AQUEOUS	200.7	Selenium
001121610	MW-54A-Y2Q4	AQUEOUS	200.7	Thallium
001121610	MW-54A-Y2Q4	AQUEOUS	200.7	Vanadium
001121610	MW-54A-Y2Q4	AQUEOUS	200.7	Zinc
001121610	MW-54A-Y2Q4	AQUEOUS	8260B	GC/MS Volatile Organics
001121610	MW-54A-Y2Q4	AQUEOUS	8270C	GC/MS Base/Neutral & Acid
001121611	FB-Y2Q4	AQUEOUS	335.2	Cyanide
001121611	FB-Y2Q4	AQUEOUS	200.7	Silver
001121611	FB-Y2Q4	AQUEOUS	200.7	Aluminum
001121611	FB-Y2Q4	AQUEOUS	200.7	Arsenic
001121611	FB-Y2Q4	AQUEOUS	200.7	Barium
001121611	FB-Y2Q4	AQUEOUS	200.7	Beryllium
001121611	FB-Y2Q4	AQUEOUS	200.7	Calcium
001121611	FB-Y2Q4	AQUEOUS	200.7	Cadmium
001121611	FB-Y2Q4	AQUEOUS	200.7	Cobalt
001121611	FB-Y2Q4	AQUEOUS	200.7	Chromium
001121611	FB-Y2Q4	AQUEOUS	200 7	Copper
001121611	FB-Y2Q4	AQUEOUS	200.7	Iron
001121611	FB-Y2Q4	AQUEOUS	245.1	Mercury
001121611	FB-Y2Q4	AQUEOUS	200.7	Potassium
001121611	FB-Y2Q4	AQUEOUS	200.7	Magnesium
001121611	FB-Y2Q4	AQUEOUS	200.7	Manganese
001121611	FB-Y2Q4	AQUEOUS	200.7	Sodium
001121611	FB-Y2Q4	AQUEOUS	200.7	Nickel
001121611	FB-Y2Q4	AQUEOUS	200.7	Lead

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

ANALYTICAL SUMMARY/CROSS REFERENCE TABLE

ient Name **Sverdrup/Jacobs Eng.** ETC Order **#0011216**
te ID **Memphis Depot**

ETC Sample ID	Field ID	Matrix	Method	Method Description
001121611	FB-Y2Q4	AQUEOUS	200.7	Antimony
001121611	FB-Y2Q4	AQUEOUS	200.7	Selenium
001121611	FB-Y2Q4	AQUEOUS	200.7	Thallium
001121611	FB-Y2Q4	AQUEOUS	200.7	Vanadium
001121611	FB-Y2Q4	AQUEOUS	200 7	Zinc
001121611	FB-Y2Q4	AQUEOUS	8260B	GC/MS Volatile Organics
001121611	FB-Y2Q4	AQUEOUS	8270C	GC/MS Base/Neutral & Acid
001121612	TB-01	AQUEOUS	8260B	GC/MS Volatile Organics

Environmental Testing & Consulting, Inc.

Sample Reports

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 271

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

Date Arrived **11/08/00**
ETC Order Number **0011216**

ETC Lab ID : **0011216-01**
Field ID : **MW-57-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/07/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	BY	METHOD	QC BATCH
Cyanide	<0.010	mg/L	0.010	11/09/00	GD	335.2	CY110901

000019

CS
Data Validator

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 272

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

Date Arrived **11/08/00**
ETC Order Number **0011216**

ETC Lab ID : **0011216-02**
Field ID : **MW-14-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/06/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	BY	METHOD	QC BATCH
Cyanide	<0.010	mg/L	0.010	11/09/00	GD	335.2	CY110901

CS
Data Validator

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 273

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

Date Arrived **11/08/00**
ETC Order Number **0011216**

ETC Lab ID : **0011216-03**
Field ID : **MW-15-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/07/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	BY	METHOD	QC BATCH
Cyanide	<0 010	mg/L	0.010	11/09/00	GD	335 2	CY110901

Q5
Data Validator

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 274

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

Date Arrived **11/08/00**
ETC Order Number **0011216**

ETC Lab ID : **0011216-04**
Field ID : **MW-58-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/07/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	BY	METHOD	QC BATCH
Cyanide	<0.010	mg/L	0.010	11/09/00	GD	335.2	CY110901

C >
Data Validator

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

Date Arrived **11/08/00**
ETC Order Number **0011216**

ETC Lab ID : **0011216-05**
Field ID : **MW-56-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/07/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	BY	METHOD	QC BATCH
Cyanide	<0.010	mg/L	0.010	11/10/00	GD	335.2	CY111001

CS

Data Validator

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 276

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

Date Arrived **11/08/00**
ETC Order Number **0011216**

ETC Lab ID : **0011216-06**
Field ID : **MW-54-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/07/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	BY	METHOD	QC BATCH
Cyanide	<0.010	mg/L	0.010	11/10/00	GD	335.2	CY111001

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Data Validator

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.
2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

Date Arrived **11/08/00**
ETC Order Number **0011216**

ETC Lab ID : **0011216-07**
Field ID : **MW-31-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/07/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	BY	METHOD	QC BATCH
Cyanide	<0.010	mg/L	0 010	11/10/00	GD	335.2	CY111001

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Data Validator

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 278

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

Date Arrived **11/08/00**
ETC Order Number **0011216**

ETC Lab ID : **0011216-08**
Field ID : **MW-30-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/07/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	BY	METHOD	QC BATCH
Cyanide	<0.010	mg/L	0.010	11/10/00	GD	335.2	CY111001

( )
Data Validator

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

Date Arrived **11/08/00**
ETC Order Number **0011216**

ETC Lab ID : **0011216-09**
Field ID : **MW-34-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/07/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	BY	METHOD	QC BATCH
Cyanide	<0.010	mg/L	0.010	11/10/00	GD	335.2	CY111001

CS
Data Validator

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 280

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

Date Arrived **11/08/00**
ETC Order Number **0011216**

ETC Lab ID : **0011216-10**
Field ID : **MW-54A-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/07/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	BY	METHOD	QC BATCH
Cyanide	<0.010	mg/L	0.010	11/10/00	GD	335 2	CY111001

< 5

Data Validator

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC. 613 281
2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

Date Arrived **11/08/00**
ETC Order Number **0011216**

ETC Lab ID : **0011216-11**
Field ID : **FB-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/07/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	BY	METHOD	QC BATCH
Cyanide	<0.010	mg/L	0 010	11/10/00	GD	335.2	CY111001

CS
Data Validator

ND - Not Detected

613 282

METHOD BLANK
INORGANICS

Lab Name. Environmental Testing and Consulting, Inc

Analyte	QC Sample No	QC Batch	Result	Detection Limit	Units	Date Analyzed	Method
Cyanide	CY1109011 BLK	CY110901	ND	0 010	mg/L	11/09/00	335 2
Cyanide	CY1110011 BLK	CY111001	ND	0 010	mg/L	11/10/00	335 2

NA - Not Applicable per Method
ND - Not Detected

Reviewed by. _____

LABORATORY CONTROL SAMPLE
INORGANICS

Lab Name. Environmental Testing and Consulting, Inc

Analyte	QC Sample No	QC Batch	Spike Added	Found	Units	% Rec #	QC Limits	
Cyanide	CY1109011 CS	CY110901	0 200	0 189	mg/L	95	90	110
Cyanide	CY1110011 CS	CY111001	0 200	0 197	mg/L	99	90	110

ND - Not Detected
Column to be used to flag recovery values with an asterisk
* Values outside of QC limits

Reviewed by

MATRIX SPIKE / MATRIX SPIKE DUPLICATE
INORGANICS

613 284

Lab Name: Environmental Testing and Consulting, Inc

Analyte	QC Sample No	QC Batch	SPIKE Added	SAMPLE Result	MS Result	Units	MS % Rec #	QC Limits	
Cyanide	0011-216-01 MS	CY110901	0 200	ND	0 184	mg/L	92	64	114
Cyanide	0011-216-05 MS	CY111001	0 200	ND	0 193	mg/L	97	64	114

Analyte	QC Sample No	QC Batch	SPIKE Added	SAMPLE Result	MSD Result	Units	MSD % Rec #	QC Limits	
Cyanide	0011-216-01 MSD	CY110901	0 200	ND	0 182	mg/L	91	64	114
Cyanide	0011-216-05 MSD	CY111001	0 200	ND	0 189	mg/L	95	64	114

ND - Not Detected
Column to be used to flag recovery values with an asterisk
* Values outside of QC limits

Reviewed by _____

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 285

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

Date Arrived **11/08/00**
ETC Order Number **0011216**

ETC Lab ID : **0011216-01**
Field ID : **MW-57-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/07/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE PREPARED	BY	METHOD
Mercury Digestion Batch	V7-AQ-63			11/13/00	11/13/00	JF	245.1
Metals Digestion Batch	V23-AQ-17			11/10/00	11/10/00	NR	3030K
Silver	<0.009	mg/L	0.009	11/14/00	11/10/00	SH	200 7
Aluminum	18.2	mg/L	0.060	11/14/00	11/10/00	SH	200 7
Arsenic	0.010	mg/L	0.003	11/14/00	11/10/00	SH	200 7
Barium	0.247	mg/L	0.003	11/14/00	11/10/00	SH	200.7
Beryllium	<0.002	mg/L	0.002	11/14/00	11/10/00	SH	200.7
Calcium	13 7	mg/L	0.015	11/14/00	11/10/00	SH	200.7
Cadmium	<0.005	mg/L	0.005	11/14/00	11/10/00	SH	200.7
Cobalt	0.014	mg/L	0.009	11/14/00	11/10/00	SH	200.7
Chromium	0 042	mg/L	0.009	11/14/00	11/10/00	SH	200.7
Copper	0.045	mg/L	0.008	11/14/00	11/10/00	SH	200.7
Iron	41 5	mg/L	0.009	11/14/00	11/10/00	SH	200.7
Mercury	<0.0002	mg/L	0.0002	11/13/00	11/13/00	JF	245.1
[redacted]sium	3 07	mg/L	0.250	11/14/00	11/10/00	SH	200.7
[redacted]esium	6 50	mg/L	0.040	11/14/00	11/10/00	SH	200.7
Manganese	0 439	mg/L	0 003	11/14/00	11/10/00	SH	200.7
Sodium	19 6	mg/L	0.050	11/14/00	11/10/00	SH	200.7
Nickel	0.042	mg/L	0 020	11/14/00	11/10/00	SH	200.7
Lead	<0.060	mg/L	0.060	11/14/00	11/10/00	SH	200.7
Antimony	<0.040	mg/L	0 040	11/14/00	11/10/00	SH	200 7
Selenium	<0.100	mg/L	0 100	11/14/00	11/10/00	SH	200.7
Thallium	<0.065	mg/L	0 065	11/14/00	11/10/00	SH	200.7
Vanadium	0.051	mg/L	0.010	11/14/00	11/10/00	SH	200.7
Zinc	0.575	mg/L	0.010	11/14/00	11/10/00	SH	200.7

CS

Data Validator

ND - Not Detected

613 286

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

Date Arrived **11/08/00**
ETC Order Number **0011216**

ETC Lab ID : **0011216-02**
Field ID : **MW-14-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/06/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE PREPARED	BY	METHOD
Mercury Digestion Batch	V7-AQ-63			11/13/00	11/13/00	JF	245.1
Metals Digestion Batch	V23-AQ-17			11/10/00	11/10/00	NR	3030K
Silver	<0.009	mg/L	0.009	11/14/00	11/10/00	SH	200.7
Aluminum	62.3	mg/L	0.060	11/14/00	11/10/00	SH	200.7
Arsenic	0.036	mg/L	0.003	11/14/00	11/10/00	SH	200 7
Barium	0.453	mg/L	0.003	11/14/00	11/10/00	SH	200 7
Beryllium	0.003	mg/L	0.002	11/14/00	11/10/00	SH	200.7
Calcium	15.8	mg/L	0.015	11/14/00	11/10/00	SH	200.7
Cadmium	<0.005	mg/L	0.005	11/14/00	11/10/00	SH	200 7
Cobalt	0.071	mg/L	0.009	11/14/00	11/10/00	SH	200.7
Chromium	0 185	mg/L	0.009	11/14/00	11/10/00	SH	200.7
Copper	0.052	mg/L	0.008	11/14/00	11/10/00	SH	200 7
Iron	96.7	mg/L	0.009	11/14/00	11/10/00	SH	200.7
Mercury	0.0003	mg/L	0.0002	11/13/00	11/13/00	JF	245.1
Potassium	7.29	mg/L	0.250	11/14/00	11/10/00	SH	200.7
Magnesium	10 0	mg/L	0.040	11/14/00	11/10/00	SH	200.7
Manganese	1.95	mg/L	0.003	11/14/00	11/10/00	SH	200.7
Sodium	15.0	mg/L	0.050	11/14/00	11/10/00	SH	200.7
Nickel	0.045	mg/L	0.020	11/14/00	11/10/00	SH	200.7
Lead	0.198	mg/L	0.060	11/14/00	11/10/00	SH	200.7
Antimony	<0.040	mg/L	0 040	11/14/00	11/10/00	SH	200.7
Selenium	<0.100	mg/L	0.100	11/14/00	11/10/00	SH	200.7
Thallium	<0.065	mg/L	0.065	11/14/00	11/10/00	SH	200.7
Vanadium	0.133	mg/L	0 010	11/14/00	11/10/00	SH	200.7
Zinc	0.368	mg/L	0 010	11/14/00	11/10/00	SH	200 7

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Data Validator

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 287

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

Date Arrived **11/08/00**
ETC Order Number **0011216**

ETC Lab ID : **0011216-03**
Field ID : **MW-15-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/07/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE PREPARED	BY	METHOD
Mercury Digestion Batch	V7-AQ-63			11/13/00	11/13/00	JF	245.1
Metals Digestion Batch	V23-AQ-17			11/10/00	11/10/00	NR	3030K
Silver	<0 009	mg/L	0.009	11/14/00	11/10/00	SH	200.7
Aluminum	7 49	mg/L	0.060	11/14/00	11/10/00	SH	200.7
Arsenic	0.013	mg/L	0.003	11/14/00	11/10/00	SH	200.7
Barium	0.135	mg/L	0.003	11/14/00	11/10/00	SH	200.7
Beryllium	<0.002	mg/L	0.002	11/14/00	11/10/00	SH	200.7
Calcium	18.0	mg/L	0.015	11/14/00	11/10/00	SH	200.7
Cadmium	<0.005	mg/L	0 005	11/14/00	11/10/00	SH	200.7
Cobalt	<0.009	mg/L	0.009	11/14/00	11/10/00	SH	200.7
Chromium	0.018	mg/L	0.009	11/14/00	11/10/00	SH	200.7
Copper	0.008	mg/L	0.008	11/14/00	11/10/00	SH	200.7
Iron	24.0	mg/L	0.009	11/14/00	11/10/00	SH	200.7
Mercury	<0.0002	mg/L	0.0002	11/13/00	11/13/00	JF	245.1
[redacted]ssium	2.27	mg/L	0.250	11/14/00	11/10/00	SH	200.7
[redacted]nesium	8.47	mg/L	0.040	11/14/00	11/10/00	SH	200.7
Manganese	0.105	mg/L	0.003	11/14/00	11/10/00	SH	200.7
Sodium	16.8	mg/L	0.050	11/14/00	11/10/00	SH	200.7
Nickel	<0.020	mg/L	0.020	11/14/00	11/10/00	SH	200.7
Lead	<0.060	mg/L	0.060	11/14/00	11/10/00	SH	200.7
Antimony	<0.040	mg/L	0.040	11/14/00	11/10/00	SH	200.7
Selenium	<0.100	mg/L	0.100	11/14/00	11/10/00	SH	200.7
Thallium	<0.065	mg/L	0.065	11/14/00	11/10/00	SH	200.7
Vanadium	0.033	mg/L	0.010	11/14/00	11/10/00	SH	200.7
Zinc	0.029	mg/L	0 010	11/14/00	11/10/00	SH	200.7

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Data Validator

ND - Not Detected

613 288

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

Date Arrived **11/08/00**
ETC Order Number **0011216**

ETC Lab ID : **0011216-04**
Field ID : **MW-58-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/07/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE PREPARED	BY	METHOD
Mercury Digestion Batch	V7-AQ-63			11/13/00	11/13/00	JF	245.1
Metals Digestion Batch	V23-AQ-17			11/10/00	11/10/00	NR	3030K
Silver	<0.009	mg/L	0.009	11/14/00	11/10/00	SH	200.7
Aluminum	110	mg/L	0.060	11/14/00	11/10/00	SH	200.7
Arsenic	0.155	mg/L	0.003	11/14/00	11/10/00	SH	200.7
Barium	2.51	mg/L	0.003	11/14/00	11/10/00	SH	200.7
Beryllium	0.022	mg/L	0.002	11/14/00	11/10/00	SH	200.7
Calcium	19.8	mg/L	0.015	11/14/00	11/10/00	SH	200 7
Cadmium	<0 005	mg/L	0.005	11/14/00	11/10/00	SH	200.7
Cobalt	0.624	mg/L	0.009	11/14/00	11/10/00	SH	200.7
Chromium	0.163	mg/L	0.009	11/14/00	11/10/00	SH	200.7
Copper	0.164	mg/L	0.008	11/14/00	11/10/00	SH	200.7
Iron	724	mg/L	0.009	11/15/00	11/10/00	SH	200.7
Mercury	0.0017	mg/L	0.0002	11/13/00	11/13/00	JF	245.1
Potassium	8 56	mg/L	0.250	11/14/00	11/10/00	SH	200.7
Magnesium	11.8	mg/L	0.040	11/14/00	11/10/00	SH	200.7
Manganese	13.4	mg/L	0.003	11/14/00	11/10/00	SH	200.7
Sodium	14.4	mg/L	0.050	11/14/00	11/10/00	SH	200.7
Nickel	0.162	mg/L	0.020	11/14/00	11/10/00	SH	200.7
Lead	0.158	mg/L	0.060	11/14/00	11/10/00	SH	200.7
Antimony	<0.040	mg/L	0.040	11/14/00	11/10/00	SH	200.7
Selenium	<0.100	mg/L	0.100	11/14/00	11/10/00	SH	200.7
Thallium	<0.065	mg/L	0.065	11/14/00	11/10/00	SH	200 7
Vanadium	0.642	mg/L	0.010	11/14/00	11/10/00	SH	200.7
Zinc	0.556	mg/L	0.010	11/14/00	11/10/00	SH	200.7

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Data Validator

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

Date Arrived **11/08/00**
ETC Order Number **0011216**

ETC Lab ID : **0011216-05**
Field ID : **MW-56-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/07/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE PREPARED	BY	METHOD
Mercury Digestion Batch	V7-AQ-63			11/13/00	11/13/00	JF	245.1
Metals Digestion Batch	V23-AQ-17			11/10/00	11/10/00	NR	3030K
Silver	<0.009	mg/L	0 009	11/14/00	11/10/00	SH	200.7
Aluminum	40.7	mg/L	0.060	11/14/00	11/10/00	SH	200.7
Arsenic	0.014	mg/L	0.003	11/14/00	11/10/00	SH	200.7
Barium	0.402	mg/L	0.003	11/14/00	11/10/00	SH	200.7
Beryllium	<0.002	mg/L	0.002	11/14/00	11/10/00	SH	200.7
Calcium	23 0	mg/L	0.015	11/14/00	11/10/00	SH	200.7
Cadmium	<0.005	mg/L	0.005	11/14/00	11/10/00	SH	200.7
Cobalt	0.013	mg/L	0.009	11/14/00	11/10/00	SH	200.7
Chromium	0.063	mg/L	0.009	11/14/00	11/10/00	SH	200.7
Copper	0.046	mg/L	0 008	11/14/00	11/10/00	SH	200.7
Iron	62.6	mg/L	0 009	11/14/00	11/10/00	SH	200 7
Mercury	0.0002	mg/L	0.0002	11/13/00	11/13/00	JF	245 1
P[redacted]sium	5.17	mg/L	0.250	11/14/00	11/10/00	SH	200.7
[redacted]esium	13.3	mg/L	0.040	11/14/00	11/10/00	SH	200.7
Manganese	0 500	mg/L	0.003	11/14/00	11/10/00	SH	200 7
Sodium	17 6	mg/L	0.050	11/14/00	11/10/00	SH	200.7
Nickel	0 024	mg/L	0.020	11/14/00	11/10/00	SH	200.7
Lead	<0.060	mg/L	0.060	11/14/00	11/10/00	SH	200 7
Antimony	<0.040	mg/L	0 040	11/14/00	11/10/00	SH	200.7
Selenium	<0.100	mg/L	0.100	11/14/00	11/10/00	SH	200.7
Thallium	<0.065	mg/L	0.065	11/14/00	11/10/00	SH	200.7
Vanadium	0.075	mg/L	0.010	11/14/00	11/10/00	SH	200.7
Zinc	0.210	mg/L	0 010	11/14/00	11/10/00	SH	200 7

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Data Validator

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 290

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

Date Arrived **11/08/00**
ETC Order Number **0011216**

ETC Lab ID : **0011216-06**
Field ID : **MW-54-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/07/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE PREPARED	BY	METHOD
Mercury Digestion Batch	V7-AQ-63			11/13/00	11/13/00	JF	245.1
Metals Digestion Batch	V23-AQ-17			11/10/00	11/10/00	NR	3030K
Silver	<0.009	mg/L	0.009	11/14/00	11/10/00	SH	200.7
Aluminum	0.067	mg/L	0.060	11/14/00	11/10/00	SH	200 7
Arsenic	<0.003	mg/L	0 003	11/14/00	11/10/00	SH	200.7
Barium	0.219	mg/L	0.003	11/14/00	11/10/00	SH	200.7
Beryllium	<0.002	mg/L	0.002	11/14/00	11/10/00	SH	200.7
Calcium	25.3	mg/L	0.015	11/14/00	11/10/00	SH	200.7
Cadmium	<0.005	mg/L	0.005	11/14/00	11/10/00	SH	200.7
Cobalt	<0.009	mg/L	0 009	11/14/00	11/10/00	SH	200.7
Chromium	<0.009	mg/L	0.009	11/14/00	11/10/00	SH	200.7
Copper	<0.008	mg/L	0 008	11/14/00	11/10/00	SH	200 7
Iron	0 573	mg/L	0.009	11/14/00	11/10/00	SH	200.7
Mercury	<0.0002	mg/L	0.0002	11/13/00	11/13/00	JF	245.1
Potassium	1.15	mg/L	0.250	11/14/00	11/10/00	SH	200.7
Magnesium	12 1	mg/L	0.040	11/14/00	11/10/00	SH	200.7
Manganese	0.005	mg/L	0.003	11/14/00	11/10/00	SH	200.7
Sodium	21.9	mg/L	0.050	11/14/00	11/10/00	SH	200.7
Nickel	<0.020	mg/L	0.020	11/14/00	11/10/00	SH	200.7
Lead	<0.060	mg/L	0.060	11/14/00	11/10/00	SH	200.7
Antimony	<0.040	mg/L	0.040	11/14/00	11/10/00	SH	200.7
Selenium	<0.100	mg/L	0.100	11/14/00	11/10/00	SH	200.7
Thallium	<0.065	mg/L	0.065	11/14/00	11/10/00	SH	200.7
Vanadium	<0 010	mg/L	0.010	11/14/00	11/10/00	SH	200.7
Zinc	<0.010	mg/L	0.010	11/14/00	11/10/00	SH	200 7

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Data Validator

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

Date Arrived **11/08/00**
ETC Order Number **0011216**

ETC Lab ID : **0011216-07**
Field ID : **MW-31-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/07/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE PREPARED	BY	METHOD
Mercury Digestion Batch	V7-AQ-63			11/13/00	11/13/00	JF	245.1
Metals Digestion Batch	V23-AQ-17			11/10/00	11/10/00	NR	3030K
Silver	<0.009	mg/L	0.009	11/14/00	11/10/00	SH	200.7
Aluminum	3.61	mg/L	0.060	11/14/00	11/10/00	SH	200.7
Arsenic	0.005	mg/L	0 003	11/14/00	11/10/00	SH	200.7
Barium	0 128	mg/L	0.003	11/14/00	11/10/00	SH	200 7
Beryllium	<0.002	mg/L	0.002	11/14/00	11/10/00	SH	200 7
Calcium	19.3	mg/L	0.015	11/14/00	11/10/00	SH	200 7
Cadmium	<0.005	mg/L	0.005	11/14/00	11/10/00	SH	200.7
Cobalt	<0.009	mg/L	0.009	11/14/00	11/10/00	SH	200.7
Chromium	<0.009	mg/L	0.009	11/14/00	11/10/00	SH	200 7
Copper	<0.008	mg/L	0.008	11/14/00	11/10/00	SH	200.7
Iron	18.4	mg/L	0.009	11/14/00	11/10/00	SH	200.7
Mercury	<0.0002	mg/L	0.0002	11/13/00	11/13/00	JF	245.1
P[redacted]ium	1.32	mg/L	0.250	11/14/00	11/10/00	SH	200 7
M[redacted]esium	9.50	mg/L	0.040	11/14/00	11/10/00	SH	200 7
Manganese	0.053	mg/L	0.003	11/14/00	11/10/00	SH	200.7
Sodium	19.0	mg/L	0.050	11/14/00	11/10/00	SH	200.7
Nickel	<0.020	mg/L	0.020	11/14/00	11/10/00	SH	200 7
Lead	<0.060	mg/L	0.060	11/14/00	11/10/00	SH	200 7
Antimony	<0.040	mg/L	0.040	11/14/00	11/10/00	SH	200.7
Selenium	<0.100	mg/L	0.100	11/14/00	11/10/00	SH	200.7
Thallium	<0 065	mg/L	0.065	11/14/00	11/10/00	SH	200.7
Vanadium	0.014	mg/L	0.010	11/14/00	11/10/00	SH	200.7
Zinc	0 015	mg/L	0.010	11/14/00	11/10/00	SH	200.7

CS
Data Validator

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 292

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

Date Arrived **11/08/00**
ETC Order Number **0011216**

ETC Lab ID : **0011216-08**
Field ID : **MW-30-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/07/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE PREPARED	BY	METHOD
Mercury Digestion Batch	V7-AQ-63			11/13/00	11/13/00	JF	245.1
Metals Digestion Batch	V23-AQ-17			11/10/00	11/10/00	NR	3030K
Silver	<0.009	mg/L	0.009	11/14/00	11/10/00	SH	200.7
Aluminum	16.6	mg/L	0.060	11/14/00	11/10/00	SH	200.7
Arsenic	0.006	mg/L	0.003	11/14/00	11/10/00	SH	200.7
Barium	0.132	mg/L	0.003	11/14/00	11/10/00	SH	200.7
Beryllium	<0.002	mg/L	0.002	11/14/00	11/10/00	SH	200.7
Calcium	11.4	mg/L	0.015	11/14/00	11/10/00	SH	200.7
Cadmium	<0.005	mg/L	0.005	11/14/00	11/10/00	SH	200 7
Cobalt	<0.009	mg/L	0.009	11/14/00	11/10/00	SH	200.7
Chromium	0.041	mg/L	0.009	11/14/00	11/10/00	SH	200.7
Copper	0.010	mg/L	0 008	11/14/00	11/10/00	SH	200.7
Iron	23.5	mg/L	0.009	11/14/00	11/10/00	SH	200.7
Mercury	<0.0002	mg/L	0.0002	11/13/00	11/13/00	JF	245.1
Potassium	3.58	mg/L	0.250	11/14/00	11/10/00	SH	200.7
Magnesium	9.52	mg/L	0.040	11/14/00	11/10/00	SH	200.7
Manganese	0.092	mg/L	0 003	11/14/00	11/10/00	SH	200.7
Sodium	843	mg/L	0.050	11/15/00	11/10/00	SH	200.7
Nickel	0.023	mg/L	0.020	11/14/00	11/10/00	SH	200.7
Lead	<0.060	mg/L	0.060	11/14/00	11/10/00	SH	200.7
Antimony	<0.040	mg/L	0.040	11/14/00	11/10/00	SH	200.7
Selenium	<0.100	mg/L	0.100	11/14/00	11/10/00	SH	200 7
Thallium	<0.065	mg/L	0 065	11/14/00	11/10/00	SH	200 7
Vanadium	0 031	mg/L	0 010	11/14/00	11/10/00	SH	200.7
Zinc	0 026	mg/L	0 010	11/14/00	11/10/00	SH	200.7

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Data Validator

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.
2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 293

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

Date Arrived **11/08/00**
ETC Order Number **0011216**

ETC Lab ID : **0011216-09**
Field ID : **MW-34-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/07/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE PREPARED	BY	METHOD
Mercury Digestion Batch	V7-AQ-63			11/13/00	11/13/00	JF	245.1
Metals Digestion Batch	V23-AQ-17			11/10/00	11/10/00	NR	3030K
Silver	<0.009	mg/L	0.009	11/14/00	11/10/00	SH	200.7
Aluminum	1.10	mg/L	0.060	11/14/00	11/10/00	SH	200.7
Arsenic	<0.003	mg/L	0.003	11/14/00	11/10/00	SH	200.7
Barium	0.117	mg/L	0.003	11/14/00	11/10/00	SH	200.7
Beryllium	<0.002	mg/L	0.002	11/14/00	11/10/00	SH	200.7
Calcium	12.7	mg/L	0.015	11/14/00	11/10/00	SH	200.7
Cadmium	<0.005	mg/L	0.005	11/14/00	11/10/00	SH	200 7
Cobalt	<0.009	mg/L	0.009	11/14/00	11/10/00	SH	200 7
Chromium	<0.009	mg/L	0.009	11/14/00	11/10/00	SH	200 7
Copper	<0.008	mg/L	0.008	11/14/00	11/10/00	SH	200 7
Iron	1.20	mg/L	0 009	11/14/00	11/10/00	SH	200.7
Mercury	<0.0002	mg/L	0 0002	11/13/00	11/13/00	JF	245.1
P[redacted]ium	2.36	mg/L	0.250	11/14/00	11/10/00	SH	200.7
M[redacted]sium	5.83	mg/L	0 040	11/14/00	11/10/00	SH	200.7
Manganese	0.019	mg/L	0.003	11/14/00	11/10/00	SH	200.7
Sodium	11.2	mg/L	0 050	11/14/00	11/10/00	SH	200.7
Nickel	<0.020	mg/L	0 020	11/14/00	11/10/00	SH	200.7
Lead	<0.060	mg/L	0.060	11/14/00	11/10/00	SH	200.7
Antimony	<0.040	mg/L	0.040	11/14/00	11/10/00	SH	200 7
Selenium	<0.100	mg/L	0.100	11/14/00	11/10/00	SH	200.7
Thallium	<0.065	mg/L	0.065	11/14/00	11/10/00	SH	200.7
Vanadium	<0.010	mg/L	0.010	11/14/00	11/10/00	SH	200.7
Zinc	0.073	mg/L	0.010	11/14/00	11/10/00	SH	200.7

CS
Data Validator

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 294

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

Date Arrived **11/08/00**
ETC Order Number **0011216**

ETC Lab ID : **0011216-10**
Field ID : **MW-54A-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/07/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE PREPARED	BY	METHOD
Mercury Digestion Batch	V7-AQ-63			11/13/00	11/13/00	JF	245.1
Metals Digestion Batch	V23-AQ-17			11/10/00	11/10/00	NR	3030K
Silver	<0.009	mg/L	0.009	11/14/00	11/10/00	SH	200.7
Aluminum	0.089	mg/L	0.060	11/14/00	11/10/00	SH	200.7
Arsenic	<0.003	mg/L	0.003	11/14/00	11/10/00	SH	200.7
Barium	0.223	mg/L	0.003	11/14/00	11/10/00	SH	200.7
Beryllium	<0.002	mg/L	0.002	11/14/00	11/10/00	SH	200 7
Calcium	25.6	mg/L	0.015	11/14/00	11/10/00	SH	200 7
Cadmium	<0.005	mg/L	0.005	11/14/00	11/10/00	SH	200.7
Cobalt	<0.009	mg/L	0 009	11/14/00	11/10/00	SH	200.7
Chromium	<0.009	mg/L	0.009	11/14/00	11/10/00	SH	200.7
Copper	<0.008	mg/L	0.008	11/14/00	11/10/00	SH	200.7
Iron	0.711	mg/L	0.009	11/14/00	11/10/00	SH	200.7
Mercury	<0.0002	mg/L	0.0002	11/13/00	11/13/00	JF	245.1
Potassium	1.22	mg/L	0.250	11/14/00	11/10/00	SH	200.7
Magnesium	12.3	mg/L	0.040	11/14/00	11/10/00	SH	200.7
Manganese	0.004	mg/L	0 003	11/14/00	11/10/00	SH	200.7
Sodium	22.1	mg/L	0.050	11/14/00	11/10/00	SH	200.7
Nickel	<0.020	mg/L	0.020	11/14/00	11/10/00	SH	200 7
Lead	<0.060	mg/L	0.060	11/14/00	11/10/00	SH	200.7
Antimony	<0.040	mg/L	0.040	11/14/00	11/10/00	SH	200.7
Selenium	<0.100	mg/L	0.100	11/14/00	11/10/00	SH	200.7
Thallium	<0 065	mg/L	0.065	11/14/00	11/10/00	SH	200.7
Vanadium	<0.010	mg/L	0.010	11/14/00	11/10/00	SH	200.7
Zinc	0.013	mg/L	0.010	11/14/00	11/10/00	SH	200.7

CS

Data Validator

ND - Not Detected

FORM 3A
WATER METHOD BLANK
METALS

Lab Name: Environmental Testing and Consulting, Inc

		QC Batch
Laboratory ID ICP/GFAA Metals	V23-AQ-17 BLK	V23-AQ-17
Laboratory ID Mercury	V7-AQ-63 BLK	V7-AQ-63

Date Sample Prepared	11/10/00	ICP/GFAA Metals
	11/13/00	Mercury

Metals	Concentration mg/L	Detection Limit mg/L	Date Analyzed	Method
Silver	ND	0 009	11/14/00	200.7
Aluminum	ND	0.060	11/14/00	200.7
Arsenic	ND	0 003	11/14/00	200 7
Barium	ND	0 003	11/14/00	200 7
Beryllium	ND	0 002	11/14/00	200 7
Calcium	0 024	0 015	11/14/00	200 7
Cadmium	ND	0 005	11/14/00	200 7
Cobalt	ND	0 009	11/14/00	200 7
Chromium	ND	0.009	11/14/00	200 7
Copper	ND	0 008	11/14/00	200 7
Iron	ND	0 009	11/14/00	200 7
Potassium	ND	0 250	11/14/00	200 7
Magnesium	ND	0 040	11/14/00	200.7
Manganese	ND	0 003	11/14/00	200 7
Sodium	ND	0 050	11/14/00	200 7
Nickel	ND	0 020	11/14/00	200 7
Lead	ND	0 060	11/14/00	200 7
Antimony	ND	0 040	11/14/00	200 7
Selenium	ND	0 100	11/14/00	200 7
Thallium	ND	0 065	11/14/00	200 7
Vanadium	ND	0.010	11/14/00	200 7
Zinc	ND	0.010	11/14/00	200 7
Mercury	ND	0 0002	11/13/00	245 1

ND - Not Detected

Reviewed by CS

613 296

FORM 7
WATER LABORATORY CONTROL SAMPLE
METALS

Lab Name Environmental Testing and Consulting, Inc

			QC Batch
Laboratory Control ID	ICP/GFAA Metals	V23-AQ-17 LCS	V23-AQ-17
	Mercury	V7-AQ-63 LCS	V7-AQ-63
Date Prepared	ICP/GFAA Metals	11/10/00	
	Mercury	11/13/00	

Metals	Spike Added mg/L	Found mg/L	% R	#	QC Limits	
Silver	0 250	0.264	106		80	120
Aluminum	2 50	2 51	100		80	120
Arsenic	0.100	0 104	104		80	120
Barium	2.50	2.70	108		80	120
Beryllium	0.250	0 267	107		80	120
Calcium	5 00	5 35	107		80	120
Cadmium	0 020	0 022	110		80	120
Cobalt	1 25	1 31	105		80	120
Chromium	0 500	0 528	106		80	120
Copper	0.500	0 528	106		80	120
Iron	2 50	2 68	107		80	120
Potassium	5 00	5 44	109		80	120
Magnesium	5 00	4 93	99		80	120
Manganese	0 250	0 271	108		80	120
Sodium	5 00	5 41	108		80	120
Nickel	1 25	1 31	105		80	120
Lead	0.100	0 107	107		80	120
Antimony	0 200	0 211	106		80	120
Selenium	0 100	0 106	106		80	120
Thallium	0 100	0 106	106		80	120
Vanadium	1 25	1 33	106		80	120
Zinc	0 250	0 271	108		80	120
Mercury	0 0050	0 0055	110		80	120

Column to be used to flag recovery values with an asterisk
* Values outside of QC limits

Reviewed by_____

FORM 6
WATER MATRIX SPIKE / MATRIX SPIKE DUPLICATE
METALS

Lab Name Environmental Testing and Consulting, Inc

		QC Batch
Laboratory ID MS ICP/GFAA Metals	0011-216-10	V23-AQ-17
Laboratory ID MS Mercury	0011-216-10	V7-AQ-63

Date Sample Prepared	11/10/00	ICP/GFAA Metals
	11/13/00	Mercury

Metals	SPIKE Added mg/L	SAMPLE Conc mg/L	MS Conc mg/L	RPD <20% #	MS % Rec #	QC Limits	
Silver	0.250	ND	0 182	4	73 *	75	125
Aluminum	2 50	0 089	2 87	4	111	75	125
Arsenic	0 100	ND	0.105	0	105	75	125
Barium	2 50	0 223	2 96	0	109	75	125
Beryllium	0 250	ND	0 274	0	110	75	125
Calcium	5 00	25 6	31 2	0	112	75	125
Cadmium	0 020	ND	0 022	0	110	75	125
Cobalt	1 25	ND	1.33	1	106	75	125
Chromium	0 500	ND	0 541	0	108	75	125
Copper	0 500	ND	0 562	4	112	75	125
Iron	2 50	0 711	3 59	1	115	75	125
Potassium	5 00	1.22	6 73	0	110	75	125
Magnesium	5 00	12 3	17 4	1	102	75	125
Manganese	0 250	0 004	0 279	0	110	75	125
Sodium	5 00	22.1	27 9	1	116	75	125
Nickel	1 25	ND	1 34	0	107	75	125
Lead	0 100	ND	0 109	0	109	75	125
Antimony	0 200	ND	0 217	0	109	75	125
Selenium	0 100	ND	0 107	0	107	75	125
Thallium	0 100	ND	0 107	2	107	75	125
Vanadium	1.25	ND	1 35	0	108	75	125
Zinc	0 250	0 013	0 283	0	108	75	125
Mercury	0 0050	ND	0 0053	0	106	75	125

ND - Not Detected
Column to be used to flag recovery values with an asterisk
* Values outside of QC limits

Reviewed by ( )

FORM 6
WATER MATRIX SPIKE / MATRIX SPIKE DUPLICATE
METALS

613 298

Lab Name Environmental Testing and Consulting, Inc

		QC Batch
Laboratory ID MS ICP/GFAA Metals	0011-216-10	V23-AQ-17
Laboratory ID MS Mercury	0011-216-10	V7-AQ-63

Date Sample Prepared	11/10/00	ICP/GFAA Metals
	11/13/00	Mercury

Metals	SPIKE Added mg/L	SAMPLE Conc mg/L	MSD Conc mg/L		MSD % Rec #	QC Limits	
Silver	0 250	ND	0 189		76	75	125
Aluminum	2.50	0 089	2.98		116	75	125
Arsenic	0.100	ND	0.105		105	75	125
Barium	2.50	0 223	2.96		109	75	125
Beryllium	0 250	ND	0 274		110	75	125
Calcium	5 00	25 6	31 2		112	75	125
Cadmium	0 020	ND	0.022		110	75	125
Cobalt	1 25	ND	1 34		107	75	125
Chromium	0 500	ND	0.541		108	75	125
Copper	0.500	ND	0 539		108	75	125
Iron	2 50	0 711	3 62		116	75	125
Potassium	5.00	1 22	6.73		110	75	125
Magnesium	5 00	12.3	17 3		100	75	125
Manganese	0 250	0 004	0.279		110	75	125
Sodium	5 00	22.1	27 6		110	75	125
Nickel	1 25	ND	1 34		107	75	125
Lead	0 100	ND	0 109		109	75	125
Antimony	0 200	ND	0 216		108	75	125
Selenium	0.100	ND	0.107		107	75	125
Thallium	0.100	ND	0.105		105	75	125
Vanadium	1 25	ND	1 35		108	75	125
Zinc	0 250	0 013	0 283		108	75	125
Mercury	0 0050	ND	0 0053		106	75	125

ND - Not Detected
Column to be used to flag recovery values with an asterisk
* Values outside of QC limits

Reviewed by CS

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name [redacted]
Sverdrup/Jacobs Eng.
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

Date Arrived **11/08/00**
ETC Order Number **0011216**

ETC Lab ID : **0011216-11**
Field ID : **FB-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/07/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE PREPARED	BY	METHOD
Mercury Digestion Batch	V7-AQ-64			11/13/00	11/13/00	JF	245.1
Metals Digestion Batch	V23-AQ-16			11/10/00	11/10/00	NR	3030K
Silver	<0.009	mg/L	0.009	11/14/00	11/10/00	SH	200.7
Aluminum	<0.060	mg/L	0.060	11/14/00	11/10/00	SH	200.7
Arsenic	<0.003	mg/L	0.003	11/14/00	11/10/00	SH	200.7
Barium	<0.003	mg/L	0.003	11/14/00	11/10/00	SH	200.7
Beryllium	<0.002	mg/L	0.002	11/14/00	11/10/00	SH	200.7
Calcium	0.079	mg/L	0.015	11/14/00	11/10/00	SH	200.7
Cadmium	<0 005	mg/L	0 005	11/14/00	11/10/00	SH	200.7
Cobalt	<0.009	mg/L	0 009	11/14/00	11/10/00	SH	200.7
Chromium	<0.009	mg/L	0 009	11/14/00	11/10/00	SH	200.7
Copper	<0.008	mg/L	0.008	11/14/00	11/10/00	SH	200 7
Iron	<0.009	mg/L	0.009	11/14/00	11/10/00	SH	200.7
Mercury	<0.0002	mg/L	0.0002	11/13/00	11/13/00	JF	245 1
P[redacted]ium	<0.250	mg/L	0.250	11/14/00	11/10/00	SH	200.7
M[redacted]esium	<0.040	mg/L	0.040	11/14/00	11/10/00	SH	200 7
Manganese	<0.003	mg/L	0.003	11/14/00	11/10/00	SH	200.7
Sodium	2 97	mg/L	0.050	11/14/00	11/10/00	SH	200.7
Nickel	<0.020	mg/L	0 020	11/14/00	11/10/00	SH	200.7
Lead	<0.060	mg/L	0.060	11/14/00	11/10/00	SH	200.7
Antimony	<0.040	mg/L	0.040	11/14/00	11/10/00	SH	200.7
Selenium	<0.100	mg/L	0.100	11/14/00	11/10/00	SH	200 7
Thallium	<0.065	mg/L	0.065	11/14/00	11/10/00	SH	200.7
Vanadium	<0.010	mg/L	0.010	11/14/00	11/10/00	SH	200 7
Zinc	<0.010	mg/L	0.010	11/14/00	11/10/00	SH	200.7

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Data Validator

ND - Not Detected

613 300

FORM 3A
WATER METHOD BLANK
METALS

Lab Name. Environmental Testing and Consulting, Inc

		QC Batch
Laboratory ID ICP/GFAA Metals	V23-AQ-16 BLK	V23-AQ-16
Laboratory ID Mercury	V7-AQ-64 BLK	V7-AQ-64

Date Sample Prepared	11/10/00 ICP/GFAA Metals
	11/13/00 Mercury

Metals	Concentration mg/L	Detection Limit mg/L	Date Analyzed	Method
Silver	ND	0 009	11/14/00	200 7
Aluminum	ND	0.060	11/14/00	200 7
Arsenic	ND	0 003	11/14/00	200.7
Barium	ND	0 003	11/14/00	200 7
Beryllium	ND	0 002	11/14/00	200.7
Calcium	0 028	0.015	11/14/00	200 7
Cadmium	ND	0 005	11/14/00	200 7
Cobalt	ND	0.009	11/14/00	200 7
Chromium	ND	0 009	11/14/00	200 7
Copper	ND	0 008	11/14/00	200 7
Iron	ND	0 009	11/14/00	200.7
Potassium	ND	0.250	11/14/00	200 7
Magnesium	ND	0 040	11/14/00	200 7
Manganese	ND	0.003	11/14/00	200 7
Sodium	ND	0 050	11/14/00	200 7
Nickel	ND	0 020	11/14/00	200.7
Lead	ND	0 060	11/14/00	200 7
Antimony	ND	0 040	11/14/00	200.7
Selenium	ND	0 100	11/14/00	200 7
Thallium	ND	0.065	11/14/00	200 7
Vanadium	ND	0 010	11/14/00	200 7
Zinc	ND	0 010	11/14/00	200 7
Mercury	ND	0 0002	11/13/00	245 1

ND - Not Detected

Reviewed by CS

FORM 7
WATER LABORATORY CONTROL SAMPLE
METALS

Lab Name Environmental Testing and Consulting, Inc

			QC Batch
Laboratory Control ID	ICP/GFAA Metals	V23-AQ-16 LCS	V23-AQ-16
	Mercury	V7-AQ-64 LCS	V7-AQ-64
Date Prepared	ICP/GFAA Metals	11/10/00	
	Mercury	11/13/00	

Metals	Spike Added mg/L	Found mg/L	% R	#	QC Limits	
Silver	0 250	0 262	105		80	120
Aluminum	2 50	2 50	100		80	120
Arsenic	0 100	0 104	104		80	120
Barium	2 50	2 71	108		80	120
Beryllium	0 250	0.268	107		80	120
Calcium	5 00	5.40	108		80	120
Cadmium	0 020	0 022	110		80	120
Cobalt	1 25	1 32	106		80	120
Chromium	0 500	0 532	106		80	120
Copper	0.500	0 526	105		80	120
Iron	2 50	2 67	107		80	120
Potassium	5 00	5 36	107		80	120
Magnesium	5 00	4 93	99		80	120
Manganese	0 250	0.271	108		80	120
Sodium	5 00	5 46	109		80	120
Nickel	1 25	1 32	106		80	120
Lead	0 100	0 108	108		80	120
Antimony	0.200	0 213	107		80	120
Selenium	0 100	0 105	105		80	120
Thallium	0 100	0 105	105		80	120
Vanadium	1 25	1.33	106		80	120
Zinc	0.250	0 272	109		80	120
Mercury	0 0050	0 0047	94		80	120

Column to be used to flag recovery values with an asterisk
* Values outside of QC limits

Reviewed by CS

613 302

FORM 6
WATER MATRIX SPIKE / MATRIX SPIKE DUPLICATE
METALS

Lab Name Environmental Testing and Consulting, Inc

		QC Batch
Laboratory ID MS ICP/GFAA Metals	0011-258-07	V23-AQ-16
Laboratory ID MS Mercury	0011-258-07	V7-AQ-64

Date Sample Prepared	11/10/00	ICP/GFAA Metals
	11/13/00	Mercury

Metals	SPIKE Added mg/L	SAMPLE Conc mg/L	MS Conc mg/L	RPD <20% #	MS % Rec #	QC Limits	
Silver	0 250	ND	0.227	21 *	91	75	125
Aluminum	2 50	59 0	63 9	7	196 *	75	125
Arsenic	0 100	0.031	0 132	0	101	75	125
Barium	2 50	0 245	2 84	1	104	75	125
Beryllium	0 250	0 004	0 266	0	105	75	125
Calcium	5 00	15 0	20 0	0	100	75	125
Cadmium	0 020	ND	0.019	0	95	75	125
Cobalt	1 25	0 075	1.34	1	101	75	125
Chromium	0 500	0.066	0 577	1	102	75	125
Copper	0 500	0 032	0 545	1	103	75	125
Iron	2 50	108	111	3	120	75	125
Potassium	5 00	5 67	10 4	4	95	75	125
Magnesium	5 00	8 98	13.7	1	94	75	125
Manganese	0 250	0 897	1 16	2	105	75	125
Sodium	5 00	22.8	27.9	1	102	75	125
Nickel	1 25	0 039	1 30	1	101	75	125
Lead	0 100	0 056	0 161	2	105	75	125
Antimony	0.200	ND	0.149	2	75	75	125
Selenium	0 100	ND	0 107	2	107	75	125
Thallium	0 100	ND	0 104	1	104	75	125
Vanadium	1 25	0 104	1.38	1	102	75	125
Zinc	0 250	0 138	0 396	2	103	75	125
Mercury	0 0050	0 0003	0 0055	0	104	75	125

ND - Not Detected
Column to be used to flag recovery values with an asterisk
* Values outside of QC limits

Reviewed by CS

FORM 6
WATER MATRIX SPIKE / MATRIX SPIKE DUPLICATE
METALS

Lab Name Environmental Testing and Consulting, Inc

		QC Batch
Laboratory ID MS ICP/GFAA Metals	0011-258-07	V23-AQ-16
Laboratory ID MS Mercury	0011-258-07	V7-AQ-64
Date Sample Prepared	11/10/00	ICP/GFAA Metals
	11/13/00	Mercury

Metals	SPIKE Added mg/L	SAMPLE Conc mg/L	MSD Conc mg/L		MSD % Rec	#	QC Limits	
Silver	0.250	ND	0 183		73	*	75	125
Aluminum	2 50	59.0	68 7		388	*	75	125
Arsenic	0 100	0 031	0 132		101		75	125
Barium	2.50	0 245	2.86		105		75	125
Beryllium	0 250	0 004	0 267		105		75	125
Calcium	5.00	15 0	20 1		102		75	125
Cadmium	0 020	ND	0 019		95		75	125
Cobalt	1.25	0 075	1 35		102		75	125
Chromium	0 500	0 066	0.583		103		75	125
Copper	0 500	0 032	0.553		104		75	125
Iron	2 50	108	114		240	*	75	125
Potassium	5 00	5 67	10 8		103		75	125
Magnesium	5 00	8 98	13 8		96		75	125
Manganese	0 250	0 897	1 18		113		75	125
Sodium	5 00	22.8	28 2		108		75	125
Nickel	1 25	0 039	1 31		102		75	125
Lead	0 100	0 056	0 164		108		75	125
Antimony	0 200	ND	0 146		73	*	75	125
Selenium	0.100	ND	0 105		105		75	125
Thallium	0 100	ND	0 103		103		75	125
Vanadium	1 25	0 104	1 39		103		75	125
Zinc	0 250	0 138	0 405		107		75	125
Mercury	0 0050	0 0003	0 0055		104		75	125

ND - Not Detected
Column to be used to flag recovery values with an asterisk
* Values outside of QC limits

Reviewed by ( )

613 304

FORM 5B
POST DIGESTION SPIKE
METALS

Lab Name Enviornmental Testing and Consulting, Inc

QC Batch ICP/GFAA Metals V23-AQ-16

Date Sample Prepared 11/10/00 ICP/GFAA Metals

Metals	Spike Expected ug/L	Spike Found ug/L	% Recovery	QC Limits	
Antimony	0 050	0 049	98	75	125

Post Digestion Spikes (PDS) were performed on those analytes with recoveries outside QC limits for both the MS and MSD that are less than 25 times the method detection limit.

Reviewed by CS

FORM 9
SERIAL DILUTIONS
METALS

Lab Name: Enviornmental Testing and Consulting, Inc.

QC Batch ICP/GFAA Metals V23-AQ-16

Date Sample Prepared 11/10/00 ICP/GFAA Metals

Analyte	Initial Sample Result	Serial Dilution Result	Serial Dilution	% Difference
Aluminum	59.0	59.2	1.5	0
Iron	108	105	1.5	3

ND - Not Detected
% Difference should be within 10% of the undiluted/lowest dilution result.

Reviewed by CS

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 306

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

FID #

Date Arrived **11/08/00**
ETC Order Number **0011216**

ETC Lab ID **0011216-01**
Field ID : **MW-57-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/07/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
GC/MS Volatile Organics				11/10/00	EM	8260B 5030B
QC Batch	**V4111001**					
Dilution Factor	**1**					
Acetone	ND	ug/L	20.0			
Benzene	ND	ug/L	1.00			
Bromodichloromethane	12.4	ug/L	1.00			
Bromoform	ND	ug/L	1.00			
Bromomethane	ND	ug/L	1.00			
2-Butanone (MEK)	ND	ug/L	20 0			
Carbon Disulfide	ND	ug/L	1.00			
Carbon Tetrachloride	48.3	ug/L	1.00			
Chlorobenzene	ND	ug/L	1.00			
Chlorodibromomethane	ND	ug/L	1 00			
Chloroethane	ND	ug/L	1 00			
Chloroform	8.93	ug/L	1.00			
Chloromethane	ND	ug/L	1.00			
1,1-Dichloroethane	ND	ug/L	1.00			
1,2-Dichloroethane	ND	ug/L	1.00			
1,1-Dichloroethene	ND	ug/L	1.00			
trans-1,2-Dichloroethene	1.50	ug/L	1 00			
1,2-Dichloropropane	ND	ug/L	1.00			
cis-1,3-Dichloropropene	ND	ug/L	1.00			
trans-1,3-Dichloropropene	ND	ug/L	1.00			
Ethylbenzene	ND	ug/L	1.00			
2-Hexanone (MBK)	ND	ug/L	5.00			
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.00			
Methylene Chloride	ND	ug/L	5.00			
Styrene	ND	ug/L	1.00			
1,1,2,2-Tetrachloroethane	ND	ug/L	1.00			
Tetrachloroethene	5.07	ug/L	1.00			
Toluene	ND	ug/L	1.00			
1,1,1-Trichloroethane	ND	ug/L	1.00			
1,1,2-Trichloroethane	ND	ug/L	1.00			
Trichloroethene	30.9	ug/L	1.00			
Vinyl Acetate	ND	ug/L	20.0			
Vinyl Chloride	ND	ug/L	1.00			
Xylenes-m,p	ND	ug/L	1.00			
Xylenes-o	ND	ug/L	1 00			
cis-1,2-Dichloroethene	0.411J	ug/L	1.00			

Surrogate Standard	% Recovery	QC Limits	
S1 - Dibromofluoromethane	95	74	123
S2 - Toluene-d8	105	86	112
S3 - 4-Bromofluorobenzene	100	81	115
S4 - 1,2-Dichloroethane-d4	96	80	120

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

FORM 1
VOA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

0011-216-1

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-216

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 0501006

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/10/00

GC Column: ID: 2.00 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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613 307

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 308

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

FID #

Date Arrived **11/08/00**
ETC Order Number **0011216**

ETC Lab ID **0011216-02**
Field ID : **MW-14-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/06/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Volatile Organics				11/10/00		EM	8260B 5030B
QC Batch	**V4111001**						
Dilution Factor	1						
Acetone	ND	ug/L	20.0				
Benzene	ND	ug/L	1 00				
Bromodichloromethane	ND	ug/L	1.00				
Bromoform	ND	ug/L	1.00				
Bromomethane	ND	ug/L	1 00				
2-Butanone (MEK)	ND	ug/L	20.0				
Carbon Disulfide	ND	ug/L	1.00				
Carbon Tetrachloride	ND	ug/L	1.00				
Chlorobenzene	ND	ug/L	1.00				
Chlorodibromomethane	ND	ug/L	1.00				
Chloroethane	ND	ug/L	1.00				
Chloroform	ND	ug/L	1.00				
Chloromethane	ND	ug/L	1.00				
1,1-Dichloroethane	ND	ug/L	1 00				
1,2-Dichloroethane	ND	ug/L	1.00				
1,1-Dichloroethene	ND	ug/L	1.00				
trans-1,2-Dichloroethene	ND	ug/L	1 00				
1,2-Dichloropropane	ND	ug/L	1.00				
cis-1,3-Dichloropropene	ND	ug/L	1.00				
trans-1,3-Dichloropropene	ND	ug/L	1.00				
Ethylbenzene	ND	ug/L	1.00				
2-Hexanone (MBK)	ND	ug/L	5.00				
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5 00				
Methylene Chloride	ND	ug/L	5 00				
Styrene	ND	ug/L	1 00				
1,1,2,2-Tetrachloroethane	ND	ug/L	1.00				
Tetrachloroethene	ND	ug/L	1.00				
Toluene	ND	ug/L	1 00				
1,1,1-Trichloroethane	ND	ug/L	1.00				
1,1,2-Trichloroethane	ND	ug/L	1.00				
Trichloroethene	ND	ug/L	1.00				
Vinyl Acetate	ND	ug/L	20.0				
Vinyl Chloride	ND	ug/L	1.00				
Xylenes-m,p	ND	ug/L	1.00				
Xylenes-o	ND	ug/L	1 00				
cis-1,2-Dichloroethene	ND	ug/L	1 00				

Surrogate Standard	% Recovery	QC Limits	
S1 - Dibromofluoromethane	94	74	123
S2 - Toluene-d8	104	86	112
S3 - 4-Bromofluorobenzene	100	81	115
S4 - 1,2-Dichloroethane-d4	97	80	120

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

FORM 1
VOA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.
613 309
0011-216-2

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-216

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 0601007

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/10/00

GC Column: ID: 2.00 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 310

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

FID #

Date Arrived **11/08/00**
ETC Order Number **0011216**

ETC Lab ID **0011216-03**
Field ID : **MW-15-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/07/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Volatile Organics				11/10/00		EM	8260B 5030B
QC Batch	**V4111001**						
Dilution Factor	**1**						
Acetone	ND	ug/L	20.0				
Benzene	ND	ug/L	1.00				
Bromodichloromethane	ND	ug/L	1.00				
Bromoform	ND	ug/L	1.00				
Bromomethane	ND	ug/L	1.00				
2-Butanone (MEK)	ND	ug/L	20.0				
Carbon Disulfide	ND	ug/L	1.00				
Carbon Tetrachloride	12.8	ug/L	1.00				
Chlorobenzene	ND	ug/L	1.00				
Chlorodibromomethane	ND	ug/L	1.00				
Chloroethane	ND	ug/L	1.00				
Chloroform	298E	ug/L	1.00				
Chloromethane	ND	ug/L	1 00				
1,1-Dichloroethane	ND	ug/L	1.00				
1,2-Dichloroethane	ND	ug/L	1.00				
1,1-Dichloroethene	ND	ug/L	1.00				
trans-1,2-Dichloroethene	1.73	ug/L	1.00				
1,2-Dichloropropane	ND	ug/L	1.00				
cis-1,3-Dichloropropene	ND	ug/L	1.00				
trans-1,3-Dichloropropene	ND	ug/L	1.00				
Ethylbenzene	ND	ug/L	1.00				
2-Hexanone (MBK)	ND	ug/L	5.00				
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.00				
Methylene Chloride	ND	ug/L	5.00				
Styrene	ND	ug/L	1.00				
1,1,2,2-Tetrachloroethane	147	ug/L	1 00				
Tetrachloroethene	2.84	ug/L	1.00				
Toluene	ND	ug/L	1 00				
1,1,1-Trichloroethane	ND	ug/L	1.00				
1,1,2-Trichloroethane	2.60	ug/L	1.00				
Trichloroethene	65 9	ug/L	1.00				
Vinyl Acetate	ND	ug/L	20.0				
Vinyl Chloride	ND	ug/L	1.00				
Xylenes-m,p	ND	ug/L	1.00				
Xylenes-o	ND	ug/L	1.00				
cis-1,2-Dichloroethene	4.75	ug/L	1 00				

Surrogate Standard	% Recovery	QC Limits	
S1 - Dibromofluoromethane	96	74	123
S2 - Toluene-d8	105	86	112
S3 - 4-Bromofluorobenzene	101	81	115
S4 - 1,2-Dichloroethane-d4	115	80	120

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

FORM 1
VOA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.
~~613~~ 311
0011-216-3

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-216

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 0701008

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/10/00

GC Column: ID: 2.00 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
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613 312 **ENVIRONMENTAL TESTING & CONSULTING, INC.**

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

FID #

Date Arrived **11/08/00**
ETC Order Number **0011216**

ETC Lab ID **0011216-03**
Field ID : **MW-15-Y2Q4-DIL**

Matrix : **AQUEOUS**
Sample Date : **11/07/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
GC/MS Volatile Organics				11/13/00	EM	8260B 5030B
QC Batch	**V4111301**					
Dilution Factor	**20**					
Acetone	ND	ug/L	400			
Benzene	ND	ug/L	20.0			
Bromodichloromethane	ND	ug/L	20.0			
Bromoform	ND	ug/L	20.0			
Bromomethane	ND	ug/L	20.0			
2-Butanone (MEK)	ND	ug/L	400			
Carbon Disulfide	ND	ug/L	20.0			
Carbon Tetrachloride	ND	ug/L	20.0			
Chlorobenzene	ND	ug/L	20.0			
Chlorodibromomethane	ND	ug/L	20.0			
Chloroethane	ND	ug/L	20.0			
Chloroform	224	ug/L	20.0			
Chloromethane	ND	ug/L	20 0			
1,1-Dichloroethane	ND	ug/L	20.0			
1,2-Dichloroethane	ND	ug/L	20.0			
1,1-Dichloroethene	ND	ug/L	20.0			
trans-1,2-Dichloroethene	ND	ug/L	20.0			
1,2-Dichloropropane	ND	ug/L	20.0			
cis-1,3-Dichloropropene	ND	ug/L	20.0			
trans-1,3-Dichloropropene	ND	ug/L	20.0			
Ethylbenzene	ND	ug/L	20.0			
2-Hexanone (MBK)	ND	ug/L	100			
4-Methyl-2-pentanone (MIBK)	ND	ug/L	100			
Methylene Chloride	ND	ug/L	100			
Styrene	ND	ug/L	20.0			
1,1,2,2-Tetrachloroethane	126	ug/L	20.0			
Tetrachloroethene	ND	ug/L	20.0			
Toluene	ND	ug/L	20.0			
1,1,1-Trichloroethane	ND	ug/L	20.0			
1,1,2-Trichloroethane	ND	ug/L	20.0			
Trichloroethene	36.1	ug/L	20.0			
Vinyl Acetate	ND	ug/L	400			
Vinyl Chloride	ND	ug/L	20.0			
Xylenes-m,p	ND	ug/L	20.0			
Xylenes-o	ND	ug/L	20.0			
cis-1,2-Dichloroethene	ND	ug/L	20.0			

Surrogate Standard	% Recovery	QC Limits	
S1 - Dibromofluoromethane	94	74	123
S2 - Toluene-d8	104	86	112
S3 - 4-Bromofluorobenzene	94	81	115
S4 - 1,2-Dichloroethane-d4	91	80	120

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

FORM 1
VOA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO. 613 313

0011-216-3

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-216

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 1601016

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/13/00

GC Column: ID: 2.00 (mm) Dilution Factor: 20.0

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

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 314

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

FID #

Date Arrived **11/08/00**
ETC Order Number **0011216**

ETC Lab ID **0011216-04**
Field ID : **MW-58-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/07/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Volatile Organics				11/13/00		EM	8260B 5030B
QC Batch	**V4111001**						
Dilution Factor	**1**						
Acetone	ND	ug/L	20.0				
Benzene	ND	ug/L	1.00				
Bromodichloromethane	ND	ug/L	1.00				
Bromoform	ND	ug/L	1.00				
Bromomethane	ND	ug/L	1.00				
2-Butanone (MEK)	ND	ug/L	20.0				
Carbon Disulfide	ND	ug/L	1.00				
Carbon Tetrachloride	ND	ug/L	1 00				
Chlorobenzene	ND	ug/L	1.00				
Chlorodibromomethane	ND	ug/L	1.00				
Chloroethane	ND	ug/L	1.00				
Chloroform	1 91	ug/L	1 00				
Chloromethane	ND	ug/L	1 00				
1,1-Dichloroethane	ND	ug/L	1.00				
1,2-Dichloroethane	ND	ug/L	1.00				
1,1-Dichloroethene	ND	ug/L	1.00				
trans-1,2-Dichloroethene	ND	ug/L	1.00				
1,2-Dichloropropane	ND	ug/L	1.00				
cis-1,3-Dichloropropene	ND	ug/L	1.00				
trans-1,3-Dichloropropene	ND	ug/L	1.00				
Ethylbenzene	ND	ug/L	1.00				
2-Hexanone (MBK)	ND	ug/L	5.00				
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5 00				
Methylene Chloride	ND	ug/L	5.00				
Styrene	ND	ug/L	1.00				
1,1,2,2-Tetrachloroethane	ND	ug/L	1 00				
Tetrachloroethene	ND	ug/L	1.00				
Toluene	ND	ug/L	1.00				
1,1,1-Trichloroethane	ND	ug/L	1.00				
1,1,2-Trichloroethane	ND	ug/L	1.00				
Trichloroethene	2.72	ug/L	1.00				
Vinyl Acetate	ND	ug/L	20.0				
Vinyl Chloride	ND	ug/L	1.00				
Xylenes-m,p	ND	ug/L	1.00				
Xylenes-o	ND	ug/L	1 00				
cis-1,2-Dichloroethene	ND	ug/L	1 00				

Surrogate Standard	% Recovery	QC Limits	
S1 - Dibromofluoromethane	94	74	123
S2 - Toluene-d8	103	86	112
S3 - 4-Bromofluorobenzene	92	81	115
S4 - 1,2-Dichloroethane-d4	104	80	120

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

FORM 1
VOA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.
613 315
0011-216-4

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-216

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 1501015

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/13/00

GC Column: ID: 2.00 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 316

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

FID #

Date Arrived **11/08/00**
ETC Order Number **0011216**

ETC Lab ID **0011216-05**
Field ID : **MW-56-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/07/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
GC/MS Volatile Organics				11/10/00	EM	8260B 5030B
QC Batch	**V4111001**					
Dilution Factor	**1**					
Acetone	ND	ug/L	20.0			
Benzene	ND	ug/L	1.00			
Bromodichloromethane	ND	ug/L	1.00			
Bromoform	ND	ug/L	1.00			
Bromomethane	ND	ug/L	1.00			
2-Butanone (MEK)	ND	ug/L	20.0			
Carbon Disulfide	ND	ug/L	1.00			
Carbon Tetrachloride	ND	ug/L	1.00			
Chlorobenzene	ND	ug/L	1.00			
Chlorodibromomethane	ND	ug/L	1 00			
Chloroethane	ND	ug/L	1.00			
Chloroform	39.4	ug/L	1.00			
Chloromethane	ND	ug/L	1.00			
1,1-Dichloroethane	ND	ug/L	1.00			
1,2-Dichloroethane	ND	ug/L	1 00			
1,1-Dichloroethene	ND	ug/L	1 00			
trans-1,2-Dichloroethene	ND	ug/L	1.00			
1,2-Dichloropropane	ND	ug/L	1.00			
cis-1,3-Dichloropropene	ND	ug/L	1.00			
trans-1,3-Dichloropropene	ND	ug/L	1.00			
Ethylbenzene	ND	ug/L	1.00			
2-Hexanone (MBK)	ND	ug/L	5.00			
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5 00			
Methylene Chloride	ND	ug/L	5 00			
Styrene	ND	ug/L	1 00			
1,1,2,2-Tetrachloroethane	ND	ug/L	1 00			
Tetrachloroethene	ND	ug/L	1 00			
Toluene	ND	ug/L	1 00			
1,1,1-Trichloroethane	ND	ug/L	1.00			
1,1,2-Trichloroethane	ND	ug/L	1.00			
Trichloroethene	1.54	ug/L	1.00			
Vinyl Acetate	ND	ug/L	20.0			
Vinyl Chloride	ND	ug/L	1.00			
Xylenes-m,p	ND	ug/L	1.00			
Xylenes-o	ND	ug/L	1.00			
cis-1,2-Dichloroethene	ND	ug/L	1.00			

Surrogate Standard	% Recovery	QC Limits	
S1 - Dibromofluoromethane	94	74	123
S2 - Toluene-d8	105	86	112
S3 - 4-Bromofluorobenzene	99	81	115
S4 - 1,2-Dichloroethane-d4	107	80	120

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

FORM 1
VOA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.
613 317
0011-216-5

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-216

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 0901010

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/10/00

GC Column: ID: 2.00 (mm) Dilution Factor: 1.0

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

Number TICs found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	108-70-3	BENZENE, 1,3,5-TRICHLORO-	14.08	14.89	NJ
2.	95-94-3	BENZENE, 1,2,4,5-TETRACHLORO	17.19	12.76	NJ
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613 318

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

FID #

Date Arrived **11/08/00**
ETC Order Number **0011216**

ETC Lab ID **0011216-06**
Field ID : **MW-54-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/07/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
GC/MS Volatile Organics				11/10/00	EM	8260B 5030B
QC Batch	**V4111001**					
Dilution Factor	1					
Acetone	ND	ug/L	20 0			
Benzene	ND	ug/L	1.00			
Bromodichloromethane	ND	ug/L	1.00			
Bromoform	ND	ug/L	1.00			
Bromomethane	ND	ug/L	1.00			
2-Butanone (MEK)	ND	ug/L	20.0			
Carbon Disulfide	ND	ug/L	1.00			
Carbon Tetrachloride	12.8	ug/L	1.00			
Chlorobenzene	ND	ug/L	1.00			
Chlorodibromomethane	ND	ug/L	1.00			
Chloroethane	ND	ug/L	1 00			
Chloroform	19 8	ug/L	1.00			
Chloromethane	ND	ug/L	1.00			
1,1-Dichloroethane	ND	ug/L	1.00			
1,2-Dichloroethane	ND	ug/L	1.00			
1,1-Dichloroethene	ND	ug/L	1 00			
trans-1,2-Dichloroethene	2.58	ug/L	1.00			
1,2-Dichloropropane	ND	ug/L	1.00			
cis-1,3-Dichloropropene	ND	ug/L	1.00			
trans-1,3-Dichloropropene	ND	ug/L	1 00			
Ethylbenzene	ND	ug/L	1 00			
2-Hexanone (MBK)	ND	ug/L	5.00			
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.00			
Methylene Chloride	ND	ug/L	5.00			
Styrene	ND	ug/L	1.00			
1,1,2,2-Tetrachloroethane	22.7	ug/L	1.00			
Tetrachloroethene	0.91J	ug/L	1.00			
Toluene	ND	ug/L	1.00			
1,1,1-Trichloroethane	ND	ug/L	1 00			
1,1,2-Trichloroethane	1.24	ug/L	1.00			
Trichloroethene	29.2	ug/L	1.00			
Vinyl Acetate	ND	ug/L	20.0			
Vinyl Chloride	ND	ug/L	1 00			
Xylenes-m,p	ND	ug/L	1 00			
Xylenes-o	ND	ug/L	1.00			
cis-1,2-Dichloroethene	34.6	ug/L	1.00			

Surrogate Standard	% Recovery	QC Limits	
S1 - Dibromofluoromethane	94	74	123
S2 - Toluene-d8	105	86	112
S3 - 4-Bromofluorobenzene	99	81	115
S4 - 1,2-Dichloroethane-d4	103	80	120

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

FORM 1
VOA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.
613 319
0011-216-6

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-216

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 1001011

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/10/00

GC Column: ID: 2.00 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
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ENVIRONMENTAL TESTING & CONSULTING, INC.
2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 320

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

FID #

Date Arrived **11/08/00**
ETC Order Number **0011216**

ETC Lab ID **0011216-07**
Field ID : **MW-31-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/07/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
GC/MS Volatile Organics				11/10/00	EM	8260B 5030B
QC Batch	**V4111001**					
Dilution Factor	**1**					
Acetone	ND	ug/L	20.0			
Benzene	ND	ug/L	1.00			
Bromodichloromethane	ND	ug/L	1.00			
Bromoform	ND	ug/L	1.00			
Bromomethane	ND	ug/L	1.00			
2-Butanone (MEK)	ND	ug/L	20.0			
Carbon Disulfide	ND	ug/L	1 00			
Carbon Tetrachloride	ND	ug/L	1.00			
Chlorobenzene	ND	ug/L	1.00			
Chlorodibromomethane	ND	ug/L	1.00			
Chloroethane	ND	ug/L	1 00			
Chloroform	ND	ug/L	1.00			
Chloromethane	ND	ug/L	1.00			
1,1-Dichloroethane	ND	ug/L	1.00			
1,2-Dichloroethane	ND	ug/L	1 00			
1,1-Dichloroethene	31 5	ug/L	1 00			
trans-1,2-Dichloroethene	4.53	ug/L	1.00			
1,2-Dichloropropane	ND	ug/L	1.00			
cis-1,3-Dichloropropene	ND	ug/L	1.00			
trans-1,3-Dichloropropene	ND	ug/L	1.00			
Ethylbenzene	ND	ug/L	1.00			
2-Hexanone (MBK)	ND	ug/L	5 00			
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.00			
Methylene Chloride	ND	ug/L	5.00			
Styrene	ND	ug/L	1 00			
1,1,2,2-Tetrachloroethane	ND	ug/L	1.00			
Tetrachloroethene	0.92J	ug/L	1.00			
Toluene	ND	ug/L	1.00			
1,1,1-Trichloroethane	ND	ug/L	1.00			
1,1,2-Trichloroethane	ND	ug/L	1.00			
Trichloroethene	18.5	ug/L	1.00			
Vinyl Acetate	ND	ug/L	20.0			
Vinyl Chloride	ND	ug/L	1.00			
Xylenes-m,p	ND	ug/L	1.00			
Xylenes-o	ND	ug/L	1 00			
cis-1,2-Dichloroethene	4 24	ug/L	1.00			

Surrogate Standard	% Recovery	QC Limits	
S1 - Dibromofluoromethane	101	74	123
S2 - Toluene-d8	104	86	112
S3 - 4-Bromofluorobenzene	101	81	115
S4 - 1,2-Dichloroethane-d4	111	80	120

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

FORM 1
VOA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.
613 321
0011-216-7

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-216

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 1101012

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/10/00

GC Column: ID: 2.00 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
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ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 322

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

FID #

Date Arrived **11/08/00**
ETC Order Number **0011216**

ETC Lab ID **0011216-08**
Field ID : **MW-30-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/07/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Volatile Organics				11/10/00		EM	8260B 5030B
QC Batch	**V4111001**						
Dilution Factor	**1**						
Acetone	ND	ug/L	20.0				
Benzene	ND	ug/L	1 00				
Bromodichloromethane	ND	ug/L	1.00				
Bromoform	ND	ug/L	1.00				
Bromomethane	ND	ug/L	1 00				
2-Butanone (MEK)	ND	ug/L	20.0				
Carbon Disulfide	ND	ug/L	1.00				
Carbon Tetrachloride	ND	ug/L	1.00				
Chlorobenzene	ND	ug/L	1.00				
Chlorodibromomethane	ND	ug/L	1.00				
Chloroethane	ND	ug/L	1.00				
Chloroform	ND	ug/L	1.00				
Chloromethane	ND	ug/L	1.00				
1,1-Dichloroethane	ND	ug/L	1.00				
1,2-Dichloroethane	ND	ug/L	1.00				
1,1-Dichloroethene	ND	ug/L	1.00				
trans-1,2-Dichloroethene	ND	ug/L	1.00				
1,2-Dichloropropane	ND	ug/L	1.00				
cis-1,3-Dichloropropene	ND	ug/L	1.00				
trans-1,3-Dichloropropene	ND	ug/L	1.00				
Ethylbenzene	ND	ug/L	1.00				
2-Hexanone (MBK)	ND	ug/L	5.00				
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.00				
Methylene Chloride	ND	ug/L	5.00				
Styrene	ND	ug/L	1.00				
1,1,2,2-Tetrachloroethane	ND	ug/L	1.00				
Tetrachloroethene	ND	ug/L	1.00				
Toluene	ND	ug/L	1.00				
1,1,1-Trichloroethane	ND	ug/L	1.00				
1,1,2-Trichloroethane	ND	ug/L	1.00				
Trichloroethene	ND	ug/L	1 00				
Vinyl Acetate	ND	ug/L	20.0				
Vinyl Chloride	ND	ug/L	1.00				
Xylenes-m,p	ND	ug/L	1.00				
Xylenes-o	ND	ug/L	1.00				
cis-1,2-Dichloroethene	ND	ug/L	1.00				

Surrogate Standard	% Recovery	QC Limits	
S1 - Dibromofluoromethane	95	74	123
S2 - Toluene-d8	103	86	112
S3 - 4-Bromofluorobenzene	101	81	115
S4 - 1,2-Dichloroethane-d4	94	80	120

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

FORM 1
VOA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.
613 323
0011-216-8

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-216

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 1201013

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/10/00

GC Column: ID: 2.00 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 324

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

FID #

Date Arrived **11/08/00**
ETC Order Number **0011216**

ETC Lab ID **0011216-09**
Field ID : **MW-34-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/07/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Volatile Organics				11/10/00		EM	8260B 5030B
QC Batch	**V4111001**						
Dilution Factor	**1**						
Acetone	ND	ug/L	20.0				
Benzene	ND	ug/L	1.00				
Bromodichloromethane	ND	ug/L	1.00				
Bromoform	ND	ug/L	1 00				
Bromomethane	ND	ug/L	1.00				
2-Butanone (MEK)	ND	ug/L	20.0				
Carbon Disulfide	ND	ug/L	1 00				
Carbon Tetrachloride	ND	ug/L	1 00				
Chlorobenzene	ND	ug/L	1.00				
Chlorodibromomethane	ND	ug/L	1.00				
Chloroethane	ND	ug/L	1 00				
Chloroform	ND	ug/L	1.00				
Chloromethane	ND	ug/L	1.00				
1,1-Dichloroethane	ND	ug/L	1.00				
1,2-Dichloroethane	ND	ug/L	1.00				
1,1-Dichloroethene	ND	ug/L	1.00				
trans-1,2-Dichloroethene	ND	ug/L	1.00				
1,2-Dichloropropane	ND	ug/L	1.00				
cis-1,3-Dichloropropene	ND	ug/L	1.00				
trans-1,3-Dichloropropene	ND	ug/L	1.00				
Ethylbenzene	ND	ug/L	1.00				
2-Hexanone (MBK)	ND	ug/L	5 00				
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5 00				
Methylene Chloride	ND	ug/L	5 00				
Styrene	ND	ug/L	1 00				
1,1,2,2-Tetrachloroethane	ND	ug/L	1.00				
Tetrachloroethene	ND	ug/L	1.00				
Toluene	ND	ug/L	1.00				
1,1,1-Trichloroethane	ND	ug/L	1.00				
1,1,2-Trichloroethane	ND	ug/L	1.00				
Trichloroethene	1.43	ug/L	1.00				
Vinyl Acetate	ND	ug/L	20.0				
Vinyl Chloride	ND	ug/L	1.00				
Xylenes-m,p	ND	ug/L	1.00				
Xylenes-o	ND	ug/L	1.00				
cis-1,2-Dichloroethene	ND	ug/L	1.00				

Surrogate Standard	% Recovery	QC Limits	
S1 - Dibromofluoromethane	97	74	123
S2 - Toluene-d8	103	86	112
S3 - 4-Bromofluorobenzene	100	81	115
S4 - 1,2-Dichloroethane-d4	108	80	120

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

FORM 1
VOA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.
613 325
0011-216-9

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-216

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 1301014

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/10/00

GC Column: ID: 2.00 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
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ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 326

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

FID #

Date Arrived **11/08/00**
ETC Order Number **0011216**

ETC Lab ID **0011216-10**
Field ID : **MW-54A-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/07/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
GC/MS Volatile Organics				11/10/00	EM	8260B 5030B
QC Batch	**V4111001**					
Dilution Factor	**1**					
Acetone	ND	ug/L	20.0			
Benzene	ND	ug/L	1.00			
Bromodichloromethane	19.8	ug/L	1.00			
Bromoform	ND	ug/L	1.00			
Bromomethane	ND	ug/L	1.00			
2-Butanone (MEK)	ND	ug/L	20.0			
Carbon Disulfide	ND	ug/L	1.00			
Carbon Tetrachloride	8.65	ug/L	1.00			
Chlorobenzene	ND	ug/L	1.00			
Chlorodibromomethane	ND	ug/L	1.00			
Chloroethane	ND	ug/L	1.00			
Chloroform	14.1	ug/L	1.00			
Chloromethane	ND	ug/L	1.00			
1,1-Dichloroethane	ND	ug/L	1.00			
1,2-Dichloroethane	ND	ug/L	1.00			
1,1-Dichloroethene	ND	ug/L	1.00			
trans-1,2-Dichloroethene	1.83	ug/L	1.00			
1,2-Dichloropropane	ND	ug/L	1.00			
cis-1,3-Dichloropropene	ND	ug/L	1.00			
trans-1,3-Dichloropropene	ND	ug/L	1.00			
Ethylbenzene	ND	ug/L	1.00			
2-Hexanone (MBK)	ND	ug/L	5.00			
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.00			
Methylene Chloride	ND	ug/L	5.00			
Styrene	ND	ug/L	1.00			
1,1,2,2-Tetrachloroethane	20.4	ug/L	1.00			
Tetrachloroethene	0.63J	ug/L	1.00			
Toluene	ND	ug/L	1.00			
1,1,1-Trichloroethane	ND	ug/L	1.00			
1,1,2-Trichloroethane	1.00	ug/L	1.00			
Trichloroethene	22.6	ug/L	1.00			
Vinyl Acetate	ND	ug/L	20.0			
Vinyl Chloride	ND	ug/L	1.00			
Xylenes-m,p	ND	ug/L	1.00			
Xylenes-o	ND	ug/L	1.00			
cis-1,2-Dichloroethene	23.8	ug/L	1.00			

Surrogate Standard	% Recovery	QC Limits	
S1 - Dibromofluoromethane	94	74	123
S2 - Toluene-d8	104	86	112
S3 - 4-Bromofluorobenzene	99	81	115
S4 - 1,2-Dichloroethane-d4	93	80	120

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

FORM 1
VOA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.
613 327
0011-216-10

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-216

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 1401015

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/10/00

GC Column: ID: 2.00 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
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ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 328

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

FID #

Date Arrived **11/08/00**
ETC Order Number **0011216**

ETC Lab ID **0011216-11**
Field ID : **FB-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/07/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
GC/MS Volatile Organics				11/10/00	EM	8260B 5030B
QC Batch	**V4111001**					
Dilution Factor	**1**					
Acetone	ND	ug/L	20.0			
Benzene	ND	ug/L	1.00			
Bromodichloromethane	ND	ug/L	1.00			
Bromoform	ND	ug/L	1.00			
Bromomethane	ND	ug/L	1.00			
2-Butanone (MEK)	ND	ug/L	20.0			
Carbon Disulfide	ND	ug/L	1.00			
Carbon Tetrachloride	ND	ug/L	1.00			
Chlorobenzene	ND	ug/L	1.00			
Chlorodibromomethane	ND	ug/L	1.00			
Chloroethane	ND	ug/L	1.00			
Chloroform	ND	ug/L	1.00			
Chloromethane	ND	ug/L	1.00			
1,1-Dichloroethane	ND	ug/L	1.00			
1,2-Dichloroethane	ND	ug/L	1.00			
1,1-Dichloroethene	ND	ug/L	1.00			
trans-1,2-Dichloroethene	ND	ug/L	1.00			
1,2-Dichloropropane	ND	ug/L	1.00			
cis-1,3-Dichloropropene	ND	ug/L	1.00			
trans-1,3-Dichloropropene	ND	ug/L	1.00			
Ethylbenzene	ND	ug/L	1.00			
2-Hexanone (MBK)	ND	ug/L	5.00			
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.00			
Methylene Chloride	ND	ug/L	5.00			
Styrene	ND	ug/L	1.00			
1,1,2,2-Tetrachloroethane	ND	ug/L	1.00			
Tetrachloroethene	ND	ug/L	1.00			
Toluene	ND	ug/L	1.00			
1,1,1-Trichloroethane	ND	ug/L	1.00			
1,1,2-Trichloroethane	ND	ug/L	1.00			
Trichloroethene	ND	ug/L	1.00			
Vinyl Acetate	ND	ug/L	20.0			
Vinyl Chloride	ND	ug/L	1.00			
Xylenes-m,p	ND	ug/L	1.00			
Xylenes-o	ND	ug/L	1.00			
cis-1,2-Dichloroethene	ND	ug/L	1.00			

Surrogate Standard	% Recovery	QC Limits	
S1 - Dibromofluoromethane	96	74	123
S2 - Toluene-d8	103	86	112
S3 - 4-Bromofluorobenzene	101	81	115
S4 - 1,2-Dichloroethane-d4	102	80	120

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

FORM 1
VOA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.
613 329
0011-216-11

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-216

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 1501016

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/10/00

GC Column: ID: 2.00 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
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ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 330

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

FID #

Date Arrived **11/08/00**
ETC Order Number **0011216**

ETC Lab ID **0011216-12**
Field ID : **TB-01**

Matrix : **AQUEOUS**
Sample Date : **11/07/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
GC/MS Volatile Organics				11/10/00	EM	8260B 5030B
QC Batch	**V4111001**					
Dilution Factor	**1**					
Acetone	ND	ug/L	20.0			
Benzene	ND	ug/L	1 00			
Bromodichloromethane	ND	ug/L	1.00			
Bromoform	ND	ug/L	1.00			
Bromomethane	ND	ug/L	1.00			
2-Butanone (MEK)	ND	ug/L	20 0			
Carbon Disulfide	ND	ug/L	1.00			
Carbon Tetrachloride	ND	ug/L	1.00			
Chlorobenzene	ND	ug/L	1.00			
Chlorodibromomethane	ND	ug/L	1.00			
Chloroethane	ND	ug/L	1.00			
Chloroform	ND	ug/L	1.00			
Chloromethane	ND	ug/L	1 00			
1,1-Dichloroethane	ND	ug/L	1.00			
1,2-Dichloroethane	ND	ug/L	1.00			
1,1-Dichloroethene	ND	ug/L	1.00			
trans-1,2-Dichloroethene	ND	ug/L	1.00			
1,2-Dichloropropane	ND	ug/L	1.00			
cis-1,3-Dichloropropene	ND	ug/L	1.00			
trans-1,3-Dichloropropene	ND	ug/L	1.00			
Ethylbenzene	ND	ug/L	1.00			
2-Hexanone (MBK)	ND	ug/L	5.00			
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.00			
Methylene Chloride	ND	ug/L	5.00			
Styrene	ND	ug/L	1.00			
1,1,2,2-Tetrachloroethane	ND	ug/L	1.00			
Tetrachloroethene	ND	ug/L	1.00			
Toluene	ND	ug/L	1.00			
1,1,1-Trichloroethane	ND	ug/L	1.00			
1,1,2-Trichloroethane	ND	ug/L	1.00			
Trichloroethene	ND	ug/L	1.00			
Vinyl Acetate	ND	ug/L	20.0			
Vinyl Chloride	ND	ug/L	1 00			
Xylenes-m,p	ND	ug/L	1 00			
Xylenes-o	ND	ug/L	1 00			
cis-1,2-Dichloroethene	ND	ug/L	1.00			

Surrogate Standard	% Recovery	QC Limits	
S1 - Dibromofluoromethane	98	74	123
S2 - Toluene-d8	105	86	112
S3 - 4-Bromofluorobenzene	99	81	115
S4 - 1,2-Dichloroethane-d4	107	80	120

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

FORM 1
VOA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.
~~613~~ 331
0011-216-12

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-216

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 0401005

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/10/00

GC Column: ID: 2.00 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
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FORM 2

613 332

WATER VOA-GCMS SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-216

	CLIENT SAMPLE NO.	SMC1 (DCE) #	SMC2 (DFM) #	SMC3 (TOL) #	OTHER (BFB) #	TOT OUT
01	V4111011LCS	109	89	103	82	0
02	V4111011LB	104	94	102	99	0
03	0011-216-12	107	98	105	99	0
04	0011-216-1	96	95	105	100	0
05	0011-216-2	97	94	104	100	0
06	0011-216-3	115	96	105	101	0
07	0011-216-5	107	94	105	99	0
08	0011-216-6	103	94	105	99	0
09	0011-216-7	111	101	104	101	0
10	0011-216-8	94	95	103	101	0
11	0011-216-9	108	97	103	100	0
12	0011-216-10	93	94	104	99	0
13	0011-216-11	102	96	103	101	0
14	0011-216-11M	75*	87	98	90	1
15	0011-216-11M	76*	87	95	76*	2
16	V4111311LCS	108	92	99	86	0
17	V4111311LB	101	96	100	94	0
18	0011-216-4	104	94	103	92	0
19	0011-216-3	91	94	104	94	0
20	0011-216-3MS	71*	84	98	79*	2
21	0011-216-3MS	68*	82	96	77*	2
22						
23						
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		QC LIMITS
SMC1 (DCE)	= 1,2-Dichloroethane-d4	(80-120)
SMC2 (DFM)	= Dibromofluoromethane	(74-123)
SMC3 (TOL)	= Toluene-d8	(86-112)
OTHER(BFB)	= Bromofluorobenzene	(81-115)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

FORM 4
VOA-GCMS METHOD BLANK SUMMARY

CLIENT SAMPLE NO.
~~613~~ 333
V4111011LB

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-216

Lab File ID: 0302004 Lab Prep Batch: V4111001

Date Analyzed: 11/10/00 Time Analyzed: 1142

GC Column: ID: 2 (mm) Heated Purge: (Y/N) Y

Instrument ID: VOC4

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

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	V4111011LCS	V4111001	0201002LCS	1004
02	0011-216-12	V4111001	0401005	1213
03	0011-216-1	V4111001	0501006	1244
04	0011-216-2	V4111001	0601007	1315
05	0011-216-3	V4111001	0701008	1346
06	0011-216-5	V4111001	0901010	1447
07	0011-216-6	V4111001	1001011	1518
08	0011-216-7	V4111001	1101012	1549
09	0011-216-8	V4111001	1201013	1620
10	0011-216-9	V4111001	1301014	1650
11	0011-216-10	V4111001	1401015	1721
12	0011-216-11	V4111001	1501016	1752
13	0011-216-11M	V4111001	2201023	2125
14	0011-216-11M	V4111001	2301024	2156
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COMMENTS:

FORM 1

VOA-GCMS ORGANICS ANALYSIS DATA SHEET

613 334

CLIENT SAMPLE NO.

V4111011LB

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-216

Matrix: (soil/water) WATER Lab Prep Batch: V4111001

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 0302004

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/10/00

GC Column: ID: 2.00 (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
67-64-1	Acetone	20.00	U
75-05-8	Acetonitrile	20.00	U
107-02-8	Acrolein	20.00	U
107-13-1	Acrylonitrile	20.00	U
107-05-1	Allyl chloride	1.00	U
71-43-2	Benzene	1.00	U
108-86-1	Bromobenzene	1.00	U
74-97-5	Bromochloromethane	1.00	U
75-27-4	Bromodichloromethane	1.00	U
75-25-2	Bromoform	1.00	U
78-93-3	2-Butanone	20.00	U
74-83-9	Bromomethane	1.00	U
104-51-8	n-Butylbenzene	1.00	U
135-98-8	sec-Butylbenzene	1.00	U
98-06-6	tert-Butylbenzene	1.00	U
75-15-0	Carbon Disulfide	1.00	U
56-23-5	Carbon Tetrachloride	1.00	U
108-90-7	Chlorobenzene	1.00	U
124-48-1	Chlorodibromomethane	1.00	U
75-00-3	Chloroethane	1.00	U
110-75-0	2-Chloroethyl vinyl ether	20.00	U
67-66-3	Chloroform	1.00	U
74-87-3	Chloromethane	1.00	U
126-99-8	Chloroprene	1.00	U
95-49-8	2-Chlorotoluene	1.00	U
106-43-4	4-Chlorotoluene	1.00	U
96-12-8	1,2-Dibromo-3-chloropropane	1.00	U
106-93-4	1,2-Dibromoethane	1.00	U
74-95-3	Dibromomethane	1.00	U
95-50-1	1,2-Dichlorobenzene	1.00	U
541-73-1	1,3-Dichlorobenzene	1.00	U
106-46-7	1,4-Dichlorobenzene	1.00	U
110-57-6	trans-1,4-Dichloro-2-butene	1.00	U

FORM 1
VOA-GCMS ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO. 613 335

V4111011LB

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-216

Matrix: (soil/water) WATER Lab Prep Batch: V4111001

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 0302004

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/10/00

GC Column: ID: 2.00 (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
1868-53-7	Dichlorodifluoromethane	1.00	U
75-34-3	1,1-Dichloroethane	1.00	U
107-06-2	1,2-Dichloroethane	1.00	U
75-35-4	1,1-Dichloroethene	1.00	U
156-59-4	cis-1,2-Dichloroethene	1.00	U
156-60-5	trans-1,2-Dichloroethene	1.00	U
78-87-5	1,2-Dichloropropane	1.00	U
142-28-9	1,3-Dichloropropane	1.00	U
590-20-7	2,2-Dichloropropane	1.00	U
563-58-6	1,1-Dichloropropene	1.00	U
10061-01-5	cis-1,3-Dichloropropene	1.00	U
10061-02-6	trans-1,3-Dichloropropene	1.00	U
108-20-3	Di isopropyl ether	5.00	U
123-91-1	1,4-Dioxane	100.0	U
141-78-6	Ethyl Acetate	5.00	U
100-41-4	Ethylbenzene	1.00	U
97-63-2	Ethyl methacrylate	1.00	U
110-00-9	Furan	1.00	U
87-63-3	Hexachlorobutadiene	1.00	U
110-54-3	Hexane	1.00	U
591-78-6	2-Hexanone	5.00	U
74-88-4	Iodomethane	1.00	U
78-83-1	Isobutyl Alcohol	100.0	U
98-82-8	Isopropylbenzene	1.00	U
99-87-6	4-Isopropyltoluene	1.00	U
126-98-7	Methacrylonitrile	10.00	U
75-09-2	Methylene Chloride	3.04	J
80-62-6	Methyl methacrylate	1.00	U
108-10-1	4-Methyl-2-Pentanone	5.00	U
1634-04-4	Methyl-tertbutyl-Ether	5.00	U
91-20-3	Naphthalene	1.00	U
76-01-7	Pentachloroethane	1.00	U
107-12-0	Propionitrile	10.00	U

FORM 1
VOA-GCMS ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.
V4111011LB

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-216

Matrix: (soil/water) WATER Lab Prep Batch: V4111001

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 0302004

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/10/00

GC Column: ID: 2.00 (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
109-60-4	n-Propyl Acetate	1.00	U
103-65-1	n-Propylbenzene	1.00	U
100-42-5	Styrene	1.00	U
630-20-6	1,1,1,2-Tetrachloroethane	1.00	U
79-34-5	1,1,2,2-Tetrachloroethane	1.00	U
127-18-4	Tetrachloroethene	1.00	U
109-99-9	Tetrahydrofuran	1.00	U
87-61-6	1,2,3-Trichlorobenzene	1.00	U
108-88-3	Toluene	1.00	U
71-55-6	1,1,1-Trichloroethane	1.00	U
79-00-5	1,1,2-Trichloroethane	1.00	U
76-13-1	1,1,2-trichloro-1,2,2-triflu	1.00	U
79-01-6	Trichloroethene	1.00	U
75-69-4	Trichlorofluoromethane	1.00	U
96-18-4	1,2,3-Trichloropropane	1.00	U
120-82-1	1,2,4-Trichlorobenzene	1.00	U
95-63-6	1,2,4-Trimethylbenzene	1.00	U
108-67-8	1,3,5-Trimethylbenzene	1.00	U
108-05-4	Vinyl Acetate	20.00	U
75-01-4	Vinyl Chloride	1.00	U
1330-20-7	Xylene-mp	1.00	U
95-47-6	Xylene-o	1.00	U
1476-11-5	cis-1,4-Dichloro-2-butene	1.00	U

FORM 1
VOA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.
~~613 337~~
V4111011LB

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-216

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 0302004

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/10/00

GC Column: ID: 2.00 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
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FORM 3
WATER VOA-GCMS LAB CONTROL SAMPLE

613 338

Lab Name: ETC, INC. Lab Prep Batch: V4111001

Lab Code: Case No.: SAS No.: SDG No.: 0011-216

Matrix Spike - Sample No.: V4111011LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Acetone	100.0		128.2	128	59-151
Acetonitrile	1000		1261	126	57-143
Acrolein	100.0		121.3	121	59-134
Acrylonitrile	100.0		122.5	122	60-146
Allyl chloride	100.0		104.0	104	74-120
Benzene	100.0		110.1	110	72-124
Bromobenzene	100.0		93.75	94	77-120
Bromochloromethane	100.0		139.3	139*	74-120
Bromodichloromethane	100.0		111.8	112	68-119
Bromoform	100.0		96.23	96	66-136
2-Butanone	100.0		120.9	121	55-151
Bromomethane	100.0		106.2	106	40-134
n-Butylbenzene	100.0		107.9	108	69-129
sec-Butylbenzene	100.0		89.50	90	72-127
tert-Butylbenzene	100.0		86.81	87	73-126
Carbon Disulfide	100.0		110.0	110	60-133
Carbon Tetrachloride	100.0		109.9	110	64-123
Chlorobenzene	100.0		94.57	94	77-112
Chlorodibromomethane	100.0		109.5	110	72-118
Chloroethane	100.0		113.9	114	64-142
2-Chloroethyl vinyl eth	100.0		123.8	124	22-165
Chloroform	100.0		85.31	85	70-115
Chloromethane	100.0		101.9	102	58-139
Chloroprene	100.0		92.81	93	73-118
2-Chlorotoluene	100.0		95.33	95	65-132
4-Chlorotoluene	100.0		94.28	94	67-127
1,2-Dibromo-3-chloropro	100.0		112.7	113	56-134
1,2-Dibromoethane	100.0		109.0	109	74-118

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER VOA-GCMS LAB CONTROL SAMPLE

613 339

Lab Name: ETC, INC. Lab Prep Batch: V4111001

Lab Code: Case No.: SAS No.: SDG No.: 0011-216

Matrix Spike - Sample No.: V4111011LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Dibromomethane	100.0		92.64	93	75-114
1,2-Dichlorobenzene	100.0		112.2	112	80-113
1,3-Dichlorobenzene	100.0		110.2	110	77-119
1,4-Dichlorobenzene	100.0		113.7	114	78-116
trans-1,4-Dichloro-2-bu	100.0		100.2	100	62-138
Dichlorodifluoromethane	100.0		95.48	95	48-145
1,1-Dichloroethane	100.0		95.51	96	76-118
1,2-Dichloroethane	100.0		103.9	104	62-124
1,1-Dichloroethene	100.0		109.1	109	69-121
cis-1,2-Dichloroethene	100.0		107.2	107	76-114
trans-1,2-Dichloroethen	100.0		107.6	108	72-121
1,2-Dichloropropane	100.0		102.3	102	64-133
1,3-Dichloropropane	100.0		102.2	102	68-128
2,2-Dichloropropane	100.0		94.22	94	67-132
1,1-Dichloropropene	100.0		108.2	108	76-117
cis-1,3-Dichloropropene	100.0		102.9	103	77-120
trans-1,3-Dichloroprope	100.0		104.8	105	73-124
Di isopropyl ether	100.0		96.64	97	62-160
1,4-Dioxane	2000		2425	121	56-131
Ethyl Acetate	100.0		108.1	108	52-151
Ethylbenzene	100.0		89.68	90	77-111
Ethyl methacrylate	200.0		224.2	112	57-140
Furan	100.0		150.6	151*	52-124
Hexachlorobutadiene	100.0		107.4	107	69-137
Hexane	100.0		127.3	127	70-130
2-Hexanone	100.0		121.4	121	53-144
Iodomethane	100.0		126.2	126	51-153
Isobutyl Alcohol	2000		2449	122	60-134

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER VOA-GCMS LAB CONTROL SAMPLE

Lab Name: ETC, INC. Lab Prep Batch: V4111001

Lab Code: Case No.: SAS No.: SDG No.: 0011-216

Matrix Spike - Sample No.: V4111011LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Isopropylbenzene	100.0		87.21	87	74-125
4-Isopropyltoluene	100.0		88.68	89	72-127
Methacrylonitrile	1000		971.0	97	70-125
Methylene Chloride	100.0		112.3	112	76-115
Methyl methacrylate	200.0		227.5	114	57-147
4-Methyl-2-Pentanone	100.0		158.9	159*	42-144
Methyl-tertbutyl-Ether	100.0		107.9	108	62-122
Naphthalene	100.0		123.9	124	53-124
Pentachloroethane	100.0		124.4	124	78-126
Propionitrile	1000		1281	128	58-139
n-Propyl Acetate	100.0		163.2	163	88-170
n-Propylbenzene	100.0		90.95	91	75-125
Styrene	100.0		93.70	94	77-117
1,1,1,2-Tetrachloroetha	100.0		90.12	90	79-113
1,1,2,2-Tetrachloroetha	100.0		112.2	112	67-126
Tetrachloroethene	100.0		102.0	102	77-115
Tetrahydrofuran	100.0		115.0	115	76-181
1,2,3-Trichlorobenzene	100.0		126.5	126	62-132
Toluene	100.0		94.70	95	77-115
1,1,1-Trichloroethane	100.0		100.2	100	63-122
1,1,2-Trichloroethane	100.0		109.6	110	69-117
1,1,2-trichloro-1,2,2-t	100.0		110.3	110	70-130
Trichloroethene	100.0		95.83	96	75-113
Trichlorofluoromethane	100.0		99.06	99	55-130
1,2,3-Trichloropropane	100.0		97.32	97	62-130
1,2,4-Trichlorobenzene	100.0		128.4	128	68-132
1,2,4-Trimethylbenzene	100.0		86.62	87	69-126
1,3,5-Trimethylbenzene	100.0		85.15	85	69-128

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER VOA-GCMS LAB CONTROL SAMPLE

613 341

Lab Name: ETC, INC. Lab Prep Batch: V4111001

Lab Code: Case No.: SAS No.: SDG No.: 0011-216

Matrix Spike - Sample No.: V4111011LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Vinyl Acetate	100.0		127.4	127	28-146
Vinyl Chloride	100.0		107.0	107	65-134
Xylene-mp	200.0		185.7	93	77-115
Xylene-o	100.0		90.38	90	77-115

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 3 out of 88 outside limits

COMMENTS: _____

FORM 3

WATER VOA-GCMS MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: ETC, INC. Lab Prep Batch: V4111001

Lab Code: Case No.: SAS No.: SDG No.: 0011-216

Matrix Spike - Sample No.: 0011-216-11

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
Benzene	100.0	0.000	110.8	111	72-124
Chlorobenzene	100.0	0.000	99.62	100	77-112
1,1-Dichloroethene	100.0	0.000	105.2	105	69-121
Toluene	100.0	0.000	95.34	95	77-115
Trichloroethene	100.0	0.000	98.46	98	75-113

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Benzene	100.0	118.5	118	6	20	72-124
Chlorobenzene	100.0	95.01	95	5	20	77-112
1,1-Dichloroethene	100.0	111.3	111	6	20	69-121
Toluene	100.0	97.04	97	2	20	77-115
Trichloroethene	100.0	98.48	98	0	20	75-113

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

COMMENTS: _____

FORM 4
VOA-GCMS METHOD BLANK SUMMARY

CLIENT SAMPLE NO.
613 343
V4111311LB

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-216

Lab File ID: 0302004 Lab Prep Batch: V4111301

Date Analyzed: 11/13/00 Time Analyzed: 1138

GC Column: ID: 2 (mm) Heated Purge: (Y/N) Y

Instrument ID: VOC4

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

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	V4111311LCS	V4111301	0201002LCS	0946
02	0011-216-4	V4111301	1501015	1856
03	0011-216-3	V4111301	1601016	1927
04	0011-216-3MS	V4111301	1801018	2029
05	0011-216-3MS	V4111301	1901019	2100
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COMMENTS:

FORM 1
VOA-GCMS ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

V4111311LB

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-216

Matrix: (soil/water) WATER Lab Prep Batch: V4111301

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 0302004

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/13/00

GC Column: ID: 2.00 (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
67-64-1	Acetone	20.00	U
75-05-8	Acetonitrile	20.00	U
107-02-8	Acrolein	20.00	U
107-13-1	Acrylonitrile	20.00	U
107-05-1	Allyl chloride	1.00	U
71-43-2	Benzene	1.00	U
108-86-1	Bromobenzene	1.00	U
74-97-5	Bromochloromethane	1.00	U
75-27-4	Bromodichloromethane	1.00	U
75-25-2	Bromoform	1.00	U
78-93-3	2-Butanone	20.00	U
74-83-9	Bromomethane	1.00	U
104-51-8	n-Butylbenzene	1.00	U
135-98-8	sec-Butylbenzene	1.00	U
98-06-6	tert-Butylbenzene	1.00	U
75-15-0	Carbon Disulfide	1.00	U
56-23-5	Carbon Tetrachloride	1.00	U
108-90-7	Chlorobenzene	1.00	U
124-48-1	Chlorodibromomethane	1.00	U
75-00-3	Chloroethane	1.00	U
110-75-0	2-Chloroethyl vinyl ether	20.00	U
67-66-3	Chloroform	1.00	U
74-87-3	Chloromethane	1.00	U
126-99-8	Chloroprene	1.00	U
95-49-8	2-Chlorotoluene	1.00	U
106-43-4	4-Chlorotoluene	1.00	U
96-12-8	1,2-Dibromo-3-chloropropane	1.00	U
106-93-4	1,2-Dibromoethane	1.00	U
74-95-3	Dibromomethane	1.00	U
95-50-1	1,2-Dichlorobenzene	1.00	U
541-73-1	1,3-Dichlorobenzene	1.00	U
106-46-7	1,4-Dichlorobenzene	1.00	U
110-57-6	trans-1,4-Dichloro-2-butene	1.00	U

FORM 1
VOA-GCMS ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO. 613 345

V4111311LB

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-216

Matrix: (soil/water) WATER Lab Prep Batch: V4111301

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 0302004

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/13/00

GC Column: ID: 2.00 (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
1868-53-7	Dichlorodifluoromethane	1.00	U
75-34-3	1,1-Dichloroethane	1.00	U
107-06-2	1,2-Dichloroethane	1.00	U
75-35-4	1,1-Dichloroethene	1.00	U
156-59-4	cis-1,2-Dichloroethene	1.00	U
156-60-5	trans-1,2-Dichloroethene	1.00	U
78-87-5	1,2-Dichloropropane	1.00	U
142-28-9	1,3-Dichloropropane	1.00	U
590-20-7	2,2-Dichloropropane	1.00	U
563-58-6	1,1-Dichloropropene	1.00	U
10061-01-5	cis-1,3-Dichloropropene	1.00	U
10061-02-6	trans-1,3-Dichloropropene	1.00	U
108-20-3	Di isopropyl ether	5.00	U
123-91-1	1,4-Dioxane	100.0	U
141-78-6	Ethyl Acetate	5.00	U
100-41-4	Ethylbenzene	1.00	U
97-63-2	Ethyl methacrylate	1.00	U
110-00-9	Furan	1.00	U
87-63-3	Hexachlorobutadiene	1.00	U
110-54-3	Hexane	1.00	U
591-78-6	2-Hexanone	5.00	U
74-88-4	Iodomethane	1.00	U
78-83-1	Isobutyl Alcohol	100.0	U
98-82-8	Isopropylbenzene	1.00	U
99-87-6	4-Isopropyltoluene	1.00	U
126-98-7	Methacrylonitrile	10.00	U
75-09-2	Methylene Chloride	1.16	J
80-62-6	Methyl methacrylate	1.00	U
108-10-1	4-Methyl-2-Pentanone	5.00	U
1634-04-4	Methyl-tertbutyl-Ether	5.00	U
91-20-3	Naphthalene	1.00	U
76-01-7	Pentachloroethane	1.00	U
107-12-0	Propionitrile	10.00	U

FORM 1
VOA-GCMS ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

V4111311LB

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-216

Matrix: (soil/water) WATER Lab Prep Batch: V4111301

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 0302004

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/13/00

GC Column: ID: 2.00 (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
109-60-4	n-Propyl Acetate	1.00	U
103-65-1	n-Propylbenzene	1.00	U
100-42-5	Styrene	1.00	U
630-20-6	1,1,1,2-Tetrachloroethane	1.00	U
79-34-5	1,1,2,2-Tetrachloroethane	1.00	U
127-18-4	Tetrachloroethene	1.00	U
109-99-9	Tetrahydrofuran	1.00	U
87-61-6	1,2,3-Trichlorobenzene	1.00	U
108-88-3	Toluene	1.00	U
71-55-6	1,1,1-Trichloroethane	1.00	U
79-00-5	1,1,2-Trichloroethane	1.00	U
76-13-1	1,1,2-trichloro-1,2,2-triflu	1.00	U
79-01-6	Trichloroethene	1.00	U
75-69-4	Trichlorofluoromethane	1.00	U
96-18-4	1,2,3-Trichloropropane	1.00	U
120-82-1	1,2,4-Trichlorobenzene	1.00	U
95-63-6	1,2,4-Trimethylbenzene	1.00	U
108-67-8	1,3,5-Trimethylbenzene	1.00	U
108-05-4	Vinyl Acetate	20.00	U
75-01-4	Vinyl Chloride	1.00	U
1330-20-7	Xylene-mp	1.00	U
95-47-6	Xylene-o	1.00	U
1476-11-5	cis-1,4-Dichloro-2-butene	1.00	U

FORM 1
VOA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

V4111311LB

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-216

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 0302004

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/13/00

GC Column: ID: 2.00 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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FORM 3
WATER VOA-GCMS LAB CONTROL SAMPLE

613 348

Lab Name: ETC, INC. Lab Prep Batch: V4111301

Lab Code: Case No.: SAS No.: SDG No.: 0011-216

Matrix Spike - Sample No.: V4111311LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Acetone	100.0		115.6	116	59-151
Acetonitrile	1000		1273	127	57-143
Acrolein	100.0		110.7	111	59-134
Acrylonitrile	100.0		114.6	115	60-146
Allyl chloride	100.0		112.0	112	74-120
Benzene	100.0		114.1	114	72-124
Bromobenzene	100.0		88.26	88	77-120
Bromochloromethane	100.0		142.1	142*	74-120
Bromodichloromethane	100.0		106.9	107	68-119
Bromoform	100.0		87.15	87	66-136
2-Butanone	100.0		109.6	110	55-151
Bromomethane	100.0		127.2	127	40-134
n-Butylbenzene	100.0		94.16	94	69-129
sec-Butylbenzene	100.0		83.65	84	72-127
tert-Butylbenzene	100.0		79.62	80	73-126
Carbon Disulfide	100.0		120.9	121	60-133
Carbon Tetrachloride	100.0		100.8	101	64-123
Chlorobenzene	100.0		89.06	89	77-112
Chlorodibromomethane	100.0		97.54	98	72-118
Chloroethane	100.0		127.4	127	64-142
2-Chloroethyl vinyl eth	100.0		108.3	108	22-165
Chloroform	100.0		86.92	87	70-115
Chloromethane	100.0		120.7	121	58-139
Chloroprene	100.0		89.68	90	73-118
2-Chlorotoluene	100.0		85.38	85	65-132
4-Chlorotoluene	100.0		86.11	86	67-127
1,2-Dibromo-3-chloropro	100.0		90.12	90	56-134
1,2-Dibromoethane	100.0		97.18	97	74-118

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER VOA-GCMS LAB CONTROL SAMPLE

Lab Name: ETC, INC. Lab Prep Batch: V4111301

Lab Code: Case No.: SAS No.: SDG No.: 0011-216

Matrix Spike - Sample No.: V4111311LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Dibromomethane	100.0		86.19	86	75-114
1,2-Dichlorobenzene	100.0		98.31	98	80-113
1,3-Dichlorobenzene	100.0		100.6	101	77-119
1,4-Dichlorobenzene	100.0		96.13	96	78-116
trans-1,4-Dichloro-2-bu	100.0		90.04	90	62-138
Dichlorodifluoromethane	100.0		94.16	94	48-145
1,1-Dichloroethane	100.0		98.33	98	76-118
1,2-Dichloroethane	100.0		99.14	99	62-124
1,1-Dichloroethene	100.0		119.0	119	69-121
cis-1,2-Dichloroethene	100.0		113.1	113	76-114
trans-1,2-Dichloroethen	100.0		114.9	115	72-121
1,2-Dichloropropane	100.0		95.83	96	64-133
1,3-Dichloropropane	100.0		93.11	93	68-128
2,2-Dichloropropane	100.0		93.66	94	67-132
1,1-Dichloropropene	100.0		106.2	106	76-117
cis-1,3-Dichloropropene	100.0		92.98	93	77-120
trans-1,3-Dichloroprope	100.0		96.39	96	73-124
Di isopropyl ether	100.0		97.31	97	62-160
1,4-Dioxane	2000		2296	115	56-131
Ethyl Acetate	100.0		100.4	100	52-151
Ethylbenzene	100.0		81.01	81	77-111
Ethyl methacrylate	200.0		197.2	99	57-140
Furan	100.0		168.3	168*	52-124
Hexachlorobutadiene	100.0		87.74	88	69-137
Hexane	100.0		130.0	130	70-130
2-Hexanone	100.0		102.2	102	53-144
Iodomethane	100.0		141.6	142	51-153
Isobutyl Alcohol	2000		2188	109	60-134

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER VOA-GCMS LAB CONTROL SAMPLE

613 350

Lab Name: ETC, INC. Lab Prep Batch: V4111301

Lab Code: Case No.: SAS No.: SDG No.: 0011-216

Matrix Spike - Sample No.: V4111311LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Isopropylbenzene	100.0		81.24	81	74-125
4-Isopropyltoluene	100.0		81.14	81	72-127
Methacrylonitrile	1000		923.7	92	70-125
Methylene Chloride	100.0		114.4	114	76-115
Methyl methacrylate	200.0		195.8	98	57-147
4-Methyl-2-Pentanone	100.0		100.5	100	42-144
Methyl-tertbutyl-Ether	100.0		102.7	103	62-122
Naphthalene	100.0		104.5	104	53-124
Pentachloroethane	100.0		121.0	121	78-126
Propionitrile	1000		1178	118	58-139
n-Propyl Acetate	100.0		152.8	153	88-170
n-Propylbenzene	100.0		83.47	83	75-125
Styrene	100.0		88.75	89	77-117
1,1,1,2-Tetrachloroetha	100.0		84.53	84	79-113
1,1,2,2-Tetrachloroetha	100.0		100.1	100	67-126
Tetrachloroethene	100.0		82.72	83	77-115
Tetrahydrofuran	100.0		126.2	126	76-181
1,2,3-Trichlorobenzene	100.0		102.9	103	62-132
Toluene	100.0		86.69	87	77-115
1,1,1-Trichloroethane	100.0		95.81	96	63-122
1,1,2-Trichloroethane	100.0		100.6	101	69-117
1,1,2-trichloro-1,2,2-t	100.0		110.2	110	70-130
Trichloroethene	100.0		87.90	88	75-113
Trichlorofluoromethane	100.0		100.5	100	55-130
1,2,3-Trichloropropane	100.0		87.40	87	62-130
1,2,4-Trichlorobenzene	100.0		108.1	108	68-132
1,2,4-Trimethylbenzene	100.0		78.93	79	69-126
1,3,5-Trimethylbenzene	100.0		79.08	79	69-128

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER VOA-GCMS LAB CONTROL SAMPLE

Lab Name: ETC, INC. Lab Prep Batch: V4111301

Lab Code: Case No.: SAS No.: SDG No.: 0011-216

Matrix Spike - Sample No.: V4111311LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Vinyl Acetate	100.0		127.4	127	28-146
Vinyl Chloride	100.0		123.3	123	65-134
Xylene-mp	200.0		174.4	87	77-115
Xylene-o	100.0		84.94	85	77-115

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 2 out of 88 outside limits

COMMENTS: _____

FORM 3

WATER VOA-GCMS MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

613 352

Lab Name: ETC, INC. Lab Prep Batch: V4111301

Lab Code: Case No.: SAS No.: SDG No.: 0011-216

Matrix Spike - Sample No.: 0011-216-3

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
Benzene	100.0	0.000	115.0	115	72-124
Chlorobenzene	100.0	0.000	99.80	100	77-112
1,1-Dichloroethene	100.0	0.000	113.9	114	69-121
Toluene	100.0	0.000	98.06	98	77-115
Trichloroethene	100.0	1.81	96.60	95	75-113

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Benzene	100.0	106.0	106	8	20	72-124
Chlorobenzene	100.0	96.01	96	4	20	77-112
1,1-Dichloroethene	100.0	108.8	109	4	20	69-121
Toluene	100.0	93.75	94	4	20	77-115
Trichloroethene	100.0	90.30	88	8	20	75-113

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

COMMENTS: _____

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

FID #

Date Arrived **11/08/00**
ETC Order Number **0011216**

ETC Lab ID **0011216-01**
Field ID : **MW-57-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/07/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Base/Neutral & Acid				11/16/00	11/09/00	PF	8270C 3510C
QC Batch	**P06008**						
Dilution Factor	**1**						
Acenaphthene	ND	ug/L	2.00				
Acenaphthylene	ND	ug/L	2.00				
Anthracene	ND	ug/L	2.00				
Benzo(a)anthracene	ND	ug/L	2.00				
Benzo(b)fluoranthene	ND	ug/L	2.00				
Benzo(k)fluoranthene	ND	ug/L	2.00				
Benzo(g,h,i)perylene	ND	ug/L	2.00				
Benzo(a)pyrene	ND	ug/L	2.00				
Benzoic Acid	ND	ug/L	50.0				
Benzyl Alcohol	ND	ug/L	10.0				
[illegible]is(2-chloroethoxy)methane	ND	ug/L	5 00				
[illegible](2-chloroethyl)ether	ND	ug/L	5.00				
Bis(2-chloroisopropyl)ether	ND	ug/L	5 00				
Bis(2-ethylhexyl)phthalate	ND	ug/L	10.0				
4-Bromophenyl phenyl ether	ND	ug/L	5.00				
Butyl benzyl phthalate	ND	ug/L	5.00				
4-Chloroaniline	ND	ug/L	5.00				
2-Chloronaphthalene	ND	ug/L	5.00				
4-Chloro-3-methylphenol	ND	ug/L	5.00				
2-Chlorophenol	ND	ug/L	5.00				
4-Chlorophenyl phenyl ether	ND	ug/L	5.00				
Chrysene	ND	ug/L	2 00				
Dibenzo(a,h)anthracene	ND	ug/L	2.00				
Dibenzofuran	ND	ug/L	5.00				
Di-n-butyl phthalate	ND	ug/L	5.00				
3,3'-Dichlorobenzidine	ND	ug/L	10.0				
2,4-Dichlorophenol	ND	ug/L	5.00				
Diethyl phthalate	ND	ug/L	5.00				
2,4-Dimethylphenol	ND	ug/L	5.00				
Dimethyl phthalate	ND	ug/L	5.00				
4,6-Dinitro-2-methylphenol	ND	ug/L	10.0				
2,4-Dinitrophenol	ND	ug/L	50.0				
2,4-Dinitrotoluene	ND	ug/L	5.00				
2,6-Dinitrotoluene	ND	ug/L	5.00				
Di-n-octyl phthalate	ND	ug/L	5.00				
Fluoranthene	ND	ug/L	2.00				
Fluorene	ND	ug/L	2 00				
Hexachlorobenzene	ND	ug/L	5 00				
Hexachlorobutadiene	ND	ug/L	5.00				
Hexachlorocyclopentadiene	ND	ug/L	5.00				
Hexachloroethane	ND	ug/L	5.00				
[illegible]eno(1,2,3-cd)pyrene	ND	ug/L	2.00				
[illegible]phorone	ND	ug/L	5 00				
2-Methylnaphthalene	ND	ug/L	2.00				
2-Methylphenol (o-cresol)	ND	ug/L	5.00				

CS
Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

ENVIRONMENTAL TESTING & CONSULTING, INC.

613 354

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

FID #

Date Arrived **11/08/00**
ETC Order Number **0011216**

ETC Lab ID **0011216-01**
Field ID : **MW-57-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/07/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Base/Neutral & Acid				11/16/00	11/09/00	PF	8270C 3510C
4-Methylphenol (p-cresol)	ND	ug/L	5.00				
Naphthalene	ND	ug/L	2.00				
Nitrobenzene	ND	ug/L	5.00				
2-Nitroaniline	ND	ug/L	5.00				
3-Nitroaniline	ND	ug/L	10.0				
4-Nitroaniline	ND	ug/L	5.00				
2-Nitrophenol	ND	ug/L	5.00				
4-Nitrophenol	ND	ug/L	5.00				
N-Nitrosodiphenylamine	ND	ug/L	5.00				
N-Nitrosodipropylamine	ND	ug/L	5.00				
Pentachlorophenol	ND	ug/L	10.0				
Phenanthrene	ND	ug/L	2.00				
Phenol	ND	ug/L	5.00				
Pyrene	ND	ug/L	2.00				
2,4,5-Trichlorphenol	ND	ug/L	5.00				
2,4,6-Trichlorophenol	ND	ug/L	5 00				

Surrogate Standard	% Recovery	QC Limits	
S1 - Nitrobenzene-d5	48	29	110
S2 - 2-Fluorobiphenyl	50	38	107
S3 - 4-Terphenyl-d14	38	33	122
S4 - Phenol-d6	24	7	58
S5 - 2,4,6-Tribromophenol	58	16	138
S6 - 2-Fluorophenol	36	8	88

CJ
Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

FORM 1
BNA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

0011-216-1

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-216

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 980.0 (g/mL) ML Lab File ID: 1201012

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/16/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

Number TICs found: 3

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	947-04-6	AZACYCLOTRIDECAN-2-ONE	15.30	12.35	NJ
2.	295-17-0	CYCLOTETRADECANE	19.08	9.56	NJ
3.	6971-40-0	17-PENTATRIACONTENE	19.73	5.30	NJ
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ENVIRONMENTAL TESTING & CONSULTING, INC.

613 356

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

FID #

Date Arrived **11/08/00**
ETC Order Number **0011216**

ETC Lab ID **0011216-02**
Field ID : **MW-14-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/06/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Base/Neutral & Acid				11/16/00		PF	8270C
					11/09/00		3510C
QC Batch	**P06008**						
Dilution Factor	**1**						
Acenaphthene	ND	ug/L	2 00				
Acenaphthylene	ND	ug/L	2.00				
Anthracene	ND	ug/L	2.00				
Benzo(a)anthracene	0.93J	ug/L	2.00				
Benzo(b)fluoranthene	1.74J	ug/L	2 00				
Benzo(k)fluoranthene	0.57J	ug/L	2.00				
Benzo(g,h,ı)perylene	1 24J	ug/L	2.00				
Benzo(a)pyrene	1.00J	ug/L	2.00				
Benzoıc Acid	ND	ug/L	50.0				
Benzyl Alcohol	ND	ug/L	10.0				
Bis(2-chloroethoxy)methane	ND	ug/L	5.00				
Bıs(2-chloroethyl)ether	ND	ug/L	5.00				
Bıs(2-chloroisopropyl)ether	ND	ug/L	5.00				
Bıs(2-ethylhexyl)phthalate	ND	ug/L	10.0				
4-Bromophenyl phenyl ether	ND	ug/L	5.00				
Butyl benzyl phthalate	ND	ug/L	5.00				
4-Chloroanılıne	ND	ug/L	5.00				
2-Chloronaphthalene	ND	ug/L	5.00				
4-Chloro-3-methylphenol	ND	ug/L	5.00				
2-Chlorophenol	ND	ug/L	5.00				
4-Chlorophenyl phenyl ether	ND	ug/L	5.00				
Chrysene	1.30J	ug/L	2.00				
Dıbenzo(a,h)anthracene	ND	ug/L	2 00				
Dıbenzofuran	ND	ug/L	5 00				
Di-n-butyl phthalate	ND	ug/L	5.00				
3,3'-Dıchlorobenzıdıne	ND	ug/L	10.0				
2,4-Dıchlorophenol	ND	ug/L	5.00				
Dıethyl phthalate	ND	ug/L	5.00				
2,4-Dımethylphenol	ND	ug/L	5 00				
Dimethyl phthalate	ND	ug/L	5.00				
4,6-Dınitro-2-methylphenol	ND	ug/L	10 0				
2,4-Dınitrophenol	ND	ug/L	50.0				
2,4-Dınitrotoluene	ND	ug/L	5.00				
2,6-Dınitrotoluene	ND	ug/L	5.00				
Dı-n-octyl phthalate	ND	ug/L	5.00				
Fluoranthene	2.40	ug/L	2.00				
Fluorene	ND	ug/L	2.00				
Hexachlorobenzene	ND	ug/L	5.00				
Hexachlorobutadiene	ND	ug/L	5.00				
Hexachlorocyclopentadiene	ND	ug/L	5.00				
Hexachloroethane	ND	ug/L	5 00				
Indeno(1,2,3-cd)pyrene	1.81J	ug/L	2 00				
Isophorone	ND	ug/L	5.00				
2-Methylnaphthalene	ND	ug/L	2.00				
2-Methylphenol (o-cresol)	ND	ug/L	5.00				

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

FID #

Date Arrived **11/08/00**
ETC Order Number **0011216**

ETC Lab ID **0011216-02**
Field ID : **MW-14-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/06/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Base/Neutral & Acid				11/16/00	11/09/00	PF	8270C 3510C
4-Methylphenol (p-cresol)	ND	ug/L	5.00				
Naphthalene	ND	ug/L	2.00				
Nitrobenzene	ND	ug/L	5.00				
2-Nitroaniline	ND	ug/L	5.00				
3-Nitroaniline	ND	ug/L	10.0				
4-Nitroaniline	ND	ug/L	5.00				
2-Nitrophenol	ND	ug/L	5.00				
4-Nitrophenol	ND	ug/L	5.00				
N-Nitrosodiphenylamine	ND	ug/L	5.00				
N-Nitrosodipropylamine	ND	ug/L	5.00				
Pentachlorophenol	ND	ug/L	10.0				
Phenanthrene	0.92J	ug/L	2.00				
[redacted]enol	ND	ug/L	5.00				
[redacted]ene	1.53J	ug/L	2.00				
2,4,5-Trichlorphenol	ND	ug/L	5.00				
2,4,6-Trichlorophenol	ND	ug/L	5.00				

Surrogate Standard	% Recovery	QC Limits	
S1 - Nitrobenzene-d5	58	29	110
S2 - 2-Fluorobiphenyl	60	38	107
S3 - 4-Terphenyl-d14	58	33	122
S4 - Phenol-d6	23	7	58
S5 - 2,4,6-Tribromophenol	73	16	138
S6 - 2-Fluorophenol	35	8	88

CS
Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

FORM 1

BNA-GCMS ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

613 358

CLIENT SAMPLE NO.

0011-216-2

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-216

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 990.0 (g/mL) ML Lab File ID: 1301013

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/16/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

Number TICs found: 7

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	558-37-2	1-BUTENE, 3,3-DIMETHYL-	3.73	70.57	NJ
2.	4245-37-8	2-PROPENOIC ACID, 2-METHYL-,	3.97	65.00	NJ
3.	4359-46-0	1,3-DIOXOLANE, 2-ETHYL-4-MET	5.12	23.99	NJ
4.	124-18-5	DECANE	5.15	4.72	NJ
5.	6624-79-9	1-DOTRIACONTANOL	18.48	11.36	NJ
6.	1599-67-3	1-DOCOSENE	19.07	29.12	NJ
7.	6971-40-0	17-PENTATRIACONTENE	19.73	18.70	NJ
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ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

FID #

Date Arrived **11/08/00**
ETC Order Number **0011216**

ETC Lab ID **0011216-03**
Field ID : **MW-15-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/07/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Base/Neutral & Acid				11/16/00	11/09/00	PF	8270C 3510C
QC Batch	**P06008**						
Dilution Factor	**1**						
Acenaphthene	ND	ug/L	2.00				
Acenaphthylene	ND	ug/L	2.00				
Anthracene	ND	ug/L	2.00				
Benzo(a)anthracene	ND	ug/L	2.00				
Benzo(b)fluoranthene	ND	ug/L	2.00				
Benzo(k)fluoranthene	ND	ug/L	2.00				
Benzo(g,h,i)perylene	ND	ug/L	2.00				
Benzo(a)pyrene	ND	ug/L	2.00				
Benzoic Acid	ND	ug/L	50.0				
Benzyl Alcohol	ND	ug/L	10.0				
[redacted](2-chloroethoxy)methane	ND	ug/L	5.00				
[redacted](2-chloroethyl)ether	ND	ug/L	5.00				
Bis(2-chloroisopropyl)ether	ND	ug/L	5.00				
Bis(2-ethylhexyl)phthalate	ND	ug/L	10.0				
4-Bromophenyl phenyl ether	ND	ug/L	5 00				
Butyl benzyl phthalate	ND	ug/L	5.00				
4-Chloroaniline	ND	ug/L	5.00				
2-Chloronaphthalene	ND	ug/L	5.00				
4-Chloro-3-methylphenol	ND	ug/L	5.00				
2-Chlorophenol	ND	ug/L	5 00				
4-Chlorophenyl phenyl ether	ND	ug/L	5.00				
Chrysene	ND	ug/L	2.00				
Dibenzo(a,h)anthracene	ND	ug/L	2.00				
Dibenzofuran	ND	ug/L	5.00				
Di-n-butyl phthalate	ND	ug/L	5.00				
3,3'-Dichlorobenzidine	ND	ug/L	10.0				
2,4-Dichlorophenol	ND	ug/L	5.00				
Diethyl phthalate	ND	ug/L	5.00				
2,4-Dimethylphenol	ND	ug/L	5.00				
Dimethyl phthalate	ND	ug/L	5.00				
4,6-Dinitro-2-methylphenol	ND	ug/L	10.0				
2,4-Dinitrophenol	ND	ug/L	50.0				
2,4-Dinitrotoluene	ND	ug/L	5.00				
2,6-Dinitrotoluene	ND	ug/L	5.00				
Di-n-octyl phthalate	ND	ug/L	5.00				
Fluoranthene	ND	ug/L	2.00				
Fluorene	ND	ug/L	2.00				
Hexachlorobenzene	ND	ug/L	5.00				
Hexachlorobutadiene	ND	ug/L	5.00				
Hexachlorocyclopentadiene	ND	ug/L	5.00				
Hexachloroethane	ND	ug/L	5.00				
[redacted]eno(1,2,3-cd)pyrene	ND	ug/L	2 00				
[redacted]phorone	ND	ug/L	5.00				
2-Methylnaphthalene	ND	ug/L	2.00				
2-Methylphenol (o-cresol)	ND	ug/L	5.00				

000107

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

613 360

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

FID #

Date Arrived **11/08/00**
ETC Order Number **0011216**

ETC Lab ID **0011216-03**
Field ID : **MW-15-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/07/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Base/Neutral & Acid				11/16/00		PF	8270C
					11/09/00		3510C
4-Methylphenol (p-cresol)	ND	ug/L	5.00				
Naphthalene	ND	ug/L	2.00				
Nitrobenzene	ND	ug/L	5.00				
2-Nitroaniline	ND	ug/L	5.00				
3-Nitroaniline	ND	ug/L	10.0				
4-Nitroaniline	ND	ug/L	5.00				
2-Nitrophenol	ND	ug/L	5.00				
4-Nitrophenol	ND	ug/L	5.00				
N-Nitrosodiphenylamine	ND	ug/L	5.00				
N-Nitrosodipropylamine	ND	ug/L	5.00				
Pentachlorophenol	ND	ug/L	10.0				
Phenanthrene	ND	ug/L	2.00				
Phenol	ND	ug/L	5.00				
Pyrene	ND	ug/L	2.00				
2,4,5-Trichlorphenol	ND	ug/L	5.00				
2,4,6-Trichlorophenol	ND	ug/L	5.00				

Surrogate Standard	% Recovery	QC Limits	
S1 - Nitrobenzene-d5	63	29	110
S2 - 2-Fluorobiphenyl	65	38	107
S3 - 4-Terphenyl-d14	58	33	122
S4 - Phenol-d6	26	7	58
S5 - 2,4,6-Tribromophenol	78	16	138
S6 - 2-Fluorophenol	42	8	88

CS
Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

FORM 1
BNA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

0011-216-3

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-216

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 970.0 (g/mL) ML Lab File ID: 1401014

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/16/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	23.69	5.91	J
2.					
3.					
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ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 362

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

FID #

Date Arrived **11/08/00**
ETC Order Number **0011216**

ETC Lab ID **0011216-04**
Field ID : **MW-58-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/07/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Base/Neutral & Acid				11/16/00	11/09/00	PF	8270C 3510C
QC Batch	**P06008**						
Dilution Factor	1						
Acenaphthene	ND	ug/L	2.00				
Acenaphthylene	ND	ug/L	2.00				
Anthracene	ND	ug/L	2.00				
Benzo(a)anthracene	ND	ug/L	2.00				
Benzo(b)fluoranthene	ND	ug/L	2.00				
Benzo(k)fluoranthene	ND	ug/L	2 00				
Benzo(g,h,ı)perylene	ND	ug/L	2.00				
Benzo(a)pyrene	ND	ug/L	2.00				
Benzoıc Acid	ND	ug/L	50.0				
Benzyl Alcohol	ND	ug/L	10.0				
Bıs(2-chloroethoxy)methane	ND	ug/L	5.00				
Bıs(2-chloroethyl)ether	ND	ug/L	5.00				
Bıs(2-chloroısopropyl)ether	ND	ug/L	5.00				
Bis(2-ethylhexyl)phthalate	ND	ug/L	10.0				
4-Bromophenyl phenyl ether	ND	ug/L	5 00				
Butyl benzyl phthalate	ND	ug/L	5.00				
4-Chloroaniline	ND	ug/L	5.00				
2-Chloronaphthalene	ND	ug/L	5.00				
4-Chloro-3-methylphenol	ND	ug/L	5.00				
2-Chlorophenol	ND	ug/L	5.00				
4-Chlorophenyl phenyl ether	ND	ug/L	5.00				
Chrysene	ND	ug/L	2.00				
Dıbenzo(a,h)anthracene	ND	ug/L	2.00				
Dibenzofuran	ND	ug/L	5.00				
Di-n-butyl phthalate	ND	ug/L	5.00				
3,3'-Dıchlorobenzıdıne	ND	ug/L	10.0				
2,4-Dichlorophenol	ND	ug/L	5.00				
Dıethyl phthalate	ND	ug/L	5.00				
2,4-Dımethylphenol	ND	ug/L	5 00				
Dımethyl phthalate	ND	ug/L	5.00				
4,6-Dınitro-2-methylphenol	ND	ug/L	10.0				
2,4-Dınitrophenol	ND	ug/L	50.0				
2,4-Dinitrotoluene	ND	ug/L	5.00				
2,6-Dınitrotoluene	ND	ug/L	5.00				
Dı-n-octyl phthalate	ND	ug/L	5.00				
Fluoranthene	ND	ug/L	2.00				
Fluorene	ND	ug/L	2.00				
Hexachlorobenzene	ND	ug/L	5 00				
Hexachlorobutadıene	ND	ug/L	5.00				
Hexachlorocyclopentadıene	ND	ug/L	5.00				
Hexachloroethane	ND	ug/L	5.00				
Indeno(1,2,3-cd)pyrene	ND	ug/L	2.00				
Isophorone	ND	ug/L	5.00				
2-Methylnaphthalene	ND	ug/L	2.00				
2-Methylphenol (o-cresol)	ND	ug/L	5.00				

000110

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

FID #

Date Arrived **11/08/00**
ETC Order Number **0011216**

ETC Lab ID **0011216-04**
Field ID : **MW-58-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/07/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Base/Neutral & Acid				11/16/00		PF	8270C
					11/09/00		3510C
4-Methylphenol (p-cresol)	ND	ug/L	5.00				
Naphthalene	ND	ug/L	2.00				
Nitrobenzene	ND	ug/L	5.00				
2-Nitroaniline	ND	ug/L	5.00				
3-Nitroaniline	ND	ug/L	10.0				
4-Nitroaniline	ND	ug/L	5.00				
2-Nitrophenol	ND	ug/L	5.00				
4-Nitrophenol	ND	ug/L	5.00				
N-Nitrosodiphenylamine	ND	ug/L	5.00				
N-Nitrosodipropylamine	ND	ug/L	5.00				
Pentachlorophenol	ND	ug/L	10.0				
Phenanthrene	ND	ug/L	2 00				
[redacted]henol	ND	ug/L	5.00				
[redacted]rene	ND	ug/L	2.00				
2,4,5-Trichlorphenol	ND	ug/L	5 00				
2,4,6-Trichlorophenol	ND	ug/L	5.00				

Surrogate Standard	% Recovery	QC Limits	
S1 - Nitrobenzene-d5	64	29	110
S2 - 2-Fluorobiphenyl	70	38	107
S3 - 4-Terphenyl-d14	61	33	122
S4 - Phenol-d6	26	7	58
S5 - 2,4,6-Tribromophenol	81	16	138
S6 - 2-Fluorophenol	44	8	88

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

FORM 1

BNA-GCMS ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

613 364

CLIENT SAMPLE NO.

0011-216-4

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-216

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 1501015

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/16/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

Number TICs found: 15

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	3083-25-8	OXIRANE, (2,2,2-TRICHLOROETH	4.85	4.30	NJ
2.	314-40-9	BROMACIL	13.00	7.23	NJ
3.	629-94-7	HENEICOSANE	18.85	5.07	NJ
4.	124-18-5	DECANE	20.22	8.70	NJ
5.		UNKNOWN	20.28	9.38	J
6.		UNKNOWN	20.30	6.84	J
7.		UNKNOWN	20.36	20.85	J
8.		UNKNOWN	20.42	27.43	J
9.		UNKNOWN	20.48	36.14	J
10.	56652-39-2	3-HYDROXY-2-METHYLGLUTARIC A	20.62	141.9	NJ
11.		UNKNOWN	20.69	88.26	J
12.	126-53-4	TRINONANOIN	20.71	118.3	NJ
13.	540-08-9	9-HEPTADECANONE	23.75	113.3	NJ
14.		UNKNOWN	23.80	27.14	J
15.	629-62-9	PENTADECANE	23.85	127.3	NJ
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ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

FID #

Date Arrived **11/08/00**
ETC Order Number **0011216**

ETC Lab ID **0011216-05**
Field ID : **MW-56-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/07/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Base/Neutral & Acid				11/17/00	11/09/00	PF	8270C 3510C
QC Batch	**P06008**						
Dilution Factor	**1**						
Acenaphthene	ND	ug/L	2.00				
Acenaphthylene	ND	ug/L	2.00				
Anthracene	ND	ug/L	2 00				
Benzo(a)anthracene	ND	ug/L	2 00				
Benzo(b)fluoranthene	ND	ug/L	2.00				
Benzo(k)fluoranthene	ND	ug/L	2.00				
Benzo(g,h,i)perylene	ND	ug/L	2.00				
Benzo(a)pyrene	ND	ug/L	2.00				
Benzoic Acid	ND	ug/L	50.0				
Benzyl Alcohol	ND	ug/L	10.0				
[redacted](2-chloroethoxy)methane	ND	ug/L	5.00				
[redacted](2-chloroethyl)ether	ND	ug/L	5.00				
Bis(2-chloroisopropyl)ether	ND	ug/L	5.00				
Bis(2-ethylhexyl)phthalate	ND	ug/L	10.0				
4-Bromophenyl phenyl ether	ND	ug/L	5.00				
Butyl benzyl phthalate	ND	ug/L	5.00				
4-Chloroaniline	ND	ug/L	5 00				
2-Chloronaphthalene	ND	ug/L	5.00				
4-Chloro-3-methylphenol	ND	ug/L	5.00				
2-Chlorophenol	ND	ug/L	5.00				
4-Chlorophenyl phenyl ether	ND	ug/L	5.00				
Chrysene	ND	ug/L	2 00				
Dibenzo(a,h)anthracene	ND	ug/L	2.00				
Dibenzofuran	ND	ug/L	5.00				
Di-n-butyl phthalate	ND	ug/L	5.00				
3,3'-Dichlorobenzidine	ND	ug/L	10.0				
2,4-Dichlorophenol	ND	ug/L	5.00				
Diethyl phthalate	ND	ug/L	5.00				
2,4-Dimethylphenol	ND	ug/L	5.00				
Dimethyl phthalate	ND	ug/L	5.00				
4,6-Dinitro-2-methylphenol	ND	ug/L	10.0				
2,4-Dinitrophenol	ND	ug/L	50.0				
2,4-Dinitrotoluene	ND	ug/L	5.00				
2,6-Dinitrotoluene	ND	ug/L	5.00				
Di-n-octyl phthalate	ND	ug/L	5.00				
Fluoranthene	ND	ug/L	2.00				
Fluorene	ND	ug/L	2 00				
Hexachlorobenzene	ND	ug/L	5 00				
Hexachlorobutadiene	ND	ug/L	5.00				
Hexachlorocyclopentadiene	ND	ug/L	5.00				
Hexachloroethane	ND	ug/L	5 00				
[redacted]eno(1,2,3-cd)pyrene	ND	ug/L	2 00				
[redacted]phorone	ND	ug/L	5.00				
2-Methylnaphthalene	ND	ug/L	2.00				
2-Methylphenol (o-cresol)	ND	ug/L	5.00				

CS

000113

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 366

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

FID #

Date Arrived **11/08/00**
ETC Order Number **0011216**

ETC Lab ID **0011216-05**
Field ID : **MW-56-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/07/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Base/Neutral & Acid				11/17/00	11/09/00	PF	8270C 3510C
4-Methylphenol (p-cresol)	ND	ug/L	5.00				
Naphthalene	ND	ug/L	2.00				
Nitrobenzene	ND	ug/L	5.00				
2-Nitroaniline	ND	ug/L	5.00				
3-Nitroaniline	ND	ug/L	10.0				
4-Nitroaniline	ND	ug/L	5 00				
2-Nitrophenol	ND	ug/L	5.00				
4-Nitrophenol	ND	ug/L	5.00				
N-Nitrosodiphenylamine	ND	ug/L	5.00				
N-Nitrosodipropylamine	ND	ug/L	5.00				
Pentachlorophenol	ND	ug/L	10.0				
Phenanthrene	ND	ug/L	2.00				
Phenol	ND	ug/L	5.00				
Pyrene	ND	ug/L	2.00				
2,4,5-Trichlorphenol	ND	ug/L	5.00				
2,4,6-Trichlorophenol	ND	ug/L	5.00				

Surrogate Standard	% Recovery	QC Limits	
S1 - Nitrobenzene-d5	63	29	110
S2 - 2-Fluorobiphenyl	59	38	107
S3 - 4-Terphenyl-d14	48	33	122
S4 - Phenol-d6	26	7	58
S5 - 2,4,6-Tribromophenol	81	16	138
S6 - 2-Fluorophenol	39	8	88

000114

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Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

FORM 1
BNA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

0011-216-5

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-216

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 980.0 (g/mL) ML Lab File ID: 1601016

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/17/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

Number TICs found: 11

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	542-85-8	ETHANE, ISOTHIOCYANATO-	5.12	5.30	NJ
2.	120-82-1	BENZENE, 1,2,4-TRICHLORO-	6.13	8.97	NJ
3.	314-40-9	BROMACIL	13.00	5.46	NJ
4.	103-44-6	HEPTANE, 3-[(ETHENYLOXY)METH	20.30	11.04	NJ
5.	126-53-4	TRINONANOIN	20.56	16.06	NJ
6.		UNKNOWN	20.63	4.49	J
7.	2876-53-1	NAPHTHALENE, 1-HEXYL-	20.99	53.74	NJ
8.	126-53-4	TRINONANOIN	21.10	126.5	NJ
9.	2876-53-1	NAPHTHALENE, 1-HEXYL-	21.30	429.5	NJ
10.	50591-13-4	2(1H)-PYRIMIDINONE, 1-(2-DEO	21.46	55.57	NJ
11.	126-53-4	TRINONANOIN	21.54	279.7	NJ
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ENVIRONMENTAL TESTING & CONSULTING, INC.

613 368

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

FID #

Date Arrived **11/08/00**
ETC Order Number **0011216**

ETC Lab ID **0011216-06**
Field ID : **MW-54-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/07/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Base/Neutral & Acid				11/17/00		PF	8270C
					11/09/00		3510C
QC Batch	**P06008**						
Dilution Factor	**1**						
Acenaphthene	ND	ug/L	2.00				
Acenaphthylene	ND	ug/L	2.00				
Anthracene	ND	ug/L	2.00				
Benzo(a)anthracene	ND	ug/L	2.00				
Benzo(b)fluoranthene	ND	ug/L	2.00				
Benzo(k)fluoranthene	ND	ug/L	2.00				
Benzo(g,h,i)perylene	ND	ug/L	2.00				
Benzo(a)pyrene	ND	ug/L	2.00				
Benzoic Acid	ND	ug/L	50.0				
Benzyl Alcohol	ND	ug/L	10.0				
Bis(2-chloroethoxy)methane	ND	ug/L	5 00				
Bis(2-chloroethyl)ether	ND	ug/L	5 00				
Bis(2-chloroisopropyl)ether	ND	ug/L	5 00				
Bis(2-ethylhexyl)phthalate	ND	ug/L	10.0				
4-Bromophenyl phenyl ether	ND	ug/L	5.00				
Butyl benzyl phthalate	ND	ug/L	5.00				
4-Chloroaniline	ND	ug/L	5 00				
2-Chloronaphthalene	ND	ug/L	5.00				
4-Chloro-3-methylphenol	ND	ug/L	5.00				
2-Chlorophenol	ND	ug/L	5.00				
4-Chlorophenyl phenyl ether	ND	ug/L	5 00				
Chrysene	ND	ug/L	2 00				
Dibenzo(a,h)anthracene	ND	ug/L	2.00				
Dibenzofuran	ND	ug/L	5 00				
Di-n-butyl phthalate	ND	ug/L	5 00				
3,3'-Dichlorobenzidine	ND	ug/L	10.0				
2,4-Dichlorophenol	ND	ug/L	5.00				
Diethyl phthalate	ND	ug/L	5 00				
2,4-Dimethylphenol	ND	ug/L	5.00				
Dimethyl phthalate	ND	ug/L	5.00				
4,6-Dinitro-2-methylphenol	ND	ug/L	10.0				
2,4-Dinitrophenol	ND	ug/L	50.0				
2,4-Dinitrotoluene	ND	ug/L	5.00				
2,6-Dinitrotoluene	ND	ug/L	5.00				
Di-n-octyl phthalate	ND	ug/L	5.00				
Fluoranthene	ND	ug/L	2.00				
Fluorene	ND	ug/L	2.00				
Hexachlorobenzene	ND	ug/L	5.00				
Hexachlorobutadiene	ND	ug/L	5 00				
Hexachlorocyclopentadiene	ND	ug/L	5.00				
Hexachloroethane	ND	ug/L	5.00				
Indeno(1,2,3-cd)pyrene	ND	ug/L	2.00				
Isophorone	ND	ug/L	5 00				
2-Methylnaphthalene	ND	ug/L	2.00				
2-Methylphenol (o-cresol)	ND	ug/L	5.00				

cs

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

FID #

Date Arrived **11/08/00**
ETC Order Number **0011216**

ETC Lab ID **0011216-06**
Field ID : **MW-54-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/07/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Base/Neutral & Acid				11/17/00	11/09/00	PF	8270C 3510C
4-Methylphenol (p-cresol)	ND	ug/L	5.00				
Naphthalene	ND	ug/L	2.00				
Nitrobenzene	ND	ug/L	5.00				
2-Nitroaniline	ND	ug/L	5.00				
3-Nitroaniline	ND	ug/L	10.0				
4-Nitroaniline	ND	ug/L	5.00				
2-Nitrophenol	ND	ug/L	5 00				
4-Nitrophenol	ND	ug/L	5.00				
N-Nitrosodiphenylamine	ND	ug/L	5.00				
N-Nitrosodipropylamine	ND	ug/L	5.00				
Pentachlorophenol	ND	ug/L	10.0				
Phenanthrene	ND	ug/L	2.00				
[redacted]enol	ND	ug/L	5 00				
[redacted]rene	ND	ug/L	2 00				
2,4,5-Trichlorphenol	ND	ug/L	5.00				
2,4,6-Trichlorophenol	ND	ug/L	5 00				

Surrogate Standard	% Recovery	QC Limits	
S1 - Nitrobenzene-d5	71	29	110
S2 - 2-Fluorobiphenyl	72	38	107
S3 - 4-Terphenyl-d14	77	33	122
S4 - Phenol-d6	30	7	58
S5 - 2,4,6-Tribromophenol	93	16	138
S6 - 2-Fluorophenol	43	8	88

CS
Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

613 370

FORM 1
BNA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

0011-216-6

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-216

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 930.0 (g/mL) ML Lab File ID: 1701017

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/17/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	314-40-9	BROMACIL	13.03	14.18	NJ
2.					
3.					
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ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

FID #

Date Arrived **11/08/00**
ETC Order Number **0011216**

ETC Lab ID **0011216-07**
Field ID : **MW-31-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/07/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Base/Neutral & Acid				11/17/00	11/09/00	PF	8270C 3510C
QC Batch	**P06008**						
Dilution Factor	**1**						
Acenaphthene	ND	ug/L	2 00				
Acenaphthylene	ND	ug/L	2.00				
Anthracene	ND	ug/L	2.00				
Benzo(a)anthracene	ND	ug/L	2.00				
Benzo(b)fluoranthene	ND	ug/L	2.00				
Benzo(k)fluoranthene	ND	ug/L	2.00				
Benzo(g,h,i)perylene	ND	ug/L	2.00				
Benzo(a)pyrene	ND	ug/L	2.00				
Benzoic Acid	ND	ug/L	50.0				
Benzyl Alcohol	ND	ug/L	10.0				
[redacted](2-chloroethoxy)methane	ND	ug/L	5.00				
[redacted](2-chloroethyl)ether	ND	ug/L	5 00				
Bis(2-chloroisopropyl)ether	ND	ug/L	5 00				
Bis(2-ethylhexyl)phthalate	ND	ug/L	10.0				
4-Bromophenyl phenyl ether	ND	ug/L	5.00				
Butyl benzyl phthalate	ND	ug/L	5.00				
4-Chloroaniline	ND	ug/L	5.00				
2-Chloronaphthalene	ND	ug/L	5.00				
4-Chloro-3-methylphenol	ND	ug/L	5.00				
2-Chlorophenol	ND	ug/L	5.00				
4-Chlorophenyl phenyl ether	ND	ug/L	5.00				
Chrysene	ND	ug/L	2.00				
Dibenzo(a,h)anthracene	ND	ug/L	2.00				
Dibenzofuran	ND	ug/L	5.00				
Di-n-butyl phthalate	ND	ug/L	5.00				
3,3'-Dichlorobenzidine	ND	ug/L	10.0				
2,4-Dichlorophenol	ND	ug/L	5.00				
Diethyl phthalate	ND	ug/L	5.00				
2,4-Dimethylphenol	ND	ug/L	5.00				
Dimethyl phthalate	ND	ug/L	5.00				
4,6-Dinitro-2-methylphenol	ND	ug/L	10.0				
2,4-Dinitrophenol	ND	ug/L	50.0				
2,4-Dinitrotoluene	ND	ug/L	5.00				
2,6-Dinitrotoluene	ND	ug/L	5.00				
Di-n-octyl phthalate	ND	ug/L	5.00				
Fluoranthene	ND	ug/L	2.00				
Fluorene	ND	ug/L	2 00				
Hexachlorobenzene	ND	ug/L	5.00				
Hexachlorobutadiene	ND	ug/L	5 00				
Hexachlorocyclopentadiene	ND	ug/L	5 00				
Hexachloroethane	ND	ug/L	5.00				
[redacted]eno(1,2,3-cd)pyrene	ND	ug/L	2.00				
[redacted]phorone	ND	ug/L	5.00				
2-Methylnaphthalene	ND	ug/L	2.00				
2-Methylphenol (o-cresol)	ND	ug/L	5.00				

CS
Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 372

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

FID #

Date Arrived **11/08/00**
ETC Order Number **0011216**

ETC Lab ID **0011216-07**
Field ID : **MW-31-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/07/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Base/Neutral & Acid				11/17/00		PF	8270C
					11/09/00		3510C
4-Methylphenol (p-cresol)	ND	ug/L	5 00				
Naphthalene	ND	ug/L	2.00				
Nitrobenzene	ND	ug/L	5.00				
2-Nitroaniline	ND	ug/L	5.00				
3-Nitroaniline	ND	ug/L	10.0				
4-Nitroaniline	ND	ug/L	5.00				
2-Nitrophenol	ND	ug/L	5.00				
4-Nitrophenol	ND	ug/L	5.00				
N-Nitrosodiphenylamine	ND	ug/L	5.00				
N-Nitrosodipropylamine	ND	ug/L	5 00				
Pentachlorophenol	ND	ug/L	10.0				
Phenanthrene	ND	ug/L	2.00				
Phenol	ND	ug/L	5.00				
Pyrene	ND	ug/L	2.00				
2,4,5-Trichlorphenol	ND	ug/L	5 00				
2,4,6-Trichlorophenol	ND	ug/L	5.00				

Surrogate Standard	% Recovery	QC Limits	
S1 - Nitrobenzene-d5	60	29	110
S2 - 2-Fluorobiphenyl	60	38	107
S3 - 4-Terphenyl-d14	77	33	122
S4 - Phenol-d6	26	7	58
S5 - 2,4,6-Tribromophenol	87	16	138
S6 - 2-Fluorophenol	38	8	88

000120

CS

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

FORM 1
BNA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

0011-216-7

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-216

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 980.0 (g/mL) ML Lab File ID: 1801018

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/17/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
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27.					
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30.					

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 374

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

FID #

Date Arrived **11/08/00**
ETC Order Number **0011216**

ETC Lab ID **0011216-08**
Field ID : **MW-30-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/07/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Base/Neutral & Acid				11/17/00		PF	8270C
					11/09/00		3510C
QC Batch	**P06008**						
Dilution Factor	**1**						
Acenaphthene	ND	ug/L	2.00				
Acenaphthylene	ND	ug/L	2.00				
Anthracene	ND	ug/L	2.00				
Benzo(a)anthracene	ND	ug/L	2.00				
Benzo(b)fluoranthene	ND	ug/L	2.00				
Benzo(k)fluoranthene	ND	ug/L	2.00				
Benzo(g,h,i)perylene	ND	ug/L	2.00				
Benzo(a)pyrene	ND	ug/L	2.00				
Benzoic Acid	ND	ug/L	50 0				
Benzyl Alcohol	ND	ug/L	10.0				
Bis(2-chloroethoxy)methane	ND	ug/L	5.00				
Bis(2-chloroethyl)ether	ND	ug/L	5.00				
Bis(2-chloroisopropyl)ether	ND	ug/L	5.00				
Bis(2-ethylhexyl)phthalate	ND	ug/L	10.0				
4-Bromophenyl phenyl ether	ND	ug/L	5.00				
Butyl benzyl phthalate	ND	ug/L	5 00				
4-Chloroaniline	ND	ug/L	5.00				
2-Chloronaphthalene	ND	ug/L	5.00				
4-Chloro-3-methylphenol	ND	ug/L	5.00				
2-Chlorophenol	ND	ug/L	5 00				
4-Chlorophenyl phenyl ether	ND	ug/L	5.00				
Chrysene	ND	ug/L	2 00				
Dibenzo(a,h)anthracene	ND	ug/L	2.00				
Dibenzofuran	ND	ug/L	5.00				
Di-n-butyl phthalate	ND	ug/L	5.00				
3,3'-Dichlorobenzidine	ND	ug/L	10 0				
2,4-Dichlorophenol	ND	ug/L	5.00				
Diethyl phthalate	ND	ug/L	5.00				
2,4-Dimethylphenol	ND	ug/L	5.00				
Dimethyl phthalate	ND	ug/L	5.00				
4,6-Dinitro-2-methylphenol	ND	ug/L	10.0				
2,4-Dinitrophenol	ND	ug/L	50.0				
2,4-Dinitrotoluene	ND	ug/L	5.00				
2,6-Dinitrotoluene	ND	ug/L	5.00				
Di-n-octyl phthalate	ND	ug/L	5.00				
Fluoranthene	ND	ug/L	2 00				
Fluorene	ND	ug/L	2.00				
Hexachlorobenzene	ND	ug/L	5 00				
Hexachlorobutadiene	ND	ug/L	5.00				
Hexachlorocyclopentadiene	ND	ug/L	5.00				
Hexachloroethane	ND	ug/L	5.00				
Indeno(1,2,3-cd)pyrene	ND	ug/L	2.00				
Isophorone	ND	ug/L	5.00				
2-Methylnaphthalene	ND	ug/L	2.00				
2-Methylphenol (o-cresol)	ND	ug/L	5.00				

CS
Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

FID #

Date Arrived **11/08/00**
ETC Order Number **0011216**

ETC Lab ID **0011216-08**
Field ID : **MW-30-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/07/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Base/Neutral & Acid				11/17/00	11/09/00	PF	8270C 3510C
4-Methylphenol (p-cresol)	ND	ug/L	5.00				
Naphthalene	ND	ug/L	2 00				
Nitrobenzene	ND	ug/L	5.00				
2-Nitroaniline	ND	ug/L	5 00				
3-Nitroaniline	ND	ug/L	10.0				
4-Nitroaniline	ND	ug/L	5.00				
2-Nitrophenol	ND	ug/L	5.00				
4-Nitrophenol	ND	ug/L	5.00				
N-Nitrosodiphenylamine	ND	ug/L	5.00				
N-Nitrosodipropylamine	ND	ug/L	5.00				
Pentachlorophenol	ND	ug/L	10.0				
Phenanthrene	ND	ug/L	2.00				
[redacted]nol	ND	ug/L	5 00				
[redacted]ene	ND	ug/L	2.00				
2,4,5-Trichlorphenol	ND	ug/L	5 00				
2,4,6-Trichlorophenol	ND	ug/L	5.00				

Surrogate Standard	% Recovery	QC Limits	
S1 - Nitrobenzene-d5	64	29	110
S2 - 2-Fluorobiphenyl	58	38	107
S3 - 4-Terphenyl-d14	80	33	122
S4 - Phenol-d6	29	7	58
S5 - 2,4,6-Tribromophenol	86	16	138
S6 - 2-Fluorophenol	42	8	88

CS
Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

613 376

FORM 1
BNA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

0011-216-8

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-216

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 940.0 (g/mL) ML Lab File ID: 1901019

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/17/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
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ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

FID #

Date Arrived **11/08/00**
ETC Order Number **0011216**

ETC Lab ID **0011216-09**
Field ID : **MW-34-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/07/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Base/Neutral & Acid				11/17/00	11/09/00	PF	8270C 3510C
QC Batch	**P06008**						
Dilution Factor	**1**						
Acenaphthene	ND	ug/L	2.00				
Acenaphthylene	ND	ug/L	2.00				
Anthracene	ND	ug/L	2.00				
Benzo(a)anthracene	ND	ug/L	2.00				
Benzo(b)fluoranthene	ND	ug/L	2.00				
Benzo(k)fluoranthene	ND	ug/L	2.00				
Benzo(g,h,i)perylene	ND	ug/L	2.00				
Benzo(a)pyrene	ND	ug/L	2.00				
Benzoic Acid	ND	ug/L	50.0				
Benzyl Alcohol	ND	ug/L	10.0				
[redacted](2-chloroethoxy)methane	ND	ug/L	5 00				
[redacted](2-chloroethyl)ether	ND	ug/L	5 00				
Bis(2-chloroisopropyl)ether	ND	ug/L	5.00				
Bis(2-ethylhexyl)phthalate	ND	ug/L	10.0				
4-Bromophenyl phenyl ether	ND	ug/L	5.00				
Butyl benzyl phthalate	ND	ug/L	5.00				
4-Chloroaniline	ND	ug/L	5 00				
2-Chloronaphthalene	ND	ug/L	5.00				
4-Chloro-3-methylphenol	ND	ug/L	5.00				
2-Chlorophenol	ND	ug/L	5.00				
4-Chlorophenyl phenyl ether	ND	ug/L	5.00				
Chrysene	ND	ug/L	2 00				
Dibenzo(a,h)anthracene	ND	ug/L	2.00				
Dibenzofuran	ND	ug/L	5.00				
Di-n-butyl phthalate	ND	ug/L	5.00				
3,3'-Dichlorobenzidine	ND	ug/L	10.0				
2,4-Dichlorophenol	ND	ug/L	5.00				
Diethyl phthalate	ND	ug/L	5.00				
2,4-Dimethylphenol	ND	ug/L	5.00				
Dimethyl phthalate	ND	ug/L	5.00				
4,6-Dinitro-2-methylphenol	ND	ug/L	10.0				
2,4-Dinitrophenol	ND	ug/L	50.0				
2,4-Dinitrotoluene	ND	ug/L	5 00				
2,6-Dinitrotoluene	ND	ug/L	5.00				
Di-n-octyl phthalate	ND	ug/L	5.00				
Fluoranthene	ND	ug/L	2 00				
Fluorene	ND	ug/L	2 00				
Hexachlorobenzene	ND	ug/L	5 00				
Hexachlorobutadiene	ND	ug/L	5.00				
Hexachlorocyclopentadiene	ND	ug/L	5.00				
Hexachloroethane	ND	ug/L	5.00				
[redacted]eno(1,2,3-cd)pyrene	ND	ug/L	2.00				
[redacted]phorone	ND	ug/L	5.00				
2-Methylnaphthalene	ND	ug/L	2.00				
2-Methylphenol (o-cresol)	ND	ug/L	5.00				

CJ
Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 378

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

FID #

Date Arrived **11/08/00**
ETC Order Number **0011216**

ETC Lab ID **0011216-09**
Field ID : **MW-34-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/07/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Base/Neutral & Acid				11/17/00	11/09/00	PF	8270C 3510C
4-Methylphenol (p-cresol)	ND	ug/L	5.00				
Naphthalene	ND	ug/L	2.00				
Nitrobenzene	ND	ug/L	5.00				
2-Nitroaniline	ND	ug/L	5.00				
3-Nitroaniline	ND	ug/L	10.0				
4-Nitroaniline	ND	ug/L	5.00				
2-Nitrophenol	ND	ug/L	5.00				
4-Nitrophenol	ND	ug/L	5.00				
N-Nitrosodiphenylamine	ND	ug/L	5 00				
N-Nitrosodipropylamine	ND	ug/L	5.00				
Pentachlorophenol	ND	ug/L	10.0				
Phenanthrene	ND	ug/L	2.00				
Phenol	ND	ug/L	5.00				
Pyrene	ND	ug/L	2.00				
2,4,5-Trichlorphenol	ND	ug/L	5 00				
2,4,6-Trichlorophenol	ND	ug/L	5.00				

Surrogate Standard	% Recovery	QC Limits	
S1 - Nitrobenzene-d5	67	29	110
S2 - 2-Fluorobiphenyl	66	38	107
S3 - 4-Terphenyl-d14	79	33	122
S4 - Phenol-d6	27	7	58
S5 - 2,4,6-Tribromophenol	86	16	138
S6 - 2-Fluorophenol	40	8	88

CS
Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

FORM 1
BNA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

0011-216-9

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-216

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 970.0 (g/mL) ML Lab File ID: 2001020

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/17/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

Number TICs found: 3

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	4359-46-0	1,3-DIOXOLANE, 2-ETHYL-4-MET	5.12	5.16	NJ
2.	51050-42-1	PYRIDINE, 3,5-DICHLORO-4-MET	12.99	4.15	NJ
3.	42786-04-9	1H-1,2,4-TRIAZOL-3-AMINE, 1-	15.29	4.16	NJ
4.					
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21.					
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27.					
28.					
29.					
30.					

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 380

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

FID #

Date Arrived **11/08/00**
ETC Order Number **0011216**

ETC Lab ID **0011216-10**
Field ID : **MW-54A-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/07/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Base/Neutral & Acid				11/17/00		PF	8270C
					11/09/00		3510C
QC Batch	**P06008**						
Dilution Factor	**1**						
Acenaphthene	ND	ug/L	4.54				
Acenaphthylene	ND	ug/L	4.54				
Anthracene	ND	ug/L	4.54				
Benzo(a)anthracene	ND	ug/L	4.54				
Benzo(b)fluoranthene	ND	ug/L	4.54				
Benzo(k)fluoranthene	ND	ug/L	4 54				
Benzo(g,h,i)perylene	ND	ug/L	4 54				
Benzo(a)pyrene	ND	ug/L	4.54				
Benzoic Acid	ND	ug/L	114				
Benzyl Alcohol	ND	ug/L	22.7				
Bis(2-chloroethoxy)methane	ND	ug/L	11.4				
Bis(2-chloroethyl)ether	ND	ug/L	11.4				
Bis(2-chloroisopropyl)ether	ND	ug/L	11.4				
Bis(2-ethylhexyl)phthalate	ND	ug/L	22.7				
4-Bromophenyl phenyl ether	ND	ug/L	11 4				
Butyl benzyl phthalate	ND	ug/L	11 4				
4-Chloroaniline	ND	ug/L	11 4				
2-Chloronaphthalene	ND	ug/L	11 4				
4-Chloro-3-methylphenol	ND	ug/L	11 4				
2-Chlorophenol	ND	ug/L	11.4				
4-Chlorophenyl phenyl ether	ND	ug/L	11.4				
Chrysene	ND	ug/L	4 54				
Dibenzo(a,h)anthracene	ND	ug/L	4.54				
Dibenzofuran	ND	ug/L	11 4				
Di-n-butyl phthalate	ND	ug/L	11.4				
3,3'-Dichlorobenzidine	ND	ug/L	22.7				
2,4-Dichlorophenol	ND	ug/L	11.4				
Diethyl phthalate	ND	ug/L	11.4				
2,4-Dimethylphenol	ND	ug/L	11.4				
Dimethyl phthalate	ND	ug/L	11.4				
4,6-Dinitro-2-methylphenol	ND	ug/L	22.7				
2,4-Dinitrophenol	ND	ug/L	114				
2,4-Dinitrotoluene	ND	ug/L	11.4				
2,6-Dinitrotoluene	ND	ug/L	11.4				
Di-n-octyl phthalate	ND	ug/L	11.4				
Fluoranthene	ND	ug/L	4.54				
Fluorene	ND	ug/L	4.54				
Hexachlorobenzene	ND	ug/L	11.4				
Hexachlorobutadiene	ND	ug/L	11.4				
Hexachlorocyclopentadiene	ND	ug/L	11.4				
Hexachloroethane	ND	ug/L	11.4				
Indeno(1,2,3-cd)pyrene	ND	ug/L	4.54				
Isophorone	ND	ug/L	11.4				
2-Methylnaphthalene	ND	ug/L	4.54				
2-Methylphenol (o-cresol)	ND	ug/L	11.4				

CS
Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

FID #

Date Arrived **11/08/00**
ETC Order Number **0011216**

ETC Lab ID **0011216-10**
Field ID : **MW-54A-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/07/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Base/Neutral & Acid				11/17/00	11/09/00	PF	8270C 3510C
4-Methylphenol (p-cresol)	ND	ug/L	11.4				
Naphthalene	ND	ug/L	4.54				
Nitrobenzene	ND	ug/L	11.4				
2-Nitroaniline	ND	ug/L	11.4				
3-Nitroaniline	ND	ug/L	22.7				
4-Nitroaniline	ND	ug/L	11.4				
2-Nitrophenol	ND	ug/L	11.4				
4-Nitrophenol	ND	ug/L	11.4				
N-Nitrosodiphenylamine	ND	ug/L	11.4				
N-Nitrosodipropylamine	ND	ug/L	11.4				
Pentachlorophenol	ND	ug/L	22.7				
Phenanthrene	ND	ug/L	4.54				
[redacted]enol	ND	ug/L	11.4				
[redacted]rene	ND	ug/L	4.54				
2,4,5-Trichlorphenol	ND	ug/L	11 4				
2,4,6-Trichlorophenol	ND	ug/L	11 4				

Surrogate Standard	% Recovery	QC Limits	
S1 - Nitrobenzene-d5	72	29	110
S2 - 2-Fluorobiphenyl	71	38	107
S3 - 4-Terphenyl-d14	77	33	122
S4 - Phenol-d6	46	7	58
S5 - 2,4,6-Tribromophenol	87	16	138
S6 - 2-Fluorophenol	56	8	88

CS
Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

613 382

FORM 1
BNA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

0011-216-10

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-216

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 440.0 (g/mL) ML Lab File ID: 2101021

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/17/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	20.84	10.87	J
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
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ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

FID #

Date Arrived **11/08/00**
ETC Order Number **0011216**

ETC Lab ID **0011216-11**
Field ID : **FB-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/07/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Base/Neutral & Acid				11/17/00	11/09/00	PF	8270C 3510C
QC Batch	**P06008**						
Dilution Factor	**1**						
Acenaphthene	ND	ug/L	2.00				
Acenaphthylene	ND	ug/L	2.00				
Anthracene	ND	ug/L	2.00				
Benzo(a)anthracene	ND	ug/L	2.00				
Benzo(b)fluoranthene	ND	ug/L	2.00				
Benzo(k)fluoranthene	ND	ug/L	2 00				
Benzo(g,h,i)perylene	ND	ug/L	2.00				
Benzo(a)pyrene	ND	ug/L	2 00				
Benzoic Acid	ND	ug/L	50 0				
Benzyl Alcohol	ND	ug/L	10 0				
[redacted](2-chloroethoxy)methane	ND	ug/L	5.00				
[redacted](2-chloroethyl)ether	ND	ug/L	5.00				
Bis(2-chloroisopropyl)ether	ND	ug/L	5 00				
Bis(2-ethylhexyl)phthalate	ND	ug/L	10.0				
4-Bromophenyl phenyl ether	ND	ug/L	5 00				
Butyl benzyl phthalate	ND	ug/L	5 00				
4-Chloroaniline	ND	ug/L	5 00				
2-Chloronaphthalene	ND	ug/L	5.00				
4-Chloro-3-methylphenol	ND	ug/L	5.00				
2-Chlorophenol	ND	ug/L	5.00				
4-Chlorophenyl phenyl ether	ND	ug/L	5.00				
Chrysene	ND	ug/L	2.00				
Dibenzo(a,h)anthracene	ND	ug/L	2 00				
Dibenzofuran	ND	ug/L	5.00				
Di-n-butyl phthalate	ND	ug/L	5.00				
3,3'-Dichlorobenzidine	ND	ug/L	10.0				
2,4-Dichlorophenol	ND	ug/L	5.00				
Diethyl phthalate	ND	ug/L	5.00				
2,4-Dimethylphenol	ND	ug/L	5.00				
Dimethyl phthalate	ND	ug/L	5.00				
4,6-Dinitro-2-methylphenol	ND	ug/L	10.0				
2,4-Dinitrophenol	ND	ug/L	50.0				
2,4-Dinitrotoluene	ND	ug/L	5.00				
2,6-Dinitrotoluene	ND	ug/L	5.00				
Di-n-octyl phthalate	ND	ug/L	5.00				
Fluoranthene	ND	ug/L	2.00				
Fluorene	ND	ug/L	2.00				
Hexachlorobenzene	ND	ug/L	5.00				
Hexachlorobutadiene	ND	ug/L	5 00				
Hexachlorocyclopentadiene	ND	ug/L	5 00				
Hexachloroethane	ND	ug/L	5 00				
[redacted]eno(1,2,3-cd)pyrene	ND	ug/L	2.00				
[redacted]phorone	ND	ug/L	5.00				
2-Methylnaphthalene	ND	ug/L	2.00				
2-Methylphenol (o-cresol)	ND	ug/L	5.00				

CS
Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 384

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

FID #

Date Arrived **11/08/00**
ETC Order Number **0011216**

ETC Lab ID **0011216-11**
Field ID : **FB-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/07/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Base/Neutral & Acid				11/17/00		PF	8270C
					11/09/00		3510C
4-Methylphenol (p-cresol)	ND	ug/L	5.00				
Naphthalene	ND	ug/L	2.00				
Nitrobenzene	ND	ug/L	5 00				
2-Nitroaniline	ND	ug/L	5.00				
3-Nitroaniline	ND	ug/L	10.0				
4-Nitroaniline	ND	ug/L	5 00				
2-Nitrophenol	ND	ug/L	5.00				
4-Nitrophenol	ND	ug/L	5.00				
N-Nitrosodiphenylamine	ND	ug/L	5.00				
N-Nitrosodipropylamine	ND	ug/L	5.00				
Pentachlorophenol	ND	ug/L	10.0				
Phenanthrene	ND	ug/L	2.00				
Phenol	ND	ug/L	5.00				
Pyrene	ND	ug/L	2 00				
2,4,5-Trichlorphenol	ND	ug/L	5.00				
2,4,6-Trichlorophenol	ND	ug/L	5.00				

Surrogate Standard	% Recovery	QC Limits	
S1 - Nitrobenzene-d5	68	29	110
S2 - 2-Fluorobiphenyl	63	38	107
S3 - 4-Terphenyl-d14	81	33	122
S4 - Phenol-d6	28	7	58
S5 - 2,4,6-Tribromophenol	88	16	138
S6 - 2-Fluorophenol	42	8	88

CS
Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

FORM 1
BNA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

0011-216-11

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-216

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 2201022

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/17/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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FORM 2

WATER BNA-GCMS SURROGATE RECOVERY

613 386

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-216

	CLIENT SAMPLE NO.	S1 (NBZ) #	S2 (FBP) #	S3 (TPH) #	S4 (PHL) #	S5 (TBP) #	S6 (2FP) #	S7 #	S8 #	TOT OUT
01	P06008LB	66	61	81	28	86	41			0
02	P06008LCS	58	64	64	24	71	35			0
03	0011-216-1	48	50	38	24	58	36			0
04	0011-216-2	58	60	58	23	73	35			0
05	0011-216-3	63	65	58	26	78	42			0
06	0011-216-4	64	70	61	26	81	44			0
07	0011-216-5	63	59	48	26	81	39			0
08	0011-216-6	71	72	77	30	93	43			0
09	0011-216-7	60	60	77	26	87	38			0
10	0011-216-8	64	58	80	29	86	42			0
11	0011-216-9	67	66	79	27	86	40			0
12	0011-216-10	72	71	77	46	87	56			0
13	0011-216-11	68	63	81	28	88	42			0
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		QC LIMITS
S1 (NBZ)	= Nitrobenzene-d5	(29-110)
S2 (FBP)	= 2-Fluorobiphenyl	(38-107)
S3 (TPH)	= Terphenyl-d14	(33-122)
S4 (PHL)	= Phenol-d6	(7- 58)
S5 (TBP)	= 2,4,6-Tribromophenol	(16-138)
S6 (2FP)	= 2-Fluorophenol	(8- 88)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogate diluted out

FORM 4
BNA-GCMS METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

P06008LB

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-216

Lab File ID: 1101011 Lab Prep Batch: P06008

Instrument ID: BNA1 Date Extracted:

Matrix: (soil/water) WATER Date Analyzed: 11/15/00

Level: (low/med) LOW Time Analyzed: 1726

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

	SAMPLE NO.	TIME ANALYZED	LAB FILE ID	DATE ANALYZED
01	P06008LCS	1803	1201012	11/15/00
02	0011-091-1	1841	1301013	11/15/00
03	0011-091-1MS	2340	2101021	11/15/00
04	0011-091-1MS	0017	2201022	11/16/00
05	0011-216-1	2202	1201012	11/16/00
06	0011-216-2	2240	1301013	11/16/00
07	0011-216-3	2317	1401014	11/16/00
08	0011-216-4	2354	1501015	11/16/00
09	0011-216-5	0032	1601016	11/17/00
10	0011-216-6	0109	1701017	11/17/00
11	0011-216-7	0147	1801018	11/17/00
12	0011-216-8	0223	1901019	11/17/00
13	0011-216-9	0300	2001020	11/17/00
14	0011-216-10	0337	2101021	11/17/00
15	0011-216-11	0414	2201022	11/17/00
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COMMENTS:

FORM 1
BNA-GCMS ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

613 388

P06008LB

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-216

Matrix: (soil/water) WATER Lab Prep Batch: P06008

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 1101011

Level: (low/med) LOW . Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/15/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
83-32-9	Acenaphthene	2.00	U
208-96-8	Acenaphthylene	2.00	U
98-86-2	Acetophenone	5.00	U
62-53-3	Aniline	5.00	U
120-12-7	Anthracene	2.00	U
92-87-5	Benzidine	20.00	U
56-55-3	Benz(a)Anthracene	2.00	U
205-99-2	Benzo(b)fluoranthene	2.00	U
207-08-9	Benzo(k)fluoranthene	2.00	U
191-24-2	Benzo(ghi)perylene	2.00	U
50-32-8	Benzo(a)pyrene	2.00	U
65-85-0	Benzoic acid	50.00	U
100-51-6	Benzyl alcohol	5.00	U
111-91-1	Bis(2-chloroethoxy)methane	5.00	U
111-44-4	Bis(2-chloroethyl)ether	5.00	U
108-60-1	Bis(2-chloroisopropyl)ether	5.00	U
117-81-7	Bis(2-ethylhexyl)phthalate	1.10	J
101-55-3	4-Bromophenyl phenyl ether	5.00	U
85-68-7	Butyl benzyl phthalate	5.00	U
86-74-8	Carbazole	2.00	U
106-47-8	4-Chloroaniline	5.00	U
510-15-6	Chlorobenzilate	5.00	U
59-50-7	4-Chloro-3-methylphenol	5.00	U
91-58-7	2-Chloronaphthalene	2.00	U
95-57-8	2-Chlorophenol	5.00	U
7005-72-3	4-Chlorophenyl phenyl ether	5.00	U
218-01-9	Chrysene	2.00	U
53-70-3	Dibenz(a,h)anthracene	2.00	U
132-64-9	Dibenzofuran	5.00	U
84-74-2	Di-n-butyl phthalate	5.00	U
95-50-1	1,2-Dichlorobenzene	5.00	U
541-73-1	1,3-Dichlorobenzene	5.00	U
106-46-7	1,4-Dichlorobenzene	5.00	U

FORM 1
BNA-GCMS ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

P06008LB

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-216

Matrix: (soil/water) WATER Lab Prep Batch: P06008

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 1101011

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/15/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-94-1	3,3'-Dichlorobenzidine	10.00	U
120-83-2	2,4-Dichlorophenol	5.00	U
87-65-0	2,6-Dichlorophenol	5.00	U
84-66-2	Diethyl phthalate	5.00	U
119-93-7	3,3-Dimethylbenzidine	10.00	U
105-67-9	2,4-Dimethyphenol	5.00	U
131-11-3	Dimethyl phthalate	5.00	U
534-52-1	4,6-Dinitro-2-methylphenol	10.00	U
51-28-5	2,4-Dinitrophenol	20.00	U
121-14-2	2,4-Dinitrotoluene	5.00	U
606-20-2	2,6-Dinitrotoluene	5.00	U
122-39-4	N-Nitrsdiphylam/Diphenylamin	5.00	U
117-84-0	Di-n-octyl phthalate	5.00	U
62-50-0	Ethyl methanesulfonate	5.00	U
206-44-0	Fluoranthene	2.00	U
86-73-7	Fluorene	2.00	U
118-74-1	Hexachlorobenzene	5.00	U
87-68-3	Hexachlorobutadiene	5.00	U
77-47-4	Hexachlorocyclopentadiene	5.00	U
67-72-1	Hexachloroethane	5.00	U
193-39-5	Indeno(1,2,3-cd)pyrene	2.00	U
78-59-1	Isophorone	5.00	U
66-27-3	Methyl methanesulfonate	5.00	U
91-57-6	2-Methylnaphthalene	2.00	U
95-48-7	2-Methylphenol	5.00	U
108-39-4	3&4-Methylphenol	5.00	U
91-20-3	Naphthalene	2.00	U
88-74-4	2-Nitroaniline	10.00	U
99-09-2	3-Nitroaniline	10.00	U
100-01-6	4-Nitroaniline	10.00	U
98-95-3	Nitrobenzene	5.00	U
88-75-5	2-Nitrophenol	10.00	U
100-02-7	4-Nitrophenol	5.00	U

613 390

FORM 1
BNA-GCMS ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

P06008LB

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-216

Matrix: (soil/water) WATER Lab Prep Batch: P06008

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 1101011

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/15/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
924-16-3	N-Nitrosodibutylamine	5.00	U
55-18-5	N-Nitrosodiethylamine	5.00	U
129-00-0	N-Nitrosodimethylamine	5.00	U
621-64-7	N-Nitrosodi-n-propylamine	5.00	U
82-68-8	Pentachloronitrobenzene	10.00	U
87-86-5	Pentachlorophenol	5.00	U
62-44-2	Phenacetin	5.00	U
85-01-8	Phenanthrene	2.00	U
108-95-2	Phenol	5.00	U
129-00-0	Pyrene	2.00	U
110-86-1	Pyridine	5.00	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.00	U
58-90-2	2,3,4,6-Tetrachlorophenol	5.00	U
120-82-1	1,2,4-Trichlorobenzene	5.00	U
95-95-4	2,4,5-Trichlorophenol	5.00	U
88-06-2	2,4,6-Trichlorophenol	5.00	U
103-33-3	1,2-Dphnylhydrzine/Azobenzen	5.00	U

FORM 1
BNA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

P06008LB

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-216

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 1101011

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/15/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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FORM 3
WATER BNA-GCMS LAB CONTROL SAMPLE

613 392

Lab Name: ETC, INC. Lab Prep Batch: P06008

Lab Code: Case No.: SAS No.: SDG No.: 0011-216

Matrix Spike - Sample No.: P06008LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Acenaphthene	50.00		27.57	55	38-117
Acenaphthylene	50.00		27.78	56	37-114
Acetophenone	50.00		28.39	57	32-108
Aniline	50.00		32.03	64	16-133
Anthracene	50.00		30.93	62	34-128
Benzidine	50.00		27.21	54	22-176
Benz(a)Anthracene	50.00		28.35	57	36-127
Benzo(b)fluoranthene	50.00		29.47	59	36-131
Benzo(k)fluoranthene	50.00		29.52	59	32-132
Benzo(ghi)perylene	50.00		31.71	63	26-123
Benzo(a)pyrene	50.00		28.22	56	34-131
Benzoic acid	50.00		10.98	22	11- 58
Benzyl alcohol	50.00		26.49	53	20-109
Bis(2-chloroethoxy)meth	50.00		28.31	57	20-126
Bis(2-chloroethyl)ether	50.00		26.29	52	16-122
Bis(2-chloroisopropyl)e	50.00		28.66	57	28-108
Bis(2-ethylhexyl)phthal	50.00		26.58	53	21-162
4-Bromophenyl phenyl et	50.00		28.53	57	31-124
Butyl benzyl phthalate	50.00		27.76	56	33-142
Carbazole	50.00		32.95	66	20-147
4-Chloroaniline	50.00		30.79	62	24-127
Chlorobenzilate	50.00		28.58	57	35-118
4-Chloro-3-methylphenol	50.00		25.94	52	35-117
2-Chloronaphthalene	50.00		31.85	64	29-137
2-Chlorophenol	50.00		28.60	57	27-102
4-Chlorophenyl phenyl e	50.00		27.14	54	39-110
Chrysene	50.00		28.74	57	30-124
Dibenz(a,h)anthracene	50.00		30.89	62	27-124

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER BNA-GCMS LAB CONTROL SAMPLE

Lab Name: ETC, INC. Lab Prep Batch: P06008

Lab Code: Case No.: SAS No.: SDG No.: 0011-216

Matrix Spike - Sample No.: P06008LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Dibenzofuran	50.00		27.70	55	40-108
Di-n-butyl phthalate	50.00		32.81	66	19-158
1,2-Dichlorobenzene	50.00		25.54	51	26-100
1,3-Dichlorobenzene	50.00		25.60	51	21-102
1,4-Dichlorobenzene	50.00		25.27	50	24- 99
3,3'-Dichlorobenzidine	50.00		35.67	71	6-192
2,4-Dichlorophenol	50.00		26.74	53	32-110
2,6-Dichlorophenol	50.00		26.92	54	31-112
Diethyl phthalate	50.00		28.12	56	36-130
3,3-Dimethylbenzidine	50.00		22.17	44	6-192
2,4-Dimethyphenol	50.00		20.18	40	34-105
Dimethyl phthalate	50.00		28.93	58	34-123
4,6-Dinitro-2-methylphe	50.00		31.13	62	27-128
2,4-Dinitrophenol	50.00		27.24	54	10-132
2,4-Dinitrotoluene	50.00		28.63	57	24-147
2,6-Dinitrotoluene	50.00		28.27	56	36-125
N-NitrsdiphylAm/Dipheny	100.0		58.40	58	35-116
Di-n-octyl phthalate	50.00		32.40	65	29-136
Ethyl methanesulfonate	50.00		31.55	63	20-121
Fluoranthene	50.00		33.91	68	28-127
Fluorene	50.00		26.86	54	41-116
Hexachlorobenzene	50.00		30.04	60	18-136
Hexachlorobutadiene	50.00		23.85	48	22-109
Hexachlorocyclopentadie	50.00		23.93	48	10-102
Hexachloroethane	50.00		25.34	51	16-107
Indeno(1,2,3-cd)pyrene	50.00		32.66	65	22-126
Isophorone	50.00		26.70	53	31-116
Methyl methanesulfonate	50.00		15.44	31	15- 82

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER BNA-GCMS LAB CONTROL SAMPLE

Lab Name: ETC, INC. Lab Prep Batch: P06008

Lab Code: Case No.: SAS No.: SDG No.: 0011-216

Matrix Spike - Sample No.: P06008LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
2-Methylnaphthalene	50.00		24.92	50	34-108
2-Methylphenol	50.00		25.00	50	22- 97
3&4-Methylphenol	50.00		23.23	46	21- 96
Naphthalene	50.00		26.62	53	33-108
2-Nitroaniline	50.00		28.65	57	32-127
3-Nitroaniline	50.00		32.94	66	28-142
4-Nitroaniline	50.00		33.86	68	23-139
Nitrobenzene	50.00		26.13	52	27-117
2-Nitrophenol	50.00		27.35	55	25-114
4-Nitrophenol	50.00		28.04	56	1- 76
N-Nitrosodibutylamine	50.00		26.59	53	31-126
N-Nitrosodiethylamine	50.00		25.69	51	28-107
N-Nitrosodimethylamine	50.00		21.29	42	14- 84
N-Nitrosodi-n-propylami	50.00		28.57	57	29-114
Pentachloronitrobenzene	50.00		31.35	63	34-135
Pentachlorophenol	50.00		26.28	52	17-142
Phenacetin	50.00		33.44	67	29-141
Phenanthrene	50.00		29.72	59	40-120
Phenol	50.00		12.06	24	11- 55
Pyrene	50.00		25.08	50	20-154
Pyridine	50.00		16.92	34	10- 71
1,2,4,5-Tetrachlorobenz	50.00		29.59	59	28-110
2,3,4,6-Tetrachlorophen	50.00		29.09	58	28-118
1,2,4-Trichlorobenzene	50.00		24.80	50	23-106
2,4,5-Trichlorophenol	50.00		28.61	57	26-118
2,4,6-Trichlorophenol	50.00		31.38	63	26-115
1,2-Dphnylhydrzine/Azob	50.00		29.11	58	45-135

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 0 out of 83 outside limits

COMMENTS: _____

FORM 3
WATER BNA-GCMS MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: ETC, INC. Lab Prep Batch: P06008

Lab Code: Case No.: SAS No.: SDG No.: 0011-216

Matrix Spike - Sample No.: 0011-091-1

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
1,4-Dichlorobenzene	200.0	0.000	181.4	91	31- 97
2,4-Dinitrotoluene	200.0	0.000	320.2	160*	34-130
Hexachlorobenzene	200.0	0.000	272.9	136*	65-133
Hexachlorobutadiene	200.0	0.000	182.6	91	50-112
Hexachloroethane	200.0	0.000	171.2	86	37-100
2-Methylphenol	200.0	0.000	230.4	115	48-117
3&4-Methylphenol	200.0	0.000	461.1	230*	46- 99
Nitrobenzene	200.0	0.000	229.4	115	57-120
Pentachlorophenol	200.0	0.000	253.5	127	22-171
Pyridine	200.0	0.000	98.77	49	10- 82
2,4,5-Trichlorophenol	200.0	0.000	290.5	145	31-147
2,4,6-Trichlorophenol	200.0	0.000	271.8	136	31-147

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,4-Dichlorobenzene	200.0	244.9	122*	29*	20	31- 97
2,4-Dinitrotoluene	200.0	406.9	203*	24*	20	34-130
Hexachlorobenzene	200.0	342.6	171*	23*	20	65-133
Hexachlorobutadiene	200.0	245.5	123*	30*	20	50-112
Hexachloroethane	200.0	223.9	112*	26*	20	37-100
2-Methylphenol	200.0	276.6	138*	18	20	48-117
3&4-Methylphenol	200.0	549.6	275*	18	20	46- 99
Nitrobenzene	200.0	288.9	144*	22*	20	57-120
Pentachlorophenol	200.0	329.2	165	26*	20	22-171
Pyridine	200.0	179.0	90*	59*	20	10- 82
2,4,5-Trichlorophenol	200.0	362.6	181*	22*	20	31-147
2,4,6-Trichlorophenol	200.0	340.1	170*	22*	20	31-147

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 10 out of 12 outside limits
Spike Recovery: 14 out of 24 outside limits

COMMENTS: _____

_____

613 396

Environmental Testing & Consulting, Inc.

Login
Chain-of-Custody

613 397

CHAIN OF CUSTODY RECORD

Environmental Testing & Consulting, Inc.
2924 Walnut Grove Rd.
Memphis, TN 38111
(901)327-2750 FAX (901)327-6334

ETC Work Order : 011216

000144

Company Name	Phone # : 615 331-9232	Fax Results	
Jacobs Eng. Group (JEG)	Fax # . 615 833 8329	RUSH	
Project/Site	FID # :	Ice	
Memphis Dept	PO # :		
Project #	Matrix		
Project Manager/Contact	1 Wastewater 4 Sludge		
Craig Smith	2 Aqueous 5 Oil/Solvent		
	3 Soil/Sediment 6 Other		

Analysis Requested
(Note special detection limits or methods)

# of cont.	Sample ID/ Number	Depth	Sample Date	Sample Time	Matrix	Type Grab/Comp		VOC	Cyanide	TAL Metals							Comments
	MW-57-Y2Q4		11-07-00	940	W			3	1	1							
	MW-14-Y2Q4		11-06-00	1420	W			3	1	1							
	MW-15-Y2Q4		11-07-00	1115	W			3	1	1							
	MW-55-Y2Q4		11-07-00	1110	W			3	1	1							
	MW-56-Y2Q4		11-07-00	1130	W			3	1	1							
	MW-54-Y2Q4		11-07-00	1315	W			3	1	1							
	MW-31-Y2Q4		11-07-00	1445	W			3	1	1							
	MW-30-Y2Q4		11-07-00	1515	W			3	1	1							
	MW-34-Y2Q4		11-07-00	1530	W			3	1	1							
	MW-54A-Y2Q4		11-07-00	1315	W			3	1	1							
	FB-Y2Q4		11-07-00	1530	W			3	1	1							

Sampled By	Method of Shipment	Blank/Cooler Temp	Remarks
Ethan Litsey	drop-off	4°C (IR)	

RELINQUISHED BY (sign)	DATE	TIME	RECEIVED BY (sign)	DATE	TIME	Sample Delivery Group ID
Ethan Litsey	11-8-00	0800				
RELINQUISHED BY (sign)	DATE	TIME	RECEIVED BY (sign)	DATE	TIME	
RELINQUISHED BY (sign)	DATE	TIME	RECEIVED BY LAB (print/sign)	DATE	TIME	
				11-8-00	8:07	

Distribution . Original and Yellow accompany samples to the laboratory Pink copy for Fi[illegible]w.
Original copy returned with results. Yellow copy for ETC, Inc files.

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CHAIN OF CUSTODY RECORD

Environmental Testing & Consulting, Inc.
2924 Walnut Grove Rd.
Memphis, TN 38111
(901)327-2750 FAX (901)327-6334

ETC Work Order : 0011216

000145

Company Name	Phone # : 615 331-9232	Fax Results	
JEG	Fax # :	RUSH	
Project/Site Memphis Depot	FID # :	Ice	
Project #	PO # :		
Project Manager/Contact Craig Smith	Matrix: 1 Wastewater, 2 Aqueous, 3 Soil/Sediment, 4 Sludge, 5 Oil/Solvent, 6 Other		

# of cont.	Sample ID/ Number	Depth	Sample Date	Sample Time	Matrix	Type Grab/Comp	Analysis Requested: VOC	Comments
	TB-01		11-07-02	1630	W		3	

Sampled By	Method of Shipment	Blank/Cooler Temp	Remarks
Ethan Litsey	Drop-off	4°C (B)	

	DATE	TIME		DATE	TIME	Sample Delivery Group ID
RELINQUISHED BY (sign) Ethan Litsey	11-8-02	8:00	RECEIVED BY (sign)			
RELINQUISHED BY (sign)	DATE	TIME	RECEIVED BY (sign)	DATE	TIME	
RELINQUISHED BY (sign)	DATE	TIME	RECEIVED BY LAB (print/sign)	DATE 11-8-02	TIME 8:02	

613 398

Distribution : Original and Yellow accompany samples to the laboratory Pink copy for Field Crew.
Original copy returned with results Yellow copy for ETC, Inc. files.

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CHAIN OF CUSTODY RECORD

Environmental Testing & Consulting, Inc.
2924 Walnut Grove Rd.
Memphis, TN 38111
(901)327-2750 FAX (901)327-6334

ETC Work Order : 0011216

000146

Company Name	Phone # : 615 331-9232	Fax Results
JEG	Fax # : 615 833 8328	RUSH
Project/Site: Memphis Depot	FID # .	Ice
Project #	PO # :	
Project Manager/Contact: Craig Smith		

Matrix: 1 Wastewater, 2 Aqueous, 3 Soil/Sediment, 4 Sludge, 5 Oil/Solvent, 6 Other

Analysis Requested (Note special detection limits or methods)

# of cont.	Sample ID/ Number	Depth	Sample Date	Sample Time	Matrix	Type Grab/Comp	SVOC	Comments
	MW-58-Y204		11-07-00	1110	W		2	
	MW-56-Y204			1130	W		2	
	MW-31-Y204			1445	W		2	
	MW-34-Y204			1530	W		2	
	MW-30-Y204			1515	W		2	

Sampled By	Method of Shipment	Blank/Cooler Temp	Remarks
Ethan Litsey	Drop-off	4°C	

RELINQUISHED BY (sign)	DATE	TIME	RECEIVED BY (sign)	DATE	TIME	Sample Delivery Group ID
Ethan Litsey	11-8-00	0800		11-8-00	8:00	
RELINQUISHED BY (sign)	DATE	TIME	RECEIVED BY (sign)	DATE	TIME	
RELINQUISHED BY (sign)	DATE	TIME	RECEIVED BY LAB (print/sign)	DATE	TIME	

Distribution : Original and Yellow accompany samples to the laboratory Pink copy for Field. Original copy returned with results. Yellow copy for ETC, Inc files

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CHAIN OF CUSTODY RECORD

Environmental Testing & Consulting, Inc.
2924 Walnut Grove Rd.
Memphis, TN 38111
(901)327-2750 FAX (901)327-6334

ETC Work Order : 001216

001147

Company Name	Phone #	Fax Results
JEG	615 331-7232	
Project/Site: Memphis Depot	Fax # : 615 833 8328	RUSH
Project #	FID # :	Ice
Project Manager/Contact: Kraig Smith	PO # :	

Matrix: 1 Wastewater, 2 Aqueous, 3 Soil/Sediment, 4 Sludge, 5 Oil/Solvent, 6 Other

# of cont.	Sample ID/ Number	Depth	Sample Date	Sample Time	Matrix	Type Grab/Comp	Analysis Requested (Note special detection limits or methods): SVOC	Comments
	MW-14-Y2Q4		11-06-00	1420	W		2	
	MW-57-Y2Q4		11-07-00	940	W		2	
	MW-54A-Y2Q4		11-07-00	1315	W		2	
	MW-54-Y2Q4		11-07-00	1315	W		2	
	MW-15-Y2Q4		11-07-00	1115	W		2	
	FB-Y2Q4		11-07-00	1530	W		2	

Sampled By: Ethan Litsey
Method of Shipment: Drop-off
Blank/Cooler Temp: 2.4°C
Remarks:

RELINQUISHED BY (sign): Ethan Litsey	DATE: 11-8-00	TIME: 0800	RECEIVED BY (sign)	DATE	TIME
RELINQUISHED BY (sign)	DATE	TIME	RECEIVED BY (sign)	DATE	TIME
RELINQUISHED BY (sign)	DATE	TIME	RECEIVED BY LAB (print/sign)	DATE: 11-8-00	TIME: 8:27

Sample Delivery Group ID:

613 400

Distribution : Original and Yellow accompany samples to the laboratory. Pink copy for Field Crew.
Original copy returned with results. Yellow copy for ETC, Inc. files.

F:\QAQC\SLOP\COC0995.XLS

Environmental Testing & Consulting, Inc.
Cooler Receipt Form

LIMS# 0011-216
Project Memphis Depot

Date Received 11/8/00
Date/Time Checked In 11/8/00-08:00
Carrier/Bill# Hand-Delivered

By John Nevels

1. Custody Seals?/Location-	**No**
2. Samples are non-radioactive?	**Yes**
3. Chain of Custody in plastic?	**Yes**
4. Temperature at receipt (ok = 4 ± 2 °C)<4oC	**OK**
5. Ice & Packing-Bags, Ice, Bubble Wrap	**Yes**
6. Chain of Custody filled out properly?	**Yes**
7. All containers in separate bags?	**No**
8. Sample containers intact?	**Yes**
9. Label(s) complete and in good condition?	**Yes**
10. Label(s) agree with Chain of Custody?	**Yes**
11. Correct containers used?	**Yes**
12. Sufficient sample?	**Yes**
13. VOA vials bubble-free (H_2O) or no head space (soil)?	**Yes**
14. Preservation OK? TM pH____; TRPH pH____; TOC pH____; TOX pH____; CN pH____; N/P pH____; Other pH____	**Yes**

Comments _____

*Validated Date and Time of Sample Receipt (VDTSR)

613 402

ENVIRONMENTAL TESTING & CONSULTING, INC.
2924 Walnut Grove Road • Memphis, TN 38111 • (901) 327-2750 • FAX (901) 327-6334
Founded 1972

November 28, 2000

Mr. Kraig Smith
Sverdrup/Jacobs Eng.
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Ref: Analytical Testing
ETC Order # 0011335
Project Description Memphis Depot

The above referenced project has been analyzed per your instructions. The analyses were performed in our laboratory in accordance with Standard Methods, The Solid Waste Manual SW-846, EPA Methods for Chemical Analysis of Water and Wastes and/or 40 CFR part 136.

The results are shown on the attached analysis sheet(s).

Please do not hesitate to contact our office if you have any questions.

Sincerely,

Chet Scheibel
Laboratory Project Manager

rt
Attachment

SVE_MHDDMT

Certifications

Tennessee	*#TN02027*	*Mississippi*	
Arkansas	*#40730*	*Oklahoma*	*#9311*
Kentucky	*#90047*	*Virginia*	*#00106*
North Carolina	*#415*	*Washington*	*#C248*
South Carolina	*#84002002*	*US Army Corps of Engineers*	

Environmental Testing & Consulting, Inc.

Data Qualifiers for Organic Reporting

Within the attached report, some analytical data may be reported as "Qualified Data" as indicated by a "Data Qualifier" next to the result. This table summarizes the possible "Data Qualifiers" that may be associated with this report. These qualifiers do not apply for TIC reports.

Q	Surrogate Recovery Outside QC Limits
J	Estimated Value Presence of the compound was confirmed but less than the
	reported detection limit.
E	Concentration exceeds the established method calibration range but is within
	the working range of the instrument.
B	Analyte detected in the associated Method Blank.
U	Reported result was unconfirmed Refer to Case Narrative.
N	Non-Compliance Report associated with this sample or project
C	Result reported from GC/MS confirmation analysis.
M	Result reported represents a minimum value. Refer to Case Narrative
NC	Result reported from Primary Column. Result did not confirm
*	QC Data (percent recovery/RPD for a particular analyte was outside QC Limits)

613 404

ENVIRONMENTAL TESTING AND CONSULTING, INC.
CASE NARRATIVE
INORGANICS – AQUEOUS

Client Name Sverdrup/Jacobs Engineering
Project Name Memphis Defense Depot

ETC Order # 0011-335

HOLDING TIMES

Sample Analysis — All samples analyzed within Method Specified Holding Times.

METHOD

Preparation/Analysis: 335.2

QUALITY CONTROL

QC Batch
CY111601
CY111701

Method Blank
No Target Analytes detected above Detection Limit.

Laboratory Control Sample
Spike Recovery — All analytes within QC limits

Matrix Spike/Matrix Spike Duplicate
RPD — All analytes within QC limits
Spike Recovery — All analytes within QC limits

CALIBRATION

All acceptance criteria met.

SAMPLE ANALYSIS

Dilutions Required — No dilutions required.

C S

Project Manager

ENVIRONMENTAL TESTING AND CONSULTING, INC.
CASE NARRATIVE
METALS - AQUEOUS

Client Name Sverdrup/Jacobs Engineering
Project Name Memphis Depot

ETC Order # 0011-335

HOLDING TIMES

QC Batch(s) for this order	ICP Metals	V23-AQ-21
	Mercury	V7-AQ-65

Sample Preparation/Analysis	All samples digested/ analyzed within holding time.
Mercury Preparation/Analysis	All samples analyzed within 28 days of collection

METHOD

Preparation:	CAWW 245.1/SM 3030K
Analysis:	CAWW 200 7/245.1

CALIBRATION

Initial Calibration	All criteria met.
Continuing Calibration	All criteria met.

SAMPLE ANALYSIS

Instrumentation: Thermo Jarrell Ash Enviro-I ICP
CETAC M-6000A Mercury Analyzer
Dilutions Required No dilutions required.

QUALITY CONTROL

0011-335.MQCBLANK
Method Blank

V23-AQ-21BLK	ICP Metals
V7-AQ-65BLK	Mercury

Calcium was detected in V23-AQ-17BLK at 0.018 mg/L. Sample concentration less than 5 times the method blank value (0.09 mg/L) should be attributed to Lab contamination This analyte was detected in the associated project samples at concentrations greater than 5 times the method blank value.

0011-335.MQCLCS
Laboratory Control Sample(s)

V23-AQ-21LCS	ICP Metals
V7-AQ-65LCS	Mercury

All acceptance criteria met.

0011-335.MQCMSMSD
Matrix Spike / Matrix Spike Dup - ICP Metals

0011-335-01	RPD	All analytes within QC limits, except as listed below.
MW-69-Y2Q4	Spike Recovery	All analytes within QC limits, except as listed below.

613 406

ENVIRONMENTAL TESTING AND CONSULTING, INC.
CASE NARRATIVE
METALS - AQUEOUS

Client Name Sverdrup/Jacobs Engineering
Project Name Memphis Depot

ETC Order # 0011-335

QUALITY CONTROL

Silver was flagged as outside QC Limits in the MS/MSD. A Post Digestion Spike was performed for verification.

Aluminum and Iron were flagged as outside QC Limits due to the level of these analytes present relative to the spike amounts. Dilution Tests were performed for verification.

Potassium was flagged for low recovery in the MSD. MS recovery was within control limits.

RPDs for Silver, Aluminum, Iron, Potassium, and Selenium were flagged for high recovery due to variances in the MS/MSD recoveries.

Refer to Form 5B, Post Digest Spike and Form 9, Serial Dilutions. All criteria were met.

Refer to Laboratory Control Sample(s) for system verification.

Matrix Spike / Matrix Spike Dup - Hg

0011-335-01	RPD	All analytes within QC limits
MW-69-Y2Q4	Spike Recovery	All analytes within QC limits.

Refer to Laboratory Control Sample(s) for system verification.

Dilution Test — Dilution result must agree within 10% of original result when sample is diluted by a factor of 5.

Post Digestion Spike — Recovery must be +/-25% of expected value for ICP.

CS

Project Manager

ENVIRONMENTAL TESTING AND CONSULTING, INC.
CASE NARRATIVE
METALS - AQUEOUS

Client Name Sverdrup/Jacobs Engineering
Project Name Memphis Depot

ETC Order # 0011-335

HOLDING TIMES

QC Batch(s) for this order	ICP Metals	V23-AQ-22
	Mercury	V7-AQ-66

Sample Preparation/Analysis	All samples digested/ analyzed within holding time.
Mercury Preparation/Analysis	All samples analyzed within 28 days of collection.

METHOD

Preparation:	CAWW 245 1/SM 3030K
Analysis:	CAWW 200.7/245.1

CALIBRATION

Initial Calibration	All criteria met.
Continuing Calibration	All criteria met.

SAMPLE ANALYSIS

Instrumentation: Thermo Jarrell Ash Enviro-I ICP
CETAC M-6000A Mercury Analyzer
Dilutions Required No dilutions required.

QUALITY CONTROL

0011-335.MQ1BLANK
Method Blank

V23-AQ-22BLK	ICP Metals
V7-AQ-66BLK	Mercury

Calcium was detected in V23-AQ-22BLK at 0 017 mg/L. Sample concentration less than 5 times the method blank value (0.085 mg/L) should be attributed to Lab contamination. This analyte was detected in the associated sample at concentration less than 5 times the method blank value.

Sodium was detected in V23-AQ-22BLK at 0 108 mg/L. Sample concentration less than 5 times the method blank value (0.54 mg/L) should be attributed to Lab contamination. This analyte was detected in the associated sample at concentration greater than 5 times the method blank value.

0011-335.MQ1LCS
Laboratory Control Sample(s)

V23-AQ-22LCS	ICP Metals
V7-AQ-66LCS	Mercury

All acceptance criteria met.

613 408

ENVIRONMENTAL TESTING AND CONSULTING, INC.
CASE NARRATIVE
METALS - AQUEOUS

Client Name Sverdrup/Jacobs Engineering
Project Name Memphis Depot

ETC Order # 0011-335

QUALITY CONTROL

0011-335.MQ1MSMSD

Matrix Spike / Matrix Spike Dup - ICP Metals

0011-335-11	RPD	All analytes within QC limits
RB-Y2Q4	Spike Recovery	All analytes within QC limits

Refer to Laboratory Control Sample(s) for system verification

Matrix Spike / Matrix Spike Dup - Hg

0011-335-11	RPD	All analytes within QC limits.
RB-Y2Q4	Spike Recovery	All analytes within QC limits.

Refer to Laboratory Control Sample(s) for system verification.

Dilution Test Dilution result must agree within 10% of original result when sample is diluted by a factor of 5.

Post Digestion Spike Recovery must be +/-25% of expected value for ICP.

CS

Project Manager

ENVIRONMENTAL TESTING AND CONSULTING, INC.
CASE NARRATIVE
GC/MS VOLATILE COMPOUNDS - AQUEOUS

Client Name Sverdrup/Jacobs Engineering
Project Name Memphis Depot

ETC Order # 0011-335

SAMPLE PRESERVATION (Verified at time of analysis)

All aqueous samples preserved to pH < 2.

METHOD

Preparation: SW-846 5030B
Analysis: SW-846 8260B

HOLDING TIMES

Sample Analysis All samples analyzed within 14 days of collection.

QUALITY CONTROL

QC Batch	Form 4 Summary
V1111301	V1111311LB
V1111401	V1111411LB
V1111501	V1111511LB

System Monitoring Compounds FORM 2
Surrogate recoveries within QC limits, except as listed below.

Surrogate Toluene-d8 was slightly high recovery in samples 0011-335-04 DIL (MW-32-Y2Q4), 0011-335-05 (RW-01-Y2Q4), 0011-335-05 MSD, 0011-335-06 DIL (RW-1A-Y2Q4), and 0011-335-12 (TB-03) These slightly high recoveries do not affect the data.

Surrogate Bromofluorobenzene was slightly high recovery (1%) in sample 0011-335-02 DIL (MW-71-Y2Q4). This slightly high recovery does not affect the data.

Method Blank FORM 4
V1111311LB
V1111411LB
V1111511LB

Target Analytes were not detected in the Method Blanks.

Laboratory Control Sample FORM 3
V1111311LCS
V1111411LCS
V1111412LCS
V1111511LCS

All acceptance criteria met, except as listed below.

ENVIRONMENTAL TESTING AND CONSULTING, INC.
CASE NARRATIVE
GC/MS VOLATILE COMPOUNDS - AQUEOUS

613 410

Client Name Sverdrup/Jacobs Engineering
Project Name Memphis Depot

ETC Order # 0011-335

QUALITY CONTROL

V1111311LCS

Tetrachloroethene was flagged for slightly low recovery in the LCS Sample results for Tetrachloroethene may be biased slightly low. Two non-target analytes were flagged for high recovery in the LCS. There is no effect on the data.

V1111411LCS/V1111412LCS

Two non-target analytes were flagged for high recovery in the LCS. There is no effect on the data.

V1111511LCS

1,4-Dichlorobenzene, Ethylbenzene, Styrene, and Xylenes-mp and six non-target analytes were flagged for high recovery in the LCS These analytes were not detected in the associated project samples. There is no effect on the data.

Matrix Spike / Matrix Spike Dup. FORM 3

Batch V1111301		
0011-335-10	RPD	All analytes within QC limits.
MW-70-Y2Q4	Spike Recovery	All analytes within QC limits, except as listed below.

Chlorobenzene and Toluene were flagged for high recovery in the MS/MSD. Trichloroethene was flagged for low recovery in the MS/MSD. The sample contains a high concentration of Trichloroethene compared to the spike concentration. Sample results may be biased slightly high.

Refer to Laboratory Control Sample(s) for system verification.

Matrix Spike / Matrix Spike Dup. FORM 3

Batch V1111401		
0011-335-05	RPD	All analytes within QC limits
RW-01-Y2Q4	Spike Recovery	All analytes within QC limits, except as listed below.

Toluene was flagged for high recovery in the MS/MSD. Sample results may be biased slightly high.

Refer to Laboratory Control Sample(s) for system verification.

Matrix Spike / Matrix Spike Dup. FORM 3

Batch V1111501		
0011-404-02	RPD	All analytes within QC limits.
	Spike Recovery	All analytes within QC limits, except as listed below.

Toluene was flagged for high recovery in the MS/MSD. Chlorobenzene was flagged for slightly high recovery in the MSD. MS recovery was within control limits. Sample spiked for this QC Batch was not from this project. There is no effect on the data.

Refer to Laboratory Control Sample(s) for system verification.

ENVIRONMENTAL TESTING AND CONSULTING, INC.
CASE NARRATIVE
GC/MS VOLATILE COMPOUNDS - AQUEOUS

Client Name Sverdrup/Jacobs Engineering
Project Name Memphis Depot

ETC Order # 0011-335

CALIBRATION

BFB Daily 12-Hour Tune	All criteria met. FORM 5
Initial Calibration	All criteria met. FORM 6
Calibration Verification	All criteria met. FORM 7

Volatile Internal Standard Area and RT FORM 8
Daily Check Standard(s) Internal Standard Areas and Retention Times within QC limits.

SAMPLE ANALYSIS

Instrumentation	HP 5890 Series II GC, 5971MSD
Dilutions Required	No dilutions required, except as listed below.

Dilutions were performed on six samples to bring Target Analyte(s) within calibration range as shown on the Sample Report Forms.

CS
Project Manager

613 412

ENVIRONMENTAL TESTING AND CONSULTING, INC.
CASE NARRATIVE
GC/MS SEMI-VOLATILE COMPOUNDS - AQUEOUS

Client Name Sverdrup/Jacobs Engineering
Project Name Memphis Defense Depot

ETC Order # 0011-335

HOLDING TIMES

Sample Extraction — All aqueous samples extracted within 7 days.
Sample Analysis — All samples analyzed within 40 days of extraction

METHOD

Sample Preparation: SW-836 3510C

Sample Analysis: SW-846 8270C

QUALITY CONTROL

QC Batch	Form 4 Summary
P06010	P06010LB

System Monitoring Compounds FORM 2
Surrogate recoveries within QC limits, except as listed below.

Surrogate 2-Fluorobiphenyl was flagged for a slightly low recovery in sample 0011-335-01 (MW-69-Y2Q4). There is no effect on the data

Surrogates 2-Fluorobiphenyl and 4-Terphenyl-d14 were flagged for a low recovery in sample 0011-335-10 (MW-70-Y2Q4) due to a matrix effect. The sample formed a heavy emulsion during extraction which may have caused the low recovery. Sample result may be biased slightly low.

Method Blank FORM 4
P06010LB
Target analytes were not detected in the Method Blank, except as listed below.

Bis(2-ethylhexyl)phthalate was detected in the Method Blank at 2.95J ug/L. Sample results less than ten times the Method Blank result (29.5 ug/L) should be attributed to lab contamination. This analyte was identified in sample 0011-335-01 at 6.53 ug/L. There is no effect on the balance of samples.

Laboratory Control Sample FORM 3
P06010LCS/LCSD

All acceptance criteria met, except as listed below.

Benzidine, non-target analyte, was flagged for a low recovery in the LCS/LCSD. There is no effect on the data.

RPD was flagged for high recovery for two non-target analytes due to variances in the LCS and LCSD recoveries.

ENVIRONMENTAL TESTING AND CONSULTING, INC.
CASE NARRATIVE
GC/MS SEMI-VOLATILE COMPOUNDS - AQUEOUS

Client Name Sverdrup/Jacobs Engineering
Project Name Memphis Defense Depot

ETC Order # 0011-335

Matrix Spike / Matrix Spike Dup. FORM 3
Batch P06010

Due to limited sample volume, no MS/MSD were analyzed.

Refer to Laboratory Control Samples(s) for system verification.

CALIBRATION

DFTPP Daily 12-Hour Tune	All criteria met. FORM 5
Initial Calibration	All criteria met. FORM 6
Calibration Verification	All criteria met. FORM 7, except as listed below.

Calibration Verification (CV): Date 11/18/00 Time: 1136

Analyte	%Diff(30% Max)	Response
3,3'-Dichlorobenzidine	-41.9	Low

Samples affected by this CV include 0011-335-03 through 0011-335-11. Low response indicates that reported levels for this analyte may be biased low. This analyte was not identified in associated project samples The LCS recovery of this analyte was within control limits. There is no effect on the data.

Semi-Volatile Internal Standard Area and RT FORM 8
Daily Check Standard(s) Internal Standard Areas and Retention Times within QC limits

SAMPLE ANALYSIS

Instrumentation	HP 5890 Series II GC, 5971MSD
Dilutions Required	No dilutions required.

CS
Project Manager

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

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ANALYTICAL SUMMARY/CROSS REFERENCE TABLE

Client Name **Sverdrup/Jacobs Eng.** ETC Order #0011335
Site ID **Memphis Depot**

ETC Sample ID	Field ID	Matrix	Method	Method Description
001133501	MW-69-Y2Q4	AQUEOUS	335.2	Cyanide
001133501	MW-69-Y2Q4	AQUEOUS	200.7	Silver
001133501	MW-69-Y2Q4	AQUEOUS	200.7	Aluminum
001133501	MW-69-Y2Q4	AQUEOUS	200.7	Arsenic
001133501	MW-69-Y2Q4	AQUEOUS	200 7	Barium
001133501	MW-69-Y2Q4	AQUEOUS	200.7	Beryllium
001133501	MW-69-Y2Q4	AQUEOUS	200.7	Calcium
001133501	MW-69-Y2Q4	AQUEOUS	200.7	Cadmium
001133501	MW-69-Y2Q4	AQUEOUS	200.7	Cobalt
001133501	MW-69-Y2Q4	AQUEOUS	200.7	Chromium
001133501	MW-69-Y2Q4	AQUEOUS	200.7	Copper
001133501	MW-69-Y2Q4	AQUEOUS	200.7	Iron
001133501	MW-69-Y2Q4	AQUEOUS	245.1	Mercury
001133501	MW-69-Y2Q4	AQUEOUS	200.7	Potassium
001133501	MW-69-Y2Q4	AQUEOUS	200.7	Magnesium
001133501	MW-69-Y2Q4	AQUEOUS	200.7	Manganese
001133501	MW-69-Y2Q4	AQUEOUS	200 7	Sodium
001133501	MW-69-Y2Q4	AQUEOUS	200.7	Nickel
001133501	MW-69-Y2Q4	AQUEOUS	200.7	Lead
001133501	MW-69-Y2Q4	AQUEOUS	200.7	Antimony
001133501	MW-69-Y2Q4	AQUEOUS	200.7	Selenium
001133501	MW-69-Y2Q4	AQUEOUS	200.7	Thallium
001133501	MW-69-Y2Q4	AQUEOUS	200.7	Vanadium
001133501	MW-69-Y2Q4	AQUEOUS	200.7	Zinc
001133501	MW-69-Y2Q4	AQUEOUS	8260B	GC/MS Volatile Organics
001133501	MW-69-Y2Q4	AQUEOUS	8270C	GC/MS Base/Neutral & Acid
001133502	MW-71-Y2Q4	AQUEOUS	335 2	Cyanide
001133502	MW-71-Y2Q4	AQUEOUS	200.7	Silver
001133502	MW-71-Y2Q4	AQUEOUS	200.7	Aluminum
001133502	MW-71-Y2Q4	AQUEOUS	200.7	Arsenic
001133502	MW-71-Y2Q4	AQUEOUS	200.7	Barium
001133502	MW-71-Y2Q4	AQUEOUS	200.7	Beryllium
001133502	MW-71-Y2Q4	AQUEOUS	200.7	Calcium
001133502	MW-71-Y2Q4	AQUEOUS	200.7	Cadmium
001133502	MW-71-Y2Q4	AQUEOUS	200.7	Cobalt
001133502	MW-71-Y2Q4	AQUEOUS	200.7	Chromium
001133502	MW-71-Y2Q4	AQUEOUS	200.7	Copper
001133502	MW-71-Y2Q4	AQUEOUS	200.7	Iron
001133502	MW-71-Y2Q4	AQUEOUS	245.1	Mercury
001133502	MW-71-Y2Q4	AQUEOUS	200.7	Potassium
001133502	MW-71-Y2Q4	AQUEOUS	200.7	Magnesium
001133502	MW-71-Y2Q4	AQUEOUS	200.7	Manganese
001133502	MW-71-Y2Q4	AQUEOUS	200.7	Sodium
001133502	MW-71-Y2Q4	AQUEOUS	200 7	Nickel
001133502	MW-71-Y2Q4	AQUEOUS	200 7	Lead
001133502	MW-71-Y2Q4	AQUEOUS	200 7	Antimony
001133502	MW-71-Y2Q4	AQUEOUS	200.7	Selenium
001133502	MW-71-Y2Q4	AQUEOUS	200.7	Thallium
001133502	MW-71-Y2Q4	AQUEOUS	200.7	Vanadium
001133502	MW-71-Y2Q4	AQUEOUS	200.7	Zinc
001133502	MW-71-Y2Q4	AQUEOUS	8260B	GC/MS Volatile Organics
001133502	MW-71-Y2Q4	AQUEOUS	8270C	GC/MS Base/Neutral & Acid
001133503	MW-71B-Y2Q4	AQUEOUS	335 2	Cyanide
001133503	MW-71B-Y2Q4	AQUEOUS	200.7	Silver
001133503	MW-71B-Y2Q4	AQUEOUS	200.7	Aluminum

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ANALYTICAL SUMMARY/CROSS REFERENCE TABLE

ent Name **Sverdrup/Jacobs Eng.** ETC Order #0011335
e ID **Memphis Depot**

ETC Sample ID	Field ID	Matrix	Method	Method Description
001133503	MW-71B-Y2Q4	AQUEOUS	200.7	Arsenic
001133503	MW-71B-Y2Q4	AQUEOUS	200.7	Barium
001133503	MW-71B-Y2Q4	AQUEOUS	200.7	Beryllium
001133503	MW-71B-Y2Q4	AQUEOUS	200.7	Calcium
001133503	MW-71B-Y2Q4	AQUEOUS	200.7	Cadmium
001133503	MW-71B-Y2Q4	AQUEOUS	200.7	Cobalt
001133503	MW-71B-Y2Q4	AQUEOUS	200.7	Chromium
001133503	MW-71B-Y2Q4	AQUEOUS	200.7	Copper
001133503	MW-71B-Y2Q4	AQUEOUS	200.7	Iron
001133503	MW-71B-Y2Q4	AQUEOUS	245.1	Mercury
001133503	MW-71B-Y2Q4	AQUEOUS	200.7	Potassium
001133503	MW-71B-Y2Q4	AQUEOUS	200.7	Magnesium
001133503	MW-71B-Y2Q4	AQUEOUS	200.7	Manganese
001133503	MW-71B-Y2Q4	AQUEOUS	200.7	Sodium
001133503	MW-71B-Y2Q4	AQUEOUS	200.7	Nickel
001133503	MW-71B-Y2Q4	AQUEOUS	200.7	Lead
001133503	MW-71B-Y2Q4	AQUEOUS	200.7	Antimony
001133503	MW-71B-Y2Q4	AQUEOUS	200.7	Selenium
001133503	MW-71B-Y2Q4	AQUEOUS	200 7	Thallium
001133503	MW-71B-Y2Q4	AQUEOUS	200 7	Vanadium
001133503	MW-71B-Y2Q4	AQUEOUS	200 7	Zinc
001133503	MW-71B-Y2Q4	AQUEOUS	8260B	GC/MS Volatile Organics
001133503	MW-71B-Y2Q4	AQUEOUS	8270C	GC/MS Base/Neutral & Acid
[redacted]3504	MW-32-Y2Q4	AQUEOUS	335.2	Cyanide
[redacted]33504	MW-32-Y2Q4	AQUEOUS	200.7	Silver
001133504	MW-32-Y2Q4	AQUEOUS	200.7	Aluminum
001133504	MW-32-Y2Q4	AQUEOUS	200 7	Arsenic
001133504	MW-32-Y2Q4	AQUEOUS	200.7	Barium
001133504	MW-32-Y2Q4	AQUEOUS	200 7	Beryllium
001133504	MW-32-Y2Q4	AQUEOUS	200.7	Calcium
001133504	MW-32-Y2Q4	AQUEOUS	200 7	Cadmium
001133504	MW-32-Y2Q4	AQUEOUS	200 7	Cobalt
001133504	MW-32-Y2Q4	AQUEOUS	200.7	Chromium
001133504	MW-32-Y2Q4	AQUEOUS	200.7	Copper
001133504	MW-32-Y2Q4	AQUEOUS	200.7	Iron
001133504	MW-32-Y2Q4	AQUEOUS	245.1	Mercury
001133504	MW-32-Y2Q4	AQUEOUS	200.7	Potassium
001133504	MW-32-Y2Q4	AQUEOUS	200 7	Magnesium
001133504	MW-32-Y2Q4	AQUEOUS	200 7	Manganese
001133504	MW-32-Y2Q4	AQUEOUS	200 7	Sodium
001133504	MW-32-Y2Q4	AQUEOUS	200 7	Nickel
001133504	MW-32-Y2Q4	AQUEOUS	200.7	Lead
001133504	MW-32-Y2Q4	AQUEOUS	200.7	Antimony
001133504	MW-32-Y2Q4	AQUEOUS	200.7	Selenium
001133504	MW-32-Y2Q4	AQUEOUS	200.7	Thallium
001133504	MW-32-Y2Q4	AQUEOUS	200.7	Vanadium
001133504	MW-32-Y2Q4	AQUEOUS	200.7	Zinc
001133504	MW-32-Y2Q4	AQUEOUS	8260B	GC/MS Volatile Organics
001133504	MW-32-Y2Q4	AQUEOUS	8270C	GC/MS Base/Neutral & Acid
001133505	RW-01-Y2Q4	AQUEOUS	335.2	Cyanide
001133505	RW-01-Y2Q4	AQUEOUS	200.7	Silver
001133505	RW-01-Y2Q4	AQUEOUS	200.7	Aluminum
[redacted]3505	RW-01-Y2Q4	AQUEOUS	200.7	Arsenic
[redacted]3505	RW-01-Y2Q4	AQUEOUS	200.7	Barium
001133505	RW-01-Y2Q4	AQUEOUS	200.7	Beryllium
001133505	RW-01-Y2Q4	AQUEOUS	200.7	Calcium

ENVIRONMENTAL TESTING & CONSULTING, INC.

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ANALYTICAL SUMMARY/CROSS REFERENCE TABLE

Client Name **Sverdrup/Jacobs Eng.** ETC Order #**0011335**

Site ID **Memphis Depot**

ETC Sample ID	Field ID	Matrix	Method	Method Description
001133505	RW-01-Y2Q4	AQUEOUS	200.7	Cadmium
001133505	RW-01-Y2Q4	AQUEOUS	200.7	Cobalt
001133505	RW-01-Y2Q4	AQUEOUS	200.7	Chromium
001133505	RW-01-Y2Q4	AQUEOUS	200.7	Copper
001133505	RW-01-Y2Q4	AQUEOUS	200.7	Iron
001133505	RW-01-Y2Q4	AQUEOUS	245.1	Mercury
001133505	RW-01-Y2Q4	AQUEOUS	200.7	Potassium
001133505	RW-01-Y2Q4	AQUEOUS	200.7	Magnesium
001133505	RW-01-Y2Q4	AQUEOUS	200.7	Manganese
001133505	RW-01-Y2Q4	AQUEOUS	200 7	Sodium
001133505	RW-01-Y2Q4	AQUEOUS	200.7	Nickel
001133505	RW-01-Y2Q4	AQUEOUS	200.7	Lead
001133505	RW-01-Y2Q4	AQUEOUS	200.7	Antimony
001133505	RW-01-Y2Q4	AQUEOUS	200.7	Selenium
001133505	RW-01-Y2Q4	AQUEOUS	200.7	Thallium
001133505	RW-01-Y2Q4	AQUEOUS	200.7	Vanadium
001133505	RW-01-Y2Q4	AQUEOUS	200.7	Zinc
001133505	RW-01-Y2Q4	AQUEOUS	8260B	GC/MS Volatile Organics
001133505	RW-01-Y2Q4	AQUEOUS	8270C	GC/MS Base/Neutral & Acid
001133506	RW-1A-Y2Q4	AQUEOUS	335.2	Cyanide
001133506	RW-1A-Y2Q4	AQUEOUS	200.7	Silver
001133506	RW-1A-Y2Q4	AQUEOUS	200.7	Aluminum
001133506	RW-1A-Y2Q4	AQUEOUS	200.7	Arsenic
001133506	RW-1A-Y2Q4	AQUEOUS	200.7	Barium
001133506	RW-1A-Y2Q4	AQUEOUS	200.7	Beryllium
001133506	RW-1A-Y2Q4	AQUEOUS	200 7	Calcium
001133506	RW-1A-Y2Q4	AQUEOUS	200.7	Cadmium
001133506	RW-1A-Y2Q4	AQUEOUS	200.7	Cobalt
001133506	RW-1A-Y2Q4	AQUEOUS	200.7	Chromium
001133506	RW-1A-Y2Q4	AQUEOUS	200.7	Copper
001133506	RW-1A-Y2Q4	AQUEOUS	200.7	Iron
001133506	RW-1A-Y2Q4	AQUEOUS	245.1	Mercury
001133506	RW-1A-Y2Q4	AQUEOUS	200.7	Potassium
001133506	RW-1A-Y2Q4	AQUEOUS	200.7	Magnesium
001133506	RW-1A-Y2Q4	AQUEOUS	200.7	Manganese
001133506	RW-1A-Y2Q4	AQUEOUS	200.7	Sodium
001133506	RW-1A-Y2Q4	AQUEOUS	200.7	Nickel
001133506	RW-1A-Y2Q4	AQUEOUS	200.7	Lead
001133506	RW-1A-Y2Q4	AQUEOUS	200.7	Antimony
001133506	RW-1A-Y2Q4	AQUEOUS	200 7	Selenium
001133506	RW-1A-Y2Q4	AQUEOUS	200 7	Thallium
001133506	RW-1A-Y2Q4	AQUEOUS	200.7	Vanadium
001133506	RW-1A-Y2Q4	AQUEOUS	200.7	Zinc
001133506	RW-1A-Y2Q4	AQUEOUS	8260B	GC/MS Volatile Organics
001133506	RW-1A-Y2Q4	AQUEOUS	8270C	GC/MS Base/Neutral & Acid
001133507	RW-1B-Y2Q4	AQUEOUS	335.2	Cyanide
001133507	RW-1B-Y2Q4	AQUEOUS	200.7	Silver
001133507	RW-1B-Y2Q4	AQUEOUS	200.7	Aluminum
001133507	RW-1B-Y2Q4	AQUEOUS	200.7	Arsenic
001133507	RW-1B-Y2Q4	AQUEOUS	200.7	Barium
001133507	RW-1B-Y2Q4	AQUEOUS	200.7	Beryllium
001133507	RW-1B-Y2Q4	AQUEOUS	200 7	Calcium
001133507	RW-1B-Y2Q4	AQUEOUS	200 7	Cadmium
001133507	RW-1B-Y2Q4	AQUEOUS	200.7	Cobalt
001133507	RW-1B-Y2Q4	AQUEOUS	200.7	Chromium
001133507	RW-1B-Y2Q4	AQUEOUS	200.7	Copper

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2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

ANALYTICAL SUMMARY/CROSS REFERENCE TABLE

Client Name **Sverdrup/Jacobs Eng.** ETC Order #0011335
Site ID **Memphis Depot**

ETC Sample ID	Field ID	Matrix	Method	Method Description
001133507	RW-1B-Y2Q4	AQUEOUS	200.7	Iron
001133507	RW-1B-Y2Q4	AQUEOUS	245.1	Mercury
001133507	RW-1B-Y2Q4	AQUEOUS	200.7	Potassium
001133507	RW-1B-Y2Q4	AQUEOUS	200 7	Magnesium
001133507	RW-1B-Y2Q4	AQUEOUS	200.7	Manganese
001133507	RW-1B-Y2Q4	AQUEOUS	200 7	Sodium
001133507	RW-1B-Y2Q4	AQUEOUS	200.7	Nickel
001133507	RW-1B-Y2Q4	AQUEOUS	200.7	Lead
001133507	RW-1B-Y2Q4	AQUEOUS	200.7	Antimony
001133507	RW-1B-Y2Q4	AQUEOUS	200.7	Selenium
001133507	RW-1B-Y2Q4	AQUEOUS	200.7	Thallium
001133507	RW-1B-Y2Q4	AQUEOUS	200.7	Vanadium
001133507	RW-1B-Y2Q4	AQUEOUS	200.7	Zinc
001133507	RW-1B-Y2Q4	AQUEOUS	8260B	GC/MS Volatile Organics
001133507	RW-1B-Y2Q4	AQUEOUS	8270C	GC/MS Base/Neutral & Acid
001133508	FB-Y2Q4	AQUEOUS	335.2	Cyanide
001133508	FB-Y2Q4	AQUEOUS	200.7	Silver
001133508	FB-Y2Q4	AQUEOUS	200.7	Aluminum
001133508	FB-Y2Q4	AQUEOUS	200 7	Arsenic
001133508	FB-Y2Q4	AQUEOUS	200 7	Barium
001133508	FB-Y2Q4	AQUEOUS	200.7	Beryllium
001133508	FB-Y2Q4	AQUEOUS	200.7	Calcium
001133508	FB-Y2Q4	AQUEOUS	200 7	Cadmium
[redacted]3508	FB-Y2Q4	AQUEOUS	200.7	Cobalt
001133508	FB-Y2Q4	AQUEOUS	200.7	Chromium
001133508	FB-Y2Q4	AQUEOUS	200.7	Copper
001133508	FB-Y2Q4	AQUEOUS	200.7	Iron
001133508	FB-Y2Q4	AQUEOUS	245.1	Mercury
001133508	FB-Y2Q4	AQUEOUS	200.7	Potassium
001133508	FB-Y2Q4	AQUEOUS	200.7	Magnesium
001133508	FB-Y2Q4	AQUEOUS	200.7	Manganese
001133508	FB-Y2Q4	AQUEOUS	200.7	Sodium
001133508	FB-Y2Q4	AQUEOUS	200.7	Nickel
001133508	FB-Y2Q4	AQUEOUS	200.7	Lead
001133508	FB-Y2Q4	AQUEOUS	200.7	Antimony
001133508	FB-Y2Q4	AQUEOUS	200 7	Selenium
001133508	FB-Y2Q4	AQUEOUS	200.7	Thallium
001133508	FB-Y2Q4	AQUEOUS	200 7	Vanadium
001133508	FB-Y2Q4	AQUEOUS	200.7	Zinc
001133508	FB-Y2Q4	AQUEOUS	8260B	GC/MS Volatile Organics
001133508	FB-Y2Q4	AQUEOUS	8270C	GC/MS Base/Neutral & Acid
001133509	RW-02-Y2Q4	AQUEOUS	335.2	Cyanide
001133509	RW-02-Y2Q4	AQUEOUS	200.7	Silver
001133509	RW-02-Y2Q4	AQUEOUS	200.7	Aluminum
001133509	RW-02-Y2Q4	AQUEOUS	200.7	Arsenic
001133509	RW-02-Y2Q4	AQUEOUS	200.7	Barium
001133509	RW-02-Y2Q4	AQUEOUS	200.7	Beryllium
001133509	RW-02-Y2Q4	AQUEOUS	200.7	Calcium
001133509	RW-02-Y2Q4	AQUEOUS	200.7	Cadmium
001133509	RW-02-Y2Q4	AQUEOUS	200.7	Cobalt
001133509	RW-02-Y2Q4	AQUEOUS	200.7	Chromium
001133509	RW-02-Y2Q4	AQUEOUS	200.7	Copper
[redacted]3509	RW-02-Y2Q4	AQUEOUS	200 7	Iron
[redacted]3509	RW-02-Y2Q4	AQUEOUS	245.1	Mercury
001133509	RW-02-Y2Q4	AQUEOUS	200.7	Potassium
001133509	RW-02-Y2Q4	AQUEOUS	200.7	Magnesium

ENVIRONMENTAL TESTING & CONSULTING, INC.

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ANALYTICAL SUMMARY/CROSS REFERENCE TABLE

Client Name **Sverdrup/Jacobs Eng.** ETC Order #0011335
Site ID **Memphis Depot**

ETC Sample ID	Field ID	Matrix	Method	Method Description
001133509	RW-02-Y2Q4	AQUEOUS	200.7	Manganese
001133509	RW-02-Y2Q4	AQUEOUS	200.7	Sodium
001133509	RW-02-Y2Q4	AQUEOUS	200.7	Nickel
001133509	RW-02-Y2Q4	AQUEOUS	200.7	Lead
001133509	RW-02-Y2Q4	AQUEOUS	200.7	Antimony
001133509	RW-02-Y2Q4	AQUEOUS	200.7	Selenium
001133509	RW-02-Y2Q4	AQUEOUS	200.7	Thallium
001133509	RW-02-Y2Q4	AQUEOUS	200.7	Vanadium
001133509	RW-02-Y2Q4	AQUEOUS	200.7	Zinc
001133509	RW-02-Y2Q4	AQUEOUS	8260B	GC/MS Volatile Organics
001133509	RW-02-Y2Q4	AQUEOUS	8270C	GC/MS Base/Neutral & Acid
001133510	MW-70-Y2Q4	AQUEOUS	335.2	Cyanide
001133510	MW-70-Y2Q4	AQUEOUS	200.7	Silver
001133510	MW-70-Y2Q4	AQUEOUS	200.7	Aluminum
001133510	MW-70-Y2Q4	AQUEOUS	200 7	Arsenic
001133510	MW-70-Y2Q4	AQUEOUS	200.7	Barium
001133510	MW-70-Y2Q4	AQUEOUS	200.7	Beryllium
001133510	MW-70-Y2Q4	AQUEOUS	200.7	Calcium
001133510	MW-70-Y2Q4	AQUEOUS	200.7	Cadmium
001133510	MW-70-Y2Q4	AQUEOUS	200.7	Cobalt
001133510	MW-70-Y2Q4	AQUEOUS	200.7	Chromium
001133510	MW-70-Y2Q4	AQUEOUS	200.7	Copper
001133510	MW-70-Y2Q4	AQUEOUS	200.7	Iron
001133510	MW-70-Y2Q4	AQUEOUS	245.1	Mercury
001133510	MW-70-Y2Q4	AQUEOUS	200.7	Potassium
001133510	MW-70-Y2Q4	AQUEOUS	200.7	Magnesium
001133510	MW-70-Y2Q4	AQUEOUS	200.7	Manganese
001133510	MW-70-Y2Q4	AQUEOUS	200.7	Sodium
001133510	MW-70-Y2Q4	AQUEOUS	200.7	Nickel
001133510	MW-70-Y2Q4	AQUEOUS	200.7	Lead
001133510	MW-70-Y2Q4	AQUEOUS	200.7	Antimony
001133510	MW-70-Y2Q4	AQUEOUS	200.7	Selenium
001133510	MW-70-Y2Q4	AQUEOUS	200.7	Thallium
001133510	MW-70-Y2Q4	AQUEOUS	200.7	Vanadium
001133510	MW-70-Y2Q4	AQUEOUS	200.7	Zinc
001133510	MW-70-Y2Q4	AQUEOUS	8260B	GC/MS Volatile Organics
001133510	MW-70-Y2Q4	AQUEOUS	8270C	GC/MS Base/Neutral & Acid
001133511	RB-Y2Q4	AQUEOUS	335.2	Cyanide
001133511	RB-Y2Q4	AQUEOUS	200.7	Silver
001133511	RB-Y2Q4	AQUEOUS	200.7	Aluminum
001133511	RB-Y2Q4	AQUEOUS	200 7	Arsenic
001133511	RB-Y2Q4	AQUEOUS	200.7	Barium
001133511	RB-Y2Q4	AQUEOUS	200.7	Beryllium
001133511	RB-Y2Q4	AQUEOUS	200.7	Calcium
001133511	RB-Y2Q4	AQUEOUS	200.7	Cadmium
001133511	RB-Y2Q4	AQUEOUS	200.7	Cobalt
001133511	RB-Y2Q4	AQUEOUS	200.7	Chromium
001133511	RB-Y2Q4	AQUEOUS	200.7	Copper
001133511	RB-Y2Q4	AQUEOUS	200.7	Iron
001133511	RB-Y2Q4	AQUEOUS	245 1	Mercury
001133511	RB-Y2Q4	AQUEOUS	200.7	Potassium
001133511	RB-Y2Q4	AQUEOUS	200.7	Magnesium
001133511	RB-Y2Q4	AQUEOUS	200.7	Manganese
001133511	RB-Y2Q4	AQUEOUS	200.7	Sodium
001133511	RB-Y2Q4	AQUEOUS	200 7	Nickel
001133511	RB-Y2Q4	AQUEOUS	200.7	Lead

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

ANALYTICAL SUMMARY/CROSS REFERENCE TABLE

Client Name **Sverdrup/Jacobs Eng.** ETC Order #0011335
Site ID **Memphis Depot**

ETC Sample ID	Field ID	Matrix	Method	Method Description
001133511	RB-Y2Q4	AQUEOUS	200.7	Antimony
001133511	RB-Y2Q4	AQUEOUS	200.7	Selenium
001133511	RB-Y2Q4	AQUEOUS	200.7	Thallium
001133511	RB-Y2Q4	AQUEOUS	200.7	Vanadium
001133511	RB-Y2Q4	AQUEOUS	200.7	Zinc
001133511	RB-Y2Q4	AQUEOUS	8260B	GC/MS Volatile Organics
001133511	RB-Y2Q4	AQUEOUS	8270C	GC/MS Base/Neutral & Acid
001133512	TB-03	AQUEOUS	8260B	GC/MS Volatile Organics

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 420

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

Date Arrived **11/10/00**
ETC Order Number **0011335**

ETC Lab ID : **0011335-01**
Field ID : **MW-69-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/09/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	BY	METHOD	QC BATCH
Cyanide	<0.010	mg/L	0.010	11/16/00	GD	335.2	CY111601

Data Validator

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

Date Arrived **11/10/00**
ETC Order Number **0011335**

ETC Lab ID : **0011335-02**
Field ID : **MW-71-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/09/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	BY	METHOD	QC BATCH
Cyanide	<0.010	mg/L	0.010	11/16/00	GD	335.2	CY111601

CS

Data Validator

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 422

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

Date Arrived **11/10/00**
ETC Order Number **0011335**

ETC Lab ID : **0011335-03**
Field ID : **MW-71B-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/09/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	BY	METHOD	QC BATCH
Cyanide	<0.010	mg/L	0.010	11/16/00	GD	335.2	CY111601

CS

Data Validator

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.
2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

Date Arrived **11/10/00**
ETC Order Number **0011335**

ETC Lab ID : **0011335-04**
Field ID : **MW-32-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/09/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	BY	METHOD	QC BATCH
Cyanide	<0.010	mg/L	0.010	11/16/00	GD	335.2	CY111601

Data Validator

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 424

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

Date Arrived **11/10/00**
ETC Order Number **0011335**

ETC Lab ID : **0011335-05**
Field ID : **RW-01-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/09/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	BY	METHOD	QC BATCH
Cyanide	<0.010	mg/L	0.010	11/16/00	GD	335.2	CY111601

CS
Data Validator

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

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613 425

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

Date Arrived **11/10/00**
ETC Order Number **0011335**

ETC Lab ID : **0011335-06**
Field ID : **RW-1A-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/09/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	BY	METHOD	QC BATCH
Cyanide	<0.010	mg/L	0.010	11/16/00	GD	335 2	CY111601

Data Validator

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

613 426

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

Date Arrived **11/10/00**
ETC Order Number **0011335**

ETC Lab ID : **0011335-07**
Field ID : **RW-1B-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/09/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	BY	METHOD	QC BATCH
Cyanide	<0 010	mg/L	0.010	11/16/00	GD	335.2	CY111601

CS
Data Validator

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.
2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 427

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

Date Arrived **11/10/00**
ETC Order Number **0011335**

ETC Lab ID : **0011335-08**
Field ID : **FB-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/09/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	BY	METHOD	QC BATCH
Cyanide	<0.010	mg/L	0.010	11/16/00	GD	335.2	CY111601

CS

Data Validator

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 428

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

Date Arrived **11/10/00**
ETC Order Number **0011335**

ETC Lab ID : **0011335-09**
Field ID : **RW-02-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/09/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	BY	METHOD	QC BATCH
Cyanide	<0.010	mg/L	0.010	11/16/00	GD	335.2	CY111601

CS
Data Validator

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

Date Arrived **11/10/00**
ETC Order Number **0011335**

ETC Lab ID : **0011335-10**
Field ID : **MW-70-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/09/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	BY	METHOD	QC BATCH
Cyanide	<0.010	mg/L	0.010	11/16/00	GD	335.2	CY111601

Data Validator

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 430

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

Date Arrived **11/10/00**
ETC Order Number **0011335**

ETC Lab ID : **0011335-11**
Field ID : **RB-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/09/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	BY	METHOD	QC BATCH
Cyanide	<0 010	mg/L	0.010	11/17/00	GD	335.2	CY111701

CS
Data Validator

ND - Not Detected

METHOD BLANK
INORGANICS

Lab Name: Environmental Testing and Consulting, Inc.

Analyte	QC Sample No.	QC Batch	Result	Detection Limit	Units	Date Analyzed	Method
Cyanide	CY1116011 BLK	CY111601	ND	0.010	mg/L	11/16/00	335 2
Cyanide	CY1117011 BLK	CY111701	ND	0.010	mg/L	11/17/00	335.2

NA - Not Applicable per Method
ND - Not Detected

Reviewed by: CS

613 432

LABORATORY CONTROL SAMPLE
INORGANICS

Lab Name: Environmental Testing and Consulting, Inc.

Analyte	QC Sample No.	QC Batch	Spike Added	Found	Units	% Rec #	QC Limits	
Cyanide	CY1116011 LCS	CY111601	0.200	0.190	mg/L	95	90	110
Cyanide	CY1117011 LCS	CY111701	0.200	0.198	mg/L	99	90	110

ND - Not Detected
Column to be used to flag recovery values with an asterisk
* Values outside of QC limits

Reviewed by: CS

MATRIX SPIKE / MATRIX SPIKE DUPLICATE
INORGANICS

Lab Name: Environmental Testing and Consulting, Inc

Analyte	QC Sample No	QC Batch	SPIKE Added	SAMPLE Result	MS Result	Units	MS % Rec #	QC Limits	
Cyanide	0011-335 01 MS	CY111601	0 200	ND	0 198	mg/L	99	64	114
Cyanide	0011 335 11 MS	CY111701	0 200	ND	0.197	mg/L	99	64	114

Analyte	QC Sample No	QC Batch	SPIKE Added	SAMPLE Result	MSD Result	Units	MSD % Rec #	QC Limits	
Cyanide	0011-335-01 MSD	CY111601	0 200	ND	0 191	mg/L	96	64	114
Cyanide	0011-335 11 MSD	CY111701	0 200	ND	0 191	mg/L	96	64	114

ND - Not Detected
Column to be used to flag recovery values with an asterisk
* Values outside of QC limits

Reviewed by CS

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 434

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

Date Arrived **11/10/00**
ETC Order Number **0011335**

ETC Lab ID : **0011335-01**
Field ID : **MW-69-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/09/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE PREPARED	BY	METHOD
Mercury Digestion Batch	V7-AQ-65			11/14/00	11/14/00	JF	245.1
Metals Digestion Batch	V23-AQ-21			11/13/00	11/13/00	NR	3030K
Silver	<0.009	mg/L	0.009	11/14/00	11/13/00	SH	200.7
Aluminum	29.7	mg/L	0.060	11/14/00	11/13/00	SH	200.7
Arsenic	0.020	mg/L	0.003	11/14/00	11/13/00	SH	200.7
Barium	0.299	mg/L	0.003	11/14/00	11/13/00	SH	200.7
Beryllium	0.003	mg/L	0.002	11/14/00	11/13/00	SH	200.7
Calcium	17.0	mg/L	0 015	11/14/00	11/13/00	SH	200.7
Cadmium	<0 005	mg/L	0.005	11/14/00	11/13/00	SH	200.7
Cobalt	0.055	mg/L	0.009	11/14/00	11/13/00	SH	200.7
Chromium	0.054	mg/L	0.009	11/14/00	11/13/00	SH	200 7
Copper	0.028	mg/L	0.008	11/14/00	11/13/00	SH	200.7
Iron	84.6	mg/L	0.009	11/14/00	11/13/00	SH	200.7
Mercury	<0.0002	mg/L	0 0002	11/15/00	11/14/00	JF	245.1
Potassium	5.91	mg/L	0.250	11/14/00	11/13/00	SH	200 7
Magnesium	7.92	mg/L	0.040	11/14/00	11/13/00	SH	200.7
Manganese	1.12	mg/L	0.003	11/14/00	11/13/00	SH	200.7
Sodium	18 2	mg/L	0.050	11/14/00	11/13/00	SH	200.7
Nickel	0.027	mg/L	0.020	11/14/00	11/13/00	SH	200.7
Lead	<0.060	mg/L	0.060	11/14/00	11/13/00	SH	200 7
Antimony	<0 040	mg/L	0.040	11/14/00	11/13/00	SH	200.7
Selenium	<0.100	mg/L	0.100	11/14/00	11/13/00	SH	200.7
Thallium	<0.065	mg/L	0 065	11/14/00	11/13/00	SH	200 7
Vanadium	0.089	mg/L	0 010	11/14/00	11/13/00	SH	200 7
Zinc	0.103	mg/L	0.010	11/14/00	11/13/00	SH	200.7

CS
Data Validator

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.
2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

Date Arrived **11/10/00**
ETC Order Number **0011335**

ETC Lab ID : **0011335-02**
Field ID : **MW-71-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/09/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE PREPARED	BY	METHOD
Mercury Digestion Batch	V7-AQ-65			11/14/00	11/14/00	JF	245.1
Metals Digestion Batch	V23-AQ-21			11/13/00	11/13/00	NR	3030K
Silver	<0.009	mg/L	0.009	11/14/00	11/13/00	SH	200 7
Aluminum	32.8	mg/L	0 060	11/14/00	11/13/00	SH	200 7
Arsenic	0.028	mg/L	0.003	11/14/00	11/13/00	SH	200 7
Barium	0.306	mg/L	0 003	11/14/00	11/13/00	SH	200.7
Beryllium	0.002	mg/L	0.002	11/14/00	11/13/00	SH	200.7
Calcium	20.1	mg/L	0.015	11/14/00	11/13/00	SH	200.7
Cadmium	<0.005	mg/L	0.005	11/14/00	11/13/00	SH	200.7
Cobalt	0.029	mg/L	0.009	11/14/00	11/13/00	SH	200 7
Chromium	0 073	mg/L	0.009	11/14/00	11/13/00	SH	200.7
Copper	0.019	mg/L	0.008	11/14/00	11/13/00	SH	200.7
Iron	103	mg/L	0.009	11/14/00	11/13/00	SH	200.7
Mercury	<0.0002	mg/L	0.0002	11/15/00	11/14/00	JF	245 1
P[redacted]ium	5.13	mg/L	0.250	11/14/00	11/13/00	SH	200.7
M[redacted]esium	9.31	mg/L	0.040	11/14/00	11/13/00	SH	200 7
Manganese	1.41	mg/L	0.003	11/14/00	11/13/00	SH	200 7
Sodium	20.0	mg/L	0.050	11/14/00	11/13/00	SH	200.7
Nickel	0 035	mg/L	0.020	11/14/00	11/13/00	SH	200.7
Lead	<0.060	mg/L	0.060	11/14/00	11/13/00	SH	200.7
Antimony	<0.040	mg/L	0.040	11/14/00	11/13/00	SH	200 7
Selenium	<0.100	mg/L	0.100	11/14/00	11/13/00	SH	200.7
Thallium	<0.065	mg/L	0.065	11/14/00	11/13/00	SH	200.7
Vanadium	0.101	mg/L	0.010	11/14/00	11/13/00	SH	200.7
Zinc	0.087	mg/L	0 010	11/14/00	11/13/00	SH	200.7

CS
Data Validator

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 436

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

Date Arrived **11/10/00**
ETC Order Number **0011335**

ETC Lab ID : **0011335-03**
Field ID : **MW-71B-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/09/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE PREPARED	BY	METHOD
Mercury Digestion Batch	V7-AQ-65			11/14/00	11/14/00	JF	245.1
Metals Digestion Batch	V23-AQ-21			11/13/00	11/13/00	NR	3030K
Silver	<0.009	mg/L	0 009	11/14/00	11/13/00	SH	200.7
Aluminum	45.1	mg/L	0 060	11/14/00	11/13/00	SH	200.7
Arsenic	0.020	mg/L	0.003	11/14/00	11/13/00	SH	200.7
Barium	0.252	mg/L	0.003	11/14/00	11/13/00	SH	200.7
Beryllium	<0.002	mg/L	0.002	11/14/00	11/13/00	SH	200 7
Calcium	18.9	mg/L	0.015	11/14/00	11/13/00	SH	200 7
Cadmium	<0.005	mg/L	0.005	11/14/00	11/13/00	SH	200.7
Cobalt	0.017	mg/L	0.009	11/14/00	11/13/00	SH	200.7
Chromium	0.064	mg/L	0.009	11/14/00	11/13/00	SH	200.7
Copper	0.013	mg/L	0.008	11/14/00	11/13/00	SH	200.7
Iron	69.8	mg/L	0.009	11/14/00	11/13/00	SH	200.7
Mercury	<0.0002	mg/L	0.0002	11/15/00	11/14/00	JF	245.1
Potassium	6.09	mg/L	0.250	11/14/00	11/13/00	SH	200.7
Magnesium	9.21	mg/L	0.040	11/14/00	11/13/00	SH	200.7
Manganese	0.794	mg/L	0.003	11/14/00	11/13/00	SH	200.7
Sodium	17.9	mg/L	0.050	11/14/00	11/13/00	SH	200 7
Nickel	0.026	mg/L	0 020	11/14/00	11/13/00	SH	200.7
Lead	<0.060	mg/L	0.060	11/14/00	11/13/00	SH	200.7
Antimony	<0.040	mg/L	0.040	11/14/00	11/13/00	SH	200 7
Selenium	<0.100	mg/L	0.100	11/14/00	11/13/00	SH	200.7
Thallium	<0.065	mg/L	0 065	11/14/00	11/13/00	SH	200.7
Vanadium	0.086	mg/L	0.010	11/14/00	11/13/00	SH	200.7
Zinc	0.068	mg/L	0.010	11/14/00	11/13/00	SH	200.7

Data Validator

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

Date Arrived **11/10/00**
ETC Order Number **0011335**

ETC Lab ID : **0011335-04**
Field ID . **MW-32-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/09/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE PREPARED	BY	METHOD
Mercury Digestion Batch	V7-AQ-65			11/14/00	11/14/00	JF	245 1
Metals Digestion Batch	V23-AQ-21			11/13/00	11/13/00	NR	3030K
Silver	<0.009	mg/L	0.009	11/14/00	11/13/00	SH	200.7
Aluminum	3.92	mg/L	0.060	11/14/00	11/13/00	SH	200.7
Arsenic	0.005	mg/L	0.003	11/14/00	11/13/00	SH	200.7
Barium	0.133	mg/L	0.003	11/14/00	11/13/00	SH	200.7
Beryllium	0.003	mg/L	0.002	11/14/00	11/13/00	SH	200.7
Calcium	26.6	mg/L	0.015	11/14/00	11/13/00	SH	200.7
Cadmium	<0.005	mg/L	0.005	11/14/00	11/13/00	SH	200.7
Cobalt	<0 009	mg/L	0.009	11/14/00	11/13/00	SH	200.7
Chromium	<0.009	mg/L	0.009	11/14/00	11/13/00	SH	200.7
Copper	<0.008	mg/L	0.008	11/14/00	11/13/00	SH	200.7
Iron	14.6	mg/L	0.009	11/14/00	11/13/00	SH	200.7
Mercury	<0.0002	mg/L	0.0002	11/15/00	11/14/00	JF	245.1
P[redacted]ium	1.93	mg/L	0.250	11/14/00	11/13/00	SH	200.7
M[redacted]sium	9.68	mg/L	0.040	11/14/00	11/13/00	SH	200.7
Manganese	0.338	mg/L	0.003	11/14/00	11/13/00	SH	200.7
Sodium	30.8	mg/L	0.050	11/14/00	11/13/00	SH	200.7
Nickel	<0 020	mg/L	0.020	11/14/00	11/13/00	SH	200.7
Lead	<0 060	mg/L	0.060	11/14/00	11/13/00	SH	200.7
Antimony	<0.040	mg/L	0 040	11/14/00	11/13/00	SH	200.7
Selenium	<0.100	mg/L	0.100	11/14/00	11/13/00	SH	200.7
Thallium	<0.065	mg/L	0.065	11/14/00	11/13/00	SH	200.7
Vanadium	0 021	mg/L	0.010	11/14/00	11/13/00	SH	200.7
Zinc	0.165	mg/L	0.010	11/14/00	11/13/00	SH	200.7

CS
Data Validator

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

613 438

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

Date Arrived **11/10/00**
ETC Order Number **0011335**

ETC Lab ID : **0011335-05**
Field ID : **RW-01-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/09/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE PREPARED	BY	METHOD
Mercury Digestion Batch	V7-AQ-65			11/14/00	11/14/00	JF	245.1
Metals Digestion Batch	V23-AQ-21			11/13/00	11/13/00	NR	3030K
Silver	<0.009	mg/L	0.009	11/14/00	11/13/00	SH	200.7
Aluminum	3.44	mg/L	0.060	11/14/00	11/13/00	SH	200.7
Arsenic	0.003	mg/L	0 003	11/14/00	11/13/00	SH	200.7
Barium	0.163	mg/L	0.003	11/14/00	11/13/00	SH	200.7
Beryllium	<0.002	mg/L	0.002	11/14/00	11/13/00	SH	200 7
Calcium	20.3	mg/L	0.015	11/14/00	11/13/00	SH	200.7
Cadmium	<0.005	mg/L	0.005	11/14/00	11/13/00	SH	200 7
Cobalt	<0.009	mg/L	0.009	11/14/00	11/13/00	SH	200.7
Chromium	0.065	mg/L	0.009	11/14/00	11/13/00	SH	200.7
Copper	<0.008	mg/L	0.008	11/14/00	11/13/00	SH	200.7
Iron	4.80	mg/L	0.009	11/14/00	11/13/00	SH	200.7
Mercury	<0.0002	mg/L	0 0002	11/15/00	11/14/00	JF	245 1
Potassium	1.42	mg/L	0.250	11/14/00	11/13/00	SH	200.7
Magnesium	9.49	mg/L	0.040	11/14/00	11/13/00	SH	200.7
Manganese	0 022	mg/L	0.003	11/14/00	11/13/00	SH	200.7
Sodium	37.2	mg/L	0.050	11/14/00	11/13/00	SH	200.7
Nickel	<0.020	mg/L	0.020	11/14/00	11/13/00	SH	200.7
Lead	<0.060	mg/L	0.060	11/14/00	11/13/00	SH	200.7
Antimony	<0.040	mg/L	0.040	11/14/00	11/13/00	SH	200 7
Selenium	<0 100	mg/L	0.100	11/14/00	11/13/00	SH	200 7
Thallium	<0.065	mg/L	0 065	11/14/00	11/13/00	SH	200.7
Vanadium	<0.010	mg/L	0 010	11/14/00	11/13/00	SH	200.7
Zinc	0 013	mg/L	0.010	11/14/00	11/13/00	SH	200.7

CS

Data Validator

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

Date Arrived **11/10/00**
ETC Order Number **0011335**

ETC Lab ID : **0011335-06**
Field ID : **RW-1A-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/09/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE PREPARED	BY	METHOD
Mercury Digestion Batch	V7-AQ-65			11/14/00	11/14/00	JF	245 1
Metals Digestion Batch	V23-AQ-21			11/13/00	11/13/00	NR	3030K
Silver	<0.009	mg/L	0.009	11/14/00	11/13/00	SH	200 7
Aluminum	3.28	mg/L	0.060	11/14/00	11/13/00	SH	200 7
Arsenic	<0 003	mg/L	0.003	11/14/00	11/13/00	SH	200.7
Barium	0.116	mg/L	0.003	11/14/00	11/13/00	SH	200.7
Beryllium	<0.002	mg/L	0.002	11/14/00	11/13/00	SH	200 7
Calcium	20.0	mg/L	0.015	11/14/00	11/13/00	SH	200.7
Cadmium	<0.005	mg/L	0.005	11/14/00	11/13/00	SH	200.7
Cobalt	<0.009	mg/L	0.009	11/14/00	11/13/00	SH	200.7
Chromium	0.012	mg/L	0 009	11/14/00	11/13/00	SH	200.7
Copper	<0.008	mg/L	0.008	11/14/00	11/13/00	SH	200.7
Iron	7.56	mg/L	0.009	11/14/00	11/13/00	SH	200.7
Mercury	<0.0002	mg/L	0.0002	11/15/00	11/14/00	JF	245.1
P[redacted]ium	1.37	mg/L	0.250	11/14/00	11/13/00	SH	200 7
M[redacted]esium	9.12	mg/L	0.040	11/14/00	11/13/00	SH	200.7
Manganese	0.058	mg/L	0.003	11/14/00	11/13/00	SH	200 7
Sodium	16.8	mg/L	0.050	11/14/00	11/13/00	SH	200.7
Nickel	<0.020	mg/L	0.020	11/14/00	11/13/00	SH	200.7
Lead	<0.060	mg/L	0.060	11/14/00	11/13/00	SH	200.7
Antimony	<0.040	mg/L	0.040	11/14/00	11/13/00	SH	200 7
Selenium	<0.100	mg/L	0.100	11/14/00	11/13/00	SH	200 7
Thallium	<0.065	mg/L	0.065	11/14/00	11/13/00	SH	200.7
Vanadium	<0.010	mg/L	0 010	11/14/00	11/13/00	SH	200 7
Zinc	0.035	mg/L	0.010	11/14/00	11/13/00	SH	200.7

CS
Data Validator

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 410

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

Date Arrived **11/10/00**
ETC Order Number **0011335**

ETC Lab ID : **0011335-07**
Field ID : **RW-1B-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/09/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE PREPARED	BY	METHOD
Mercury Digestion Batch	V7-AQ-65			11/14/00	11/14/00	JF	245 1
Metals Digestion Batch	V23-AQ-21			11/13/00	11/13/00	NR	3030K
Silver	<0.009	mg/L	0.009	11/14/00	11/13/00	SH	200.7
Aluminum	0.760	mg/L	0.060	11/14/00	11/13/00	SH	200.7
Arsenic	<0.003	mg/L	0.003	11/14/00	11/13/00	SH	200.7
Barium	0.084	mg/L	0.003	11/14/00	11/13/00	SH	200.7
Beryllium	<0 002	mg/L	0.002	11/14/00	11/13/00	SH	200 7
Calcium	24.8	mg/L	0.015	11/14/00	11/13/00	SH	200.7
Cadmium	<0.005	mg/L	0.005	11/14/00	11/13/00	SH	200.7
Cobalt	<0.009	mg/L	0.009	11/14/00	11/13/00	SH	200.7
Chromium	<0.009	mg/L	0.009	11/14/00	11/13/00	SH	200.7
Copper	<0.008	mg/L	0.008	11/14/00	11/13/00	SH	200.7
Iron	1.18	mg/L	0.009	11/14/00	11/13/00	SH	200.7
Mercury	<0.0002	mg/L	0.0002	11/15/00	11/14/00	JF	245.1
Potassium	1.26	mg/L	0.250	11/14/00	11/13/00	SH	200.7
Magnesium	9.59	mg/L	0.040	11/14/00	11/13/00	SH	200 7
Manganese	0 017	mg/L	0.003	11/14/00	11/13/00	SH	200.7
Sodium	24.0	mg/L	0.050	11/14/00	11/13/00	SH	200.7
Nickel	<0.020	mg/L	0.020	11/14/00	11/13/00	SH	200.7
Lead	<0.060	mg/L	0.060	11/14/00	11/13/00	SH	200 7
Antimony	<0.040	mg/L	0.040	11/14/00	11/13/00	SH	200.7
Selenium	<0 100	mg/L	0.100	11/14/00	11/13/00	SH	200.7
Thallium	<0.065	mg/L	0.065	11/14/00	11/13/00	SH	200.7
Vanadium	<0.010	mg/L	0.010	11/14/00	11/13/00	SH	200.7
Zinc	<0.010	mg/L	0.010	11/14/00	11/13/00	SH	200.7

CS

Data Validator

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 441

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

Date Arrived **11/10/00**
ETC Order Number **0011335**

ETC Lab ID : **0011335-08**
Field ID : **FB-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/09/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE PREPARED	BY	METHOD
Mercury Digestion Batch	V7-AQ-65			11/14/00	11/14/00	JF	245 1
Metals Digestion Batch	V23-AQ-21			11/13/00	11/13/00	NR	3030K
Silver	<0.009	mg/L	0.009	11/14/00	11/13/00	SH	200 7
Aluminum	<0.060	mg/L	0.060	11/14/00	11/13/00	SH	200.7
Arsenic	<0.003	mg/L	0.003	11/14/00	11/13/00	SH	200.7
Barium	<0.003	mg/L	0.003	11/14/00	11/13/00	SH	200.7
Beryllium	<0.002	mg/L	0.002	11/14/00	11/13/00	SH	200.7
Calcium	0.045	mg/L	0.015	11/14/00	11/13/00	SH	200.7
Cadmium	<0.005	mg/L	0 005	11/14/00	11/13/00	SH	200.7
Cobalt	<0.009	mg/L	0.009	11/14/00	11/13/00	SH	200.7
Chromium	<0.009	mg/L	0.009	11/14/00	11/13/00	SH	200.7
Copper	<0.008	mg/L	0.008	11/14/00	11/13/00	SH	200 7
Iron	0 021	mg/L	0.009	11/14/00	11/13/00	SH	200 7
Mercury	<0.0002	mg/L	0.0002	11/15/00	11/14/00	JF	245.1
P[redacted]ium	<0.250	mg/L	0.250	11/14/00	11/13/00	SH	200.7
M[redacted]sium	<0.040	mg/L	0.040	11/14/00	11/13/00	SH	200.7
Manganese	<0.003	mg/L	0.003	11/14/00	11/13/00	SH	200.7
Sodium	3.57	mg/L	0 050	11/14/00	11/13/00	SH	200.7
Nickel	<0.020	mg/L	0 020	11/14/00	11/13/00	SH	200.7
Lead	<0.060	mg/L	0 060	11/14/00	11/13/00	SH	200.7
Antimony	<0.040	mg/L	0.040	11/14/00	11/13/00	SH	200.7
Selenium	<0.100	mg/L	0.100	11/14/00	11/13/00	SH	200.7
Thallium	<0.065	mg/L	0.065	11/14/00	11/13/00	SH	200.7
Vanadium	<0.010	mg/L	0 010	11/14/00	11/13/00	SH	200.7
Zinc	0.016	mg/L	0.010	11/14/00	11/13/00	SH	200.7

CS
Data Validator

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 442

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

Date Arrived **11/10/00**
ETC Order Number **0011335**

ETC Lab ID : **0011335-09**
Field ID : **RW-02-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/09/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE PREPARED	BY	METHOD
Mercury Digestion Batch	V7-AQ-65			11/14/00	11/14/00	JF	245.1
Metals Digestion Batch	V23-AQ-21			11/13/00	11/13/00	NR	3030K
Silver	<0.009	mg/L	0.009	11/14/00	11/13/00	SH	200.7
Aluminum	0 177	mg/L	0.060	11/14/00	11/13/00	SH	200.7
Arsenic	<0.003	mg/L	0.003	11/14/00	11/13/00	SH	200.7
Barium	0.083	mg/L	0.003	11/14/00	11/13/00	SH	200 7
Beryllium	<0.002	mg/L	0 002	11/14/00	11/13/00	SH	200 7
Calcium	26.0	mg/L	0.015	11/14/00	11/13/00	SH	200.7
Cadmium	<0.005	mg/L	0.005	11/14/00	11/13/00	SH	200.7
Cobalt	<0.009	mg/L	0.009	11/14/00	11/13/00	SH	200.7
Chromium	<0.009	mg/L	0.009	11/14/00	11/13/00	SH	200.7
Copper	<0.008	mg/L	0.008	11/14/00	11/13/00	SH	200.7
Iron	0 536	mg/L	0.009	11/14/00	11/13/00	SH	200.7
Mercury	<0.0002	mg/L	0 0002	11/15/00	11/14/00	JF	245 1
Potassium	0.881	mg/L	0.250	11/14/00	11/13/00	SH	200.7
Magnesium	9.72	mg/L	0.040	11/14/00	11/13/00	SH	200.7
Manganese	0.035	mg/L	0.003	11/14/00	11/13/00	SH	200.7
Sodium	22.3	mg/L	0.050	11/14/00	11/13/00	SH	200.7
Nickel	<0.020	mg/L	0.020	11/14/00	11/13/00	SH	200.7
Lead	<0.060	mg/L	0.060	11/14/00	11/13/00	SH	200.7
Antimony	<0.040	mg/L	0.040	11/14/00	11/13/00	SH	200.7
Selenium	<0 100	mg/L	0.100	11/14/00	11/13/00	SH	200.7
Thallium	<0.065	mg/L	0.065	11/14/00	11/13/00	SH	200.7
Vanadium	<0.010	mg/L	0.010	11/14/00	11/13/00	SH	200.7
Zinc	<0.010	mg/L	0.010	11/14/00	11/13/00	SH	200.7

CS
Data Validator

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

Date Arrived **11/10/00**
ETC Order Number **0011335**

ETC Lab ID : **0011335-10**
Field ID : **MW-70-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/09/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE PREPARED	BY	METHOD
Mercury Digestion Batch	V7-AQ-65			11/14/00	11/14/00	JF	245.1
Metals Digestion Batch	V23-AQ-21			11/13/00	11/13/00	NR	3030K
Silver	<0.009	mg/L	0.009	11/14/00	11/13/00	SH	200.7
Aluminum	41 5	mg/L	0.060	11/14/00	11/13/00	SH	200.7
Arsenic	0 028	mg/L	0.003	11/14/00	11/13/00	SH	200.7
Barium	0 371	mg/L	0.003	11/14/00	11/13/00	SH	200 7
Beryllium	0 003	mg/L	0.002	11/14/00	11/13/00	SH	200 7
Calcium	23 3	mg/L	0.015	11/14/00	11/13/00	SH	200.7
Cadmium	<0 005	mg/L	0.005	11/14/00	11/13/00	SH	200.7
Cobalt	0.057	mg/L	0.009	11/14/00	11/13/00	SH	200.7
Chromium	0.088	mg/L	0.009	11/14/00	11/13/00	SH	200.7
Copper	0.035	mg/L	0.008	11/14/00	11/13/00	SH	200.7
Iron	137	mg/L	0.009	11/14/00	11/13/00	SH	200.7
Mercury	0.0004	mg/L	0 0002	11/15/00	11/14/00	JF	245 1
[redacted]sium	6.39	mg/L	0.250	11/14/00	11/13/00	SH	200 7
[redacted]esium	12.3	mg/L	0.040	11/14/00	11/13/00	SH	200.7
Manganese	1.77	mg/L	0.003	11/14/00	11/13/00	SH	200.7
Sodium	24.3	mg/L	0.050	11/14/00	11/13/00	SH	200.7
Nickel	0.041	mg/L	0 020	11/14/00	11/13/00	SH	200.7
Lead	<0.060	mg/L	0.060	11/14/00	11/13/00	SH	200.7
Antimony	<0.040	mg/L	0.040	11/14/00	11/13/00	SH	200.7
Selenium	<0.100	mg/L	0.100	11/14/00	11/13/00	SH	200.7
Thallium	<0.065	mg/L	0.065	11/14/00	11/13/00	SH	200.7
Vanadium	0.121	mg/L	0.010	11/14/00	11/13/00	SH	200.7
Zinc	0.150	mg/L	0.010	11/14/00	11/13/00	SH	200.7

Data Validator

ND - Not Detected

613 444

FORM 3A
WATER METHOD BLANK
METALS

Lab Name Environmental Testing and Consulting, Inc

		QC Batch
Laboratory ID ICP/GFAA Metals	V23-AQ-21 BLK	V23-AQ-21
Laboratory ID Mercury	V7-AQ-65 BLK	V7-AQ-65

Date Sample Prepared	11/13/00 ICP/GFAA Metals
	11/14/00 Mercury

Metals	Concentration mg/L	Detection Limit mg/L	Date Analyzed	Method
Silver	ND	0 009	11/14/00	200.7
Aluminum	ND	0 060	11/14/00	200 7
Arsenic	ND	0 003	11/14/00	200 7
Barium	ND	0.003	11/14/00	200 7
Beryllium	ND	0 002	11/14/00	200 7
Calcium	0 018	0.015	11/14/00	200 7
Cadmium	ND	0 005	11/14/00	200.7
Cobalt	ND	0 009	11/14/00	200 7
Chromium	ND	0 009	11/14/00	200 7
Copper	ND	0 008	11/14/00	200.7
Iron	ND	0.009	11/14/00	200 7
Potassium	ND	0 250	11/14/00	200 7
Magnesium	ND	0 040	11/14/00	200 7
Manganese	ND	0.003	11/14/00	200 7
Sodium	ND	0.050	11/14/00	200 7
Nickel	ND	0 020	11/14/00	200 7
Lead	ND	0 060	11/14/00	200 7
Antimony	ND	0 040	11/14/00	200 7
Selenium	ND	0 100	11/14/00	200 7
Thallium	ND	0 065	11/14/00	200 7
Vanadium	ND	0 010	11/14/00	200 7
Zinc	ND	0 010	11/14/00	200 7
Mercury	ND	0.0002	11/15/00	245 1

ND - Not Detected

Reviewed by CS

0011-335 mqc BLANK

FORM 7
WATER LABORATORY CONTROL SAMPLE
METALS

Lab Name: Environmental Testing and Consulting, Inc

			QC Batch
Laboratory Control ID	ICP/GFAA Metals	V23-AQ-21 LCS	V23-AQ-21
	Mercury	V7-AQ-65 LCS	V7-AQ-65
Date Prepared	ICP/GFAA Metals	11/13/00	
	Mercury	11/14/00	

Metals	Spike Added mg/L	Found mg/L	% R	#	QC Limits	
Silver	0.250	0 259	104		80	120
Aluminum	2 50	2 47	99		80	120
Arsenic	0 100	0 104	104		80	120
Barium	2 50	2.66	106		80	120
Beryllium	0.250	0 265	106		80	120
Calcium	5.00	5 33	107		80	120
Cadmium	0.020	0.021	105		80	120
Cobalt	1 25	1 30	104		80	120
Chromium	0 500	0 525	105		80	120
Copper	0 500	0 518	104		80	120
Iron	2 50	2 64	106		80	120
Potassium	5 00	5 32	106		80	120
Magnesium	5 00	4 89	98		80	120
Manganese	0.250	0 268	107		80	120
Sodium	5 00	5 39	108		80	120
Nickel	1 25	1 30	104		80	120
Lead	0.100	0 107	107		80	120
Antimony	0 200	0.208	104		80	120
Selenium	0.100	0 105	105		80	120
Thallium	0.100	0 106	106		80	120
Vanadium	1.25	1 31	105		80	120
Zinc	0 250	0.272	109		80	120
Mercury	0 0050	0 0047	94		80	120

Column to be used to flag recovery values with an asterisk
* Values outside of QC limits

Reviewed by CS

FORM 6
WATER MATRIX SPIKE / MATRIX SPIKE DUPLICATE
METALS

613 446

Lab Name Environmental Testing and Consulting, Inc

		QC Batch
Laboratory ID MS ICP/GFAA Metals	0011-335-01	V23-AQ-21
Laboratory ID MS Mercury	0011-335-01	V7-AQ-65

Date Sample Prepared	11/13/00	ICP/GFAA Metals
	11/14/00	Mercury

Metals	SPIKE Added mg/L	SAMPLE Conc mg/L	MS Conc mg/L	RPD <20% #	MS % Rec #	QC Limits	
Silver	0 250	ND	0 109	61 *	44 *	75	125
Aluminum	2 50	29 7	35 8	81 *	244 *	75	125
Arsenic	0.100	0.020	0.121	13	101	75	125
Barium	2 50	0 299	3 00	1	108	75	125
Beryllium	0 250	0 003	0 269	0	106	75	125
Calcium	5 00	17 0	22.4	0	108	75	125
Cadmium	0 020	ND	0 020	5	100	75	125
Cobalt	1 25	0 055	1.35	1	104	75	125
Chromium	0 500	0 054	0 576	2	104	75	125
Copper	0 500	0.028	0 564	1	107	75	125
Iron	2.50	84 6	87 9	30 *	132 *	75	125
Potassium	5.00	5 91	11 3	24 *	108	75	125
Magnesium	5 00	7 92	12 8	5	98	75	125
Manganese	0 250	1 12	1 40	4	112	75	125
Sodium	5 00	18.2	23 8	1	112	75	125
Nickel	1 25	0 027	1 32	0	103	75	125
Lead	0 100	0 023	0 131	5	108	75	125
Antimony	0 200	ND	0 183	1	92	75	125
Selenium	0 100	ND	0 109	21 *	109	75	125
Thallium	0 100	ND	0 101	3	101	75	125
Vanadium	1 25	0 089	1 40	1	105	75	125
Zinc	0 250	0 103	0 366	8	105	75	125
Mercury	0 0050	0 0002	0 0050	2	96	75	125

ND - Not Detected
Column to be used to flag recovery values with an asterisk
* Values outside of QC limits

Reviewed by ( )

FORM 6
WATER MATRIX SPIKE / MATRIX SPIKE DUPLICATE
METALS

Lab Name Environmental Testing and Consulting, Inc

		QC Batch
Laboratory ID MS ICP/GFAA Metals	0011-335-01	V23-AQ-21
Laboratory ID MS Mercury	0011-335-01	V7-AQ-65

Date Sample Prepared	11/13/00	ICP/GFAA Metals
	11/14/00	Mercury

Metals	SPIKE Added mg/L	SAMPLE Conc mg/L	MSD Conc mg/L		MSD % Rec	#	QC Limits	
Silver	0 250	ND	0 058		23	*	75	125
Aluminum	2 50	29 7	15 1		-584	*	75	125
Arsenic	0 100	0 020	0.106		86		75	125
Barium	2 50	0 299	2 97		107		75	125
Beryllium	0 250	0 003	0.269		106		75	125
Calcium	5 00	17 0	22 4		108		75	125
Cadmium	0 020	ND	0.021		105		75	125
Cobalt	1.25	0 055	1 36		104		75	125
Chromium	0 500	0.054	0 562		102		75	125
Copper	0 500	0 028	0 561		107		75	125
Iron	2.50	84 6	64 9		-788	*	75	125
Potassium	5 00	5 91	8 84		59	*	75	125
Magnesium	5 00	7 92	12 2		86		75	125
Manganese	0 250	1 12	1 34		88		75	125
Sodium	5.00	18.2	23 6		108		75	125
Nickel	1 25	0 027	1 32		103		75	125
Lead	0 100	0 023	0 124		101		75	125
Antimony	0 200	ND	0 184		92		75	125
Selenium	0 100	ND	0.088		88		75	125
Thallium	0 100	ND	0 104		104		75	125
Vanadium	1 25	0 089	1 38		103		75	125
Zinc	0.250	0 103	0 339		94		75	125
Mercury	0.0050	0 0002	0 0049		94		75	125

ND - Not Detected
Column to be used to flag recovery values with an asterisk
* Values outside of QC limits

Reviewed by ( )

613 448

FORM 5B
POST DIGESTION SPIKE
METALS

Lab Name: Enviornmental Testing and Consulting, Inc.

QC Batch ICP/GFAA Metals V23-AQ-21

Date Sample Prepared 11/13/00 ICP/GFAA Metals

Metals	Spike Expected mg/L	Spike Found mg/L	% Recovery	QC Limits	
Silver	0.025	0.024	96	75	125

Post Digestion Spikes (PDS) were performed on those analytes with recoveries outside QC limits for both the MS and MSD that are less than 25 times the method detection limit.

Reviewed by CS

FORM 9
SERIAL DILUTIONS
METALS

Lab Name: Enviornmental Testing and Consulting, Inc.

QC Batch ICP/GFAA Metals V23-AQ-21

Date Sample Prepared 11/13/00 ICP/GFAA Metals

Analyte	Initial Sample Result	Serial Dilution Result	Serial Dilution	% Difference
Aluminum	29 7	28 6	1.5	4
Iron	84 6	81 9	1 5	3

ND - Not Detected
% Difference should be within 10% of the undiluted/lowest dilution result

Reviewed by CS

Serial Dilution 0011-335 mqc

613 450

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

Date Arrived **11/10/00**
ETC Order Number **0011335**

ETC Lab ID : **0011335-11**
Field ID : **RB-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/09/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE PREPARED	BY	METHOD
Mercury Digestion Batch	V7-AQ-66			11/14/00	11/14/00	JF	245 1
Metals Digestion Batch	V23-AQ-22			11/13/00	11/13/00	NR	3030K
Silver	<0.009	mg/L	0.009	11/14/00	11/13/00	SH	200.7
Aluminum	<0.060	mg/L	0.060	11/14/00	11/13/00	SH	200.7
Arsenic	<0.003	mg/L	0.003	11/14/00	11/13/00	SH	200.7
Barium	<0.003	mg/L	0.003	11/14/00	11/13/00	SH	200.7
Beryllium	<0.002	mg/L	0.002	11/14/00	11/13/00	SH	200.7
Calcium	0.055	mg/L	0.015	11/14/00	11/13/00	SH	200.7
Cadmium	<0.005	mg/L	0.005	11/14/00	11/13/00	SH	200.7
Cobalt	<0.009	mg/L	0.009	11/14/00	11/13/00	SH	200.7
Chromium	<0.009	mg/L	0.009	11/14/00	11/13/00	SH	200.7
Copper	<0.008	mg/L	0.008	11/14/00	11/13/00	SH	200.7
Iron	<0.009	mg/L	0.009	11/14/00	11/13/00	SH	200.7
Mercury	<0.0002	mg/L	0.0002	11/15/00	11/14/00	JF	245.1
Potassium	<0.250	mg/L	0.250	11/14/00	11/13/00	SH	200.7
Magnesium	<0.040	mg/L	0.040	11/14/00	11/13/00	SH	200.7
Manganese	<0.003	mg/L	0.003	11/14/00	11/13/00	SH	200.7
Sodium	3.49	mg/L	0.050	11/14/00	11/13/00	SH	200 7
Nickel	<0.020	mg/L	0.020	11/14/00	11/13/00	SH	200.7
Lead	<0.060	mg/L	0.060	11/14/00	11/13/00	SH	200 7
Antimony	<0.040	mg/L	0.040	11/14/00	11/13/00	SH	200 7
Selenium	<0.100	mg/L	0.100	11/14/00	11/13/00	SH	200.7
Thallium	<0.065	mg/L	0.065	11/14/00	11/13/00	SH	200.7
Vanadium	<0.010	mg/L	0 010	11/14/00	11/13/00	SH	200 7
Zinc	<0.010	mg/L	0 010	11/14/00	11/13/00	SH	200.7

( )
Data Validator

ND - Not Detected

FORM 3A
WATER METHOD BLANK
METALS

Lab Name: Environmental Testing and Consulting, Inc

		QC Batch
Laboratory ID ICP/GFAA Metals	V23-AQ-22 BLK	V23-AQ-22
Laboratory ID Mercury	V7-AQ-66 BLK	V7-AQ-66

Date Sample Prepared	11/13/00 ICP/GFAA Metals
	11/14/00 Mercury

Metals	Concentration mg/L	Detection Limit mg/L	Date Analyzed	Method
Silver	ND	0 009	11/14/00	200.7
Aluminum	ND	0 060	11/14/00	200 7
Arsenic	ND	0.003	11/14/00	200 7
Barium	ND	0.003	11/14/00	200 7
Beryllium	ND	0 002	11/14/00	200.7
Calcium	0.017	0 015	11/14/00	200.7
Cadmium	ND	0.005	11/14/00	200 7
Cobalt	ND	0.009	11/14/00	200 7
Chromium	ND	0 009	11/14/00	200.7
Copper	ND	0.008	11/14/00	200.7
Iron	ND	0.009	11/14/00	200.7
Potassium	ND	0.250	11/14/00	200.7
Magnesium	ND	0.040	11/14/00	200 7
Manganese	ND	0 003	11/14/00	200.7
Sodium	0.108	0 050	11/14/00	200.7
Nickel	ND	0.020	11/14/00	200.7
Lead	ND	0 060	11/14/00	200.7
Antimony	ND	0 040	11/14/00	200.7
Selenium	ND	0.100	11/14/00	200.7
Thallium	ND	0.065	11/14/00	200.7
Vanadium	ND	0.010	11/14/00	200 7
Zinc	ND	0 010	11/14/00	200 7
Mercury	ND	0.0002	11/15/00	245.1

ND - Not Detected

Reviewed by CS

613 452

FORM 7
WATER LABORATORY CONTROL SAMPLE
METALS

Lab Name: Environmental Testing and Consulting, Inc

			QC Batch
Laboratory Control ID	ICP/GFAA Metals	V23-AQ-22 LCS	V23-AQ-22
	Mercury	V7-AQ-66 LCS	V7-AQ-66
Date Prepared	ICP/GFAA Metals	11/13/00	
	Mercury	11/14/00	

Metals	Spike Added mg/L	Found mg/L	% R #	QC Limits	
Silver	0 250	0 252	101	80	120
Aluminum	2 50	2 37	95	80	120
Arsenic	0 100	0 099	99	80	120
Barium	2 50	2 58	103	80	120
Beryllium	0 250	0 258	103	80	120
Calcium	5.00	5 18	104	80	120
Cadmium	0.020	0 021	105	80	120
Cobalt	1 25	1 28	102	80	120
Chromium	0 500	0 509	102	80	120
Copper	0.500	0 503	101	80	120
Iron	2 50	2 58	103	80	120
Potassium	5 00	5.18	104	80	120
Magnesium	5 00	4 78	96	80	120
Manganese	0 250	0 262	105	80	120
Sodium	5.00	5 20	104	80	120
Nickel	1 25	1 27	102	80	120
Lead	0.100	0 104	104	80	120
Antimony	0 200	0 204	102	80	120
Selenium	0 100	0.103	103	80	120
Thallium	0 100	0 101	101	80	120
Vanadium	1 25	1.28	102	80	120
Zinc	0 250	0 261	104	80	120
Mercury	0 0050	0 0047	94	80	120

Column to be used to flag recovery values with an asterisk
* Values outside of QC limits

Reviewed by CS

FORM 6
WATER MATRIX SPIKE / MATRIX SPIKE DUPLICATE
METALS

Lab Name: Environmental Testing and Consulting, Inc

		QC Batch
Laboratory ID MS ICP/GFAA Metals	0011-335-11	V23-AQ-22
Laboratory ID MS Mercury	0011-335-11	V7-AQ-66

Date Sample Prepared	11/13/00	ICP/GFAA Metals
	11/14/00	Mercury

Metals	SPIKE Added mg/L	SAMPLE Conc mg/L	MS Conc mg/L	RPD <20% #	MS % Rec #	QC Limits	
Silver	0.250	ND	0 264	1	106	75	125
Aluminum	2 50	ND	2 51	2	100	75	125
Arsenic	0 100	ND	0 105	2	105	75	125
Barium	2 50	ND	2.71	1	108	75	125
Beryllium	0 250	ND	0 270	1	108	75	125
Calcium	5 00	0 055	5 44	1	108	75	125
Cadmium	0 020	ND	0 022	5	110	75	125
Cobalt	1 25	ND	1 32	1	106	75	125
Chromium	0 500	ND	0.534	1	107	75	125
Copper	0 500	ND	0 531	1	106	75	125
Iron	2 50	ND	2 72	0	109	75	125
Potassium	5.00	ND	5 48	1	110	75	125
Magnesium	5 00	ND	4 91	1	98	75	125
Manganese	0 250	ND	0 272	1	109	75	125
Sodium	5 00	3 49	8 85	2	107	75	125
Nickel	1 25	ND	1 33	2	106	75	125
Lead	0 100	ND	0 108	0	108	75	125
Antimony	0 200	ND	0 212	0	106	75	125
Selenium	0 100	ND	0.105	0	105	75	125
Thallium	0 100	ND	0 105	1	105	75	125
Vanadium	1 25	ND	1 34	1	107	75	125
Zinc	0 250	ND	0 279	1	112	75	125
Mercury	0 0050	ND	0 0049	2	98	75	125

ND - Not Detected
Column to be used to flag recovery values with an asterisk
* Values outside of QC limits

Reviewed by CS

613 454

FORM 6
WATER MATRIX SPIKE / MATRIX SPIKE DUPLICATE
METALS

Lab Name Environmental Testing and Consulting, Inc

		QC Batch
Laboratory ID MS ICP/GFAA Metals	0011-335-11	V23-AQ-22
Laboratory ID MS Mercury	0011-335-11	V7-AQ-66

Date Sample Prepared	11/13/00	ICP/GFAA Metals
	11/14/00	Mercury

Metals	SPIKE Added mg/L	SAMPLE Conc mg/L	MSD Conc mg/L		MSD % Rec #	QC Limits	
Silver	0.250	ND	0.261		104	75	125
Aluminum	2 50	ND	2 47		99	75	125
Arsenic	0 100	ND	0.103		103	75	125
Barium	2 50	ND	2 69		108	75	125
Beryllium	0 250	ND	0 267		107	75	125
Calcium	5.00	0 055	5 40		107	75	125
Cadmium	0 020	ND	0 021		105	75	125
Cobalt	1 25	ND	1 31		105	75	125
Chromium	0 500	ND	0 530		106	75	125
Copper	0.500	ND	0 525		105	75	125
Iron	2 50	ND	2 71		108	75	125
Potassium	5 00	ND	5 40		108	75	125
Magnesium	5 00	ND	4 86		97	75	125
Manganese	0 250	ND	0.269		108	75	125
Sodium	5.00	3 49	8 71		104	75	125
Nickel	1.25	ND	1 31		105	75	125
Lead	0 100	ND	0 108		108	75	125
Antimony	0 200	ND	0.212		106	75	125
Selenium	0 100	ND	0.105		105	75	125
Thallium	0.100	ND	0 104		104	75	125
Vanadium	1 25	ND	1 33		106	75	125
Zinc	0.250	ND	0 276		110	75	125
Mercury	0 0050	ND	0 0048		96	75	125

ND - Not Detected
Column to be used to flag recovery values with an asterisk
* Values outside of QC limits

Reviewed by CS

ENVIRONMENTAL TESTING & CONSULTING, INC.
2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

FID #

Date Arrived **11/10/00**
ETC Order Number **0011335**

ETC Lab ID **0011335-01**
Field ID : **MW-69-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/09/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
GC/MS Volatile Organics				11/13/00	LS	8260B 5030B
QC Batch	**V1111301**					
Dilution Factor	**1**					
Acetone	ND	ug/L	20.0			
Benzene	ND	ug/L	1.00			
Bromodichloromethane	ND	ug/L	1 00			
Bromoform	ND	ug/L	1.00			
Bromomethane	ND	ug/L	1 00			
2-Butanone (MEK)	ND	ug/L	20.0			
Carbon Disulfide	ND	ug/L	1.00			
Carbon Tetrachloride	ND	ug/L	1 00			
Chlorobenzene	ND	ug/L	1 00			
Chlorodibromomethane	ND	ug/L	1.00			
[illegible]loroethane	ND	ug/L	1 00			
[illegible]oroform	2.12	ug/L	1 00			
[illegible]hloromethane	ND	ug/L	1.00			
1,1-Dichloroethane	ND	ug/L	1.00			
1,2-Dichloroethane	ND	ug/L	1.00			
1,1-Dichloroethene	ND	ug/L	1.00			
trans-1,2-Dichloroethene	12.3	ug/L	1.00			
1,2-Dichloropropane	ND	ug/L	1.00			
cis-1,3-Dichloropropene	ND	ug/L	1.00			
trans-1,3-Dichloropropene	ND	ug/L	1 00			
Ethylbenzene	ND	ug/L	1.00			
2-Hexanone (MBK)	ND	ug/L	5.00			
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.00			
Methylene Chloride	ND	ug/L	5 00			
Styrene	ND	ug/L	1.00			
1,1,2,2-Tetrachloroethane	ND	ug/L	1.00			
Tetrachloroethene	6.39	ug/L	1.00			
Toluene	ND	ug/L	1.00			
1,1,1-Trichloroethane	ND	ug/L	1.00			
1,1,2-Trichloroethane	ND	ug/L	1.00			
Trichloroethene	282E	ug/L	1.00			
Vinyl Acetate	ND	ug/L	20.0			
Vinyl Chloride	ND	ug/L	1.00			
Xylenes-m,p	ND	ug/L	1.00			
Xylenes-o	ND	ug/L	1.00			
cis-1,2-Dichloroethene	23.1	ug/L	1 00			

Surrogate Standard	% Recovery	QC Limits	
S1 - Dibromofluoromethane	91	74	123
S2 - Toluene-d8	94	86	112
4-Bromofluorobenzene	96	81	115
1,2-Dichloroethane-d4	96	80	120

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

FORM 1

613 456 VOA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

0011-335-1

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-335

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 0501006

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/13/00

GC Column: ID: 2.00 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

FID #

Date Arrived **11/10/00**
ETC Order Number **0011335**

ETC Lab ID **0011335-01**
Field ID : **MW-69-Y2Q4-DIL**

Matrix : **AQUEOUS**
Sample Date : **11/09/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
GC/MS Volatile Organics				11/15/00	LS	8260B 5030B
QC Batch	**V1111501**					
Dilution Factor	**10**					
Acetone	ND	ug/L	200			
Benzene	ND	ug/L	10 0			
Bromodichloromethane	ND	ug/L	10.0			
Bromoform	ND	ug/L	10.0			
Bromomethane	ND	ug/L	10.0			
2-Butanone (MEK)	ND	ug/L	200			
Carbon Disulfide	ND	ug/L	10.0			
Carbon Tetrachloride	ND	ug/L	10.0			
Chlorobenzene	ND	ug/L	10 0			
Chlorodibromomethane	ND	ug/L	10.0			
[redacted]loroethane	ND	ug/L	10.0			
[redacted]oroform	ND	ug/L	10 0			
Chloromethane	ND	ug/L	10 0			
1,1-Dichloroethane	ND	ug/L	10.0			
1,2-Dichloroethane	ND	ug/L	10.0			
1,1-Dichloroethene	ND	ug/L	10.0			
trans-1,2-Dichloroethene	14 7	ug/L	10.0			
1,2-Dichloropropane	ND	ug/L	10.0			
cis-1,3-Dichloropropene	ND	ug/L	10.0			
trans-1,3-Dichloropropene	ND	ug/L	10.0			
Ethylbenzene	ND	ug/L	10.0			
2-Hexanone (MBK)	ND	ug/L	50 0			
4-Methyl-2-pentanone (MIBK)	ND	ug/L	50 0			
Methylene Chloride	ND	ug/L	50 0			
Styrene	ND	ug/L	10 0			
1,1,2,2-Tetrachloroethane	ND	ug/L	10 0			
Tetrachloroethene	ND	ug/L	10.0			
Toluene	ND	ug/L	10.0			
1,1,1-Trichloroethane	ND	ug/L	10.0			
1,1,2-Trichloroethane	ND	ug/L	10.0			
Trichloroethene	464	ug/L	10.0			
Vinyl Acetate	ND	ug/L	200			
Vinyl Chloride	ND	ug/L	10.0			
Xylenes-m,p	ND	ug/L	10.0			
Xylenes-o	ND	ug/L	10.0			
cis-1,2-Dichloroethene	29.6	ug/L	10.0			

Surrogate Standard	% Recovery	QC Limits	
S1 - Dibromofluoromethane	109	74	123
S2 - Toluene-d8	107	86	112
4-Bromofluorobenzene	112	81	115
1,2-Dichloroethane-d4	114	80	120

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

613 458

FORM 1
VOA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

0011-335-1

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-335

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 0901009

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/15/00

GC Column: ID: 2.00 (mm) Dilution Factor: 10.0

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

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
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ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 459

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

FID #

Date Arrived **11/10/00**
ETC Order Number **0011335**

ETC Lab ID **0011335-02**
Field ID : **MW-71-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/09/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
GC/MS Volatile Organics				11/13/00	LS	8260B 5030B
QC Batch	**V1111301**					
Dilution Factor	**1**					
Acetone	ND	ug/L	20.0			
Benzene	ND	ug/L	1.00			
Bromodichloromethane	ND	ug/L	1.00			
Bromoform	ND	ug/L	1.00			
Bromomethane	ND	ug/L	1.00			
2-Butanone (MEK)	ND	ug/L	20.0			
Carbon Disulfide	ND	ug/L	1.00			
Carbon Tetrachloride	26 5	ug/L	1 00			
Chlorobenzene	ND	ug/L	1.00			
Chlorodibromomethane	ND	ug/L	1.00			
[redacted]loroethane	ND	ug/L	1 00			
[redacted]oroform	451E	ug/L	1 00			
Chloromethane	ND	ug/L	1.00			
1,1-Dichloroethane	ND	ug/L	1.00			
1,2-Dichloroethane	ND	ug/L	1.00			
1,1-Dichloroethene	ND	ug/L	1.00			
trans-1,2-Dichloroethene	2.29	ug/L	1.00			
1,2-Dichloropropane	ND	ug/L	1.00			
cis-1,3-Dichloropropene	ND	ug/L	1.00			
trans-1,3-Dichloropropene	ND	ug/L	1 00			
Ethylbenzene	ND	ug/L	1.00			
2-Hexanone (MBK)	ND	ug/L	5 00			
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5 00			
Methylene Chloride	ND	ug/L	5.00			
Styrene	ND	ug/L	1.00			
1,1,2,2-Tetrachloroethane	106	ug/L	1.00			
Tetrachloroethene	4 09	ug/L	1.00			
Toluene	ND	ug/L	1.00			
1,1,1-Trichloroethane	ND	ug/L	1.00			
1,1,2-Trichloroethane	2 99	ug/L	1.00			
Trichloroethene	95 6	ug/L	1.00			
Vinyl Acetate	ND	ug/L	20.0			
Vinyl Chloride	ND	ug/L	1.00			
Xylenes-m,p	ND	ug/L	1.00			
Xylenes-o	ND	ug/L	1.00			
cis-1,2-Dichloroethene	6.49	ug/L	1.00			

Surrogate Standard	% Recovery	QC Limits	
S1 - Dibromofluoromethane	94	74	123
S2 - Toluene-d8	104	86	112
4-Bromofluorobenzene	101	81	115
1,2-Dichloroethane-d4	99	80	120

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

FORM 1

613 460 VOA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

0011-335-2

Lab Name: ETC,INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-335

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 0601007

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/13/00

GC Column: ID: 2.00 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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ENVIRONMENTAL TESTING & CONSULTING, INC.
2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

FID #

Date Arrived **11/10/00**
ETC Order Number **0011335**

ETC Lab ID **0011335-02**
Field ID : **MW-71-Y2Q4-DIL**

Matrix : **AQUEOUS**
Sample Date : **11/09/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
GC/MS Volatile Organics				11/15/00	LS	8260B 5030B
QC Batch	**V1111501**					
Dilution Factor	**10**					
Acetone	ND	ug/L	200			
Benzene	ND	ug/L	10.0			
Bromodichloromethane	ND	ug/L	10.0			
Bromoform	ND	ug/L	10 0			
Bromomethane	ND	ug/L	10 0			
2-Butanone (MEK)	ND	ug/L	200			
Carbon Disulfide	ND	ug/L	10.0			
Carbon Tetrachloride	30.2	ug/L	10 0			
Chlorobenzene	ND	ug/L	10 0			
Chlorodibromomethane	ND	ug/L	10.0			
[redacted]loroethane	ND	ug/L	10 0			
[redacted]loroform	605	ug/L	10.0			
Chloromethane	ND	ug/L	10.0			
1,1-Dichloroethane	ND	ug/L	10 0			
1,2-Dichloroethane	ND	ug/L	10.0			
1,1-Dichloroethene	ND	ug/L	10.0			
trans-1,2-Dichloroethene	ND	ug/L	10.0			
1,2-Dichloropropane	ND	ug/L	10.0			
cis-1,3-Dichloropropene	ND	ug/L	10 0			
trans-1,3-Dichloropropene	ND	ug/L	10 0			
Ethylbenzene	ND	ug/L	10.0			
2-Hexanone (MBK)	ND	ug/L	50.0			
4-Methyl-2-pentanone (MIBK)	ND	ug/L	50 0			
Methylene Chloride	ND	ug/L	50.0			
Styrene	ND	ug/L	10.0			
1,1,2,2-Tetrachloroethane	115	ug/L	10.0			
Tetrachloroethene	ND	ug/L	10.0			
Toluene	ND	ug/L	10 0			
1,1,1-Trichloroethane	ND	ug/L	10 0			
1,1,2-Trichloroethane	ND	ug/L	10.0			
Trichloroethene	115	ug/L	10.0			
Vinyl Acetate	ND	ug/L	200			
Vinyl Chloride	ND	ug/L	10.0			
Xylenes-m,p	ND	ug/L	10.0			
Xylenes-o	ND	ug/L	10 0			
cis-1,2-Dichloroethene	ND	ug/L	10 0			

Surrogate Standard	% Recovery	QC Limits	
S1 - Dibromofluoromethane	104	74	123
S2 - Toluene-d8	109	86	112
4-Bromofluorobenzene	116 Q	81	115
1,2-Dichloroethane-d4	104	80	120

Data Validator

ND - Not Detected Q - Recovery Outside QC Limits

FORM 1

VOA-GCMS ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

613 462

CLIENT SAMPLE NO.

0011-335-2

Lab Name: ETC,INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-335

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 1001010

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/15/00

GC Column: ID: 2.00 (mm) Dilution Factor: 10.0

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

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 463

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

FID #

Date Arrived **11/10/00**
ETC Order Number **0011335**

ETC Lab ID **0011335-03**
Field ID : **MW-71B-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/09/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Volatile Organics				11/13/00		LS	8260B 5030B
QC Batch	**V1111301**						
Dilution Factor	**1**						
Acetone	ND	ug/L	20.0				
Benzene	ND	ug/L	1.00				
Bromodichloromethane	ND	ug/L	1.00				
Bromoform	ND	ug/L	1 00				
Bromomethane	ND	ug/L	1 00				
2-Butanone (MEK)	ND	ug/L	20.0				
Carbon Disulfide	ND	ug/L	1.00				
Carbon Tetrachloride	19.7	ug/L	1.00				
Chlorobenzene	ND	ug/L	1.00				
Chlorodibromomethane	ND	ug/L	1.00				
[redacted]loroethane	ND	ug/L	1 00				
[redacted]loroform	349E	ug/L	1 00				
Chloromethane	ND	ug/L	1.00				
1,1-Dichloroethane	ND	ug/L	1.00				
1,2-Dichloroethane	ND	ug/L	1.00				
1,1-Dichloroethene	ND	ug/L	1.00				
trans-1,2-Dichloroethene	1.58	ug/L	1.00				
1,2-Dichloropropane	ND	ug/L	1.00				
cis-1,3-Dichloropropene	ND	ug/L	1.00				
trans-1,3-Dichloropropene	ND	ug/L	1.00				
Ethylbenzene	ND	ug/L	1.00				
2-Hexanone (MBK)	ND	ug/L	5.00				
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.00				
Methylene Chloride	ND	ug/L	5.00				
Styrene	ND	ug/L	1.00				
1,1,2,2-Tetrachloroethane	78.4	ug/L	1.00				
Tetrachloroethene	3.15	ug/L	1.00				
Toluene	ND	ug/L	1 00				
1,1,1-Trichloroethane	ND	ug/L	1 00				
1,1,2-Trichloroethane	2.03	ug/L	1.00				
Trichloroethene	75 3	ug/L	1 00				
Vinyl Acetate	ND	ug/L	20.0				
Vinyl Chloride	ND	ug/L	1.00				
Xylenes-m,p	ND	ug/L	1.00				
Xylenes-o	ND	ug/L	1.00				
cis-1,2-Dichloroethene	4.71	ug/L	1.00				

Surrogate Standard	% Recovery	QC Limits	
S1 - Dibromofluoromethane	89	74	123
S2 - Toluene-d8	94	86	112
4-Bromofluorobenzene	95	81	115
1,2-Dichloroethane-d4	92	80	120

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

FORM 1

VOA-GCMS ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

613 464

CLIENT SAMPLE NO.

0011-335-3

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-335

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 0701008

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/13/00

GC Column: ID: 2.00 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 465

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

FID #

Date Arrived **11/10/00**
ETC Order Number **0011335**

ETC Lab ID **0011335-03**
Field ID : **MW-71B-Y2Q4-DIL**

Matrix : **AQUEOUS**
Sample Date : **11/09/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
GC/MS Volatile Organics				11/15/00	LS	8260B 5030B
QC Batch	**V1111501**					
Dilution Factor	**10**					
Acetone	ND	ug/L	200			
Benzene	ND	ug/L	10.0			
Bromodichloromethane	ND	ug/L	10.0			
Bromoform	ND	ug/L	10.0			
Bromomethane	ND	ug/L	10 0			
2-Butanone (MEK)	ND	ug/L	200			
Carbon Disulfide	ND	ug/L	10 0			
Carbon Tetrachloride	23.5	ug/L	10.0			
Chlorobenzene	ND	ug/L	10.0			
Chlorodibromomethane	ND	ug/L	10.0			
[redacted]loroethane	ND	ug/L	10.0			
[redacted]oroform	554	ug/L	10.0			
Chloromethane	ND	ug/L	10.0			
1,1-Dichloroethane	ND	ug/L	10.0			
1,2-Dichloroethane	ND	ug/L	10.0			
1,1-Dichloroethene	ND	ug/L	10 0			
trans-1,2-Dichloroethene	ND	ug/L	10 0			
1,2-Dichloropropane	ND	ug/L	10 0			
cis-1,3-Dichloropropene	ND	ug/L	10 0			
trans-1,3-Dichloropropene	ND	ug/L	10 0			
Ethylbenzene	ND	ug/L	10.0			
2-Hexanone (MBK)	ND	ug/L	50.0			
4-Methyl-2-pentanone (MIBK)	ND	ug/L	50.0			
Methylene Chloride	ND	ug/L	50.0			
Styrene	ND	ug/L	10.0			
1,1,2,2-Tetrachloroethane	99 7	ug/L	10.0			
Tetrachloroethene	ND	ug/L	10.0			
Toluene	ND	ug/L	10 0			
1,1,1-Trichloroethane	ND	ug/L	10.0			
1,1,2-Trichloroethane	ND	ug/L	10.0			
Trichloroethene	95 0	ug/L	10.0			
Vinyl Acetate	ND	ug/L	200			
Vinyl Chloride	ND	ug/L	10.0			
Xylenes-m,p	ND	ug/L	10.0			
Xylenes-o	ND	ug/L	10.0			
cis-1,2-Dichloroethene	ND	ug/L	10 0			

Surrogate Standard	% Recovery	QC Limits	
S1 - Dibromofluoromethane	113	74	123
S2 - Toluene-d8	111	86	112
4-Bromofluorobenzene	111	81	115
1,2-Dichloroethane-d4	116	80	120

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

FORM 1

VOA-GCMS ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

613 466

CLIENT SAMPLE NO.

0011-335-3

Lab Name: ETC,INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-335

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 1101011

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/15/00

GC Column: ID: 2.00 (mm) Dilution Factor: 10.0

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

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750 613 467

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

FID #

Date Arrived **11/10/00**
ETC Order Number **0011335**

ETC Lab ID **0011335-04**
Field ID : **MW-32-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/09/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
GC/MS Volatile Organics				11/13/00	LS	8260B 5030B
QC Batch	**V1111301**					
Dilution Factor	**1**					
Acetone	ND	ug/L	20.0			
Benzene	ND	ug/L	1.00			
Bromodichloromethane	ND	ug/L	1.00			
Bromoform	ND	ug/L	1.00			
Bromomethane	ND	ug/L	1.00			
2-Butanone (MEK)	ND	ug/L	20.0			
Carbon Disulfide	ND	ug/L	1.00			
Carbon Tetrachloride	61.3	ug/L	1.00			
Chlorobenzene	ND	ug/L	1.00			
Chlorodibromomethane	ND	ug/L	1.00			
Chloroethane	ND	ug/L	1.00			
Chloroform	278E	ug/L	1.00			
[redacted]oromethane	ND	ug/L	1.00			
1,1-Dichloroethane	ND	ug/L	1.00			
1,2-Dichloroethane	ND	ug/L	1.00			
1,1-Dichloroethene	ND	ug/L	1.00			
trans-1,2-Dichloroethene	4.53	ug/L	1 00			
1,2-Dichloropropane	ND	ug/L	1.00			
cis-1,3-Dichloropropene	ND	ug/L	1.00			
trans-1,3-Dichloropropene	ND	ug/L	1.00			
Ethylbenzene	ND	ug/L	1 00			
2-Hexanone (MBK)	ND	ug/L	5.00			
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5 00			
Methylene Chloride	ND	ug/L	5.00			
Styrene	ND	ug/L	1.00			
1,1,2,2-Tetrachloroethane	21.5	ug/L	1.00			
Tetrachloroethene	6.39	ug/L	1.00			
Toluene	ND	ug/L	1.00			
1,1,1-Trichloroethane	ND	ug/L	1 00			
1,1,2-Trichloroethane	0.61J	ug/L	1 00			
Trichloroethene	94.8	ug/L	1.00			
Vinyl Acetate	ND	ug/L	20.0			
Vinyl Chloride	ND	ug/L	1.00			
Xylenes-m,p	ND	ug/L	1.00			
Xylenes-o	ND	ug/L	1.00			
cis-1,2-Dichloroethene	8.55	ug/L	1.00			

Surrogate Standard	% Recovery	QC Limits	
S1 - Dibromofluoromethane	99	74	123
S2 - Toluene-d8	99	86	112
S3 - 4-Bromofluorobenzene	95	81	115
S4 - 1,2-Dichloroethane-d4	107	80	120

Data Validator

ND - Not Detected Q - Recovery Outside QC Limits

FORM 1

VOA-GCMS ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

613 468

CLIENT SAMPLE NO.

0011-335-4

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-335

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 0801009

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/13/00

GC Column: ID: 2.00 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 469

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

FID #

Date Arrived **11/10/00**
ETC Order Number **0011335**

ETC Lab ID **0011335-04**
Field ID : **MW-32-Y2Q4-DIL**

Matrix : **AQUEOUS**
Sample Date : **11/09/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
GC/MS Volatile Organics				11/15/00	LS	8260B 5030B
QC Batch	**V1111501**					
Dilution Factor	**10**					
Acetone	ND	ug/L	200			
Benzene	ND	ug/L	10.0			
Bromodichloromethane	ND	ug/L	10.0			
Bromoform	ND	ug/L	10 0			
Bromomethane	ND	ug/L	10.0			
2-Butanone (MEK)	ND	ug/L	200			
Carbon Disulfide	ND	ug/L	10 0			
Carbon Tetrachloride	74.2	ug/L	10 0			
Chlorobenzene	ND	ug/L	10.0			
Chlorodibromomethane	ND	ug/L	10 0			
[redacted]loroethane	ND	ug/L	10.0			
[redacted]oroform	372	ug/L	10 0			
[redacted]loromethane	ND	ug/L	10.0			
1,1-Dichloroethane	ND	ug/L	10.0			
1,2-Dichloroethane	ND	ug/L	10.0			
1,1-Dichloroethene	ND	ug/L	10 0			
trans-1,2-Dichloroethene	ND	ug/L	10.0			
1,2-Dichloropropane	ND	ug/L	10.0			
cis-1,3-Dichloropropene	ND	ug/L	10.0			
trans-1,3-Dichloropropene	ND	ug/L	10 0			
Ethylbenzene	ND	ug/L	10.0			
2-Hexanone (MBK)	ND	ug/L	50.0			
4-Methyl-2-pentanone (MIBK)	ND	ug/L	50 0			
Methylene Chloride	ND	ug/L	50 0			
Styrene	ND	ug/L	10 0			
1,1,2,2-Tetrachloroethane	24.0	ug/L	10 0			
Tetrachloroethene	ND	ug/L	10.0			
Toluene	ND	ug/L	10.0			
1,1,1-Trichloroethane	ND	ug/L	10.0			
1,1,2-Trichloroethane	ND	ug/L	10.0			
Trichloroethene	121	ug/L	10.0			
Vinyl Acetate	ND	ug/L	200			
Vinyl Chloride	ND	ug/L	10.0			
Xylenes-m,p	ND	ug/L	10 0			
Xylenes-o	ND	ug/L	10 0			
cis-1,2-Dichloroethene	ND	ug/L	10 0			

Surrogate Standard	% Recovery	QC Limits	
S1 - Dibromofluoromethane	109	74	123
S2 - Toluene-d8	113 Q	86	112
S3 - 4-Bromofluorobenzene	113	81	115
[redacted]1,2-Dichloroethane-d4	114	80	120

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

FORM 1

VOA-GCMS ORGANICS ANALYSIS DATA SHEET

613 470 TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

0011-335-4

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-335

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 1201012

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/15/00

GC Column: ID: 2.00 (mm) Dilution Factor: 10.0

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

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
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ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 471

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

FID #

Date Arrived **11/10/00**
ETC Order Number **0011335**

ETC Lab ID **0011335-05**
Field ID : **RW-01-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/09/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
GC/MS Volatile Organics				11/14/00	LS	8260B 5030B
QC Batch	**V1111401**					
Dilution Factor	**1**					
Acetone	ND	ug/L	20.0			
Benzene	ND	ug/L	1.00			
Bromodichloromethane	ND	ug/L	1.00			
Bromoform	ND	ug/L	1.00			
Bromomethane	ND	ug/L	1 00			
2-Butanone (MEK)	ND	ug/L	20.0			
Carbon Disulfide	ND	ug/L	1.00			
Carbon Tetrachloride	46.1	ug/L	1.00			
Chlorobenzene	ND	ug/L	1.00			
Chlorodibromomethane	ND	ug/L	1.00			
[redacted]loroethane	ND	ug/L	1 00			
[redacted]oroform	13.1	ug/L	1.00			
Chloromethane	ND	ug/L	1 00			
1,1-Dichloroethane	ND	ug/L	1 00			
1,2-Dichloroethane	ND	ug/L	1 00			
1,1-Dichloroethene	ND	ug/L	1.00			
trans-1,2-Dichloroethene	1.18	ug/L	1.00			
1,2-Dichloropropane	ND	ug/L	1.00			
cis-1,3-Dichloropropene	ND	ug/L	1.00			
trans-1,3-Dichloropropene	ND	ug/L	1 00			
Ethylbenzene	ND	ug/L	1 00			
2-Hexanone (MBK)	ND	ug/L	5.00			
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.00			
Methylene Chloride	ND	ug/L	5.00			
Styrene	ND	ug/L	1 00			
1,1,2,2-Tetrachloroethane	ND	ug/L	1 00			
Tetrachloroethene	3 77	ug/L	1.00			
Toluene	ND	ug/L	1.00			
1,1,1-Trichloroethane	ND	ug/L	1.00			
1,1,2-Trichloroethane	ND	ug/L	1.00			
Trichloroethene	28.0	ug/L	1.00			
Vinyl Acetate	ND	ug/L	20 0			
Vinyl Chloride	ND	ug/L	1 00			
Xylenes-m,p	ND	ug/L	1.00			
Xylenes-o	ND	ug/L	1 00			
cis-1,2-Dichloroethene	ND	ug/L	1.00			

Surrogate Standard	% Recovery	QC Limits	
S1 - Dibromofluoromethane	102	74	123
S2 - Toluene-d8	114 Q	86	112
4-Bromofluorobenzene	109	81	115
1,2-Dichloroethane-d4	107	80	120

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

FORM 1

VOA-GCMS ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

613 472

CLIENT SAMPLE NO.

0011-335-5

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-335

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 1201013

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/14/00

GC Column: ID: 2.00 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
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ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 473

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

FID #

Date Arrived **11/10/00**
ETC Order Number **0011335**

ETC Lab ID **0011335-06**
Field ID : **RW-1A-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/09/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Volatile Organics				11/13/00		LS	8260B 5030B
QC Batch	**V1111301**						
Dilution Factor	**1**						
Acetone	ND	ug/L	20.0				
Benzene	ND	ug/L	1.00				
Bromodichloromethane	ND	ug/L	1.00				
Bromoform	ND	ug/L	1.00				
Bromomethane	ND	ug/L	1.00				
2-Butanone (MEK)	ND	ug/L	20.0				
Carbon Disulfide	ND	ug/L	1.00				
Carbon Tetrachloride	15.6	ug/L	1.00				
Chlorobenzene	ND	ug/L	1.00				
Chlorodibromomethane	ND	ug/L	1.00				
[illegible]loroethane	ND	ug/L	1 00				
[illegible]loroform	319E	ug/L	1.00				
Chloromethane	ND	ug/L	1.00				
1,1-Dichloroethane	ND	ug/L	1.00				
1,2-Dichloroethane	ND	ug/L	1 00				
1,1-Dichloroethene	ND	ug/L	1 00				
trans-1,2-Dichloroethene	1.59	ug/L	1 00				
1,2-Dichloropropane	ND	ug/L	1.00				
cis-1,3-Dichloropropene	ND	ug/L	1.00				
trans-1,3-Dichloropropene	ND	ug/L	1.00				
Ethylbenzene	ND	ug/L	1.00				
2-Hexanone (MBK)	ND	ug/L	5.00				
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.00				
Methylene Chloride	ND	ug/L	5.00				
Styrene	ND	ug/L	1 00				
1,1,2,2-Tetrachloroethane	43.9	ug/L	1.00				
Tetrachloroethene	2.62	ug/L	1.00				
Toluene	ND	ug/L	1.00				
1,1,1-Trichloroethane	ND	ug/L	1 00				
1,1,2-Trichloroethane	1.39	ug/L	1.00				
Trichloroethene	66.4	ug/L	1.00				
Vinyl Acetate	ND	ug/L	20.0				
Vinyl Chloride	ND	ug/L	1.00				
Xylenes-m,p	ND	ug/L	1.00				
Xylenes-o	ND	ug/L	1.00				
cis-1,2-Dichloroethene	3.29	ug/L	1.00				

Surrogate Standard	% Recovery	QC Limits	
S1 - Dibromofluoromethane	98	74	123
S2 - Toluene-d8	98	86	112
4-Bromofluorobenzene	105	81	115
1,2-Dichloroethane-d4	104	80	120

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

FORM 1

VOA-GCMS ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

613 474

CLIENT SAMPLE NO.

0011-335-6

Lab Name: ETC,INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-335

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 1001011

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/13/00

GC Column: ID: 2.00 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
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ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 475

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

FID #

Date Arrived **11/10/00**
ETC Order Number **0011335**

ETC Lab ID **0011335-06**
Field ID : **RW-1A-Y2Q4-DIL**

Matrix : **AQUEOUS**
Sample Date : **11/09/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Volatile Organics				11/15/00		LS	8260B 5030B
QC Batch	**V1111501**						
Dilution Factor	**10**						
Acetone	ND	ug/L	200				
Benzene	ND	ug/L	10.0				
Bromodichloromethane	ND	ug/L	10.0				
Bromoform	ND	ug/L	10 0				
Bromomethane	ND	ug/L	10.0				
2-Butanone (MEK)	ND	ug/L	200				
Carbon Disulfide	ND	ug/L	10.0				
Carbon Tetrachloride	17.2	ug/L	10.0				
Chlorobenzene	ND	ug/L	10.0				
Chlorodibromomethane	ND	ug/L	10.0				
[illegible]loroethane	ND	ug/L	10.0				
[illegible]oroform	420	ug/L	10.0				
[illegible]hloromethane	ND	ug/L	10 0				
1,1-Dichloroethane	ND	ug/L	10 0				
1,2-Dichloroethane	ND	ug/L	10 0				
1,1-Dichloroethene	ND	ug/L	10 0				
trans-1,2-Dichloroethene	ND	ug/L	10 0				
1,2-Dichloropropane	ND	ug/L	10.0				
cis-1,3-Dichloropropene	ND	ug/L	10.0				
trans-1,3-Dichloropropene	ND	ug/L	10.0				
Ethylbenzene	ND	ug/L	10.0				
2-Hexanone (MBK)	ND	ug/L	50.0				
4-Methyl-2-pentanone (MIBK)	ND	ug/L	50.0				
Methylene Chloride	ND	ug/L	50.0				
Styrene	ND	ug/L	10.0				
1,1,2,2-Tetrachloroethane	53 8	ug/L	10.0				
Tetrachloroethene	ND	ug/L	10.0				
Toluene	ND	ug/L	10.0				
1,1,1-Trichloroethane	ND	ug/L	10.0				
1,1,2-Trichloroethane	ND	ug/L	10.0				
Trichloroethene	87 4	ug/L	10.0				
Vinyl Acetate	ND	ug/L	200				
Vinyl Chloride	ND	ug/L	10 0				
Xylenes-m,p	ND	ug/L	10.0				
Xylenes-o	ND	ug/L	10.0				
cis-1,2-Dichloroethene	ND	ug/L	10.0				

Surrogate Standard	% Recovery	QC Limits	
S1 - Dibromofluoromethane	107	74	123
S2 - Toluene-d8	118 Q	86	112
4-Bromofluorobenzene	106	81	115
1,2-Dichloroethane-d4	109	80	120

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

FORM 1
VOA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

613 476

CLIENT SAMPLE NO.

0011-335-6

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-335

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 1301013

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/15/00

GC Column: ID: 2.00 (mm) Dilution Factor: 10.0

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

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
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ENVIRONMENTAL TESTING & CONSULTING, INC.
2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

FID #

Date Arrived **11/10/00**
ETC Order Number **0011335**

ETC Lab ID **0011335-07**
Field ID : **RW-1B-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/09/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
GC/MS Volatile Organics				11/14/00	LS	8260B 5030B
QC Batch	V1111401					
Dilution Factor	1					
Acetone	ND	ug/L	20.0			
Benzene	ND	ug/L	1.00			
Bromodichloromethane	ND	ug/L	1.00			
Bromoform	ND	ug/L	1.00			
Bromomethane	ND	ug/L	1.00			
2-Butanone (MEK)	ND	ug/L	20.0			
Carbon Disulfide	ND	ug/L	1.00			
Carbon Tetrachloride	20.1	ug/L	1.00			
Chlorobenzene	ND	ug/L	1.00			
Chlorodibromomethane	ND	ug/L	1.00			
[redacted]loroethane	ND	ug/L	1.00			
[redacted]oroform	37.0	ug/L	1.00			
[redacted]hloromethane	ND	ug/L	1.00			
1,1-Dichloroethane	ND	ug/L	1.00			
1,2-Dichloroethane	ND	ug/L	1 00			
1,1-Dichloroethene	ND	ug/L	1 00			
trans-1,2-Dichloroethene	1.22	ug/L	1 00			
1,2-Dichloropropane	ND	ug/L	1 00			
cis-1,3-Dichloropropene	ND	ug/L	1.00			
trans-1,3-Dichloropropene	ND	ug/L	1.00			
Ethylbenzene	ND	ug/L	1 00			
2-Hexanone (MBK)	ND	ug/L	5 00			
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.00			
Methylene Chloride	ND	ug/L	5.00			
Styrene	ND	ug/L	1.00			
1,1,2,2-Tetrachloroethane	ND	ug/L	1.00			
Tetrachloroethene	1.93	ug/L	1.00			
Toluene	ND	ug/L	1 00			
1,1,1-Trichloroethane	ND	ug/L	1.00			
1,1,2-Trichloroethane	ND	ug/L	1.00			
Trichloroethene	21.1	ug/L	1 00			
Vinyl Acetate	ND	ug/L	20.0			
Vinyl Chloride	ND	ug/L	1 00			
Xylenes-m,p	ND	ug/L	1 00			
Xylenes-o	ND	ug/L	1.00			
cis-1,2-Dichloroethene	3 66	ug/L	1.00			

Surrogate Standard	% Recovery	QC Limits	
S1 - Dibromofluoromethane	98	74	123
S2 - Toluene-d8	111	86	112
4-Bromofluorobenzene	108	81	115
1,2-Dichloroethane-d4	104	80	120

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

FORM 1
VOA-GCMS ORGANICS ANALYSIS DATA SHEET
613 478 TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

0011-335-7

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-335

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 1301014

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/14/00

GC Column: ID: 2.00 (mm) Dilution Factor: 1.0

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

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
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ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 479

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

FID #

Date Arrived **11/10/00**
ETC Order Number **0011335**

ETC Lab ID **0011335-08**
Field ID : **FB-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/09/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
GC/MS Volatile Organics				11/13/00	LS	8260B 5030B
QC Batch	**V1111301**					
Dilution Factor	**1**					
Acetone	ND	ug/L	20.0			
Benzene	ND	ug/L	1.00			
Bromodichloromethane	ND	ug/L	1.00			
Bromoform	ND	ug/L	1.00			
Bromomethane	ND	ug/L	1.00			
2-Butanone (MEK)	ND	ug/L	20.0			
Carbon Disulfide	ND	ug/L	1.00			
Carbon Tetrachloride	ND	ug/L	1.00			
Chlorobenzene	ND	ug/L	1.00			
Chlorodibromomethane	ND	ug/L	1 00			
[illegible]loroethane	ND	ug/L	1.00			
[illegible]oroform	ND	ug/L	1 00			
Chloromethane	ND	ug/L	1.00			
1,1-Dichloroethane	ND	ug/L	1 00			
1,2-Dichloroethane	ND	ug/L	1.00			
1,1-Dichloroethene	ND	ug/L	1.00			
trans-1,2-Dichloroethene	ND	ug/L	1.00			
1,2-Dichloropropane	ND	ug/L	1.00			
cis-1,3-Dichloropropene	ND	ug/L	1.00			
trans-1,3-Dichloropropene	ND	ug/L	1.00			
Ethylbenzene	ND	ug/L	1.00			
2-Hexanone (MBK)	ND	ug/L	5 00			
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5 00			
Methylene Chloride	ND	ug/L	5.00			
Styrene	ND	ug/L	1 00			
1,1,2,2-Tetrachloroethane	ND	ug/L	1 00			
Tetrachloroethene	ND	ug/L	1 00			
Toluene	ND	ug/L	1.00			
1,1,1-Trichloroethane	ND	ug/L	1.00			
1,1,2-Trichloroethane	ND	ug/L	1.00			
Trichloroethene	ND	ug/L	1.00			
Vinyl Acetate	ND	ug/L	20.0			
Vinyl Chloride	ND	ug/L	1.00			
Xylenes-m,p	ND	ug/L	1.00			
Xylenes-o	ND	ug/L	1.00			
cis-1,2-Dichloroethene	ND	ug/L	1.00			

Surrogate Standard	% Recovery	QC Limits	
S1 - Dibromofluoromethane	97	74	123
S2 - Toluene-d8	98	86	112
4-Bromofluorobenzene	102	81	115
1,2-Dichloroethane-d4	105	80	120

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

FORM 1
VOA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

613 480

CLIENT SAMPLE NO.

0011-335-8

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-335

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 1201013

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/13/00

GC Column: ID: 2.00 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
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ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 481

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

FID #

Date Arrived **11/10/00**
ETC Order Number **0011335**

ETC Lab ID **0011335-09**
Field ID : **RW-02-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/09/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Volatile Organics				11/13/00		LS	8260B 5030B
QC Batch	**V1111301**						
Dilution Factor	**1**						
Acetone	ND	ug/L	20.0				
Benzene	ND	ug/L	1.00				
Bromodichloromethane	ND	ug/L	1 00				
Bromoform	ND	ug/L	1.00				
Bromomethane	ND	ug/L	1 00				
2-Butanone (MEK)	ND	ug/L	20 0				
Carbon Disulfide	ND	ug/L	1 00				
Carbon Tetrachloride	23.8	ug/L	1.00				
Chlorobenzene	ND	ug/L	1.00				
Chlorodibromomethane	ND	ug/L	1.00				
[redacted]loroethane	ND	ug/L	1 00				
[redacted]oroform	20.2	ug/L	1 00				
Chloromethane	ND	ug/L	1.00				
1,1-Dichloroethane	ND	ug/L	1.00				
1,2-Dichloroethane	ND	ug/L	1.00				
1,1-Dichloroethene	ND	ug/L	1.00				
trans-1,2-Dichloroethene	1.93	ug/L	1.00				
1,2-Dichloropropane	ND	ug/L	1 00				
cis-1,3-Dichloropropene	ND	ug/L	1.00				
trans-1,3-Dichloropropene	ND	ug/L	1.00				
Ethylbenzene	ND	ug/L	1 00				
2-Hexanone (MBK)	ND	ug/L	5.00				
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.00				
Methylene Chloride	ND	ug/L	5.00				
Styrene	ND	ug/L	1.00				
1,1,2,2-Tetrachloroethane	2.18	ug/L	1.00				
Tetrachloroethene	1.36	ug/L	1.00				
Toluene	ND	ug/L	1.00				
1,1,1-Trichloroethane	ND	ug/L	1.00				
1,1,2-Trichloroethane	ND	ug/L	1 00				
Trichloroethene	17.2	ug/L	1.00				
Vinyl Acetate	ND	ug/L	20 0				
Vinyl Chloride	ND	ug/L	1.00				
Xylenes-m,p	ND	ug/L	1.00				
Xylenes-o	ND	ug/L	1.00				
cis-1,2-Dichloroethene	12.1	ug/L	1.00				

Surrogate Standard	% Recovery	QC Limits	
S1 - Dibromofluoromethane	101	74	123
S2 - Toluene-d8	102	86	112
4-Bromofluorobenzene	102	81	115
1,2-Dichloroethane-d4	108	80	120

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

FORM 1

613 482 VOA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

0011-335-9

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-335

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 1301014

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/13/00

GC Column: ID: 2.00 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 483

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

FID #

Date Arrived **11/10/00**
ETC Order Number **0011335**

ETC Lab ID **0011335-10**
Field ID : **MW-70-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/09/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Volatile Organics				11/13/00		LS	8260B 5030B
QC Batch	**V1111301**						
Dilution Factor	**1**						
Acetone	ND	ug/L	20.0				
Benzene	ND	ug/L	1.00				
Bromodichloromethane	ND	ug/L	1.00				
Bromoform	ND	ug/L	1.00				
Bromomethane	ND	ug/L	1.00				
2-Butanone (MEK)	ND	ug/L	20.0				
Carbon Disulfide	ND	ug/L	1.00				
Carbon Tetrachloride	1.81	ug/L	1.00				
Chlorobenzene	ND	ug/L	1.00				
Chlorodibromomethane	ND	ug/L	1.00				
Chloroethane	ND	ug/L	1.00				
Chloroform	9.37	ug/L	1 00				
[redacted]oromethane	ND	ug/L	1 00				
1,1-Dichloroethane	1.00	ug/L	1.00				
1,2-Dichloroethane	ND	ug/L	1 00				
1,1-Dichloroethene	ND	ug/L	1.00				
trans-1,2-Dichloroethene	57 3	ug/L	1 00				
1,2-Dichloropropane	ND	ug/L	1.00				
cis-1,3-Dichloropropene	ND	ug/L	1 00				
trans-1,3-Dichloropropene	ND	ug/L	1.00				
Ethylbenzene	ND	ug/L	1.00				
2-Hexanone (MBK)	ND	ug/L	5 00				
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.00				
Methylene Chloride	ND	ug/L	5.00				
Styrene	ND	ug/L	1.00				
1,1,2,2-Tetrachloroethane	1,830E	ug/L	1.00				
Tetrachloroethene	32 5	ug/L	1.00				
Toluene	ND	ug/L	1.00				
1,1,1-Trichloroethane	ND	ug/L	1.00				
1,1,2-Trichloroethane	16.0	ug/L	1.00				
Trichloroethene	1,330E	ug/L	1 00				
Vinyl Acetate	ND	ug/L	20.0				
Vinyl Chloride	1.69	ug/L	1.00				
Xylenes-m,p	ND	ug/L	1 00				
Xylenes-o	ND	ug/L	1.00				
cis-1,2-Dichloroethene	247E	ug/L	1.00				

Surrogate Standard	% Recovery	QC Limits	
S1 - Dibromofluoromethane	95	74	123
S2 - Toluene-d8	100	86	112
S3 - 4-Bromofluorobenzene	97	81	115
S4 - 1,2-Dichloroethane-d4	102	80	120

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

FORM 1

VOA-GCMS ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

613 484

CLIENT SAMPLE NO.

0011-335-10

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-335

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 1401015

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/13/00

GC Column: ID: 2.00 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 485

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

FID #

Date Arrived **11/10/00**
ETC Order Number **0011335**

ETC Lab ID **0011335-10**
Field ID : **MW-70-Y2Q4-DIL**

Matrix : **AQUEOUS**
Sample Date : **11/09/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
GC/MS Volatile Organics				11/15/00	LS	8260B 5030B
QC Batch	**V1111501**					
Dilution Factor	**50**					
Acetone	ND	ug/L	1000			
Benzene	ND	ug/L	50.0			
Bromodichloromethane	ND	ug/L	50.0			
Bromoform	ND	ug/L	50.0			
Bromomethane	ND	ug/L	50.0			
2-Butanone (MEK)	ND	ug/L	1000			
Carbon Disulfide	ND	ug/L	50.0			
Carbon Tetrachloride	ND	ug/L	50.0			
Chlorobenzene	ND	ug/L	50.0			
Chlorodibromomethane	ND	ug/L	50.0			
Chloroethane	ND	ug/L	50.0			
Chloroform	ND	ug/L	50 0			
Chloromethane	ND	ug/L	50.0			
1,1-Dichloroethane	ND	ug/L	50.0			
1,2-Dichloroethane	ND	ug/L	50.0			
1,1-Dichloroethene	ND	ug/L	50.0			
trans-1,2-Dichloroethene	66.7	ug/L	50.0			
1,2-Dichloropropane	ND	ug/L	50 0			
cis-1,3-Dichloropropene	ND	ug/L	50.0			
trans-1,3-Dichloropropene	ND	ug/L	50.0			
Ethylbenzene	ND	ug/L	50.0			
2-Hexanone (MBK)	ND	ug/L	250			
4-Methyl-2-pentanone (MIBK)	ND	ug/L	250			
Methylene Chloride	ND	ug/L	250			
Styrene	ND	ug/L	50.0			
1,1,2,2-Tetrachloroethane	3,370	ug/L	50.0			
Tetrachloroethene	ND	ug/L	50.0			
Toluene	ND	ug/L	50.0			
1,1,1-Trichloroethane	ND	ug/L	50.0			
1,1,2-Trichloroethane	ND	ug/L	50.0			
Trichloroethene	4,040	ug/L	50.0			
Vinyl Acetate	ND	ug/L	1000			
Vinyl Chloride	ND	ug/L	50.0			
Xylenes-m,p	ND	ug/L	50.0			
Xylenes-o	ND	ug/L	50.0			
cis-1,2-Dichloroethene	292	ug/L	50.0			

Surrogate Standard	% Recovery	QC Limits	
S1 - Dibromofluoromethane	106	74	123
S2 - Toluene-d8	110	86	112
4-Bromofluorobenzene	109	81	115
1,2-Dichloroethane-d4	109	80	120

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

FORM 1
VOA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

613 486

CLIENT SAMPLE NO.

0011-335-10

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-335

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 1401014

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/15/00

GC Column: ID: 2.00 (mm) Dilution Factor: 50.0

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

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

FID #

Date Arrived **11/10/00**
ETC Order Number **0011335**

ETC Lab ID **0011335-11**
Field ID : **RB-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/09/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
GC/MS Volatile Organics				11/14/00	LS	8260B 5030B
QC Batch	**V1111401**					
Dilution Factor	**1**					
Acetone	ND	ug/L	20 0			
Benzene	ND	ug/L	1 00			
Bromodichloromethane	ND	ug/L	1.00			
Bromoform	ND	ug/L	1.00			
Bromomethane	ND	ug/L	1 00			
2-Butanone (MEK)	ND	ug/L	20.0			
Carbon Disulfide	ND	ug/L	1.00			
Carbon Tetrachloride	ND	ug/L	1 00			
Chlorobenzene	ND	ug/L	1 00			
Chlorodibromomethane	ND	ug/L	1.00			
Chloroethane	ND	ug/L	1.00			
Chloroform	ND	ug/L	1 00			
Chloromethane	ND	ug/L	1.00			
1,1-Dichloroethane	ND	ug/L	1 00			
1,2-Dichloroethane	ND	ug/L	1.00			
1,1-Dichloroethene	ND	ug/L	1 00			
trans-1,2-Dichloroethene	ND	ug/L	1.00			
1,2-Dichloropropane	ND	ug/L	1.00			
cis-1,3-Dichloropropene	ND	ug/L	1.00			
trans-1,3-Dichloropropene	ND	ug/L	1.00			
Ethylbenzene	ND	ug/L	1.00			
2-Hexanone (MBK)	ND	ug/L	5 00			
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5 00			
Methylene Chloride	ND	ug/L	5 00			
Styrene	ND	ug/L	1.00			
1,1,2,2-Tetrachloroethane	ND	ug/L	1.00			
Tetrachloroethene	ND	ug/L	1.00			
Toluene	ND	ug/L	1.00			
1,1,1-Trichloroethane	ND	ug/L	1.00			
1,1,2-Trichloroethane	ND	ug/L	1.00			
Trichloroethene	ND	ug/L	1 00			
Vinyl Acetate	ND	ug/L	20.0			
Vinyl Chloride	ND	ug/L	1.00			
Xylenes-m,p	ND	ug/L	1.00			
Xylenes-o	ND	ug/L	1.00			
cis-1,2-Dichloroethene	ND	ug/L	1.00			

Surrogate Standard	% Recovery	QC Limits	
S1 - Dibromofluoromethane	108	74	123
S2 - Toluene-d8	110	86	112
S3 - 4-Bromofluorobenzene	108	81	115
1,2-Dichloroethane-d4	117	80	120

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

FORM 1

VOA-GCMS ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

613 488

CLIENT SAMPLE NO.

0011-335-11

Lab Name: ETC,INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-335

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 1101012

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/14/00

GC Column: ID: 2.00 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

FID #

Date Arrived **11/10/00**
ETC Order Number **0011335**

ETC Lab ID **0011335-12**
Field ID : **TB-03**

Matrix : **AQUEOUS**
Sample Date : **11/09/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
GC/MS Volatile Organics				11/14/00	LS	8260B 5030B
QC Batch	**V1111401**					
Dilution Factor	**1**					
Acetone	ND	ug/L	20.0			
Benzene	ND	ug/L	1.00			
Bromodichloromethane	ND	ug/L	1.00			
Bromoform	ND	ug/L	1.00			
Bromomethane	ND	ug/L	1.00			
2-Butanone (MEK)	ND	ug/L	20.0			
Carbon Disulfide	ND	ug/L	1.00			
Carbon Tetrachloride	ND	ug/L	1.00			
Chlorobenzene	ND	ug/L	1.00			
Chlorodibromomethane	ND	ug/L	1.00			
[illegible]loroethane	ND	ug/L	1.00			
[illegible]oroform	ND	ug/L	1.00			
Chloromethane	ND	ug/L	1.00			
1,1-Dichloroethane	ND	ug/L	1.00			
1,2-Dichloroethane	ND	ug/L	1 00			
1,1-Dichloroethene	ND	ug/L	1 00			
trans-1,2-Dichloroethene	ND	ug/L	1 00			
1,2-Dichloropropane	ND	ug/L	1 00			
cis-1,3-Dichloropropene	ND	ug/L	1.00			
trans-1,3-Dichloropropene	ND	ug/L	1.00			
Ethylbenzene	ND	ug/L	1 00			
2-Hexanone (MBK)	ND	ug/L	5.00			
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.00			
Methylene Chloride	ND	ug/L	5.00			
Styrene	ND	ug/L	1 00			
1,1,2,2-Tetrachloroethane	ND	ug/L	1 00			
Tetrachloroethene	ND	ug/L	1.00			
Toluene	ND	ug/L	1 00			
1,1,1-Trichloroethane	ND	ug/L	1.00			
1,1,2-Trichloroethane	ND	ug/L	1.00			
Trichloroethene	ND	ug/L	1.00			
Vinyl Acetate	ND	ug/L	20.0			
Vinyl Chloride	ND	ug/L	1 00			
Xylenes-m,p	ND	ug/L	1 00			
Xylenes-o	ND	ug/L	1 00			
cis-1,2-Dichloroethene	ND	ug/L	1.00			

Surrogate Standard	% Recovery	QC Limits	
S1 - Dibromofluoromethane	99	74	123
S2 - Toluene-d8	115 Q	86	112
4-Bromofluorobenzene	102	81	115
1,2-Dichloroethane-d4	106	80	120

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

613 490

FORM 1
VOA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

0011-335-12

Lab Name: ETC,INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-335

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 1001011

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/14/00

GC Column: ID: 2.00 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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FORM 2

WATER VOA-GCMS SYSTEM MONITORING COMPOUND RECOVERY 613 491

Lab Name: ETC,INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-335

	CLIENT SAMPLE NO.	SMC1 (DCE) #	SMC2 (DFM) #	SMC3 (TOL) #	OTHER (BFB) #	TOT OUT
01	V1111311LCS	96	91	90	91	0
02	V1111311LB	95	95	93	97	0
03	0011-335-1	96	91	94	96	0
04	0011-335-2	99	94	104	101	0
05	0011-335-3	92	89	94	95	0
06	0011-335-4	107	99	99	95	0
07	0011-335-6	104	98	98	105	0
08	0011-335-8	105	97	98	102	0
09	0011-335-9	108	101	102	102	0
10	0011-335-10	102	95	100	97	0
11	0011-335-10M	105	94	104	103	0
12	0011-335-10M	103	95	107	105	0
13	V1111411LCS	103	93	100	95	0
14	V1111411LB	98	96	111	103	0
15	0011-335-12	106	99	115*	102	1
16	0011-335-11	117	108	110	108	0
17	0011-335-5	107	102	114*	109	1
18	0011-335-7	103	98	111	108	0
19	V1111412LCS	100	96	112	112	0
20	0011-335-5MS	103	94	111	102	0
21	0011-335-5MS	101	95	113*	99	1
22	V1111511LCS	107	99	101	110	0
23	V1111511LB	105	102	107	103	0
24	0011-335-1	114	109	107	112	0
25	0011-335-2	104	104	109	116*	1
26	0011-335-3	116	113	111	111	0
27	0011-335-4	114	109	113*	113	1
28	0011-335-6	109	107	118*	106	1
29	0011-335-10	109	106	110	109	0
30						

		QC LIMITS
SMC1 (DCE)	= 1,2-Dichloroethane-d4	(80-120)
SMC2 (DFM)	= Dibromofluoromethane	(74-123)
SMC3 (TOL)	= Toluene-d8	(86-112)
OTHER(BFB)	= Bromofluorobenzene	(81-115)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

613 492

FORM 4
VOA-GCMS METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

V1111311LB

Lab Name: ETC,INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-335

Lab File ID: 0302004 Lab Prep Batch: V1111301

Date Analyzed: 11/13/00 Time Analyzed: 1605

GC Column: ID: 2 (mm) Heated Purge: (Y/N) Y

Instrument ID: VOC1

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

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	V1111311LCS	V1111301	0201002LCS	1454
02	0011-335-1	V1111301	0501006	1708
03	0011-335-2	V1111301	0601007	1736
04	0011-335-3	V1111301	0701008	1812
05	0011-335-4	V1111301	0801009	1840
06	0011-335-6	V1111301	1001011	1936
07	0011-335-8	V1111301	1201013	2033
08	0011-335-9	V1111301	1301014	2101
09	0011-335-10	V1111301	1401015	2129
10	0011-335-10M	V1111301	1901020	2350
11	0011-335-10M	V1111301	2001021	0018
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COMMENTS:

FORM 1
VOA-GCMS ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

V1111311LB

Lab Name: ETC,INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-335

Matrix: (soil/water) WATER Lab Prep Batch: V1111301

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 0302004

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/13/00

GC Column: ID: 2.00 (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
67-64-1	Acetone	20.00	U
75-05-8	Acetonitrile	20.00	U
107-02-8	Acrolein	20.00	U
107-13-1	Acrylonitrile	20.00	U
107-05-1	Allyl chloride	1.00	U
71-43-2	Benzene	1.00	U
108-86-1	Bromobenzene	1.00	U
74-97-5	Bromochloromethane	1.00	U
75-27-4	Bromodichloromethane	1.00	U
75-25-2	Bromoform	1.00	U
78-93-3	2-Butanone	20.00	U
74-83-9	Bromomethane	1.00	U
104-51-8	n-Butylbenzene	1.00	U
135-98-8	sec-Butylbenzene	1.00	U
98-06-6	tert-Butylbenzene	1.00	U
75-15-0	Carbon Disulfide	1.00	U
56-23-5	Carbon Tetrachloride	1.00	U
108-90-7	Chlorobenzene	1.00	U
124-48-1	Chlorodibromomethane	1.00	U
75-00-3	Chloroethane	1.00	U
110-75-0	2-Chloroethyl vinyl ether	20.00	U
67-66-3	Chloroform	1.00	U
74-87-3	Chloromethane	1.00	U
126-99-8	Chloroprene	1.00	U
95-49-8	2-Chlorotoluene	1.00	U
106-43-4	4-Chlorotoluene	1.00	U
96-12-8	1,2-Dibromo-3-chloropropane	1.00	U
106-93-4	1,2-Dibromoethane	1.00	U
74-95-3	Dibromomethane	1.00	U
95-50-1	1,2-Dichlorobenzene	1.00	U
541-73-1	1,3-Dichlorobenzene	1.00	U
106-46-7	1,4-Dichlorobenzene	1.00	U
110-57-6	trans-1,4-Dichloro-2-butene	1.00	U

FORM 1
VOA-GCMS ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.
V1111311LB

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-335

Matrix: (soil/water) WATER Lab Prep Batch: V1111301

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 0302004

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/13/00

GC Column: ID: 2.00 (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
1868-53-7	Dichlorodifluoromethane	1.00	U
75-34-3	1,1-Dichloroethane	1.00	U
107-06-2	1,2-Dichloroethane	1.00	U
75-35-4	1,1-Dichloroethene	1.00	U
156-59-4	cis-1,2-Dichloroethene	1.00	U
156-60-5	trans-1,2-Dichloroethene	1.00	U
78-87-5	1,2-Dichloropropane	1.00	U
142-28-9	1,3-Dichloropropane	1.00	U
590-20-7	2,2-Dichloropropane	1.00	U
563-58-6	1,1-Dichloropropene	1.00	U
10061-01-5	cis-1,3-Dichloropropene	1.00	U
10061-02-6	trans-1,3-Dichloropropene	1.00	U
108-20-3	Di isopropyl ether	5.00	U
123-91-1	1,4-Dioxane	100.0	U
141-78-6	Ethyl Acetate	5.00	U
100-41-4	Ethylbenzene	1.00	U
97-63-2	Ethyl methacrylate	1.00	U
110-00-9	Furan	1.00	U
87-63-3	Hexachlorobutadiene	1.00	U
110-54-3	Hexane	1.00	U
591-78-6	2-Hexanone	5.00	U
74-88-4	Iodomethane	1.00	U
78-83-1	Isobutyl Alcohol	100.0	U
98-82-8	Isopropylbenzene	1.00	U
99-87-6	4-Isopropyltoluene	1.00	U
126-98-7	Methacrylonitrile	10.00	U
75-09-2	Methylene Chloride	5.00	U
80-62-6	Methyl methacrylate	1.00	U
108-10-1	4-Methyl-2-Pentanone	5.00	U
1634-04-4	Methyl-tertbutyl-Ether	5.00	U
91-20-3	Naphthalene	1.00	U
76-01-7	Pentachloroethane	1.00	U
107-12-0	Propionitrile	10.00	U

FORM 1 613 495 CLIENT SAMPLE NO.

VOA-GCMS ORGANICS ANALYSIS DATA SHEET

V1111311LB

Lab Name: ETC,INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-335

Matrix: (soil/water) WATER Lab Prep Batch: V1111301

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 0302004

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/13/00

GC Column: ID: 2.00 (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
109-60-4	n-Propyl Acetate	1.00	U
103-65-1	n-Propylbenzene	1.00	U
100-42-5	Styrene	1.00	U
630-20-6	1,1,1,2-Tetrachloroethane	1.00	U
79-34-5	1,1,2,2-Tetrachloroethane	1.00	U
127-18-4	Tetrachloroethene	1.00	U
109-99-9	Tetrahydrofuran	1.00	U
87-61-6	1,2,3-Trichlorobenzene	1.00	U
108-88-3	Toluene	1.00	U
71-55-6	1,1,1-Trichloroethane	1.00	U
79-00-5	1,1,2-Trichloroethane	1.00	U
76-13-1	1,1,2-trichloro-1,2,2-triflu	1.00	U
79-01-6	Trichloroethene	1.00	U
75-69-4	Trichlorofluoromethane	1.00	U
96-18-4	1,2,3-Trichloropropane	1.00	U
120-82-1	1,2,4-Trichlorobenzene	1.00	U
95-63-6	1,2,4-Trimethylbenzene	1.00	U
108-67-8	1,3,5-Trimethylbenzene	1.00	U
108-05-4	Vinyl Acetate	20.00	U
75-01-4	Vinyl Chloride	1.00	U
1330-20-7	Xylene-mp	1.00	U
95-47-6	Xylene-o	1.00	U
1476-11-5	cis-1,4-Dichloro-2-butene	1.00	U

FORM 1

VOA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

V1111311LB

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-335

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 0302004

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/13/00

GC Column: ID: 2.00 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
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FORM 3
WATER VOA-GCMS LAB CONTROL SAMPLE

Lab Name: ETC,INC. Lab Prep Batch: V1111301

Lab Code: Case No.: SAS No.: SDG No.: 0011-335

Matrix Spike - Sample No.: V1111311LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Acetone	100.0		100.8	101	59-151
Acetonitrile	1000		1094	109	57-143
Acrolein	100.0		119.0	119	59-134
Acrylonitrile	100.0		105.7	106	60-146
Allyl chloride	100.0		95.71	96	74-120
Benzene	100.0		92.92	93	72-124
Bromobenzene	100.0		96.00	96	77-120
Bromochloromethane	100.0		99.54	100	74-120
Bromodichloromethane	100.0		91.00	91	68-119
Bromoform	100.0		112.3	112	66-136
2-Butanone	100.0		113.0	113	55-151
Bromomethane	100.0		105.0	105	40-134
n-Butylbenzene	100.0		101.4	101	69-129
sec-Butylbenzene	100.0		99.31	99	72-127
tert-Butylbenzene	100.0		95.98	96	73-126
Carbon Disulfide	100.0		93.90	94	60-133
Carbon Tetrachloride	100.0		98.00	98	64-123
Chlorobenzene	100.0		89.79	90	77-112
Chlorodibromomethane	100.0		101.4	101	72-118
Chloroethane	100.0		70.32	70	64-142
2-Chloroethyl vinyl eth	100.0		93.64	94	22-165
Chloroform	100.0		94.84	95	70-115
Chloromethane	100.0		93.43	93	58-139
Chloroprene	100.0		94.54	94	73-118
2-Chlorotoluene	100.0		89.58	90	65-132
4-Chlorotoluene	100.0		100.5	100	67-127
1,2-Dibromo-3-chloropro	100.0		119.1	119	56-134
1,2-Dibromoethane	100.0		100.4	100	74-118

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER VOA-GCMS LAB CONTROL SAMPLE

Lab Name: ETC,INC. Lab Prep Batch: V1111301

Lab Code: Case No.: SAS No.: SDG No.: 0011-335

Matrix Spike - Sample No.: V1111311LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Dibromomethane	100.0		94.23	94	75-114
1,2-Dichlorobenzene	100.0		104.3	104	80-113
1,3-Dichlorobenzene	100.0		106.0	106	77-119
1,4-Dichlorobenzene	100.0		98.85	99	78-116
trans-1,4-Dichloro-2-bu	100.0		106.8	107	62-138
Dichlorodifluoromethane	100.0		74.60	75	48-145
1,1-Dichloroethane	100.0		96.94	97	76-118
1,2-Dichloroethane	100.0		97.19	97	62-124
1,1-Dichloroethene	100.0		101.2	101	69-121
cis-1,2-Dichloroethene	100.0		100.9	101	76-114
trans-1,2-Dichloroethen	100.0		101.3	101	72-121
1,2-Dichloropropane	100.0		86.67	87	64-133
1,3-Dichloropropane	100.0		94.63	95	68-128
2,2-Dichloropropane	100.0		101.1	101	67-132
1,1-Dichloropropene	100.0		96.84	97	76-117
cis-1,3-Dichloropropene	100.0		101.4	101	77-120
trans-1,3-Dichloroprope	100.0		92.62	93	73-124
Di isopropyl ether	100.0		95.14	95	62-160
1,4-Dioxane	2000		2049	102	56-131
Ethyl Acetate	100.0		106.2	106	52-151
Ethylbenzene	100.0		88.41	88	77-111
Ethyl methacrylate	200.0		197.1	98	57-140
Furan	100.0		145.3	145*	52-124
Hexachlorobutadiene	100.0		106.9	107	69-137
Hexane	100.0		107.0	107	70-130
2-Hexanone	100.0		103.7	104	53-144
Iodomethane	100.0		104.4	104	51-153
Isobutyl Alcohol	2000		2333	117	60-134

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

Lab Name: ETC,INC. Lab Prep Batch: V1111301

Lab Code: Case No.: SAS No.: SDG No.: 0011-335

Matrix Spike - Sample No.: V1111311LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Isopropylbenzene	100.0		94.71	95	74-125
4-Isopropyltoluene	100.0		98.53	98	72-127
Methacrylonitrile	1000		1048	105	70-125
Methylene Chloride	100.0		103.8	104	76-115
Methyl methacrylate	200.0		200.2	100	57-147
4-Methyl-2-Pentanone	100.0		100.7	101	42-144
Methyl-tertbutyl-Ether	100.0		109.2	109	62-122
Naphthalene	100.0		112.6	113	53-124
Pentachloroethane	100.0		232.3	232*	78-126
Propionitrile	1000		1087	109	58-139
n-Propyl Acetate	100.0		143.6	144	88-170
n-Propylbenzene	100.0		94.46	94	75-125
Styrene	100.0		98.54	98	77-117
1,1,1,2-Tetrachloroetha	100.0		98.01	98	79-113
1,1,2,2-Tetrachloroetha	100.0		101.9	102	67-126
Tetrachloroethene	100.0		71.39	71*	77-115
Tetrahydrofuran	100.0		94.58	94	76-181
1,2,3-Trichlorobenzene	100.0		113.4	113	62-132
Toluene	100.0		94.85	95	77-115
1,1,1-Trichloroethane	100.0		100.4	100	63-122
1,1,2-Trichloroethane	100.0		97.11	97	69-117
1,1,2-trichloro-1,2,2-t	100.0		96.34	96	70-130
Trichloroethene	100.0		89.22	89	75-113
Trichlorofluoromethane	100.0		97.69	98	55-130
1,2,3-Trichloropropane	100.0		110.2	110	62-130
1,2,4-Trichlorobenzene	100.0		114.4	114	68-132
1,2,4-Trimethylbenzene	100.0		98.17	98	69-126
1,3,5-Trimethylbenzene	100.0		96.65	97	69-128

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER VOA-GCMS LAB CONTROL SAMPLE

Lab Name: ETC, INC. Lab Prep Batch: V1111301

Lab Code: Case No.: SAS No.: SDG No.: 0011-335

Matrix Spike - Sample No.: V1111311LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Vinyl Acetate	100.0		126.0	126	28-146
Vinyl Chloride	100.0		94.92	95	65-134
Xylene-mp	200.0		190.5	95	77-115
Xylene-o	100.0		92.89	93	77-115

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 3 out of 88 outside limits

COMMENTS: _____

FORM 3
WATER VOA-GCMS MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY 613 501

Lab Name: ETC,INC. Lab Prep Batch: V1111301

Lab Code: Case No.: SAS No.: SDG No.: 0011-335

Matrix Spike - Sample No.: 0011-335-10

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
Benzene	100.0	0.000	111.3	111	72-124
Chlorobenzene	100.0	0.000	115.5	116*	77-112
1,1-Dichloroethene	100.0	0.000	111.7	112	69-121
Toluene	100.0	0.000	125.9	126*	77-115
Trichloroethene	100.0	1334	1301	-33*	75-113

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Benzene	100.0	109.0	109	2	20	72-124
Chlorobenzene	100.0	117.2	117*	1	20	77-112
1,1-Dichloroethene	100.0	112.0	112	0	20	69-121
Toluene	100.0	120.6	121*	4	20	77-115
Trichloroethene	100.0	1240	-94*	-96	20	75-113

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 5 outside limits
Spike Recovery: 6 out of 10 outside limits

COMMENTS: _____

FORM 4
VOA-GCMS METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

V1111411LB

Lab Name: ETC,INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-335

Lab File ID: 0402005 Lab Prep Batch: V1111401

Date Analyzed: 11/14/00 Time Analyzed: 1633

GC Column: ID: 2 (mm) Heated Purge: (Y/N) Y

Instrument ID: VOC1

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

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	V1111411LCS	V1111401	0201002LCS	1437
02	0011-335-12	V1111401	1001011	1922
03	0011-335-11	V1111401	1101012	1950
04	0011-335-5	V1111401	1201013	2018
05	0011-335-7	V1111401	1301014	2046
06	V1111412LCS	V1111401	1801019	2306
07	0011-335-5MS	V1111401	1901020	2334
08	0011-335-5MS	V1111401	2001021	0003
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COMMENTS:

FORM 1 613 503 CLIENT SAMPLE NO.

VOA-GCMS ORGANICS ANALYSIS DATA SHEET

V1111411LB

Lab Name: ETC,INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-335

Matrix: (soil/water) WATER Lab Prep Batch: V1111401

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 0402005

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/14/00

GC Column: ID: 2.00 (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
67-64-1	Acetone	20.00	U
75-05-8	Acetonitrile	20.00	U
107-02-8	Acrolein	20.00	U
107-13-1	Acrylonitrile	20.00	U
107-05-1	Allyl chloride	1.00	U
71-43-2	Benzene	1.00	U
108-86-1	Bromobenzene	1.00	U
74-97-5	Bromochloromethane	1.00	U
75-27-4	Bromodichloromethane	1.00	U
75-25-2	Bromoform	1.00	U
78-93-3	2-Butanone	20.00	U
74-83-9	Bromomethane	1.00	U
104-51-8	n-Butylbenzene	1.00	U
135-98-8	sec-Butylbenzene	1.00	U
98-06-6	tert-Butylbenzene	1.00	U
75-15-0	Carbon Disulfide	1.00	U
56-23-5	Carbon Tetrachloride	1.00	U
108-90-7	Chlorobenzene	1.00	U
124-48-1	Chlorodibromomethane	1.00	U
75-00-3	Chloroethane	1.00	U
110-75-0	2-Chloroethyl vinyl ether	20.00	U
67-66-3	Chloroform	1.00	U
74-87-3	Chloromethane	1.00	U
126-99-8	Chloroprene	1.00	U
95-49-8	2-Chlorotoluene	1.00	U
106-43-4	4-Chlorotoluene	1.00	U
96-12-8	1,2-Dibromo-3-chloropropane	1.00	U
106-93-4	1,2-Dibromoethane	1.00	U
74-95-3	Dibromomethane	1.00	U
95-50-1	1,2-Dichlorobenzene	1.00	U
541-73-1	1,3-Dichlorobenzene	1.00	U
106-46-7	1,4-Dichlorobenzene	1.00	U
110-57-6	trans-1,4-Dichloro-2-butene	1.00	U

613 504

FORM 1
VOA-GCMS ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.
V1111411LB

Lab Name: ETC,INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-335

Matrix: (soil/water) WATER Lab Prep Batch: V1111401

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 0402005

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/14/00

GC Column: ID: 2.00 (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
1868-53-7	Dichlorodifluoromethane	1.00	U
75-34-3	1,1-Dichloroethane	1.00	U
107-06-2	1,2-Dichloroethane	1.00	U
75-35-4	1,1-Dichloroethene	1.00	U
156-59-4	cis-1,2-Dichloroethene	1.00	U
156-60-5	trans-1,2-Dichloroethene	1.00	U
78-87-5	1,2-Dichloropropane	1.00	U
142-28-9	1,3-Dichloropropane	1.00	U
590-20-7	2,2-Dichloropropane	1.00	U
563-58-6	1,1-Dichloropropene	1.00	U
10061-01-5	cis-1,3-Dichloropropene	1.00	U
10061-02-6	trans-1,3-Dichloropropene	1.00	U
108-20-3	Di isopropyl ether	5.00	U
123-91-1	1,4-Dioxane	100.0	U
141-78-6	Ethyl Acetate	5.00	U
100-41-4	Ethylbenzene	1.00	U
97-63-2	Ethyl methacrylate	1.00	U
110-00-9	Furan	1.00	U
87-63-3	Hexachlorobutadiene	1.00	U
110-54-3	Hexane	1.00	U
591-78-6	2-Hexanone	5.00	U
74-88-4	Iodomethane	1.00	U
78-83-1	Isobutyl Alcohol	100.0	U
98-82-8	Isopropylbenzene	1.00	U
99-87-6	4-Isopropyltoluene	1.00	U
126-98-7	Methacrylonitrile	10.00	U
75-09-2	Methylene Chloride	5.00	U
80-62-6	Methyl methacrylate	1.00	U
108-10-1	4-Methyl-2-Pentanone	5.00	U
1634-04-4	Methyl-tertbutyl-Ether	5.00	U
91-20-3	Naphthalene	1.00	U
76-01-7	Pentachloroethane	1.00	U
107-12-0	Propionitrile	10.00	U

FORM 1 613 505 CLIENT SAMPLE NO.

VOA-GCMS ORGANICS ANALYSIS DATA SHEET

V1111411LB

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-335

Matrix: (soil/water) WATER Lab Prep Batch: V1111401

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 0402005

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/14/00

GC Column: ID: 2.00 (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
109-60-4	n-Propyl Acetate	1.00	U
103-65-1	n-Propylbenzene	1.00	U
100-42-5	Styrene	1.00	U
630-20-6	1,1,1,2-Tetrachloroethane	1.00	U
79-34-5	1,1,2,2-Tetrachloroethane	1.00	U
127-18-4	Tetrachloroethene	1.00	U
109-99-9	Tetrahydrofuran	1.00	U
87-61-6	1,2,3-Trichlorobenzene	1.00	U
108-88-3	Toluene	1.00	U
71-55-6	1,1,1-Trichloroethane	1.00	U
79-00-5	1,1,2-Trichloroethane	1.00	U
76-13-1	1,1,2-trichloro-1,2,2-triflu	1.00	U
79-01-6	Trichloroethene	1.00	U
75-69-4	Trichlorofluoromethane	1.00	U
96-18-4	1,2,3-Trichloropropane	1.00	U
120-82-1	1,2,4-Trichlorobenzene	1.00	U
95-63-6	1,2,4-Trimethylbenzene	1.00	U
108-67-8	1,3,5-Trimethylbenzene	1.00	U
108-05-4	Vinyl Acetate	20.00	U
75-01-4	Vinyl Chloride	1.00	U
1330-20-7	Xylene-mp	1.00	U
95-47-6	Xylene-o	1.00	U
1476-11-5	cis-1,4-Dichloro-2-butene	1.00	U

613 506

FORM 1

VOA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

V1111411LB

Lab Name: ETC,INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-335

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 0402005

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/14/00

GC Column: ID: 2.00 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
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FORM 3
WATER VOA-GCMS LAB CONTROL SAMPLE

613 597

Lab Name: ETC,INC. Lab Prep Batch: V1111401

Lab Code: Case No.: SAS No.: SDG No.: 0011-335

Matrix Spike - Sample No.: V1111411LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Acetone	100.0		99.39	99	59-151
Acetonitrile	1000		946.1	95	57-143
Acrolein	100.0		120.4	120	59-134
Acrylonitrile	100.0		99.54	100	60-146
Allyl chloride	100.0		102.0	102	74-120
Benzene	100.0		96.37	96	72-124
Bromobenzene	100.0		100.8	101	77-120
Bromochloromethane	100.0		97.29	97	74-120
Bromodichloromethane	100.0		99.77	100	68-119
Bromoform	100.0		108.3	108	66-136
2-Butanone	100.0		99.09	99	55-151
Bromomethane	100.0		100.8	101	40-134
n-Butylbenzene	100.0		111.0	111	69-129
sec-Butylbenzene	100.0		108.7	109	72-127
tert-Butylbenzene	100.0		103.3	103	73-126
Carbon Disulfide	100.0		101.7	102	60-133
Carbon Tetrachloride	100.0		103.0	103	64-123
Chlorobenzene	100.0		93.14	93	77-112
Chlorodibromomethane	100.0		100.5	100	72-118
Chloroethane	100.0		106.3	106	64-142
2-Chloroethyl vinyl eth	100.0		93.78	94	22-165
Chloroform	100.0		97.15	97	70-115
Chloromethane	100.0		102.4	102	58-139
Chloroprene	100.0		99.54	100	73-118
2-Chlorotoluene	100.0		95.99	96	65-132
4-Chlorotoluene	100.0		108.4	108	67-127
1,2-Dibromo-3-chloropro	100.0		112.1	112	56-134
1,2-Dibromoethane	100.0		99.83	100	74-118

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER VOA-GCMS LAB CONTROL SAMPLE

Lab Name: ETC, INC. Lab Prep Batch: V1111401

Lab Code: Case No.: SAS No.: SDG No.: 0011-335

Matrix Spike - Sample No.: V1111411LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Dibromomethane	100.0		96.04	96	75-114
1,2-Dichlorobenzene	100.0		104.5	104	80-113
1,3-Dichlorobenzene	100.0		108.6	109	77-119
1,4-Dichlorobenzene	100.0		103.2	103	78-116
trans-1,4-Dichloro-2-bu	100.0		98.88	99	62-138
Dichlorodifluoromethane	100.0		76.64	77	48-145
1,1-Dichloroethane	100.0		99.37	99	76-118
1,2-Dichloroethane	100.0		96.00	96	62-124
1,1-Dichloroethene	100.0		100.7	101	69-121
cis-1,2-Dichloroethene	100.0		99.81	100	76-114
trans-1,2-Dichloroethen	100.0		102.0	102	72-121
1,2-Dichloropropane	100.0		90.16	90	64-133
1,3-Dichloropropane	100.0		94.40	94	68-128
2,2-Dichloropropane	100.0		104.7	105	67-132
1,1-Dichloropropene	100.0		97.38	97	76-117
cis-1,3-Dichloropropene	100.0		101.6	102	77-120
trans-1,3-Dichloroprope	100.0		100.3	100	73-124
Di isopropyl ether	100.0		95.04	95	62-160
1,4-Dioxane	2000		1902	95	56-131
Ethyl Acetate	100.0		93.07	93	52-151
Ethylbenzene	100.0		95.91	96	77-111
Ethyl methacrylate	200.0		192.6	96	57-140
Furan	100.0		158.1	158*	52-124
Hexachlorobutadiene	100.0		110.0	110	69-137
Hexane	100.0		113.5	114	70-130
2-Hexanone	100.0		95.50	96	53-144
Iodomethane	100.0		113.6	114	51-153
Isobutyl Alcohol	2000		1698	85	60-134

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER VOA-GCMS LAB CONTROL SAMPLE

Lab Name: ETC,INC. Lab Prep Batch: V1111401

Lab Code: Case No.: SAS No.: SDG No.: 0011-335

Matrix Spike - Sample No.: V1111411LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Isopropylbenzene	100.0		99.98	100	74-125
4-Isopropyltoluene	100.0		107.7	108	72-127
Methacrylonitrile	1000		980.6	98	70-125
Methylene Chloride	100.0		105.7	106	76-115
Methyl methacrylate	200.0		185.9	93	57-147
4-Methyl-2-Pentanone	100.0		92.11	92	42-144
Methyl-tertbutyl-Ether	100.0		96.29	96	62-122
Naphthalene	100.0		104.4	104	53-124
Pentachloroethane	100.0		255.6	256*	78-126
Propionitrile	1000		1010	101	58-139
n-Propyl Acetate	100.0		142.7	143	88-170
n-Propylbenzene	100.0		102.0	102	75-125
Styrene	100.0		102.1	102	77-117
1,1,1,2-Tetrachloroetha	100.0		101.1	101	79-113
1,1,2,2-Tetrachloroetha	100.0		94.64	95	67-126
Tetrachloroethene	100.0		71.19	71*	77-115
Tetrahydrofuran	100.0		82.53	82	76-181
1,2,3-Trichlorobenzene	100.0		110.3	110	62-132
Toluene	100.0		99.63	100	77-115
1,1,1-Trichloroethane	100.0		102.7	103	63-122
1,1,2-Trichloroethane	100.0		94.36	94	69-117
1,1,2-trichloro-1,2,2-t	100.0		98.78	99	70-130
Trichloroethene	100.0		90.95	91	75-113
Trichlorofluoromethane	100.0		107.8	108	55-130
1,2,3-Trichloropropane	100.0		101.6	102	62-130
1,2,4-Trichlorobenzene	100.0		111.3	111	68-132
1,2,4-Trimethylbenzene	100.0		103.1	103	69-126
1,3,5-Trimethylbenzene	100.0		104.3	104	69-128

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER VOA-GCMS LAB CONTROL SAMPLE

Lab Name: ETC,INC. Lab Prep Batch: V1111401

Lab Code: Case No.: SAS No.: SDG No.: 0011-335

Matrix Spike - Sample No.: V1111411LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Vinyl Acetate	100.0		121.2	121	28-146
Vinyl Chloride	100.0		107.5	108	65-134
Xylene-mp	200.0		194.6	97	77-115
Xylene-o	100.0		98.93	99	77-115

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 3 out of 88 outside limits

COMMENTS: _____

FORM 3
WATER VOA-GCMS LAB CONTROL SAMPLE

Lab Name: ETC,INC. Lab Prep Batch: V1111401

Lab Code: Case No.: SAS No.: SDG No.: 0011-335

Matrix Spike - Sample No.: V1111412LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Tetrachloroethene	100.0		113.8	114	77-115

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 0 out of 1 outside limits

COMMENTS: _____

FORM 3

WATER VOA-GCMS MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: ETC,INC. Lab Prep Batch: V1111401

Lab Code: Case No.: SAS No.: SDG No.: 0011-335

Matrix Spike - Sample No.: 0011-335-5

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
Benzene	100.0	0.000	103.2	103	72-124
Chlorobenzene	100.0	0.000	111.1	111	77-112
1,1-Dichloroethene	100.0	0.000	104.4	104	69-121
Toluene	100.0	0.000	122.8	123*	77-115
Trichloroethene	100.0	27.96	130.8	103	75-113

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Benzene	100.0	101.3	101	2	20	72-124
Chlorobenzene	100.0	105.0	105	6	20	77-112
1,1-Dichloroethene	100.0	103.3	103	1	20	69-121
Toluene	100.0	123.5	124*	1	20	77-115
Trichloroethene	100.0	133.4	105	2	20	75-113

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 5 outside limits
Spike Recovery: 2 out of 10 outside limits

COMMENTS: _____

FORM 4 613 513 CLIENT SAMPLE NO.

VOA-GCMS METHOD BLANK SUMMARY

V1111511LB

Lab Name: ETC,INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-335

Lab File ID: 0402005 Lab Prep Batch: V1111501

Date Analyzed: 11/15/00 Time Analyzed: 1223

GC Column: ID: 2 (mm) Heated Purge: (Y/N) Y

Instrument ID: VOC1

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

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	V1111511LCS	V1111501	0201002LCS	1024
02	0011-404-2	V1111501	0701007	1427
03	0011-335-1	V1111501	0901009	1523
04	0011-335-2	V1111501	1001010	1551
05	0011-335-3	V1111501	1101011	1620
06	0011-335-4	V1111501	1201012	1648
07	0011-335-6	V1111501	1301013	1716
08	0011-335-10	V1111501	1401014	1744
09	0011-404-2MS	V1111501	2001020	2032
10	0011-404-2MS	V1111501	2101021	2101
11				
12				
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COMMENTS:

613 514

FORM 1
VOA-GCMS ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

V1111511LB

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-335

Matrix: (soil/water) WATER Lab Prep Batch: V1111501

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 0402005

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/15/00

GC Column: ID: 2.00 (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
67-64-1	Acetone	20.00	U
75-05-8	Acetonitrile	20.00	U
107-02-8	Acrolein	20.00	U
107-13-1	Acrylonitrile	20.00	U
107-05-1	Allyl chloride	1.00	U
71-43-2	Benzene	1.00	U
108-86-1	Bromobenzene	1.00	U
74-97-5	Bromochloromethane	1.00	U
75-27-4	Bromodichloromethane	1.00	U
75-25-2	Bromoform	1.00	U
78-93-3	2-Butanone	20.00	U
74-83-9	Bromomethane	1.00	U
104-51-8	n-Butylbenzene	1.00	U
135-98-8	sec-Butylbenzene	1.00	U
98-06-6	tert-Butylbenzene	1.00	U
75-15-0	Carbon Disulfide	1.00	U
56-23-5	Carbon Tetrachloride	1.00	U
108-90-7	Chlorobenzene	1.00	U
124-48-1	Chlorodibromomethane	1.00	U
75-00-3	Chloroethane	1.00	U
110-75-0	2-Chloroethyl vinyl ether	20.00	U
67-66-3	Chloroform	1.00	U
74-87-3	Chloromethane	1.00	U
126-99-8	Chloroprene	1.00	U
95-49-8	2-Chlorotoluene	1.00	U
106-43-4	4-Chlorotoluene	1.00	U
96-12-8	1,2-Dibromo-3-chloropropane	1.00	U
106-93-4	1,2-Dibromoethane	1.00	U
74-95-3	Dibromomethane	1.00	U
95-50-1	1,2-Dichlorobenzene	1.00	U
541-73-1	1,3-Dichlorobenzene	1.00	U
106-46-7	1,4-Dichlorobenzene	1.00	U
110-57-6	trans-1,4-Dichloro-2-butene	1.00	U

FORM 1 613 515 CLIENT SAMPLE NO.

VOA-GCMS ORGANICS ANALYSIS DATA SHEET

V1111511LB

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-335

Matrix: (soil/water) WATER Lab Prep Batch: V1111501

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 0402005

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/15/00

GC Column: ID: 2.00 (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
1868-53-7	Dichlorodifluoromethane	1.00	U
75-34-3	1,1-Dichloroethane	1.00	U
107-06-2	1,2-Dichloroethane	1.00	U
75-35-4	1,1-Dichloroethene	1.00	U
156-59-4	cis-1,2-Dichloroethene	1.00	U
156-60-5	trans-1,2-Dichloroethene	1.00	U
78-87-5	1,2-Dichloropropane	1.00	U
142-28-9	1,3-Dichloropropane	1.00	U
590-20-7	2,2-Dichloropropane	1.00	U
563-58-6	1,1-Dichloropropene	1.00	U
10061-01-5	cis-1,3-Dichloropropene	1.00	U
10061-02-6	trans-1,3-Dichloropropene	1.00	U
108-20-3	Di isopropyl ether	5.00	U
123-91-1	1,4-Dioxane	100.0	U
141-78-6	Ethyl Acetate	5.00	U
100-41-4	Ethylbenzene	1.00	U
97-63-2	Ethyl methacrylate	1.00	U
110-00-9	Furan	1.00	U
87-63-3	Hexachlorobutadiene	1.00	U
110-54-3	Hexane	1.00	U
591-78-6	2-Hexanone	5.00	U
74-88-4	Iodomethane	1.00	U
78-83-1	Isobutyl Alcohol	100.0	U
98-82-8	Isopropylbenzene	1.00	U
99-87-6	4-Isopropyltoluene	1.00	U
126-98-7	Methacrylonitrile	10.00	U
75-09-2	Methylene Chloride	5.00	U
80-62-6	Methyl methacrylate	1.00	U
108-10-1	4-Methyl-2-Pentanone	5.00	U
1634-04-4	Methyl-tertbutyl-Ether	5.00	U
91-20-3	Naphthalene	1.00	U
76-01-7	Pentachloroethane	1.00	U
107-12-0	Propionitrile	10.00	U

FORM 1
VOA-GCMS ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

V1111511LB

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-335

Matrix: (soil/water) WATER Lab Prep Batch: V1111501

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 0402005

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/15/00

GC Column: ID: 2.00 (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
109-60-4	n-Propyl Acetate	1.00	U
103-65-1	n-Propylbenzene	1.00	U
100-42-5	Styrene	1.00	U
630-20-6	1,1,1,2-Tetrachloroethane	1.00	U
79-34-5	1,1,2,2-Tetrachloroethane	1.00	U
127-18-4	Tetrachloroethene	1.00	U
109-99-9	Tetrahydrofuran	1.00	U
87-61-6	1,2,3-Trichlorobenzene	1.00	U
108-88-3	Toluene	1.00	U
71-55-6	1,1,1-Trichloroethane	1.00	U
79-00-5	1,1,2-Trichloroethane	1.00	U
76-13-1	1,1,2-trichloro-1,2,2-triflu	1.00	U
79-01-6	Trichloroethene	1.00	U
75-69-4	Trichlorofluoromethane	1.00	U
96-18-4	1,2,3-Trichloropropane	1.00	U
120-82-1	1,2,4-Trichlorobenzene	1.00	U
95-63-6	1,2,4-Trimethylbenzene	1.00	U
108-67-8	1,3,5-Trimethylbenzene	1.00	U
108-05-4	Vinyl Acetate	20.00	U
75-01-4	Vinyl Chloride	1.00	U
1330-20-7	Xylene-mp	1.00	U
95-47-6	Xylene-o	1.00	U
1476-11-5	cis-1,4-Dichloro-2-butene	1.00	U

FORM 1 613 517 CLIENT SAMPLE NO.

VOA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

V1111511LB

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-335

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 0402005

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 11/15/00

GC Column: ID: 2.00 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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FORM 3
WATER VOA-GCMS LAB CONTROL SAMPLE

Lab Name: ETC,INC. Lab Prep Batch: V1111501

Lab Code: Case No.: SAS No.: SDG No.: 0011-335

Matrix Spike - Sample No.: V1111511LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.	
Acetone	100.0		95.66	96	59-151	
Acetonitrile	1000		1056	106	57-143	
Acrolein	100.0		127.1	127	59-134	
Acrylonitrile	100.0		106.7	107	60-146	
Allyl chloride	100.0		102.5	102	74-120	
Benzene	100.0		96.43	96	72-124	
Bromobenzene	100.0		121.6	122*	77-120	NT
Bromochloromethane	100.0		101.0	101	74-120	
Bromodichloromethane	100.0		104.3	104	68-119	
Bromoform	100.0		132.3	132	66-136	
2-Butanone	100.0		105.7	106	55-151	
Bromomethane	100.0		107.5	108	40-134	
n-Butylbenzene	100.0		118.9	119	69-129	
sec-Butylbenzene	100.0		128.3	128*	72-127	NT
tert-Butylbenzene	100.0		125.2	125	73-126	
Carbon Disulfide	100.0		99.61	100	60-133	
Carbon Tetrachloride	100.0		103.7	104	64-123	
Chlorobenzene	100.0		108.6	109	77-112	
Chlorodibromomethane	100.0		105.6	106	72-118	
Chloroethane	100.0		98.36	98	64-142	
2-Chloroethyl vinyl eth	100.0		104.4	104	22-165	
Chloroform	100.0		95.07	95	70-115	
Chloromethane	100.0		101.8	102	58-139	
Chloroprene	100.0		98.15	98	73-118	
2-Chlorotoluene	100.0		126.3	126	65-132	
4-Chlorotoluene	100.0		130.0	130*	67-127	NT
1,2-Dibromo-3-chloropro	100.0		71.84	72	56-134	
1,2-Dibromoethane	100.0		105.5	106	74-118	

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER VOA-GCMS LAB CONTROL SAMPLE

Lab Name: ETC,INC. Lab Prep Batch: V1111501

Lab Code: Case No.: SAS No.: SDG No.: 0011-335

Matrix Spike - Sample No.: V1111511LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Dibromomethane	100.0		97.22	97	75-114
1,2-Dichlorobenzene	100.0		109.2	109	80-113
1,3-Dichlorobenzene	100.0		114.9	115	77-119
1,4-Dichlorobenzene	100.0		117.5	118*	78-116
trans-1,4-Dichloro-2-bu	100.0		123.6	124	62-138
Dichlorodifluoromethane	100.0		83.98	84	48-145
1,1-Dichloroethane	100.0		98.03	98	76-118
1,2-Dichloroethane	100.0		97.35	97	62-124
1,1-Dichloroethene	100.0		104.2	104	69-121
cis-1,2-Dichloroethene	100.0		99.41	99	76-114
trans-1,2-Dichloroethen	100.0		100.8	101	72-121
1,2-Dichloropropane	100.0		94.18	94	64-133
1,3-Dichloropropane	100.0		106.9	107	68-128
2,2-Dichloropropane	100.0		106.7	107	67-132
1,1-Dichloropropene	100.0		98.86	99	76-117
cis-1,3-Dichloropropene	100.0		111.8	112	77-120
trans-1,3-Dichloroprope	100.0		103.3	103	73-124
Di isopropyl ether	100.0		101.1	101	62-160
1,4-Dioxane	2000		1970	98	56-131
Ethyl Acetate	100.0		100.9	101	52-151
Ethylbenzene	100.0		112.7	113*	77-111
Ethyl methacrylate	200.0		210.0	105	57-140
Furan	100.0		159.7	160*	52-124
Hexachlorobutadiene	100.0		117.9	118	69-137
Hexane	100.0		111.7	112	70-130
2-Hexanone	100.0		108.0	108	53-144
Iodomethane	100.0		109.2	109	51-153
Isobutyl Alcohol	2000		2182	109	60-134

NT

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

613 520

FORM 3
WATER VOA-GCMS LAB CONTROL SAMPLE

Lab Name: ETC,INC. Lab Prep Batch: V1111501

Lab Code: Case No.: SAS No.: SDG No.: 0011-335

Matrix Spike - Sample No.: V1111511LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.	
Isopropylbenzene	100.0		120.3	120	74-125	
4-Isopropyltoluene	100.0		125.3	125	72-127	
Methacrylonitrile	1000		1027	103	70-125	
Methylene Chloride	100.0		106.5	106	76-115	
Methyl methacrylate	200.0		203.6	102	57-147	
4-Methyl-2-Pentanone	100.0		102.5	102	42-144	
Methyl-tertbutyl-Ether	100.0		98.86	99	62-122	
Naphthalene	100.0		109.9	110	53-124	
Pentachloroethane	100.0		280.2	280*	78-126	vT
Propionitrile	1000		1050	105	58-139	
n-Propyl Acetate	100.0		156.9	157	88-170	
n-Propylbenzene	100.0		120.5	120	75-125	
Styrene	100.0		121.2	121*	77-117	
1,1,1,2-Tetrachloroetha	100.0		121.0	121*	79-113	nT
1,1,2,2-Tetrachloroetha	100.0		104.4	104	67-126	
Tetrachloroethene	100.0		76.64	77	77-115	
Tetrahydrofuran	100.0		92.05	92	76-181	
1,2,3-Trichlorobenzene	100.0		116.3	116	62-132	
Toluene	100.0		110.2	110	77-115	
1,1,1-Trichloroethane	100.0		101.7	102	63-122	
1,1,2-Trichloroethane	100.0		100.2	100	69-117	
1,1,2-trichloro-1,2,2-t	100.0		94.54	94	70-130	
Trichloroethene	100.0		94.34	94	75-113	
Trichlorofluoromethane	100.0		105.4	105	55-130	
1,2,3-Trichloropropane	100.0		124.5	124	62-130	
1,2,4-Trichlorobenzene	100.0		119.7	120	68-132	
1,2,4-Trimethylbenzene	100.0		126.5	126	69-126	
1,3,5-Trimethylbenzene	100.0		125.1	125	69-128	

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER VOA-GCMS LAB CONTROL SAMPLE

613 521

Lab Name: ETC,INC. Lab Prep Batch: V1111501

Lab Code: Case No.: SAS No.: SDG No.: 0011-335

Matrix Spike - Sample No.: V1111511LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Vinyl Acetate	100.0		127.7	128	28-146
Vinyl Chloride	100.0		105.4	105	65-134
Xylene-mp	200.0		237.1	118*	77-115
Xylene-o	100.0		115.2	115	77-115

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 10 out of 88 outside limits

COMMENTS: _____

613 522

FORM 3

WATER VOA-GCMS MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: ETC, INC. Lab Prep Batch: V1111501

Lab Code: Case No.: SAS No.: SDG No.: 0011-335

Matrix Spike - Sample No.: 0011-404-2

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
Benzene	100.0	0.000	105.6	106	72-124
Chlorobenzene	100.0	0.000	111.4	111	77-112
1,1-Dichloroethene	100.0	0.000	103.4	103	69-121
Toluene	100.0	0.000	126.1	126*	77-115
Trichloroethene	100.0	6.41	115.4	109	75-113

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Benzene	100.0	98.95	99	7	20	72-124
Chlorobenzene	100.0	113.1	113*	2	20	77-112
1,1-Dichloroethene	100.0	99.22	99	4	20	69-121
Toluene	100.0	126.6	127*	1	20	77-115
Trichloroethene	100.0	115.6	109	0	20	75-113

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 5 outside limits
Spike Recovery: 3 out of 10 outside limits

COMMENTS: _____

ENVIRONMENTAL TESTING & CONSULTING, INC.
2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 523

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

FID #

Date Arrived **11/10/00**
ETC Order Number **0011335**

ETC Lab ID **0011335-01**
Field ID : **MW-69-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/09/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Base/Neutral & Acid				11/17/00	11/13/00	PF	8270C 3510C
QC Batch	**P06010**						
Dilution Factor	**1**						
Acenaphthene	ND	ug/L	2 00				
Acenaphthylene	ND	ug/L	2.00				
Anthracene	ND	ug/L	2.00				
Benzo(a)anthracene	ND	ug/L	2.00				
Benzo(b)fluoranthene	ND	ug/L	2.00				
Benzo(k)fluoranthene	ND	ug/L	2.00				
Benzo(g,h,i)perylene	ND	ug/L	2.00				
Benzo(a)pyrene	ND	ug/L	2.00				
Benzoic Acid	ND	ug/L	50 0				
Benzyl Alcohol	ND	ug/L	10 0				
[redacted](2-chloroethoxy)methane	ND	ug/L	5.00				
[redacted](2-chloroethyl)ether	ND	ug/L	5 00				
Bis(2-chloroisopropyl)ether	ND	ug/L	5.00				
Bis(2-ethylhexyl)phthalate	6.53B	ug/L	10 0				
4-Bromophenyl phenyl ether	ND	ug/L	5.00				
Butyl benzyl phthalate	ND	ug/L	5 00				
4-Chloroaniline	ND	ug/L	5 00				
2-Chloronaphthalene	ND	ug/L	5 00				
4-Chloro-3-methylphenol	ND	ug/L	5 00				
2-Chlorophenol	ND	ug/L	5.00				
4-Chlorophenyl phenyl ether	ND	ug/L	5.00				
Chrysene	ND	ug/L	2.00				
Dibenzo(a,h)anthracene	ND	ug/L	2.00				
Dibenzofuran	ND	ug/L	5 00				
Di-n-butyl phthalate	ND	ug/L	5.00				
3,3'-Dichlorobenzidine	ND	ug/L	10.0				
2,4-Dichlorophenol	ND	ug/L	5.00				
Diethyl phthalate	ND	ug/L	5.00				
2,4-Dimethylphenol	ND	ug/L	5.00				
Dimethyl phthalate	ND	ug/L	5.00				
4,6-Dinitro-2-methylphenol	ND	ug/L	10.0				
2,4-Dinitrophenol	ND	ug/L	50.0				
2,4-Dinitrotoluene	ND	ug/L	5.00				
2,6-Dinitrotoluene	ND	ug/L	5.00				
Di-n-octyl phthalate	ND	ug/L	5.00				
Fluoranthene	ND	ug/L	2.00				
Fluorene	ND	ug/L	2.00				
Hexachlorobenzene	ND	ug/L	5.00				
Hexachlorobutadiene	ND	ug/L	5.00				
Hexachlorocyclopentadiene	ND	ug/L	5.00				
Hexachloroethane	ND	ug/L	5 00				
[redacted]eno(1,2,3-cd)pyrene	ND	ug/L	2.00				
[redacted]phorone	ND	ug/L	5.00				
2-Methylnaphthalene	ND	ug/L	2.00				
2-Methylphenol (o-cresol)	ND	ug/L	5.00				

CS
Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 524

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

FID #

Date Arrived **11/10/00**
ETC Order Number **0011335**

ETC Lab ID **0011335-01**
Field ID : **MW-69-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/09/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Base/Neutral & Acid				11/17/00		PF	8270C
					11/13/00		3510C
4-Methylphenol (p-cresol)	ND	ug/L	5.00				
Naphthalene	0.32J	ug/L	2.00				
Nitrobenzene	ND	ug/L	5.00				
2-Nitroaniline	ND	ug/L	5.00				
3-Nitroaniline	ND	ug/L	10 0				
4-Nitroaniline	ND	ug/L	5.00				
2-Nitrophenol	ND	ug/L	5.00				
4-Nitrophenol	ND	ug/L	5.00				
N-Nitrosodiphenylamine	ND	ug/L	5.00				
N-Nitrosodipropylamine	ND	ug/L	5.00				
Pentachlorophenol	ND	ug/L	10.0				
Phenanthrene	ND	ug/L	2.00				
Phenol	ND	ug/L	5.00				
Pyrene	ND	ug/L	2.00				
2,4,5-Trichlorphenol	ND	ug/L	5.00				
2,4,6-Trichlorophenol	ND	ug/L	5.00				

Surrogate Standard	% Recovery	QC Limits	
S1 - Nitrobenzene-d5	32	29	110
S2 - 2-Fluorobiphenyl	27 Q	38	107
S3 - 4-Terphenyl-d14	40	33	122
S4 - Phenol-d6	18	7	58
S5 - 2,4,6-Tribromophenol	30	16	138
S6 - 2-Fluorophenol	21	8	88

CJ

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

FORM 1 613 525 CLIENT SAMPLE NO.

BNA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

0011-335-1

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-335

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 920.0 (g/mL) ML Lab File ID: 0601006

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/17/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

Number TICs found: 4

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	542-85-8	ETHANE, ISOTHIOCYANATO-	5.11	14.31	NJ
2.	124-07-2	OCTANOIC ACID	6.28	16.74	NJ
3.	112-62-9	9-OCTADECENOIC ACID (Z)-, ME	14.12	4.71	NJ
4.	4897-50-1	1,4'-BIPIPERIDINE	15.28	12.63	NJ
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FORM I BNA-GCMS-TIC

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 526

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

FID #

Date Arrived **11/10/00**
ETC Order Number **0011335**

ETC Lab ID **0011335-02**
Field ID : **MW-71-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/09/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Base/Neutral & Acid				11/17/00		PF	8270C
					11/13/00		3510C
QC Batch	**P06010**						
Dilution Factor	**1**						
Acenaphthene	ND	ug/L	2.00				
Acenaphthylene	ND	ug/L	2.00				
Anthracene	ND	ug/L	2.00				
Benzo(a)anthracene	ND	ug/L	2.00				
Benzo(b)fluoranthene	ND	ug/L	2.00				
Benzo(k)fluoranthene	ND	ug/L	2.00				
Benzo(g,h,i)perylene	ND	ug/L	2.00				
Benzo(a)pyrene	ND	ug/L	2 00				
Benzoic Acid	ND	ug/L	50.0				
Benzyl Alcohol	ND	ug/L	10.0				
Bis(2-chloroethoxy)methane	ND	ug/L	5.00				
Bis(2-chloroethyl)ether	ND	ug/L	5.00				
Bis(2-chloroisopropyl)ether	ND	ug/L	5.00				
Bis(2-ethylhexyl)phthalate	ND	ug/L	10.0				
4-Bromophenyl phenyl ether	ND	ug/L	5.00				
Butyl benzyl phthalate	ND	ug/L	5.00				
4-Chloroaniline	ND	ug/L	5.00				
2-Chloronaphthalene	ND	ug/L	5.00				
4-Chloro-3-methylphenol	ND	ug/L	5.00				
2-Chlorophenol	ND	ug/L	5.00				
4-Chlorophenyl phenyl ether	ND	ug/L	5.00				
Chrysene	ND	ug/L	2.00				
Dibenzo(a,h)anthracene	ND	ug/L	2.00				
Dibenzofuran	ND	ug/L	5.00				
Di-n-butyl phthalate	ND	ug/L	5.00				
3,3'-Dichlorobenzidine	ND	ug/L	10.0				
2,4-Dichlorophenol	ND	ug/L	5.00				
Diethyl phthalate	ND	ug/L	5.00				
2,4-Dimethylphenol	ND	ug/L	5.00				
Dimethyl phthalate	ND	ug/L	5.00				
4,6-Dinitro-2-methylphenol	ND	ug/L	10.0				
2,4-Dinitrophenol	ND	ug/L	50.0				
2,4-Dinitrotoluene	ND	ug/L	5.00				
2,6-Dinitrotoluene	ND	ug/L	5.00				
Di-n-octyl phthalate	ND	ug/L	5.00				
Fluoranthene	ND	ug/L	2.00				
Fluorene	ND	ug/L	2 00				
Hexachlorobenzene	ND	ug/L	5 00				
Hexachlorobutadiene	ND	ug/L	5.00				
Hexachlorocyclopentadiene	ND	ug/L	5 00				
Hexachloroethane	ND	ug/L	5.00				
Indeno(1,2,3-cd)pyrene	ND	ug/L	2.00				
Isophorone	ND	ug/L	5.00				
2-Methylnaphthalene	ND	ug/L	2.00				
2-Methylphenol (o-cresol)	ND	ug/L	5 00				

CS

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 527

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

FID #

Date Arrived **11/10/00**
ETC Order Number **0011335**

ETC Lab ID **0011335-02**
Field ID : **MW-71-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/09/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Base/Neutral & Acid				11/17/00		PF	8270C
					11/13/00		3510C
4-Methylphenol (p-cresol)	ND	ug/L	5.00				
Naphthalene	ND	ug/L	2.00				
Nitrobenzene	ND	ug/L	5.00				
2-Nitroaniline	ND	ug/L	5.00				
3-Nitroaniline	ND	ug/L	10.0				
4-Nitroaniline	ND	ug/L	5.00				
2-Nitrophenol	ND	ug/L	5.00				
4-Nitrophenol	ND	ug/L	5.00				
N-Nitrosodiphenylamine	ND	ug/L	5.00				
N-Nitrosodipropylamine	ND	ug/L	5.00				
Pentachlorophenol	ND	ug/L	10 0				
Phenanthrene	ND	ug/L	2.00				
[redacted]enol	ND	ug/L	5.00				
[redacted]ene	ND	ug/L	2.00				
2,4,5-Trichlorphenol	ND	ug/L	5.00				
2,4,6-Trichlorophenol	ND	ug/L	5.00				

Surrogate Standard	% Recovery	QC Limits	
S1 - Nitrobenzene-d5	46	29	110
S2 - 2-Fluorobiphenyl	42	38	107
S3 - 4-Terphenyl-d14	48	33	122
S4 - Phenol-d6	23	7	58
S5 - 2,4,6-Tribromophenol	53	16	138
S6 - 2-Fluorophenol	33	8	88

CS

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

FORM 1
BNA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

613 528

CLIENT SAMPLE NO.

0011-335-2

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-335

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 970.0 (g/mL) ML Lab File ID: 0701007

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/17/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

Number TICs found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	314-40-9	BROMACIL	13.04	4.86	NJ
2.	0-00-0	URACIL, 6-AMINO-1,3-DIETHYL-	20.80	14.45	NJ
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ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 529

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

FID #

Date Arrived **11/10/00**
ETC Order Number **0011335**

ETC Lab ID **0011335-03**
Field ID : **MW-71B-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/09/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Base/Neutral & Acid				11/18/00	11/13/00	PF	8270C 3510C
QC Batch	**P06010**						
Dilution Factor	**1**						
Acenaphthene	ND	ug/L	2.00				
Acenaphthylene	ND	ug/L	2.00				
Anthracene	ND	ug/L	2.00				
Benzo(a)anthracene	ND	ug/L	2.00				
Benzo(b)fluoranthene	ND	ug/L	2 00				
Benzo(k)fluoranthene	ND	ug/L	2.00				
Benzo(g,h,i)perylene	ND	ug/L	2.00				
Benzo(a)pyrene	ND	ug/L	2.00				
Benzoic Acid	ND	ug/L	50.0				
Benzyl Alcohol	ND	ug/L	10.0				
[redacted](2-chloroethoxy)methane	ND	ug/L	5.00				
[redacted](2-chloroethyl)ether	ND	ug/L	5.00				
Bis(2-chloroisopropyl)ether	ND	ug/L	5 00				
Bis(2-ethylhexyl)phthalate	ND	ug/L	10.0				
4-Bromophenyl phenyl ether	ND	ug/L	5.00				
Butyl benzyl phthalate	ND	ug/L	5.00				
4-Chloroaniline	ND	ug/L	5.00				
2-Chloronaphthalene	ND	ug/L	5 00				
4-Chloro-3-methylphenol	ND	ug/L	5.00				
2-Chlorophenol	ND	ug/L	5.00				
4-Chlorophenyl phenyl ether	ND	ug/L	5 00				
Chrysene	ND	ug/L	2.00				
Dibenzo(a,h)anthracene	ND	ug/L	2 00				
Dibenzofuran	ND	ug/L	5.00				
Di-n-butyl phthalate	ND	ug/L	5.00				
3,3'-Dichlorobenzidine	ND	ug/L	10.0				
2,4-Dichlorophenol	ND	ug/L	5.00				
Diethyl phthalate	ND	ug/L	5 00				
2,4-Dimethylphenol	ND	ug/L	5 00				
Dimethyl phthalate	ND	ug/L	5 00				
4,6-Dinitro-2-methylphenol	ND	ug/L	10 0				
2,4-Dinitrophenol	ND	ug/L	50 0				
2,4-Dinitrotoluene	ND	ug/L	5.00				
2,6-Dinitrotoluene	ND	ug/L	5.00				
Di-n-octyl phthalate	ND	ug/L	5 00				
Fluoranthene	ND	ug/L	2 00				
Fluorene	ND	ug/L	2.00				
Hexachlorobenzene	ND	ug/L	5.00				
Hexachlorobutadiene	ND	ug/L	5.00				
Hexachlorocyclopentadiene	ND	ug/L	5.00				
Hexachloroethane	ND	ug/L	5.00				
[redacted]eno(1,2,3-cd)pyrene	ND	ug/L	2.00				
[redacted]phorone	ND	ug/L	5.00				
2-Methylnaphthalene	ND	ug/L	2.00				
2-Methylphenol (o-cresol)	ND	ug/L	5.00				

CS
Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 530

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

FID #

Date Arrived **11/10/00**
ETC Order Number **0011335**

ETC Lab ID **0011335-03**
Field ID : **MW-71B-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/09/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Base/Neutral & Acid				11/18/00		PF	8270C
					11/13/00		3510C
4-Methylphenol (p-cresol)	ND	ug/L	5.00				
Naphthalene	ND	ug/L	2.00				
Nitrobenzene	ND	ug/L	5.00				
2-Nitroaniline	ND	ug/L	5.00				
3-Nitroaniline	ND	ug/L	10.0				
4-Nitroaniline	ND	ug/L	5 00				
2-Nitrophenol	ND	ug/L	5 00				
4-Nitrophenol	ND	ug/L	5.00				
N-Nitrosodiphenylamine	ND	ug/L	5.00				
N-Nitrosodipropylamine	ND	ug/L	5.00				
Pentachlorophenol	ND	ug/L	10.0				
Phenanthrene	ND	ug/L	2.00				
Phenol	ND	ug/L	5.00				
Pyrene	ND	ug/L	2.00				
2,4,5-Trichlorphenol	ND	ug/L	5.00				
2,4,6-Trichlorophenol	ND	ug/L	5.00				

Surrogate Standard	% Recovery	QC Limits	
S1 - Nitrobenzene-d5	56	29	110
S2 - 2-Fluorobiphenyl	51	38	107
S3 - 4-Terphenyl-d14	64	33	122
S4 - Phenol-d6	25	7	58
S5 - 2,4,6-Tribromophenol	72	16	138
S6 - 2-Fluorophenol	37	8	88

CS

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

FORM 1 613 531

BNA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

0011-335-3

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-335

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 980.0 (g/mL) ML Lab File ID: 0301003

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/18/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	57633-64-4	1,3,2-DIOXABOROLANE, 2-ETHYL	13.07	5.63	NJ
2.					
3.					
4.					
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ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 532

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

FID #

Date Arrived **11/10/00**
ETC Order Number **0011335**

ETC Lab ID **0011335-04**
Field ID : **MW-32-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/09/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Base/Neutral & Acid				11/18/00	11/13/00	PF	8270C 3510C
QC Batch	**P06010**						
Dilution Factor	**1**						
Acenaphthene	ND	ug/L	2.00				
Acenaphthylene	ND	ug/L	2.00				
Anthracene	ND	ug/L	2.00				
Benzo(a)anthracene	ND	ug/L	2.00				
Benzo(b)fluoranthene	ND	ug/L	2.00				
Benzo(k)fluoranthene	ND	ug/L	2.00				
Benzo(g,h,i)perylene	ND	ug/L	2.00				
Benzo(a)pyrene	ND	ug/L	2.00				
Benzoic Acid	ND	ug/L	50.0				
Benzyl Alcohol	ND	ug/L	10.0				
Bis(2-chloroethoxy)methane	ND	ug/L	5.00				
Bis(2-chloroethyl)ether	ND	ug/L	5.00				
Bis(2-chloroisopropyl)ether	ND	ug/L	5.00				
Bis(2-ethylhexyl)phthalate	ND	ug/L	10.0				
4-Bromophenyl phenyl ether	ND	ug/L	5.00				
Butyl benzyl phthalate	ND	ug/L	5.00				
4-Chloroaniline	ND	ug/L	5 00				
2-Chloronaphthalene	ND	ug/L	5.00				
4-Chloro-3-methylphenol	ND	ug/L	5.00				
2-Chlorophenol	ND	ug/L	5.00				
4-Chlorophenyl phenyl ether	ND	ug/L	5.00				
Chrysene	ND	ug/L	2.00				
Dibenzo(a,h)anthracene	ND	ug/L	2.00				
Dibenzofuran	ND	ug/L	5.00				
Di-n-butyl phthalate	ND	ug/L	5.00				
3,3'-Dichlorobenzidine	ND	ug/L	10.0				
2,4-Dichlorophenol	ND	ug/L	5.00				
Diethyl phthalate	ND	ug/L	5.00				
2,4-Dimethylphenol	ND	ug/L	5.00				
Dimethyl phthalate	ND	ug/L	5.00				
4,6-Dinitro-2-methylphenol	ND	ug/L	10 0				
2,4-Dinitrophenol	ND	ug/L	50.0				
2,4-Dinitrotoluene	ND	ug/L	5 00				
2,6-Dinitrotoluene	ND	ug/L	5 00				
Di-n-octyl phthalate	ND	ug/L	5 00				
Fluoranthene	ND	ug/L	2.00				
Fluorene	ND	ug/L	2.00				
Hexachlorobenzene	ND	ug/L	5.00				
Hexachlorobutadiene	ND	ug/L	5.00				
Hexachlorocyclopentadiene	ND	ug/L	5 00				
Hexachloroethane	ND	ug/L	5.00				
Indeno(1,2,3-cd)pyrene	ND	ug/L	2.00				
Isophorone	ND	ug/L	5.00				
2-Methylnaphthalene	ND	ug/L	2.00				
2-Methylphenol (o-cresol)	ND	ug/L	5.00				

CS
Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 533

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

FID #

Date Arrived **11/10/00**
ETC Order Number **0011335**

ETC Lab ID **0011335-04**
Field ID : **MW-32-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/09/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Base/Neutral & Acid				11/18/00		PF	8270C
					11/13/00		3510C
4-Methylphenol (p-cresol)	ND	ug/L	5.00				
Naphthalene	ND	ug/L	2 00				
Nitrobenzene	ND	ug/L	5.00				
2-Nitroaniline	ND	ug/L	5.00				
3-Nitroaniline	ND	ug/L	10.0				
4-Nitroaniline	ND	ug/L	5.00				
2-Nitrophenol	ND	ug/L	5.00				
4-Nitrophenol	ND	ug/L	5.00				
N-Nitrosodiphenylamine	ND	ug/L	5.00				
N-Nitrosodipropylamine	ND	ug/L	5 00				
Pentachlorophenol	ND	ug/L	10.0				
Phenanthrene	ND	ug/L	2.00				
[redacted]enol	ND	ug/L	5.00				
[redacted]ene	ND	ug/L	2.00				
2,4,5-Trichlorphenol	ND	ug/L	5.00				
2,4,6-Trichlorophenol	ND	ug/L	5.00				

Surrogate Standard	% Recovery	QC Limits	
S1 - Nitrobenzene-d5	57	29	110
S2 - 2-Fluorobiphenyl	56	38	107
S3 - 4-Terphenyl-d14	81	33	122
S4 - Phenol-d6	24	7	58
S5 - 2,4,6-Tribromophenol	77	16	138
S6 - 2-Fluorophenol	33	8	88

CS

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

FORM 1

BNA-GCMS ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

613 534

CLIENT SAMPLE NO.

0011-335-4

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-335

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 0401004

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/18/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	4359-46-0	1,3-DIOXOLANE, 2-ETHYL-4-MET	5.10	6.89	NJ
2.					
3.					
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ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 535

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

FID #

Date Arrived **11/10/00**
ETC Order Number **0011335**

ETC Lab ID **0011335-05**
Field ID : **RW-01-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/09/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Base/Neutral & Acid				11/18/00		PF	8270C
					11/13/00		3510C
QC Batch	**P06010**						
Dilution Factor	**1**						
Acenaphthene	ND	ug/L	2.00				
Acenaphthylene	ND	ug/L	2.00				
Anthracene	ND	ug/L	2.00				
Benzo(a)anthracene	ND	ug/L	2.00				
Benzo(b)fluoranthene	ND	ug/L	2.00				
Benzo(k)fluoranthene	ND	ug/L	2 00				
Benzo(g,h,i)perylene	ND	ug/L	2.00				
Benzo(a)pyrene	ND	ug/L	2 00				
Benzoic Acid	ND	ug/L	50 0				
Benzyl Alcohol	ND	ug/L	10.0				
[redacted](2-chloroethoxy)methane	ND	ug/L	5.00				
[redacted](2-chloroethyl)ether	ND	ug/L	5.00				
Bis(2-chloroisopropyl)ether	ND	ug/L	5.00				
Bis(2-ethylhexyl)phthalate	ND	ug/L	10.0				
4-Bromophenyl phenyl ether	ND	ug/L	5.00				
Butyl benzyl phthalate	ND	ug/L	5.00				
4-Chloroaniline	ND	ug/L	5.00				
2-Chloronaphthalene	ND	ug/L	5.00				
4-Chloro-3-methylphenol	ND	ug/L	5.00				
2-Chlorophenol	ND	ug/L	5.00				
4-Chlorophenyl phenyl ether	ND	ug/L	5.00				
Chrysene	ND	ug/L	2.00				
Dibenzo(a,h)anthracene	ND	ug/L	2.00				
Dibenzofuran	ND	ug/L	5.00				
Di-n-butyl phthalate	ND	ug/L	5.00				
3,3'-Dichlorobenzidine	ND	ug/L	10.0				
2,4-Dichlorophenol	ND	ug/L	5.00				
Diethyl phthalate	ND	ug/L	5.00				
2,4-Dimethylphenol	ND	ug/L	5 00				
Dimethyl phthalate	ND	ug/L	5.00				
4,6-Dinitro-2-methylphenol	ND	ug/L	10.0				
2,4-Dinitrophenol	ND	ug/L	50.0				
2,4-Dinitrotoluene	ND	ug/L	5.00				
2,6-Dinitrotoluene	ND	ug/L	5.00				
Di-n-octyl phthalate	ND	ug/L	5.00				
Fluoranthene	ND	ug/L	2.00				
Fluorene	ND	ug/L	2.00				
Hexachlorobenzene	ND	ug/L	5.00				
Hexachlorobutadiene	ND	ug/L	5.00				
Hexachlorocyclopentadiene	ND	ug/L	5.00				
Hexachloroethane	ND	ug/L	5.00				
[redacted]eno(1,2,3-cd)pyrene	ND	ug/L	2.00				
[redacted]phorone	ND	ug/L	5.00				
2-Methylnaphthalene	ND	ug/L	2.00				
2-Methylphenol (o-cresol)	ND	ug/L	5.00				

c S

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 536

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

FID #

Date Arrived **11/10/00**
ETC Order Number **0011335**

ETC Lab ID **0011335-05**
Field ID : **RW-01-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/09/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Base/Neutral & Acid				11/18/00	11/13/00	PF	8270C 3510C
4-Methylphenol (p-cresol)	ND	ug/L	5.00				
Naphthalene	ND	ug/L	2.00				
Nitrobenzene	ND	ug/L	5.00				
2-Nitroaniline	ND	ug/L	5.00				
3-Nitroaniline	ND	ug/L	10.0				
4-Nitroaniline	ND	ug/L	5 00				
2-Nitrophenol	ND	ug/L	5.00				
4-Nitrophenol	ND	ug/L	5 00				
N-Nitrosodiphenylamine	ND	ug/L	5.00				
N-Nitrosodipropylamine	ND	ug/L	5.00				
Pentachlorophenol	ND	ug/L	10.0				
Phenanthrene	ND	ug/L	2 00				
Phenol	ND	ug/L	5.00				
Pyrene	ND	ug/L	2.00				
2,4,5-Trichlorphenol	ND	ug/L	5.00				
2,4,6-Trichlorophenol	ND	ug/L	5 00				

Surrogate Standard	% Recovery	QC Limits	
S1 - Nitrobenzene-d5	52	29	110
S2 - 2-Fluorobiphenyl	54	38	107
S3 - 4-Terphenyl-d14	82	33	122
S4 - Phenol-d6	23	7	58
S5 - 2,4,6-Tribromophenol	85	16	138
S6 - 2-Fluorophenol	32	8	88

CS

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

FORM 1 613 537 CLIENT SAMPLE NO.

BNA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

0011-335-5

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-335

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 970.0 (g/mL) ML Lab File ID: 0501005

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/18/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

Number TICs found: 2 CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	62238-37-3	3-PENTEN-1-OL, 2-METHYL-	3.70	8.83	NJ
2.	34075-28-0	BUTANE, 2,3-DIMETHYL-2-NITRO	3.94	7.65	NJ
3.					
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ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 538

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**

FID #

Date Arrived **11/10/00**
ETC Order Number **0011335**

ETC Lab ID **0011335-06**
Field ID : **RW-1A-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/09/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Base/Neutral & Acid				11/18/00	11/13/00	PF	8270C 3510C
QC Batch	**P06010**						
Dilution Factor	**1**						
Acenaphthene	ND	ug/L	2.00				
Acenaphthylene	ND	ug/L	2 00				
Anthracene	ND	ug/L	2.00				
Benzo(a)anthracene	ND	ug/L	2.00				
Benzo(b)fluoranthene	ND	ug/L	2.00				
Benzo(k)fluoranthene	ND	ug/L	2.00				
Benzo(g,h,ı)perylene	ND	ug/L	2.00				
Benzo(a)pyrene	ND	ug/L	2.00				
Benzoıc Acıd	ND	ug/L	50.0				
Benzyl Alcohol	ND	ug/L	10.0				
Bıs(2-chloroethoxy)methane	ND	ug/L	5.00				
Bıs(2-chloroethyl)ether	ND	ug/L	5.00				
Bıs(2-chloroısopropyl)ether	ND	ug/L	5.00				
Bıs(2-ethylhexyl)phthalate	ND	ug/L	10.0				
4-Bromophenyl phenyl ether	ND	ug/L	5 00				
Butyl benzyl phthalate	ND	ug/L	5.00				
4-Chloroanılıne	ND	ug/L	5 00				
2-Chloronaphthalene	ND	ug/L	5.00				
4-Chloro-3-methylphenol	ND	ug/L	5.00				
2-Chlorophenol	ND	ug/L	5.00				
4-Chlorophenyl phenyl ether	ND	ug/L	5.00				
Chrysene	ND	ug/L	2.00				
Dıbenzo(a,h)anthracene	ND	ug/L	2.00				
Dıbenzofuran	ND	ug/L	5.00				
Dı-n-butyl phthalate	ND	ug/L	5.00				
3,3'-Dıchlorobenzıdıne	ND	ug/L	10.0				
2,4-Dichlorophenol	ND	ug/L	5.00				
Dıethyl phthalate	ND	ug/L	5.00				
2,4-Dimethylphenol	ND	ug/L	5.00				
Dımethyl phthalate	ND	ug/L	5.00				
4,6-Dinitro-2-methylphenol	ND	ug/L	10.0				
2,4-Dınitrophenol	ND	ug/L	50.0				
2,4-Dınitrotoluene	ND	ug/L	5.00				
2,6-Dınitrotoluene	ND	ug/L	5 00				
Dı-n-octyl phthalate	ND	ug/L	5 00				
Fluoranthene	ND	ug/L	2 00				
Fluorene	ND	ug/L	2 00				
Hexachlorobenzene	ND	ug/L	5 00				
Hexachlorobutadıene	ND	ug/L	5 00				
Hexachlorocyclopentadıene	ND	ug/L	5.00				
Hexachloroethane	ND	ug/L	5 00				
Indeno(1,2,3-cd)pyrene	ND	ug/L	2.00				
Isophorone	ND	ug/L	5.00				
2-Methylnaphthalene	ND	ug/L	2.00				
2-Methylphenol (o-cresol)	ND	ug/L	5.00				

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 539

Client Name: Sverdrup/Jacobs Eng.
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID: Memphis Depot

FID #

Date Arrived: 11/10/00
ETC Order Number: 0011335

ETC Lab ID: 0011335-06
Field ID : RW-1A-Y2Q4

Matrix : AQUEOUS
Sample Date : 11/09/00

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Base/Neutral & Acid				11/18/00		PF	8270C
					11/13/00		3510C
4-Methylphenol (p-cresol)	ND	ug/L	5.00				
Naphthalene	ND	ug/L	2.00				
Nitrobenzene	ND	ug/L	5.00				
2-Nitroaniline	ND	ug/L	5.00				
3-Nitroaniline	ND	ug/L	10.0				
4-Nitroaniline	ND	ug/L	5.00				
2-Nitrophenol	ND	ug/L	5.00				
4-Nitrophenol	ND	ug/L	5.00				
N-Nitrosodiphenylamine	ND	ug/L	5.00				
N-Nitrosodipropylamine	ND	ug/L	5.00				
Pentachlorophenol	ND	ug/L	10.0				
Phenanthrene	ND	ug/L	2.00				
Phenol	ND	ug/L	5.00				
[redacted]ene	ND	ug/L	2.00				
[redacted],5-Trichlorphenol	ND	ug/L	5.00				
2,4,6-Trichlorophenol	ND	ug/L	5.00				

Surrogate Standard	% Recovery	QC Limits	
S1 - Nitrobenzene-d5	67	29	110
S2 - 2-Fluorobiphenyl	66	38	107
S3 - 4-Terphenyl-d14	94	33	122
S4 - Phenol-d6	27	7	58
S5 - 2,4,6-Tribromophenol	92	16	138
S6 - 2-Fluorophenol	40	8	88

CJ

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

FORM 1 613 540 CLIENT SAMPLE NO.

BNA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

0011-335-6

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-335

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 980.0 (g/mL) ML Lab File ID: 0601006

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/18/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
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613 541

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name: Sverdrup/Jacobs Eng.
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID: Memphis Depot

FID #

Date Arrived: 11/10/00
ETC Order Number: 0011335

ETC Lab ID: 0011335-07
Field ID : RW-1B-Y2Q4

Matrix : AQUEOUS
Sample Date . 11/09/00

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Base/Neutral & Acid				11/18/00		PF	8270C
QC Batch	**P06010**				11/13/00		3510C
Dilution Factor	**1**						
Acenaphthene	ND	ug/L	2.00				
Acenaphthylene	ND	ug/L	2 00				
Anthracene	ND	ug/L	2.00				
Benzo(a)anthracene	ND	ug/L	2.00				
Benzo(b)fluoranthene	ND	ug/L	2.00				
Benzo(k)fluoranthene	ND	ug/L	2.00				
Benzo(g,h,i)perylene	ND	ug/L	2 00				
Benzo(a)pyrene	ND	ug/L	2.00				
Benzoic Acid	ND	ug/L	50.0				
Benzyl Alcohol	ND	ug/L	10.0				
Bis(2-chloroethoxy)methane	ND	ug/L	5.00				
Bis(2-chloroethyl)ether	ND	ug/L	5.00				
Bis(2-chloroisopropyl)ether	ND	ug/L	5.00				
Bis(2-ethylhexyl)phthalate	ND	ug/L	10.0				
4-Bromophenyl phenyl ether	ND	ug/L	5 00				
Butyl benzyl phthalate	ND	ug/L	5.00				
4-Chloroaniline	ND	ug/L	5 00				
2-Chloronaphthalene	ND	ug/L	5 00				
4-Chloro-3-methylphenol	ND	ug/L	5.00				
2-Chlorophenol	ND	ug/L	5 00				
4-Chlorophenyl phenyl ether	ND	ug/L	5 00				
Chrysene	ND	ug/L	2.00				
Dibenzo(a,h)anthracene	ND	ug/L	2.00				
Dibenzofuran	ND	ug/L	5.00				
Di-n-butyl phthalate	ND	ug/L	5.00				
3,3'-Dichlorobenzidine	ND	ug/L	10.0				
2,4-Dichlorophenol	ND	ug/L	5.00				
Diethyl phthalate	ND	ug/L	5 00				
2,4-Dimethylphenol	ND	ug/L	5.00				
Dimethyl phthalate	ND	ug/L	5 00				
4,6-Dinitro-2-methylphenol	ND	ug/L	10 0				
2,4-Dinitrophenol	ND	ug/L	50.0				
2,4-Dinitrotoluene	ND	ug/L	5.00				
2,6-Dinitrotoluene	ND	ug/L	5.00				
Di-n-octyl phthalate	ND	ug/L	5 00				
Fluoranthene	ND	ug/L	2.00				
Fluorene	ND	ug/L	2.00				
Hexachlorobenzene	ND	ug/L	5.00				
Hexachlorobutadiene	ND	ug/L	5.00				
Hexachlorocyclopentadiene	ND	ug/L	5.00				
Hexachloroethane	ND	ug/L	5.00				
Indeno(1,2,3-cd)pyrene	ND	ug/L	2.00				
Isophorone	ND	ug/L	5.00				
2-Methylnaphthalene	ND	ug/L	2.00				
2-Methylphenol (o-cresol)	ND	ug/L	5.00				

PS
ita Validator

ND - Not Detected

Q - Recovery Outside QC Limits

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name: Sverdrup/Jacobs Eng.
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID: Memphis Depot

FID #

Date Arrived: 11/10/00
ETC Order Number: 0011335

ETC Lab ID: 0011335-07
Field ID : RW-1B-Y2Q4

Matrix : AQUEOUS
Sample Date : 11/09/00

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Base/Neutral & Acid				11/18/00	11/13/00	PF	8270C 3510C
4-Methylphenol (p-cresol)	ND	ug/L	5.00				
Naphthalene	ND	ug/L	2.00				
Nitrobenzene	ND	ug/L	5.00				
2-Nitroaniline	ND	ug/L	5.00				
3-Nitroaniline	ND	ug/L	10 0				
4-Nitroaniline	ND	ug/L	5.00				
2-Nitrophenol	ND	ug/L	5.00				
4-Nitrophenol	ND	ug/L	5.00				
N-Nitrosodiphenylamine	ND	ug/L	5.00				
N-Nitrosodipropylamine	ND	ug/L	5.00				
Pentachlorophenol	ND	ug/L	10.0				
Phenanthrene	ND	ug/L	2.00				
[redacted]enol	ND	ug/L	5 00				
[redacted]ene	ND	ug/L	2 00				
2,4,5-Trichlorphenol	ND	ug/L	5.00				
2,4,6-Trichlorophenol	ND	ug/L	5.00				

Surrogate Standard	% Recovery	QC Limits	
S1 - Nitrobenzene-d5	65	29	110
S2 - 2-Fluorobiphenyl	62	38	107
S3 - 4-Terphenyl-d14	85	33	122
S4 - Phenol-d6	29	7	58
S5 - 2,4,6-Tribromophenol	95	16	138
S6 - 2-Fluorophenol	41	8	88

CS
Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

613 543

FORM 1
BNA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.
0011-335-7

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-335

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 0701007

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/18/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
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ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 544

Client Name: Sverdrup/Jacobs Eng.
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID: Memphis Depot

FID #

Date Arrived: 11/10/00
ETC Order Number: 0011335

ETC Lab ID: 0011335-08
Field ID : FB-Y2Q4

Matrix : AQUEOUS
Sample Date : 11/09/00

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Base/Neutral & Acid				11/18/00		PF	8270C
					11/13/00		3510C
QC Batch	**P06010**						
Dilution Factor	**1**						
Acenaphthene	ND	ug/L	2.00				
Acenaphthylene	ND	ug/L	2.00				
Anthracene	ND	ug/L	2.00				
Benzo(a)anthracene	ND	ug/L	2.00				
Benzo(b)fluoranthene	ND	ug/L	2.00				
Benzo(k)fluoranthene	ND	ug/L	2.00				
Benzo(g,h,i)perylene	ND	ug/L	2 00				
Benzo(a)pyrene	ND	ug/L	2.00				
Benzoic Acid	ND	ug/L	50.0				
Benzyl Alcohol	ND	ug/L	10.0				
Bis(2-chloroethoxy)methane	ND	ug/L	5.00				
[redacted]2-chloroethyl)ether	ND	ug/L	5 00				
[redacted](2-chloroisopropyl)ether	ND	ug/L	5 00				
Bis(2-ethylhexyl)phthalate	ND	ug/L	10.0				
4-Bromophenyl phenyl ether	ND	ug/L	5.00				
Butyl benzyl phthalate	ND	ug/L	5.00				
4-Chloroaniline	ND	ug/L	5.00				
2-Chloronaphthalene	ND	ug/L	5.00				
4-Chloro-3-methylphenol	ND	ug/L	5.00				
2-Chlorophenol	ND	ug/L	5.00				
4-Chlorophenyl phenyl ether	ND	ug/L	5.00				
Chrysene	ND	ug/L	2.00				
Dibenzo(a,h)anthracene	ND	ug/L	2.00				
Dibenzofuran	ND	ug/L	5.00				
Di-n-butyl phthalate	ND	ug/L	5.00				
3,3'-Dichlorobenzidine	ND	ug/L	10.0				
2,4-Dichlorophenol	ND	ug/L	5 00				
Diethyl phthalate	ND	ug/L	5 00				
2,4-Dimethylphenol	ND	ug/L	5.00				
Dimethyl phthalate	ND	ug/L	5 00				
4,6-Dinitro-2-methylphenol	ND	ug/L	10.0				
2,4-Dinitrophenol	ND	ug/L	50.0				
2,4-Dinitrotoluene	ND	ug/L	5.00				
2,6-Dinitrotoluene	ND	ug/L	5.00				
Di-n-octyl phthalate	ND	ug/L	5.00				
Fluoranthene	ND	ug/L	2.00				
Fluorene	ND	ug/L	2.00				
Hexachlorobenzene	ND	ug/L	5.00				
Hexachlorobutadiene	ND	ug/L	5.00				
Hexachlorocyclopentadiene	ND	ug/L	5.00				
Hexachloroethane	ND	ug/L	5.00				
[redacted]eno(1,2,3-cd)pyrene	ND	ug/L	2.00				
[redacted]horone	ND	ug/L	5.00				
[redacted]ethylnaphthalene	ND	ug/L	2.00				
2-Methylphenol (o-cresol)	ND	ug/L	5.00				

CS

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 545

Client Name: Sverdrup/Jacobs Eng.
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID: Memphis Depot

FID #

Date Arrived: 11/10/00
ETC Order Number: 0011335

ETC Lab ID: 0011335-08
Field ID : FB-Y2Q4

Matrix : AQUEOUS
Sample Date : 11/09/00

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Base/Neutral & Acid				11/18/00	11/13/00	PF	8270C 3510C
4-Methylphenol (p-cresol)	ND	ug/L	5.00				
Naphthalene	ND	ug/L	2.00				
Nitrobenzene	ND	ug/L	5.00				
2-Nitroaniline	ND	ug/L	5.00				
3-Nitroaniline	ND	ug/L	10.0				
4-Nitroaniline	ND	ug/L	5.00				
2-Nitrophenol	ND	ug/L	5.00				
4-Nitrophenol	ND	ug/L	5.00				
N-Nitrosodiphenylamine	ND	ug/L	5.00				
N-Nitrosodipropylamine	ND	ug/L	5.00				
Pentachlorophenol	ND	ug/L	10 0				
Phenanthrene	ND	ug/L	2.00				
Phenol	ND	ug/L	5.00				
Pyrene	ND	ug/L	2.00				
2,4,5-Trichlorphenol	ND	ug/L	5.00				
2,4,6-Trichlorophenol	ND	ug/L	5.00				

Surrogate Standard	% Recovery	QC Limits	
S1 - Nitrobenzene-d5	68	29	110
S2 - 2-Fluorobiphenyl	63	38	107
S3 - 4-Terphenyl-d14	88	33	122
S4 - Phenol-d6	30	7	58
S5 - 2,4,6-Tribromophenol	98	16	138
S6 - 2-Fluorophenol	43	8	88

C.S

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

FORM 1 613 546 CLIENT SAMPLE NO.

BNA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

0011-335-8

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-335

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 0801008

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/18/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
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ENVIRONMENTAL TESTING & CONSULTING, INC.

613 547

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name: Sverdrup/Jacobs Eng.
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID: Memphis Depot

FID #

Date Arrived: 11/10/00
ETC Order Number: 0011335

ETC Lab ID: 0011335-09
Field ID : RW-02-Y2Q4

Matrix : AQUEOUS
Sample Date : 11/09/00

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Base/Neutral & Acid				11/18/00		PF	8270C
QC Batch	P06010				11/13/00		3510C
Dilution Factor	1						
Acenaphthene	ND	ug/L	2 00				
Acenaphthylene	ND	ug/L	2 00				
Anthracene	ND	ug/L	2 00				
Benzo(a)anthracene	ND	ug/L	2.00				
Benzo(b)fluoranthene	ND	ug/L	2.00				
Benzo(k)fluoranthene	ND	ug/L	2.00				
Benzo(g,h,ı)perylene	ND	ug/L	2 00				
Benzo(a)pyrene	ND	ug/L	2 00				
Benzoıc Acid	ND	ug/L	50.0				
Benzyl Alcohol	ND	ug/L	10.0				
Bıs(2-chloroethoxy)methane	ND	ug/L	5.00				
Bis(2-chloroethyl)ether	ND	ug/L	5.00				
Bis(2-chloroısopropyl)ether	ND	ug/L	5.00				
Bis(2-ethylhexyl)phthalate	ND	ug/L	10.0				
4-Bromophenyl phenyl ether	ND	ug/L	5 00				
Butyl benzyl phthalate	ND	ug/L	5.00				
4-Chloroanılıne	ND	ug/L	5.00				
2-Chloronaphthalene	ND	ug/L	5.00				
4-Chloro-3-methylphenol	ND	ug/L	5.00				
2-Chlorophenol	ND	ug/L	5.00				
4-Chlorophenyl phenyl ether	ND	ug/L	5.00				
Chrysene	ND	ug/L	5.00				
Dibenzo(a,h)anthracene	ND	ug/L	2.00				
Dibenzofuran	ND	ug/L	2.00				
Dı-n-butyl phthalate	ND	ug/L	5.00				
3,3'-Dıchlorobenzıdıne	ND	ug/L	5 00				
2,4-Dıchlorophenol	ND	ug/L	10.0				
Diethyl phthalate	ND	ug/L	5.00				
2,4-Dımethylphenol	ND	ug/L	5.00				
Dımethyl phthalate	ND	ug/L	5 00				
4,6-Dinitro-2-methylphenol	ND	ug/L	5 00				
2,4-Dınıtrophenol	ND	ug/L	10.0				
2,4-Dinitrotoluene	ND	ug/L	50.0				
2,6-Dınıtrotoluene	ND	ug/L	5.00				
Dı-n-octyl phthalate	ND	ug/L	5 00				
Fluoranthene	ND	ug/L	5 00				
Fluorene	ND	ug/L	2.00				
Hexachlorobenzene	ND	ug/L	2.00				
Hexachlorobutadıene	ND	ug/L	5.00				
Hexachlorocyclopentadiene	ND	ug/L	5.00				
Hexachloroethane	ND	ug/L	5.00				
Indeno(1,2,3-cd)pyrene	ND	ug/L	5.00				
Isophorone	ND	ug/L	2.00				
2-Methylnaphthalene	ND	ug/L	5.00				
2-Methylphenol (o-cresol)	ND	ug/L	2 00				
	ND	ug/L	5 00				

C S
ata Validator

ND - Not Detected

Q - Recovery Outside QC Limits

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 548

Client Name: Sverdrup/Jacobs Eng.
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID: Memphis Depot

FID #

Date Arrived: 11/10/00
ETC Order Number: 0011335

ETC Lab ID: 0011335-09
Field ID : RW-02-Y2Q4

Matrix : AQUEOUS
Sample Date : 11/09/00

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Base/Neutral & Acid				11/18/00		PF	8270C
4-Methylphenol (p-cresol)	ND	ug/L	5.00		11/13/00		3510C
Naphthalene	ND	ug/L	2.00				
Nitrobenzene	ND	ug/L	5.00				
2-Nitroaniline	ND	ug/L	5 00				
3-Nitroaniline	ND	ug/L	10.0				
4-Nitroaniline	ND	ug/L	5.00				
2-Nitrophenol	ND	ug/L	5.00				
4-Nitrophenol	ND	ug/L	5.00				
N-Nitrosodiphenylamine	ND	ug/L	5.00				
N-Nitrosodipropylamine	ND	ug/L	5.00				
Pentachlorophenol	ND	ug/L	10 0				
Phenanthrene	ND	ug/L	2.00				
Phenol	ND	ug/L	5.00				
[redacted]ne	ND	ug/L	2.00				
[redacted]-Trichlorphenol	ND	ug/L	5 00				
2,4,6-Trichlorophenol	ND	ug/L	5.00				

Surrogate Standard	% Recovery	QC Limits	
S1 - Nitrobenzene-d5	63	29	110
S2 - 2-Fluorobiphenyl	64	38	107
S3 - 4-Terphenyl-d14	83	33	122
S4 - Phenol-d6	28	7	58
S5 - 2,4,6-Tribromophenol	95	16	138
S6 - 2-Fluorophenol	42	8	88

CS

ta Validator

ND - Not Detected

Q - Recovery Outside QC Limits

FORM 1
BNA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

0011-335-9

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-335

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 990.0 (g/mL) ML Lab File ID: 0901009

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/18/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
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ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 550

Client Name: Sverdrup/Jacobs Eng.
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID: Memphis Depot

FID #

Date Arrived: 11/10/00
ETC Order Number: 0011335

ETC Lab ID: 0011335-10
Field ID : MW-70-Y2Q4

Matrix : AQUEOUS
Sample Date : 11/09/00

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Base/Neutral & Acid				11/18/00	11/13/00	PF	8270C 3510C
QC Batch	**P06010**						
Dilution Factor	**1**						
Acenaphthene	ND	ug/L	2.00				
Acenaphthylene	ND	ug/L	2.00				
Anthracene	ND	ug/L	2.00				
Benzo(a)anthracene	ND	ug/L	2.00				
Benzo(b)fluoranthene	ND	ug/L	2.00				
Benzo(k)fluoranthene	ND	ug/L	2.00				
Benzo(g,h,i)perylene	ND	ug/L	2.00				
Benzo(a)pyrene	ND	ug/L	2.00				
Benzoic Acid	ND	ug/L	50.0				
Benzyl Alcohol	ND	ug/L	10.0				
Bis(2-chloroethoxy)methane	ND	ug/L	5.00				
[redacted]2-chloroethyl)ether	ND	ug/L	5.00				
[redacted]2-chloroisopropyl)ether	ND	ug/L	5.00				
Bis(2-ethylhexyl)phthalate	ND	ug/L	10.0				
4-Bromophenyl phenyl ether	ND	ug/L	5.00				
Butyl benzyl phthalate	ND	ug/L	5.00				
4-Chloroaniline	ND	ug/L	5.00				
2-Chloronaphthalene	ND	ug/L	5.00				
4-Chloro-3-methylphenol	ND	ug/L	5 00				
2-Chlorophenol	ND	ug/L	5.00				
4-Chlorophenyl phenyl ether	ND	ug/L	5 00				
Chrysene	ND	ug/L	2.00				
Dibenzo(a,h)anthracene	ND	ug/L	2.00				
Dibenzofuran	ND	ug/L	5.00				
Di-n-butyl phthalate	7.29	ug/L	5.00				
3,3'-Dichlorobenzidine	ND	ug/L	10.0				
2,4-Dichlorophenol	ND	ug/L	5.00				
Diethyl phthalate	ND	ug/L	5.00				
2,4-Dimethylphenol	ND	ug/L	5.00				
Dimethyl phthalate	ND	ug/L	5.00				
4,6-Dinitro-2-methylphenol	ND	ug/L	10.0				
2,4-Dinitrophenol	ND	ug/L	50.0				
2,4-Dinitrotoluene	ND	ug/L	5.00				
2,6-Dinitrotoluene	ND	ug/L	5.00				
Di-n-octyl phthalate	ND	ug/L	5.00				
Fluoranthene	ND	ug/L	2.00				
Fluorene	ND	ug/L	2.00				
Hexachlorobenzene	ND	ug/L	5.00				
Hexachlorobutadiene	ND	ug/L	5.00				
Hexachlorocyclopentadiene	ND	ug/L	5.00				
Hexachloroethane	ND	ug/L	5.00				
Indeno(1,2,3-cd)pyrene	ND	ug/L	2.00				
[redacted]horone	ND	ug/L	5 00				
[redacted]ethylnaphthalene	ND	ug/L	2.00				
2-Methylphenol (o-cresol)	ND	ug/L	5.00				

CS
Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 551

Client Name: Sverdrup/Jacobs Eng.
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID: Memphis Depot

FID #

Date Arrived: 11/10/00
ETC Order Number: 0011335

ETC Lab ID: 0011335-10
Field ID : MW-70-Y2Q4

Matrix : AQUEOUS
Sample Date : 11/09/00

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Base/Neutral & Acid				11/18/00	11/13/00	PF	8270C 3510C
4-Methylphenol (p-cresol)	ND	ug/L	5.00				
Naphthalene	ND	ug/L	2.00				
Nitrobenzene	ND	ug/L	5.00				
2-Nitroaniline	ND	ug/L	5.00				
3-Nitroaniline	ND	ug/L	10 0				
4-Nitroaniline	ND	ug/L	5 00				
2-Nitrophenol	ND	ug/L	5 00				
4-Nitrophenol	ND	ug/L	5.00				
N-Nitrosodiphenylamine	ND	ug/L	5.00				
N-Nitrosodipropylamine	ND	ug/L	5 00				
Pentachlorophenol	ND	ug/L	10.0				
Phenanthrene	ND	ug/L	2 00				
Phenol	ND	ug/L	5.00				
Pyrene	ND	ug/L	2.00				
2,4,5-Trichlorphenol	ND	ug/L	5 00				
2,4,6-Trichlorophenol	ND	ug/L	5 00				

Surrogate Standard	% Recovery	QC Limits	
S1 - Nitrobenzene-d5	37	29	110
S2 - 2-Fluorobiphenyl	22 Q	38	107
S3 - 4-Terphenyl-d14	21 Q	33	122
S4 - Phenol-d6	18	7	58
S5 - 2,4,6-Tribromophenol	30	16	138
S6 - 2-Fluorophenol	24	8	88

C S
Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

FORM 1 613 552 CLIENT SAMPLE NO.

BNA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

0011-335-10

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-335

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 950.0 (g/mL) ML Lab File ID: 1001010

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/18/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	314-40-9	BROMACIL	13.04	5.50	NJ
2.					
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ENVIRONMENTAL TESTING & CONSULTING, INC.

613 553

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name: Sverdrup/Jacobs Eng.
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID: Memphis Depot

FID #

Date Arrived: 11/10/00
ETC Order Number: 0011335

ETC Lab ID: 0011335-11
Field ID : RB-Y2Q4

Matrix : AQUEOUS
Sample Date : 11/09/00

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Base/Neutral & Acid				11/18/00		PF	8270C
					11/13/00		3510C
QC Batch	**P06010**						
Dilution Factor	**1**						
Acenaphthene	ND	ug/L	2.00				
Acenaphthylene	ND	ug/L	2.00				
Anthracene	ND	ug/L	2.00				
Benzo(a)anthracene	ND	ug/L	2.00				
Benzo(b)fluoranthene	ND	ug/L	2.00				
Benzo(k)fluoranthene	ND	ug/L	2.00				
Benzo(g,h,i)perylene	ND	ug/L	2.00				
Benzo(a)pyrene	ND	ug/L	2 00				
Benzoic Acid	ND	ug/L	50.0				
Benzyl Alcohol	ND	ug/L	10.0				
Bis(2-chloroethoxy)methane	ND	ug/L	5 00				
Bis(2-chloroethyl)ether	ND	ug/L	5.00				
Bis(2-chloroisopropyl)ether	ND	ug/L	5.00				
Bis(2-ethylhexyl)phthalate	ND	ug/L	10.0				
4-Bromophenyl phenyl ether	ND	ug/L	5.00				
Butyl benzyl phthalate	ND	ug/L	5.00				
4-Chloroaniline	ND	ug/L	5 00				
2-Chloronaphthalene	ND	ug/L	5.00				
4-Chloro-3-methylphenol	ND	ug/L	5 00				
2-Chlorophenol	ND	ug/L	5.00				
4-Chlorophenyl phenyl ether	ND	ug/L	5.00				
Chrysene	ND	ug/L	2.00				
Dibenzo(a,h)anthracene	ND	ug/L	2 00				
Dibenzofuran	ND	ug/L	5.00				
Di-n-butyl phthalate	ND	ug/L	5 00				
3,3'-Dichlorobenzidine	ND	ug/L	10.0				
2,4-Dichlorophenol	ND	ug/L	5.00				
Diethyl phthalate	ND	ug/L	5 00				
2,4-Dimethylphenol	ND	ug/L	5.00				
Dimethyl phthalate	ND	ug/L	5.00				
4,6-Dinitro-2-methylphenol	ND	ug/L	10.0				
2,4-Dinitrophenol	ND	ug/L	50.0				
2,4-Dinitrotoluene	ND	ug/L	5.00				
2,6-Dinitrotoluene	ND	ug/L	5.00				
Di-n-octyl phthalate	ND	ug/L	5.00				
Fluoranthene	ND	ug/L	2.00				
Fluorene	ND	ug/L	2.00				
Hexachlorobenzene	ND	ug/L	5 00				
Hexachlorobutadiene	ND	ug/L	5.00				
Hexachlorocyclopentadiene	ND	ug/L	5.00				
Hexachloroethane	ND	ug/L	5.00				
Indeno(1,2,3-cd)pyrene	ND	ug/L	2.00				
Isophorone	ND	ug/L	5.00				
2-Methylnaphthalene	ND	ug/L	2 00				
2-Methylphenol (o-cresol)	ND	ug/L	5.00				

C S
Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

ENVIRONMENTAL TESTING & CONSULTING, INC.
2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 554

Client Name: Sverdrup/Jacobs Eng.
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID: Memphis Depot

FID #

Date Arrived: 11/10/00
ETC Order Number: 0011335

ETC Lab ID: 0011335-11
Field ID : RB-Y2Q4

Matrix . AQUEOUS
Sample Date : 11/09/00

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Base/Neutral & Acid				11/18/00		PF	8270C
					11/13/00		3510C
4-Methylphenol (p-cresol)	ND	ug/L	5.00				
Naphthalene	ND	ug/L	2.00				
Nitrobenzene	ND	ug/L	5 00				
2-Nitroaniline	ND	ug/L	5.00				
3-Nitroaniline	ND	ug/L	10.0				
4-Nitroaniline	ND	ug/L	5.00				
2-Nitrophenol	ND	ug/L	5.00				
4-Nitrophenol	ND	ug/L	5.00				
N-Nitrosodiphenylamine	ND	ug/L	5.00				
N-Nitrosodipropylamine	ND	ug/L	5 00				
Pentachlorophenol	ND	ug/L	10.0				
Phenanthrene	ND	ug/L	2.00				
Phenol	ND	ug/L	5.00				
[redacted]ene	ND	ug/L	2 00				
[redacted],5-Trichlorphenol	ND	ug/L	5 00				
2,4,6-Trichlorophenol	ND	ug/L	5.00				

Surrogate Standard	% Recovery	QC Limits	
S1 - Nitrobenzene-d5	60	29	110
S2 - 2-Fluorobiphenyl	55	38	107
S3 - 4-Terphenyl-d14	75	33	122
S4 - Phenol-d6	26	7	58
S5 - 2,4,6-Tribromophenol	80	16	138
S6 - 2-Fluorophenol	38	8	88

CS

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

FORM 1
BNA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.
0011-335-11

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-335

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 980.0 (g/mL) ML Lab File ID: 1101011

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/18/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
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FORM 2
WATER BNA-GCMS SURROGATE RECOVERY

613 556

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-335

	CLIENT SAMPLE NO.	S1 (NBZ)#	S2 (FBP)#	S3 (TPH)#	S4 (PHL)#	S5 (TBP)#	S6 (2FP)#	S7 #	S8 #	TOT OUT
01	P06010LB	71	62	77	29	94	44			0
02	P06010LCS	67	68	90	26	89	39			0
03	P06010LCSD	71	76	90	28	93	41			0
04	0011-335-1	32	27*	40	18	30	21			1
05	0011-335-2	46	42	48	23	53	33			0
06	0011-335-3	56	51	64	25	72	37			0
07	0011-335-4	57	56	81	24	77	33			0
08	0011-335-5	52	54	82	23	85	32			0
09	0011-335-6	67	66	94	27	92	40			0
10	0011-335-7	65	62	85	29	95	41			0
11	0011-335-8	68	63	88	30	98	43			0
12	0011-335-9	63	64	83	28	95	41			0
13	0011-335-10	37	22*	21*	18	30	24			2
14	0011-335-11	60	55	75	26	80	38			0
15										
16										
17										
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19										
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21										
22										
23										
24										
25										
26										
27										
28										
29										
30										

		QC LIMITS
S1 (NBZ)	= Nitrobenzene-d5	(29-110)
S2 (FBP)	= 2-Fluorobiphenyl	(38-107)
S3 (TPH)	= Terphenyl-d14	(33-122)
S4 (PHL)	= Phenol-d6	(7- 58)
S5 (TBP)	= 2,4,6-Tribromophenol	(16-138)
S6 (2FP)	= 2-Fluorophenol	(8- 88)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogate diluted out

FORM 4

613 557 BNA-GCMS METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

P06010LB

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-335

Lab File ID: 0301003 Lab Prep Batch: P06010

Instrument ID: BNA1 Date Extracted:

Matrix: (soil/water) WATER Date Analyzed: 11/17/00

Level: (low/med) LOW Time Analyzed: 1319

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

	SAMPLE NO.	TIME ANALYZED	LAB FILE ID	DATE ANALYZED
01	P06010LCS	1356	0401004	11/17/00
02	P06010LCSD	1433	0501005	11/17/00
03	0011-335-1	1510	0601006	11/17/00
04	0011-335-2	1547	0701007	11/17/00
05	0011-335-3	1213	0301003	11/18/00
06	0011-335-4	1249	0401004	11/18/00
07	0011-335-5	1327	0501005	11/18/00
08	0011-335-6	1404	0601006	11/18/00
09	0011-335-7	1441	0701007	11/18/00
10	0011-335-8	1518	0801008	11/18/00
11	0011-335-9	1555	0901009	11/18/00
12	0011-335-10	1632	1001010	11/18/00
13	0011-335-11	1709	1101011	11/18/00
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COMMENTS:

FORM 1
BNA-GCMS ORGANICS ANALYSIS DATA SHEET

613 558

CLIENT SAMPLE NO.

P06010LB

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-335

Matrix: (soil/water) WATER Lab Prep Batch: P06010

Sample wt/vol: _____ (g/mL) ML Lab File ID: 0301003

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/17/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
83-32-9	Acenaphthene	2.00	U
208-96-8	Acenaphthylene	2.00	U
98-86-2	Acetophenone	5.00	U
62-53-3	Aniline	5.00	U
120-12-7	Anthracene	2.00	U
92-87-5	Benzidine	20.00	U
56-55-3	Benz(a)Anthracene	2.00	U
205-99-2	Benzo(b)fluoranthene	2.00	U
207-08-9	Benzo(k)fluoranthene	2.00	U
191-24-2	Benzo(ghi)perylene	2.00	U
50-32-8	Benzo(a)pyrene	2.00	U
65-85-0	Benzoic acid	50.00	U
100-51-6	Benzyl alcohol	5.00	U
111-91-1	Bis(2-chloroethoxy)methane	5.00	U
111-44-4	Bis(2-chloroethyl)ether	5.00	U
108-60-1	Bis(2-chloroisopropyl)ether	5.00	U
117-81-7	Bis(2-ethylhexyl)phthalate	2.95	J
101-55-3	4-Bromophenyl phenyl ether	5.00	U
85-68-7	Butyl benzyl phthalate	5.00	U
86-74-8	Carbazole	2.00	U
106-47-8	4-Chloroaniline	5.00	U
510-15-6	Chlorobenzilate	5.00	U
59-50-7	4-Chloro-3-methylphenol	5.00	U
91-58-7	2-Chloronaphthalene	2.00	U
95-57-8	2-Chlorophenol	5.00	U
7005-72-3	4-Chlorophenyl phenyl ether	5.00	U
218-01-9	Chrysene	2.00	U
53-70-3	Dibenz(a,h)anthracene	2.00	U
132-64-9	Dibenzofuran	5.00	U
84-74-2	Di-n-butyl phthalate	5.00	U
95-50-1	1,2-Dichlorobenzene	5.00	U
541-73-1	1,3-Dichlorobenzene	5.00	U
106-46-7	1,4-Dichlorobenzene	5.00	U

FORM 1
BNA-GCMS ORGANICS ANALYSIS DATA SHEET

613 559

CLIENT SAMPLE NO.

P06010LB

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-335

Matrix: (soil/water) WATER Lab Prep Batch: P06010

Sample wt/vol: _____ (g/mL) ML Lab File ID: 0301003

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/17/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-94-1	3,3'-Dichlorobenzidine	10.00	U
120-83-2	2,4-Dichlorophenol	5.00	U
87-65-0	2,6-Dichlorophenol	5.00	U
84-66-2	Diethyl phthalate	5.00	U
119-93-7	3,3-Dimethylbenzidine	10.00	U
105-67-9	2,4-Dimethyphenol	5.00	U
131-11-3	Dimethyl phthalate	5.00	U
534-52-1	4,6-Dinitro-2-methylphenol	10.00	U
51-28-5	2,4-Dinitrophenol	20.00	U
121-14-2	2,4-Dinitrotoluene	5.00	U
606-20-2	2,6-Dinitrotoluene	5.00	U
122-39-4	N-NitrsdiphylAm/Diphenylamin	5.00	U
117-84-0	Di-n-octyl phthalate	5.00	U
62-50-0	Ethyl methanesulfonate	5.00	U
206-44-0	Fluoranthene	2.00	U
86-73-7	Fluorene	2.00	U
118-74-1	Hexachlorobenzene	5.00	U
87-68-3	Hexachlorobutadiene	5.00	U
77-47-4	Hexachlorocyclopentadiene	5.00	U
67-72-1	Hexachloroethane	5.00	U
193-39-5	Indeno(1,2,3-cd)pyrene	2.00	U
78-59-1	Isophorone	5.00	U
66-27-3	Methyl methanesulfonate	5.00	U
91-57-6	2-Methylnaphthalene	2.00	U
95-48-7	2-Methylphenol	5.00	U
108-39-4	3&4-Methylphenol	5.00	U
91-20-3	Naphthalene	2.00	U
88-74-4	2-Nitroaniline	10.00	U
99-09-2	3-Nitroaniline	10.00	U
100-01-6	4-Nitroaniline	10.00	U
98-95-3	Nitrobenzene	5.00	U
88-75-5	2-Nitrophenol	10.00	U
100-02-7	4-Nitrophenol	5.00	U

FORM 1 613 560 CLIENT SAMPLE NO.

BNA-GCMS ORGANICS ANALYSIS DATA SHEET

P06010LB

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-335

Matrix: (soil/water) WATER Lab Prep Batch: P06010

Sample wt/vol: _____ (g/mL) ML Lab File ID: 0301003

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/17/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
924-16-3	N-Nitrosodibutylamine	5.00	U
55-18-5	N-Nitrosodiethylamine	5.00	U
129-00-0	N-Nitrosodimethylamine	5.00	U
621-64-7	N-Nitrosodi-n-propylamine	5.00	U
82-68-8	Pentachloronitrobenzene	10.00	U
87-86-5	Pentachlorophenol	5.00	U
62-44-2	Phenacetin	5.00	U
85-01-8	Phenanthrene	2.00	U
108-95-2	Phenol	5.00	U
129-00-0	Pyrene	2.00	U
110-86-1	Pyridine	5.00	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.00	U
58-90-2	2,3,4,6-Tetrachlorophenol	5.00	U
120-82-1	1,2,4-Trichlorobenzene	5.00	U
95-95-4	2,4,5-Trichlorophenol	5.00	U
88-06-2	2,4,6-Trichlorophenol	5.00	U
103-33-3	1,2-Dphnylhydrzine/Azobenzen	5.00	U

613 561

FORM 1

BNA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

P06010LB

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-335

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 0.000 (g/mL) ML Lab File ID: 0301003

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/17/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

FORM I BNA-GCMS-TIC

FORM 3
WATER BNA-GCMS LAB CONTROL SAMPLE

613 562

Lab Name: ETC, INC. Lab Prep Batch: P06010

Lab Code: Case No.: SAS No.: SDG No.: 0011-335

Matrix Spike - Sample No.: P06010LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Acenaphthene	50.00		30.18	60	38-117
Acenaphthylene	50.00		29.98	60	37-114
Acetophenone	50.00		30.35	61	32-108
Aniline	50.00		34.49	69	16-133
Anthracene	50.00		32.86	66	34-128
Benzidine	50.00		8.42	17*	22-176
Benz(a)Anthracene	50.00		30.91	62	36-127
Benzo(b)fluoranthene	50.00		31.10	62	36-131
Benzo(k)fluoranthene	50.00		30.62	61	32-132
Benzo(ghi)perylene	50.00		34.31	69	26-123
Benzo(a)pyrene	50.00		30.46	61	34-131
Benzoic acid	50.00		14.12	28	11- 58
Benzyl alcohol	50.00		31.29	62	20-109
Bis(2-chloroethoxy)meth	50.00		31.10	62	20-126
Bis(2-chloroethyl)ether	50.00		27.54	55	16-122
Bis(2-chloroisopropyl)e	50.00		29.69	59	28-108
Bis(2-ethylhexyl)phthal	50.00		31.35	63	21-162
4-Bromophenyl phenyl et	50.00		30.55	61	31-124
Butyl benzyl phthalate	50.00		31.09	62	33-142
Carbazole	50.00		33.48	67	20-147
4-Chloroaniline	50.00		34.40	69	24-127
Chlorobenzilate	50.00		35.64	71	35-118
4-Chloro-3-methylphenol	50.00		31.94	64	35-117
2-Chloronaphthalene	50.00		33.80	68	29-137
2-Chlorophenol	50.00		29.72	59	27-102
4-Chlorophenyl phenyl e	50.00		32.11	64	39-110
Chrysene	50.00		30.63	61	30-124
Dibenz(a,h)anthracene	50.00		33.34	67	27-124

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER BNA-GCMS LAB CONTROL SAMPLE

Lab Name: ETC, INC. Lab Prep Batch: P06010

Lab Code: Case No.: SAS No.: SDG No.: 0011-335

Matrix Spike - Sample No.: P06010LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Dibenzofuran	50.00		31.52	63	40-108
Di-n-butyl phthalate	50.00		33.16	66	19-158
1,2-Dichlorobenzene	50.00		26.62	53	26-100
1,3-Dichlorobenzene	50.00		26.24	52	21-102
1,4-Dichlorobenzene	50.00		26.10	52	24- 99
3,3'-Dichlorobenzidine	50.00		30.33	61	6-192
2,4-Dichlorophenol	50.00		30.07	60	32-110
2,6-Dichlorophenol	50.00		30.02	60	31-112
Diethyl phthalate	50.00		34.09	68	36-130
3,3-Dimethylbenzidine	50.00		27.82	56	6-192
2,4-Dimethyphenol	50.00		26.08	52	34-105
Dimethyl phthalate	50.00		32.53	65	34-123
4,6-Dinitro-2-methylphe	50.00		36.05	72	27-128
2,4-Dinitrophenol	50.00		38.10	76	10-132
2,4-Dinitrotoluene	50.00		36.65	73	24-147
2,6-Dinitrotoluene	50.00		32.83	66	36-125
N-NitrsdiphylAm/Dipheny	100.0		60.25	60	35-116
Di-n-octyl phthalate	50.00		34.32	69	29-13[illegible]
Ethyl methanesulfonate	50.00		31.94	64	20-1[illegible]
Fluoranthene	50.00		30.07	60	28-127
Fluorene	50.00		31.83	64	41-116
Hexachlorobenzene	50.00		32.25	64	18-136
Hexachlorobutadiene	50.00		25.15	50	22-109
Hexachlorocyclopentadie	50.00		21.99	44	10-102
Hexachloroethane	50.00		28.62	57	16-107
Indeno(1,2,3-cd)pyrene	50.00		34.96	70	22-126
Isophorone	50.00		30.44	61	31-116
Methyl methanesulfonate	50.00		15.07	30	15- 82

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER BNA-GCMS LAB CONTROL SAMPLE

613 564

Lab Name: ETC, INC. Lab Prep Batch: P06010

Lab Code: Case No.: SAS No.: SDG No.: 0011-335

Matrix Spike - Sample No.: P06010LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
2-Methylnaphthalene	50.00		28.16	56	34-108
2-Methylphenol	50.00		27.47	55	22- 97
3&4-Methylphenol	50.00		25.82	52	21- 96
Naphthalene	50.00		28.37	57	33-108
2-Nitroaniline	50.00		33.77	68	32-127
3-Nitroaniline	50.00		38.49	77	28-142
4-Nitroaniline	50.00		42.43	85	23-139
Nitrobenzene	50.00		28.52	57	27-117
2-Nitrophenol	50.00		29.74	59	25-114
4-Nitrophenol	50.00		32.03	64	1- 76
N-Nitrosodibutylamine	50.00		31.60	63	31-126
N-Nitrosodiethylamine	50.00		26.54	53	28-107
N-Nitrosodimethylamine	50.00		20.98	42	14- 84
N-Nitrosodi-n-propylami	50.00		31.88	64	29-114
Pentachloronitrobenzene	50.00		33.25	66	34-135
Pentachlorophenol	50.00		31.66	63	17-142
Phenacetin	50.00		34.85	70	29-141
Phenanthrene	50.00		31.28	62	40-120
Phenol	50.00		13.10	26	11- 55
Pyrene	50.00		33.99	68	20-154
Pyridine	50.00		17.73	35	10- 71
1,2,4,5-Tetrachlorobenz	50.00		29.13	58	28-110
2,3,4,6-Tetrachlorophen	50.00		36.10	72	28-118
1,2,4-Trichlorobenzene	50.00		25.93	52	23-106
2,4,5-Trichlorophenol	50.00		32.32	65	26-118
2,4,6-Trichlorophenol	50.00		33.28	66	26-115
1,2-Dphnylhydrzine/Azob	50.00		29.60	59	45-135

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER BNA-GCMS LAB CONTROL SAMPLE

Lab Name: ETC, INC. Lab Prep Batch: P06010

Lab Code: Case No.: SAS No.: SDG No.: 0011-335

Matrix Spike - Sample No.: P06010LCS

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Acenaphthene	50.00	32.60	65	8	20	38-117
Acenaphthylene	50.00	33.15	66	10	20	37-114
Acetophenone	50.00	32.69	65	6	20	32-108
Aniline	50.00	35.19	70	1	20	16-133
Anthracene	50.00	35.65	71	7	20	34-128
Benzidine	50.00	5.42	11*	43*	20	22-176
Benz(a)Anthracene	50.00	32.36	65	5	20	36-127
Benzo(b)fluoranthene	50.00	33.13	66	6	20	36-131
Benzo(k)fluoranthene	50.00	33.65	67	9	20	32-132
Benzo(ghi)perylene	50.00	34.14	68	1	20	26-123
Benzo(a)pyrene	50.00	32.26	64	5	20	34-131
Benzoic acid	50.00	12.41	25	11	20	11- 58
Benzyl alcohol	50.00	33.58	67	8	20	20-109
Bis(2-chloroethoxy)meth	50.00	33.40	67	8	20	20-126
Bis(2-chloroethyl)ether	50.00	29.58	59	7	20	16-122
Bis(2-chloroisopropyl)e	50.00	31.29	62	5	20	28-108
Bis(2-ethylhexyl)phthal	50.00	34.13	68	8	20	21-162
4-Bromophenyl phenyl et	50.00	33.55	67	9	20	31-12
Butyl benzyl phthalate	50.00	32.85	66	6	20	33-14
Carbazole	50.00	35.56	71	6	20	20-147
4-Chloroaniline	50.00	36.34	73	6	20	24-127
Chlorobenzilate	50.00	37.38	75	5	20	35-118
4-Chloro-3-methylphenol	50.00	34.04	68	6	20	35-117
2-Chloronaphthalene	50.00	36.40	73	7	20	29-137
2-Chlorophenol	50.00	32.17	64	8	20	27-102
4-Chlorophenyl phenyl e	50.00	34.07	68	6	20	39-110
Chrysene	50.00	32.47	65	6	20	30-124
Dibenz(a,h)anthracene	50.00	32.76	66	2	20	27-124

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER BNA-GCMS LAB CONTROL SAMPLE

Lab Name: ETC, INC. Lab Prep Batch: P06010

Lab Code: Case No.: SAS No.: SDG No.: 0011-335

Matrix Spike - Sample No.: P06010LCS

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Dibenzofuran	50.00	34.07	68	8	20	40-108
Di-n-butyl phthalate	50.00	37.18	74	11	20	19-158
1,2-Dichlorobenzene	50.00	29.51	59	11	20	26-100
1,3-Dichlorobenzene	50.00	28.80	58	11	20	21-102
1,4-Dichlorobenzene	50.00	28.41	57	9	20	24- 99
3,3'-Dichlorobenzidine	50.00	31.48	63	3	20	6-192
2,4-Dichlorophenol	50.00	32.12	64	6	20	32-110
2,6-Dichlorophenol	50.00	32.47	65	8	20	31-112
Diethyl phthalate	50.00	35.50	71	4	20	36-130
3,3-Dimethylbenzidine	50.00	17.11	34	49*	20	6-192
2,4-Dimethyphenol	50.00	21.92	44	17	20	34-105
Dimethyl phthalate	50.00	34.96	70	7	20	34-123
4,6-Dinitro-2-methylphe	50.00	36.85	74	3	20	27-128
2,4-Dinitrophenol	50.00	36.66	73	4	20	10-132
2,4-Dinitrotoluene	50.00	37.91	76	4	20	24-147
2,6-Dinitrotoluene	50.00	36.36	73	10	20	36-125
N-NitrsdiphylAm/Dipheny	100.0	66.52	66	10	20	35-116
Di-n-octyl phthalate	50.00	36.87	74	7	20	29-136
Ethyl methanesulfonate	50.00	33.65	67	4	20	20-121
Fluoranthene	50.00	32.32	65	8	20	28-127
Fluorene	50.00	33.66	67	4	20	41-116
Hexachlorobenzene	50.00	34.48	69	8	20	18-136
Hexachlorobutadiene	50.00	27.00	54	8	20	22-109
Hexachlorocyclopentadie	50.00	23.25	46	4	20	10-102
Hexachloroethane	50.00	31.03	62	8	20	16-107
Indeno(1,2,3-cd)pyrene	50.00	35.36	71	1	20	22-126
Isophorone	50.00	32.34	65	6	20	31-116
Methyl methanesulfonate	50.00	16.00	32	6	20	15- 82

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER BNA-GCMS LAB CONTROL SAMPLE

Lab Name: ETC, INC. Lab Prep Batch: P06010

Lab Code: Case No.: SAS No.: SDG No.: 0011-335

Matrix Spike - Sample No.: P06010LCS

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
2-Methylnaphthalene	50.00	29.90	60	7	20	34-108
2-Methylphenol	50.00	28.57	57	4	20	22- 97
3&4-Methylphenol	50.00	26.15	52	0	20	21- 96
Naphthalene	50.00	30.26	60	5	20	33-108
2-Nitroaniline	50.00	35.57	71	4	20	32-127
3-Nitroaniline	50.00	39.02	78	1	20	28-142
4-Nitroaniline	50.00	41.24	82	4	20	23-139
Nitrobenzene	50.00	30.56	61	7	20	27-117
2-Nitrophenol	50.00	32.60	65	10	20	25-114
4-Nitrophenol	50.00	33.88	68	6	20	1- 76
N-Nitrosodibutylamine	50.00	33.53	67	6	20	31-126
N-Nitrosodiethylamine	50.00	27.83	56	6	20	28-107
N-Nitrosodimethylamine	50.00	21.81	44	5	20	14- 84
N-Nitrosodi-n-propylami	50.00	34.60	69	8	20	29-114
Pentachloronitrobenzene	50.00	36.48	73	10	20	34-135
Pentachlorophenol	50.00	31.08	62	2	20	17-142
Phenacetin	50.00	36.64	73	4	20	29-141
Phenanthrene	50.00	33.79	68	9	20	40-12
Phenol	50.00	13.62	27	4	20	11- [redacted]
Pyrene	50.00	33.92	68	0	20	20-154
Pyridine	50.00	16.65	33	6	20	10- 71
1,2,4,5-Tetrachlorobenz	50.00	32.46	65	11	20	28-110
2,3,4,6-Tetrachlorophen	50.00	37.50	75	4	20	28-118
1,2,4-Trichlorobenzene	50.00	28.07	56	7	20	23-106
2,4,5-Trichlorophenol	50.00	34.99	70	7	20	26-118
2,4,6-Trichlorophenol	50.00	36.15	72	9	20	26-115
1,2-Dphnylhydrzine/Azob	50.00	33.09	66	11	20	45-135

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 2 out of 83 outside limits
Spike Recovery: 2 out of 166 outside limits

COMMENTS: _____

FORM III BNA-GCMS

613 568

CHAIN OF CUSTODY RECORD

000166

Environmental Testing & Consulting, Inc.
2924 Walnut Grove Rd.
Memphis, TN 38111
(901)327-2750 FAX (901)327-6334

ETC Work Order : 0011335

Company Name	Phone # :	Fax Results
JEG	Fax # .	RUSH
Project/Site: Memphis Depot	FID # :	Ice
Project #	PO # :	
Project Manager/Contact: Kraig Smith	Matrix: 1 Wastewater, 2 Aqueous, 3 Soil/Sediment, 4 Sludge, 5 Oil/Solvent, 6 Other	

# of cont.	Sample ID/ Number	Depth	Sample Date	Sample Time	Matrix	Type Grab/Comp	VOC	SVOC	Metals-TAL	Cyanide	Comments
7	MW-69-Y2Q4		11-9-00	0940	W		3	2	1	1	
	MW-71-Y2Q4		11-9-00	1100	W						
	MW-71B-Y2Q4		11-9-00	1100	W						
	MW-32-Y2Q4		11-9-00	1150	W						
	RW-01-Y2Q4		11-9-00	1415	W						
	RW-1A-Y2Q4		11-9-00	1440	W						
	RW-1B-Y2Q4		11-9-00	1515	W						
	FB-Y2Q4		11-9-00	1530	W						
	RW-02-Y2Q4		11-10-00	0915	W						
	MW-70-Y2Q4		11-10-00	1110	W						
↓	RB-Y2Q4		11-10-00	1130	W		↓	↓	↓	↓	

Analysis Requested (Note special detection limits or methods)

Sampled By	Method of Shipment	Blank/Cooler Temp	Remarks
Ethan Litsey	Drop-off	4°C	

RELINQUISHED BY (sign)	DATE	TIME	RECEIVED BY (sign)	DATE	TIME	Sample Delivery Group ID
RELINQUISHED BY (sign)	DATE	TIME	RECEIVED BY (sign)	DATE	TIME	
RELINQUISHED BY (sign) Ethan Litsey	DATE 11-10-00	TIME 1610	RECEIVED BY LAB (print/sign) RJBaus	DATE 11/10/00	TIME 1610	

Distribution : Original and Yellow accompany samples to the laboratory. Pink copy for Field
Original copy returned with results Yellow copy for ETC, Inc files.

F:\QAQC\SLOP\COC0995.XLS

CHAIN OF CUSTODY RECORD

Environmental Testing & Consulting, Inc.
2924 Walnut Grove Rd.
Memphis, TN 38111
(901)327-2750 FAX (901)327-6334

ETC Work Order : 0011335
613 569

000167

Company Name: JEG
Project/Site: Memphis Depot
Project #:
Project Manager/Contact: Kraig Smith

Phone # :
Fax # :
FID # :
PO #
Fax Results
RUSH
Ice

Matrix
1 Wastewater 4 Sludge
2 Aqueous 5 Oil/Solvent
3 Soil/Sediment 6 Other

Analysis Requested
(Note special detection limits or methods)

# of cont.	Sample ID/ Number	Depth	Sample Date	Sample Time	Matrix	Type Grab/Comp	VOC										Comments
3	TB-03		11-9-00	1400	W		X										

Sampled By: Ethan Lifsey
Method of Shipment: Drop-off
Blank/Cooler Temp: C4°C (28)
Remarks:

RELINQUISHED BY (sign)	DATE	TIME	RECEIVED BY (sign)	DATE	TIME	Sample Delivery Group ID
RELINQUISHED BY (sign)	DATE	TIME	RECEIVED BY (sign)	DATE	TIME	
RELINQUISHED BY (sign) Ethan Lifsey	DATE 11-10-00	TIME 1610	RECEIVED BY LAB (print/sign) R Bailey	DATE 11/10/00	TIME 1610	

Distribution : Original and Yellow accompany samples to the laboratory. Pink copy for Field Crew.
Original copy returned with results. Yellow copy for ETC, Inc. files.

F:\QAQC\SLOP\COC0996.XLS

Environmental Testing & Consulting, Inc.
Cooler Receipt Form

LIMS# 0011-335
Project Memphis Depot

Date Received 11/10/00
Date/Time Checked In 11/10/00-16:10
Carrier/Bill# Hand-Delivered
By

1.	Custody Seals?/Location-	No
2.	Samples are non-radioactive?	Yes
3.	Chain of Custody in plastic?	Yes
4.	Temperature at receipt (ok = 4 ± 2 °C)<4oC	OK
5.	Ice & Packing-bags, Ice, Bubble Wrap	Yes
6.	Chain of Custody filled out properly?	Yes
7.	All containers in separate bags?	No
8.	Sample containers intact?	Yes
9.	Label(s) complete and in good condition?	Yes
10.	Label(s) agree with Chain of Custody?	Yes
11.	Correct containers used?	Yes
12.	Sufficient sample?	Yes
13.	VOA vials bubble-free (H_2O) or no head space (soil)?	Yes
14.	Preservation OK? TM pH____; TRPH pH____; TOC pH____; TOX pH____; CN pH____; N/P pH____; Other pH____	Yes

Comments _____

*Validated Date and Time of Sample Receipt (VDTSR)

613 571

ENVIRONMENTAL TESTING & CONSULTING, INC.
2924 Walnut Grove Road • Memphis, TN 38111 • (901) 327-2750 • FAX (901) 327-6334
Founded 1972

December 11, 2000

Mr. Kraig Smith
Sverdrup/Jacobs Eng.
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Ref: Analytical Testing
ETC Order # 0011593
Project Description Memphis Depot
Dunn Field

The above referenced project has been analyzed per your instructions. The analyses were performed in our laboratory in accordance with Standard Methods, The Solid Waste Manual SW-846, EPA Methods for Chemical Analysis of Water and Wastes and/or 40 CFR part 136.

The results are shown on the attached analysis sheet(s).

Please do not hesitate to contact our office if you have any questions.

Sincerely,

Chet Scheibel
Laboratory Project Manager

rt
Attachment

SVE_MHDDMT

Certifications

Tennessee	*#TN02027*	*Mississippi*	
Arkansas	*#40730*	*Oklahoma*	*#9311*
Kentucky	*#90047*	*Virginia*	*#00106*
North Carolina	*#415*	*Washington*	*#C248*
South Carolina	*#84002002*	*US Army Corps of Engineers*	

Environmental Testing & Consulting, Inc.

Data Qualifiers for Organic Reporting

Within the attached report, some analytical data may be reported as "Qualified Data" as indicated by a "Data Qualifier" next to the result. This table summarizes the possible "Data Qualifiers" that may be associated with this report. These qualifiers do not apply for TIC reports

Q	Surrogate Recovery Outside QC Limits
J	Estimated Value. Presence of the compound was confirmed but less than the
	reported detection limit
E	Concentration exceeds the established method calibration range but is within
	the working range of the instrument.
B	Analyte detected in the associated Method Blank.
U	Reported result was unconfirmed Refer to Case Narrative.
N	Non-Compliance Report associated with this sample or project
C	Result reported from GC/MS confirmation analysis
M	Result reported represents a minimum value Refer to Case Narrative
NC	Result reported from Primary Column Result did not confirm
*	QC Data (percent recovery/RPD for a particular analyte was outside QC Limits)

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ENVIRONMENTAL TESTING AND CONSULTING, INC.
CASE NARRATIVE
INORGANICS – AQUEOUS

Client Name Sverdrup/Jacobs Engineering
Project Name Memphis Depot

ETC Order # 0011-593

HOLDING TIMES

Sample Analysis All samples analyzed within Method Specified Holding Times

METHOD

Preparation/Analysis 335.2

QUALITY CONTROL

QC Batch
CY112901

Method Blank
No Target Analytes detected above Detection Limit

Laboratory Control Sample
Spike Recovery All analytes within QC limits

Matrix Spike/Matrix Spike Duplicate
RPD All analytes within QC limits
Spike Recovery All analytes within QC limits

CALIBRATION

All acceptance criteria met.

SAMPLE ANALYSIS

Dilutions Required No dilutions required.

C J
Project Manager

ENVIRONMENTAL TESTING AND CONSULTING, INC.
CASE NARRATIVE
METALS - AQUEOUS

Client Name Sverdrup/Jacobs Engineering
Project Name Memphis Depot

ETC Order # 0011-593

HOLDING TIMES

QC Batch(s) for this order	ICP Metals	V23-AQ-37
	Mercury	V7-AQ-70

Sample Preparation/Analysis All samples digested/ analyzed within holding time.
Mercury Preparation/Analysis All samples analyzed within 28 days of collection.

METHOD

Preparation: SW-846 245.1/3030K
Analysis: SW-846 200.7/245 1

CALIBRATION

Initial Calibration All criteria met.
Continuing Calibration All criteria met.

SAMPLE ANALYSIS

Instrumentation: Thermo Jarrell Ash Enviro-I ICP
CETAC M-6000A Mercury Analyzer
Dilutions Required No dilutions required.

QUALITY CONTROL

0011-593.MQCBLANK
Method Blank

V23-AQ-37BLK	ICP Metals
V7-AQ-70BLK	Mercury

No analytes detected in the Method Blank

0011-593.MQCLCS
Laboratory Control Sample(s)

V23-AQ-37LCS	ICP Metals
V7-AQ-70LCS	Mercury

All acceptance criteria met

0011-593.MQCMSMSD
Matrix Spike / Matrix Spike Dup - ICP Metals

0011-593-01	RPD	All analytes within QC limits.
RW-09-Y2Q4	Spike Recovery	All analytes within QC limits, except as listed below.

ENVIRONMENTAL TESTING AND CONSULTING, INC.
CASE NARRATIVE
METALS - AQUEOUS

613 575

Client Name Sverdrup/Jacobs Engineering
Project Name Memphis Depot

ETC Order # 0011-593

QUALITY CONTROL

Silver was flagged for low recovery in the MS/MSD. This analyte was not detected in the associated project samples. A post digest spike was performed Refer to From 5B Post Digest Spike All criteria were met.

Refer to Laboratory Control Sample(s) for system verification

Matrix Spike / Matrix Spike Dup - Hg

0011-593-01	RPD	All analytes within QC limits.
RW-09-Y2Q4	Spike Recovery	All analytes within QC limits.

Refer to Laboratory Control Sample(s) for system verification.

Dilution Test Dilution result must agree within 10% of original result when sample is diluted by a factor of 5

Post Digestion Spike Recovery must be +/-25% of expected value for ICP.

CJ

Project Manager

ENVIRONMENTAL TESTING AND CONSULTING, INC.
CASE NARRATIVE
GC/MS VOLATILE COMPOUNDS - AQUEOUS

Client Name Sverdrup/Jacobs Engineering
Project Name Memphis Depot

ETC Order # 0011-593

SAMPLE PRESERVATION (Verified at time of analysis)

All aqueous samples preserved to pH < 2.

METHOD

Preparation: SW-846 5030B
Analysis SW-846 8260B

HOLDING TIMES

Sample Analysis All samples analyzed within 14 days of collection.

QUALITY CONTROL

QC Batch	Form 4 Summary
V1120401	V1120411LB
V2120401	V2120411LB
V2120501	V2120511LB

System Monitoring Compounds FORM 2
Surrogate recoveries within QC limits, except as listed below.

Surrogate Toluene-d8 and Bromofluorobenzene were flagged for high recovery in sample 0011-593-04MS/MSD (RW-06-Y2Q4). There is no effect on the recovery data.

Method Blank FORM 4
V2120411LB
V1120411LB
V2120511LB

Target Analytes were not detected in the Method Blanks, except as listed below.

V2120411LB

Methylene Chloride was detected at a concentration of 1.32 ug/L. This analyte was not identified in associated project samples There is no effect on the data.

Laboratory Control Sample FORM 3
V1120411LCS
V1120412LCS
V2120411LCS
V2120511LCS

All acceptance criteria met, except as listed below.

613 577

ENVIRONMENTAL TESTING AND CONSULTING, INC.
CASE NARRATIVE
GC/MS VOLATILE COMPOUNDS - AQUEOUS

Client Name Sverdrup/Jacobs Engineering
Project Name Memphis Depot

ETC Order # 0011-593

QUALITY CONTROL

V1120411LCS/V1120412LCS

Four non-target analytes were flagged for high recovery in the LCS. There is no effect on the data. Tetrachloroethene was flagged for slightly low recovery (1%) in this LCS. This analyte was reanalyzed in V1120412LCS with similar recovery. Sample results for this analyte may be biased low

V2120411LCS

One non-target analyte was flagged for low recovery in the LCS. There is no effect on the data.

V2120511LCS

One non-target analyte was flagged for low recovery in the LCS. There is no effect on the data.

Matrix Spike / Matrix Spike Dup. FORM 3
Batch V1120401

0011-593-04	RPD	All analytes within QC limits, except as listed below
RW-06-Y2Q4	Spike Recovery	All analytes within QC limits, except as listed below

1,1-Dichloroethene, Toluene, and Trichloroethene were flagged for high recovery in the MS/MSD. Chlorobenzene was flagged for high recoovery in the MSD. MS recovery was within control limits Sample results may be biased high.

Refer to Laboratory Control Sample(s) for system verification

Matrix Spike / Matrix Spike Dup FORM 3
Batch V2120401

0011-593-06	RPD	All analytes within QC limits.
RW-10-Y2Q4	Spike Recovery	All analytes within QC limits.

Refer to Laboratory Control Sample(s) for system verification.

Matrix Spike / Matrix Spike Dup FORM 3
Batch V2120501

0011-705-01	RPD	All analytes within QC limits.
	Spike Recovery	All analytes within QC limits, except as listed below.

1,1-Dichloroethene was flagged for slightly low recovery in the MS/MSD Sample spiked for this QC Batch was not from this project There is no effect on the data.

Refer to Laboratory Control Sample(s) for system verification.

ENVIRONMENTAL TESTING AND CONSULTING, INC.
CASE NARRATIVE
GC/MS VOLATILE COMPOUNDS - AQUEOUS

613 578

Client Name Sverdrup/Jacobs Engineering
Project Name Memphis Depot

ETC Order # 0011-593

CALIBRATION

CALIBRATION

BFB Daily 12-Hour Tune	All criteria met FORM 5
Initial Calibration	All criteria met. FORM 6
Calibration Verification	All criteria met. FORM 7, except as listed below.

Calibration Verification (CV). Date 12/04/00 Time: 1615/1650

Analyte	%Diff(30% Max)	Response
2-Chloroethyl vinyl ether	-41.1	Low

Samples affected by this CV include V2120411LB, V2120411LCS, 0011-593-06MS/MSD, 0011-593-05 through 0011-593-08 Low response indicates that reported levels for this analyte may be biased low. This analyte was not identified in associated project samples There is no effect on the data.

Volatile Internal Standard Area and RT FORM 8
Daily Check Standard(s) Internal Standard Areas and Retention Times within QC limits.

SAMPLE ANALYSIS

Instrumentation	HP 5890 Series II GC, 5971MSD
Dilutions Required	Dilutions were performed on one sample to bring Target Analytes within calibration range as shown on the Sample Report Form.

CS
Project Manager

613 579

ENVIRONMENTAL TESTING AND CONSULTING, INC.
CASE NARRATIVE
GC/MS SEMI-VOLATILE COMPOUNDS - AQUEOUS

Client Name Sverdrup/Jacobs Engineering
Project Name Memphis Defense Depot

ETC Order # 0011-593

HOLDING TIMES

Sample Extraction	All aqueous samples extracted within 7 days
Sample Analysis	All samples analyzed within 40 days of extraction

METHOD

Sample Preparation:	SW-836 3510C
Sample Analysis	SW-846 8270C

QUALITY CONTROL

QC Batch	Form 4 Summary
P06015	P06015LB

System Monitoring Compounds FORM 2
Surrogate recoveries within QC limits, except as listed below

Surrogates 2,4,6-Tribromophenol and 2-Fluorophenol were flagged for high recovery in sample 0011-593-01(RW-09-Y2Q4). Analytes were not detected in this sample. This high recovery does not affect the data.

Method Blank FORM 4
P06015LB

Target analytes were not detected in the Method Blank, except as listed below.

Bis(2-ethylhexyl)phthalate was detected in the Method Blank at 3.66J ug/L. This analyte was not identified in associated project samples. There is no effect on the data.

Di-n-butyl phthalate was detected in the Method Blank at 1.35J ug/L. This analyte was not identified in associated project samples. There is no effect on the data.

Laboratory Control Sample FORM 3
P06015LCS/LCSD

All acceptance criteria met, except as listed below

Benzidine, a non-target analyte, was flagged for low recovery in the LCS/LCSD. There is no effect on the data.

RPDs for Benzidine (non-target analyte), Benzoic Acid, 3,3-Dimethylbenzidine (non-target analyte), and Dibenzo (a,h) anthracene were flagged for high recovery due to variances in the LCS/LCSD recoveries

ENVIRONMENTAL TESTING AND CONSULTING, INC.
CASE NARRATIVE
GC/MS SEMI-VOLATILE COMPOUNDS - AQUEOUS

613 580

Client Name Sverdrup/Jacobs Engineering
Project Name Memphis Defense Depot

ETC Order # 0011-593

QUALITY CONTROL

Matrix Spike / Matrix Spike Dup FORM 3
Batch P06015
Due to the limited amount of sample available, no MS/MSD were extracted.

Refer to Laboratory Control Sample(s) for system verification.

CALIBRATION

DFTPP Daily 12-Hour Tune	All criteria met FORM 5
Initial Calibration	All criteria met. FORM 6
Calibration Verification	All criteria met. FORM 7

Semi-Volatile Internal Standard Area and RT FORM 8
Daily Check Standard(s) Internal Standard Areas and Retention Times within QC limits

SAMPLE ANALYSIS

Instrumentation	HP 5890 Series II GC, 5971MSD
Dilutions Required	No dilutions required.

C S
Project Manager

ENVIRONMENTAL TESTING AND CONSULTING, INC.
CASE NARRATIVE
GC PESTICIDES - AQUEOUS

Client Name Sverdrup/Jacobs Engineering
Project Name Memphis Defense Depot

ETC Order # 0011-593
Method (SW-846) 8081A/3510C

HOLDING TIMES

Sample Extraction	All aqueous samples extracted within 7 days
Sample Analysis	All samples analyzed within 40 days of extraction.

QUALITY CONTROL

QC Batch	Form 4 Summary
P07190	P07190LB

System Monitoring Compounds FORM 2
Surrogate recoveries within QC limits, except as listed below.

Surrogates Decachlorobiphenyl and Tetrachloro-m-xylene were flagged for low recovery on the primary and confirmation columns in sample 0011-593-08 (RW-03-Y2Q4). Analytes were not detected in the associated project sample. There is no effect on the data.

Surrogate Decachlorobiphenyl (DCB) was flagged for high recovery on the primary columns for samples 0011-593-03 (RW-07-Y2Q4), 0011-593-05 (RW-05-Y2Q4), 0011-593-06 (RW-10-Y2Q4), and 0011-593-07 (RW-04-Y2Q4). Surrogate recovery for DCB was within control limits on the confirmation column. Surrogate recovery for Tetrachloro-m-xylene was within control for these samples on both columns There is no effect on the data.

Method Blank FORM 4
P07190LB

Target analytes were not detected in the Method Blank.

Laboratory Control Sample FORM 3
P07190LCS/LCSD

All acceptance criteria met.

Matrix Spike / Matrix Spike Dup FORM 3
Batch P07190
Due to the limited amount of sample available, no MS/MSD were extracted.

Refer to Laboratory Control Sample(s) for system verification

ENVIRONMENTAL TESTING AND CONSULTING, INC.
CASE NARRATIVE
GC PESTICIDES - AQUEOUS

613 582

Client Name Sverdrup/Jacobs Engineering
Project Name Memphis Defense Depot

ETC Order # 0011-593
Method (SW-846) 8081A/3510C

CALIBRATION

Initial Calibration	All criteria met. FORM 6
Calibration Verification	All criteria met. FORM 7, except as listed below.
Endrin/Breakdown	All criteria met. FORM 7

Calibration Verification (CV): Date 11/28/00 Time. 0151

Analyte	%Diff(15% Max)	Response
Endosulfan sulfate	+18.2	High
Decachlorobiphenyl	+15.8	High (Surrogate)

Samples affected by this CV include 0111-593-01 through 0011-593-08. High responses indicate the reported level may be biased high. This analyte was not detected in the associated project samples. This slightly high response for Decachlorobiphenyl does not affect the recovery data.

SAMPLE ANALYSIS

Instrumentation	HP 5890 Series II GC
Dilutions Required	No dilutions required.

CS
Project Manager

613 583

ENVIRONMENTAL TESTING AND CONSULTING, INC.
CASE NARRATIVE
HERBICIDE - AQUEOUS

Client Name Sverdrup/Jacobs Engineering
Project Name Memphis Depot

ETC Order # 0011-593

HOLDING TIMES

Sample Extraction	All aqueous samples extracted within 7 days.
Sample Analysis	All samples analyzed within 40 days of extraction.

METHOD

Preparation:	SW-846 8151A
Analysis	SW-846 8151A

QUALITY CONTROL

QC Batch	Form 4 Summary
P13002	P13002LB

System Monitoring Compounds FORM 2
Surrogate recoveries within QC limits

Method Blank FORM 4
P13002LB

Target analytes were not detected in the Method Blank, except as listed below.

2,4-DB was detected at a concentration of 2.90 ug/L. This analyte was not identified in associated project samples. There is no effect on the data.

Laboratory Control Sample FORM 3
P13002LCS

All acceptance criteria met, except as listed below.

Dalapon was flagged for high recovery in the LCS. This analyte was not detected in the associated project samples. Dinoseb was flagged for low recovery in the LCS. This analyte was not detected in the associated project sample There is no effect on the data.

Matrix Spike / Matrix Spike Dup FORM 3
Batch P13002

0011-705-01	RPD	All analytes within QC limits, except as listed below
	Spike Recovery	All analytes within QC limits, except as listed below.

Dinoseb was flagged for low recovery in the MS/MSD Dicamba was flagged for low recovery in the MSD. Dalapon was flagged for high recovery in the MSD. Sample spiked for this QC Batch was not from this project. There is no effect on the data.

RPDs for Dalapon, MCPP, Dicamba, MCPA, Dichloroprop, Silvex, Dinoseb were flagged for high recovery due to variances in the MS/MSD recoveries.

ENVIRONMENTAL TESTING AND CONSULTING, INC.
CASE NARRATIVE
HERBICIDE - AQUEOUS

613 584

Client Name Sverdrup/Jacobs Engineering
Project Name Memphis Depot

ETC Order # 0011-593

QUALITY CONTROL

Refer to Laboratory Control Samples for system verification

CALIBRATION

Initial Calibration	All criteria met FORM 6
Calibration Verification	All criteria met. FORM 7

SAMPLE ANALYSIS

Instrumentation	HP 5890 Series II GC
Dilutions Required	No dilutions required

Project Manager

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 585 ANALYTICAL SUMMARY/CROSS REFERENCE TABLE

Client Name Sverdrup/Jacobs Eng. ETC Order #0011593
Site ID Memphis Depot
Dunn Field

ETC Sample ID	Field ID	Matrix	Method	Method Description
001159301	RW-09-Y2Q4	AQUEOUS	335.2	Cyanide
001159301	RW-09-Y2Q4	AQUEOUS	200.7	Silver
001159301	RW-09-Y2Q4	AQUEOUS	200 7	Aluminum
001159301	RW-09-Y2Q4	AQUEOUS	200.7	Arsenic
001159301	RW-09-Y2Q4	AQUEOUS	200.7	Barium
001159301	RW-09-Y2Q4	AQUEOUS	200.7	Beryllium
001159301	RW-09-Y2Q4	AQUEOUS	200.7	Calcium
001159301	RW-09-Y2Q4	AQUEOUS	200 7	Cadmium
001159301	RW-09-Y2Q4	AQUEOUS	200.7	Cobalt
001159301	RW-09-Y2Q4	AQUEOUS	200.7	Chromium
001159301	RW-09-Y2Q4	AQUEOUS	200.7	Copper
001159301	RW-09-Y2Q4	AQUEOUS	200.7	Iron
001159301	RW-09-Y2Q4	AQUEOUS	245.1	Mercury
001159301	RW-09-Y2Q4	AQUEOUS	200 7	Potassium
001159301	RW-09-Y2Q4	AQUEOUS	200.7	Magnesium
001159301	RW-09-Y2Q4	AQUEOUS	200.7	Manganese
001159301	RW-09-Y2Q4	AQUEOUS	200.7	Sodium
001159301	RW-09-Y2Q4	AQUEOUS	200 7	Nickel
001159301	RW-09-Y2Q4	AQUEOUS	200.7	Lead
001159301	RW-09-Y2Q4	AQUEOUS	200.7	Antimony
001159301	RW-09-Y2Q4	AQUEOUS	200.7	Selenium
001159301	RW-09-Y2Q4	AQUEOUS	200 7	Thallium
001159301	RW-09-Y2Q4	AQUEOUS	200.7	Vanadium
001159301	RW-09-Y2Q4	AQUEOUS	200 7	Zinc
001159301	RW-09-Y2Q4	AQUEOUS	8260B	GC/MS Volatile Organics
001159301	RW-09-Y2Q4	AQUEOUS	8270C	GC/MS Base/Neutral & Acid
001159301	RW-09-Y2Q4	AQUEOUS	8151A	Chlorinated Herbicides
001159301	RW-09-Y2Q4	AQUEOUS	8081A	Organochlorine Pesticides
001159302	RW-08-Y2Q4	AQUEOUS	335.2	Cyanide
001159302	RW-08-Y2Q4	AQUEOUS	200.7	Silver
001159302	RW-08-Y2Q4	AQUEOUS	200.7	Aluminum
001159302	RW-08-Y2Q4	AQUEOUS	200.7	Arsenic
001159302	RW-08-Y2Q4	AQUEOUS	200.7	Barium
001159302	RW-08-Y2Q4	AQUEOUS	200.7	Beryllium
001159302	RW-08-Y2Q4	AQUEOUS	200.7	Calcium
001159302	RW-08-Y2Q4	AQUEOUS	200.7	Cadmium
001159302	RW-08-Y2Q4	AQUEOUS	200.7	Cobalt
001159302	RW-08-Y2Q4	AQUEOUS	200.7	Chromium
001159302	RW-08-Y2Q4	AQUEOUS	200.7	Copper
001159302	RW-08-Y2Q4	AQUEOUS	200.7	Iron
001159302	RW-08-Y2Q4	AQUEOUS	245.1	Mercury
001159302	RW-08-Y2Q4	AQUEOUS	200.7	Potassium
001159302	RW-08-Y2Q4	AQUEOUS	200.7	Magnesium
001159302	RW-08-Y2Q4	AQUEOUS	200.7	Manganese
001159302	RW-08-Y2Q4	AQUEOUS	200 7	Sodium
001159302	RW-08-Y2Q4	AQUEOUS	200 7	Nickel
001159302	RW-08-Y2Q4	AQUEOUS	200.7	Lead
001159302	RW-08-Y2Q4	AQUEOUS	200.7	Antimony
001159302	RW-08-Y2Q4	AQUEOUS	200.7	Selenium
001159302	RW-08-Y2Q4	AQUEOUS	200.7	Thallium
001159302	RW-08-Y2Q4	AQUEOUS	200 7	Vanadium
001159302	RW-08-Y2Q4	AQUEOUS	200.7	Zinc
001159302	RW-08-Y2Q4	AQUEOUS	8260B	GC/MS Volatile Organics
001159302	RW-08-Y2Q4	AQUEOUS	8270C	GC/MS Base/Neutral & Acid
001159302	RW-08-Y2Q4	AQUEOUS	8151A	Chlorinated Herbicides
001159302	RW-08-Y2Q4	AQUEOUS	8081A	Organochlorine Pesticides

(1) 11/21/0

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

ANALYTICAL SUMMARY/CROSS REFERENCE TABLE

613 586

Client Name Sverdrup/Jacobs Eng. ETC Order #0011593
Site ID Memphis Depot
Dunn Field

ETC Sample ID	Field ID	Matrix	Method	Method Description
001159303	RW-07-Y2Q4	AQUEOUS	335.2	Cyanide
001159303	RW-07-Y2Q4	AQUEOUS	200.7	Silver
001159303	RW-07-Y2Q4	AQUEOUS	200.7	Aluminum
001159303	RW-07-Y2Q4	AQUEOUS	200.7	Arsenic
001159303	RW-07-Y2Q4	AQUEOUS	200 7	Barium
001159303	RW-07-Y2Q4	AQUEOUS	200.7	Beryllium
001159303	RW-07-Y2Q4	AQUEOUS	200.7	Calcium
001159303	RW-07-Y2Q4	AQUEOUS	200 7	Cadmium
001159303	RW-07-Y2Q4	AQUEOUS	200.7	Cobalt
001159303	RW-07-Y2Q4	AQUEOUS	200.7	Chromium
001159303	RW-07-Y2Q4	AQUEOUS	200 7	Copper
001159303	RW-07-Y2Q4	AQUEOUS	200.7	Iron
001159303	RW-07-Y2Q4	AQUEOUS	245.1	Mercury
001159303	RW-07-Y2Q4	AQUEOUS	200.7	Potassium
001159303	RW-07-Y2Q4	AQUEOUS	200.7	Magnesium
001159303	RW-07-Y2Q4	AQUEOUS	200.7	Manganese
001159303	RW-07-Y2Q4	AQUEOUS	200.7	Sodium
001159303	RW-07-Y2Q4	AQUEOUS	200.7	Nickel
001159303	RW-07-Y2Q4	AQUEOUS	200.7	Lead
001159303	RW-07-Y2Q4	AQUEOUS	200.7	Antimony
001159303	RW-07-Y2Q4	AQUEOUS	200.7	Selenium
001159303	RW-07-Y2Q4	AQUEOUS	200.7	Thallium
001159303	RW-07-Y2Q4	AQUEOUS	200.7	Vanadium
[redacted]9303	RW-07-Y2Q4	AQUEOUS	200.7	Zinc
[redacted]9303	RW-07-Y2Q4	AQUEOUS	8260B	GC/MS Volatile Organics
001159303	RW-07-Y2Q4	AQUEOUS	8270C	GC/MS Base/Neutral & Acid
001159303	RW-07-Y2Q4	AQUEOUS	8151A	Chlorinated Herbicides
001159303	RW-07-Y2Q4	AQUEOUS	8081A	Organochlorine Pesticides
001159304	RW-06-Y2Q4	AQUEOUS	335 2	Cyanide
001159304	RW-06-Y2Q4	AQUEOUS	200 7	Silver
001159304	RW-06-Y2Q4	AQUEOUS	200.7	Aluminum
001159304	RW-06-Y2Q4	AQUEOUS	200.7	Arsenic
001159304	RW-06-Y2Q4	AQUEOUS	200.7	Barium
001159304	RW-06-Y2Q4	AQUEOUS	200.7	Beryllium
001159304	RW-06-Y2Q4	AQUEOUS	200.7	Calcium
001159304	RW-06-Y2Q4	AQUEOUS	200.7	Cadmium
001159304	RW-06-Y2Q4	AQUEOUS	200.7	Cobalt
001159304	RW-06-Y2Q4	AQUEOUS	200.7	Chromium
001159304	RW-06-Y2Q4	AQUEOUS	200.7	Copper
001159304	RW-06-Y2Q4	AQUEOUS	200.7	Iron
001159304	RW-06-Y2Q4	AQUEOUS	245.1	Mercury
001159304	RW-06-Y2Q4	AQUEOUS	200.7	Potassium
001159304	RW-06-Y2Q4	AQUEOUS	200.7	Magnesium
001159304	RW-06-Y2Q4	AQUEOUS	200.7	Manganese
001159304	RW-06-Y2Q4	AQUEOUS	200.7	Sodium
001159304	RW-06-Y2Q4	AQUEOUS	200 7	Nickel
001159304	RW-06-Y2Q4	AQUEOUS	200 7	Lead
001159304	RW-06-Y2Q4	AQUEOUS	200 7	Antimony
001159304	RW-06-Y2Q4	AQUEOUS	200.7	Selenium
001159304	RW-06-Y2Q4	AQUEOUS	200.7	Thallium
001159304	RW-06-Y2Q4	AQUEOUS	200.7	Vanadium
001159304	RW-06-Y2Q4	AQUEOUS	200.7	Zinc
001159304	RW-06-Y2Q4	AQUEOUS	8260B	GC/MS Volatile Organics
[redacted]9304	RW-06-Y2Q4	AQUEOUS	8270C	GC/MS Base/Neutral & Acid
001159304	RW-06-Y2Q4	AQUEOUS	8151A	Chlorinated Herbicides
001159304	RW-06-Y2Q4	AQUEOUS	8081A	Organochlorine Pesticides

613 587

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

ANALYTICAL SUMMARY/CROSS REFERENCE TABLE

Client Name Sverdrup/Jacobs Eng.
Site ID Memphis Depot
Dunn Field

ETC Order #0011593

ETC Sample ID	Field ID	Matrix	Method	Method Description
001159305	RW-05-Y2Q4	AQUEOUS	335 2	Cyanide
001159305	RW-05-Y2Q4	AQUEOUS	200.7	Silver
001159305	RW-05-Y2Q4	AQUEOUS	200.7	Aluminum
001159305	RW-05-Y2Q4	AQUEOUS	200 7	Arsenic
001159305	RW-05-Y2Q4	AQUEOUS	200.7	Barium
001159305	RW-05-Y2Q4	AQUEOUS	200 7	Beryllium
001159305	RW-05-Y2Q4	AQUEOUS	200.7	Calcium
001159305	RW-05-Y2Q4	AQUEOUS	200.7	Cadmium
001159305	RW-05-Y2Q4	AQUEOUS	200 7	Cobalt
001159305	RW-05-Y2Q4	AQUEOUS	200.7	Chromium
001159305	RW-05-Y2Q4	AQUEOUS	200.7	Copper
001159305	RW-05-Y2Q4	AQUEOUS	200.7	Iron
001159305	RW-05-Y2Q4	AQUEOUS	245.1	Mercury
001159305	RW-05-Y2Q4	AQUEOUS	200.7	Potassium
001159305	RW-05-Y2Q4	AQUEOUS	200.7	Magnesium
001159305	RW-05-Y2Q4	AQUEOUS	200.7	Manganese
001159305	RW-05-Y2Q4	AQUEOUS	200.7	Sodium
001159305	RW-05-Y2Q4	AQUEOUS	200.7	Nickel
001159305	RW-05-Y2Q4	AQUEOUS	200.7	Lead
001159305	RW-05-Y2Q4	AQUEOUS	200 7	Antimony
001159305	RW-05-Y2Q4	AQUEOUS	200.7	Selenium
001159305	RW-05-Y2Q4	AQUEOUS	200 7	Thallium
001159305	RW-05-Y2Q4	AQUEOUS	200.7	Vanadium
001159305	RW-05-Y2Q4	AQUEOUS	200.7	Zinc
001159305	RW-05-Y2Q4	AQUEOUS	8260B	GC/MS Volatile Organics
001159305	RW-05-Y2Q4	AQUEOUS	8270C	GC/MS Base/Neutral & Acid
001159305	RW-05-Y2Q4	AQUEOUS	8151A	Chlorinated Herbicides
001159305	RW-05-Y2Q4	AQUEOUS	8081A	Organochlorine Pesticides
001159306	RW-10-Y2Q4	AQUEOUS	335.2	Cyanide
001159306	RW-10-Y2Q4	AQUEOUS	200.7	Silver
001159306	RW-10-Y2Q4	AQUEOUS	200.7	Aluminum
001159306	RW-10-Y2Q4	AQUEOUS	200.7	Arsenic
001159306	RW-10-Y2Q4	AQUEOUS	200.7	Barium
001159306	RW-10-Y2Q4	AQUEOUS	200.7	Beryllium
001159306	RW-10-Y2Q4	AQUEOUS	200.7	Calcium
001159306	RW-10-Y2Q4	AQUEOUS	200 7	Cadmium
001159306	RW-10-Y2Q4	AQUEOUS	200.7	Cobalt
001159306	RW-10-Y2Q4	AQUEOUS	200.7	Chromium
001159306	RW-10-Y2Q4	AQUEOUS	200 7	Copper
001159306	RW-10-Y2Q4	AQUEOUS	200.7	Iron
001159306	RW-10-Y2Q4	AQUEOUS	245.1	Mercury
001159306	RW-10-Y2Q4	AQUEOUS	200.7	Potassium
001159306	RW-10-Y2Q4	AQUEOUS	200.7	Magnesium
001159306	RW-10-Y2Q4	AQUEOUS	200.7	Manganese
001159306	RW-10-Y2Q4	AQUEOUS	200 7	Sodium
001159306	RW-10-Y2Q4	AQUEOUS	200.7	Nickel
001159306	RW-10-Y2Q4	AQUEOUS	200.7	Lead
001159306	RW-10-Y2Q4	AQUEOUS	200 7	Antimony
001159306	RW-10-Y2Q4	AQUEOUS	200.7	Selenium
001159306	RW-10-Y2Q4	AQUEOUS	200 7	Thallium
001159306	RW-10-Y2Q4	AQUEOUS	200.7	Vanadium
001159306	RW-10-Y2Q4	AQUEOUS	200.7	Zinc
001159306	RW-10-Y2Q4	AQUEOUS	8260B	GC/MS Volatile Organics
001159306	RW-10-Y2Q4	AQUEOUS	8270C	GC/MS Base/Neutral & Acid
001159306	RW-10-Y2Q4	AQUEOUS	8151A	Chlorinated Herbicides
001159306	RW-10-Y2Q4	AQUEOUS	8081A	Organochlorine Pesticides

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

ANALYTICAL SUMMARY/CROSS REFERENCE TABLE

Client Name Sverdrup/Jacobs Eng. ETC Order #0011593
Site ID Memphis Depot
Dunn Field

ETC Sample ID	Field ID	Matrix	Method	Method Description
001159307	RW-04-Y2Q4	AQUEOUS	335.2	Cyanide
001159307	RW-04-Y2Q4	AQUEOUS	200.7	Silver
001159307	RW-04-Y2Q4	AQUEOUS	200.7	Aluminum
001159307	RW-04-Y2Q4	AQUEOUS	200 7	Arsenic
001159307	RW-04-Y2Q4	AQUEOUS	200 7	Barium
001159307	RW-04-Y2Q4	AQUEOUS	200.7	Beryllium
001159307	RW-04-Y2Q4	AQUEOUS	200.7	Calcium
001159307	RW-04-Y2Q4	AQUEOUS	200.7	Cadmium
001159307	RW-04-Y2Q4	AQUEOUS	200.7	Cobalt
001159307	RW-04-Y2Q4	AQUEOUS	200.7	Chromium
001159307	RW-04-Y2Q4	AQUEOUS	200 7	Copper
001159307	RW-04-Y2Q4	AQUEOUS	200 7	Iron
001159307	RW-04-Y2Q4	AQUEOUS	245.1	Mercury
001159307	RW-04-Y2Q4	AQUEOUS	200 7	Potassium
001159307	RW-04-Y2Q4	AQUEOUS	200 7	Magnesium
001159307	RW-04-Y2Q4	AQUEOUS	200.7	Manganese
001159307	RW-04-Y2Q4	AQUEOUS	200.7	Sodium
001159307	RW-04-Y2Q4	AQUEOUS	200.7	Nickel
001159307	RW-04-Y2Q4	AQUEOUS	200.7	Lead
001159307	RW-04-Y2Q4	AQUEOUS	200.7	Antimony
001159307	RW-04-Y2Q4	AQUEOUS	200.7	Selenium
001159307	RW-04-Y2Q4	AQUEOUS	200.7	Thallium
001159307	RW-04-Y2Q4	AQUEOUS	200.7	Vanadium
[redacted]9307	RW-04-Y2Q4	AQUEOUS	200.7	Zinc
[redacted]9307	RW-04-Y2Q4	AQUEOUS	8260B	GC/MS Volatile Organics
001159307	RW-04-Y2Q4	AQUEOUS	8270C	GC/MS Base/Neutral & Acid
001159307	RW-04-Y2Q4	AQUEOUS	8151A	Chlorinated Herbicides
001159307	RW-04-Y2Q4	AQUEOUS	8081A	Organochlorine Pesticides
001159308	RW-03-Y2Q4	AQUEOUS	335.2	Cyanide
001159308	RW-03-Y2Q4	AQUEOUS	200.7	Silver
001159308	RW-03-Y2Q4	AQUEOUS	200.7	Aluminum
001159308	RW-03-Y2Q4	AQUEOUS	200.7	Arsenic
001159308	RW-03-Y2Q4	AQUEOUS	200.7	Barium
001159308	RW-03-Y2Q4	AQUEOUS	200 7	Beryllium
001159308	RW-03-Y2Q4	AQUEOUS	200.7	Calcium
001159308	RW-03-Y2Q4	AQUEOUS	200 7	Cadmium
001159308	RW-03-Y2Q4	AQUEOUS	200.7	Cobalt
001159308	RW-03-Y2Q4	AQUEOUS	200.7	Chromium
001159308	RW-03-Y2Q4	AQUEOUS	200.7	Copper
001159308	RW-03-Y2Q4	AQUEOUS	200.7	Iron
001159308	RW-03-Y2Q4	AQUEOUS	245.1	Mercury
001159308	RW-03-Y2Q4	AQUEOUS	200.7	Potassium
001159308	RW-03-Y2Q4	AQUEOUS	200.7	Magnesium
001159308	RW-03-Y2Q4	AQUEOUS	200.7	Manganese
001159308	RW-03-Y2Q4	AQUEOUS	200.7	Sodium
001159308	RW-03-Y2Q4	AQUEOUS	200.7	Nickel
001159308	RW-03-Y2Q4	AQUEOUS	200.7	Lead
001159308	RW-03-Y2Q4	AQUEOUS	200.7	Antimony
001159308	RW-03-Y2Q4	AQUEOUS	200.7	Selenium
001159308	RW-03-Y2Q4	AQUEOUS	200.7	Thallium
001159308	RW-03-Y2Q4	AQUEOUS	200.7	Vanadium
001159308	RW-03-Y2Q4	AQUEOUS	200.7	Zinc
001[redacted]9308	RW-03-Y2Q4	AQUEOUS	8260B	GC/MS Volatile Organics
001[redacted]9308	RW-03-Y2Q4	AQUEOUS	8270C	GC/MS Base/Neutral & Acid
001159308	RW-03-Y2Q4	AQUEOUS	8151A	Chlorinated Herbicides
001159308	RW-03-Y2Q4	AQUEOUS	8081A	Organochlorine Pesticides

Environmental Testing & Consulting, Inc.

Sample Reports

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 590

Client Name: Sverdrup/Jacobs Eng.
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID: Memphis Depot
Dunn Field

Date Arrived: 11/20/00
ETC Order Number: 0011593

ETC Lab ID : 0011593-01
Field ID : RW-09-Y2Q4

Matrix : AQUEOUS
Sample Date : 11/20/00

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	BY	METHOD	QC BATCH
Cyanide	<0.010	mg/L	0.010	11/29/00	GD	335.2	CY112901

CS

Data Validator

ND - Not Detected

613 591

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name: **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID: **Memphis Depot**
Dunn Field

Date Arrived: **11/20/00**
ETC Order Number: **0011593**

ETC Lab ID : **0011593-02**
Field ID : **RW-08-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/20/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	BY	METHOD	QC BATCH
Cyanide	<0.010	mg/L	0.010	11/29/00	GD	335 2	CY112901

CS
Data Validator

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 592

Client Name: Sverdrup/Jacobs Eng.
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID: Memphis Depot
Dunn Field

Date Arrived: 11/20/00
ETC Order Number: 0011593

ETC Lab ID : 0011593-03
Field ID : RW-07-Y2Q4

Matrix : AQUEOUS
Sample Date : 11/20/00

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	BY	METHOD	QC BATCH
Cyanide	<0.010	mg/L	0.010	11/29/00	GD	335.2	CY112901

CS
Data Validator

ND - Not Detected

613 593

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name: **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID: **Memphis Depot**
Dunn Field

Date Arrived: **11/20/00**
ETC Order Number: **0011593**

ETC Lab ID . : **0011593-04**
Field ID : **RW-06-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/20/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	BY	METHOD	QC BATCH
Cyanide	<0 010	mg/L	0 010	11/29/00	GD	335.2	CY112901

CS
Data Validator

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 594

Client Name: Sverdrup/Jacobs Eng.
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID: Memphis Depot
Dunn Field

Date Arrived: 11/20/00
ETC Order Number: 0011593

ETC Lab ID : 0011593-05
Field ID : RW-05-Y2Q4

Matrix : AQUEOUS
Sample Date : 11/20/00

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	BY	METHOD	QC BATCH
Cyanide	<0.010	mg/L	0.010	11/29/00	GD	335.2	CY112901

CS
Data Validator

ND - Not Detected

613 595

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name: Sverdrup/Jacobs Eng.
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID: Memphis Depot
Dunn Field

Date Arrived: 11/20/00
ETC Order Number: 0011593

ETC Lab ID : 0011593-06
Field ID : RW-10-Y2Q4

Matrix : AQUEOUS
Sample Date : 11/20/00

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	BY	METHOD	QC BATCH
Cyanide	<0 010	mg/L	0.010	11/29/00	GD	335.2	CY112901

CS
Data Validator

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name: **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID: **Memphis Depot**
Dunn Field

Date Arrived: **11/20/00**
ETC Order Number: **0011593**

ETC Lab ID : **0011593-07**
Field ID : **RW-04-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/20/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	BY	METHOD	QC BATCH
Cyanide	<0.010	mg/L	0.010	11/29/00	GD	335.2	CY112901

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 .597

Client Name: **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID: **Memphis Depot**
Dunn Field

Date Arrived: **11/20/00**
ETC Order Number: **0011593**

ETC Lab ID : **0011593-08**
Field ID: **RW-03-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/20/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	BY	METHOD	QC BATCH
Cyanide	<0 010	mg/L	0.010	11/29/00	GD	335.2	CY112901

CS
Data Validator

ND - Not Detected

METHOD BLANK
INORGANICS

Lab Name Environmental Testing and Consulting, Inc

Analyte	QC Sample No	QC Batch	Result	Detection Limit	Units	Date Analyzed	Method
Cyanide	CY1129011 BLK	CY112901	ND	0 010	mg/L	11/29/00	9010

NA - Not Applicable per Method
ND - Not Detected

Reviewed by: CS

613 599

LABORATORY CONTROL SAMPLE
INORGANICS

Lab Name Environmental Testing and Consulting, Inc

Analyte	QC Sample No.	QC Batch	Spike Added	Found	Units	% Rec #	QC Limits	
Cyanide	CY1129011 CS	CY112901	0 200	0 189	mg/L	95	90	110

ND - Not Detected
Column to be used to flag recovery values with an asterisk
* Values outside of QC limits

Reviewed by: _____

MATRIX SPIKE / MATRIX SPIKE DUPLICATE
INORGANICS

613 600

Lab Name Environmental Testing and Consulting, Inc

Analyte	QC Sample No.	QC Batch	SPIKE Added	SAMPLE Result	MS Result	Units	MS % Rec #	QC Limits	
Cyanide	0011-634-01 MS	CY112901	0.200	ND	0 185	mg/L	93	64	114

Analyte	QC Sample No	QC Batch	SPIKE Added	SAMPLE Result	MSD Result	Units	MSD % Rec #	QC Limits	
Cyanide	0011-634-01 MSD	CY112901	0 200	ND	0 176	mg/L	88	64	114

ND - Not Detected
Column to be used to flag recovery values with an asterisk
* Values outside of QC limits

Reviewed by. CJ

INORG MS-MSD 0011-593 iqc

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 601

Client Name: Sverdrup/Jacobs Eng.
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID: Memphis Depot
Dunn Field

Date Arrived: 11/20/00
ETC Order Number: 0011593

ETC Lab ID : 0011593-01
Field ID : RW-09-Y2Q4

Matrix : AQUEOUS
Sample Date : 11/20/00

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE PREPARED	BY	METHOD
Mercury Digestion Batch	V7-AQ-70			11/22/00	11/22/00	JF	245.1
Metals Digestion Batch	V23-AQ-37			11/21/00	11/21/00	NR	3030K
Silver	<0.009	mg/L	0.009	11/26/00	11/21/00	SH	200 7
Aluminum	<0.060	mg/L	0 060	11/26/00	11/21/00	SH	200.7
Arsenic	<0 003	mg/L	0.003	11/26/00	11/21/00	SH	200.7
Barium	0.127	mg/L	0.003	11/26/00	11/21/00	SH	200 7
Beryllium	<0.002	mg/L	0.002	11/26/00	11/21/00	SH	200 7
Calcium	27.8	mg/L	0.015	11/26/00	11/21/00	SH	200.7
Cadmium	<0 005	mg/L	0.005	11/26/00	11/21/00	SH	200.7
Cobalt	<0.009	mg/L	0 009	11/26/00	11/21/00	SH	200.7
Chromium	<0.009	mg/L	0.009	11/26/00	11/21/00	SH	200.7
Copper	<0.008	mg/L	0.008	11/26/00	11/21/00	SH	200.7
Iron	0.099	mg/L	0.009	11/26/00	11/21/00	SH	200.7
Mercury	<0 0002	mg/L	0 0002	11/22/00	11/22/00	JF	245 1
Potassium	1.09	mg/L	0.250	11/26/00	11/21/00	SH	200.7
Magnesium	13.6	mg/L	0.040	11/26/00	11/21/00	SH	200.7
Manganese	<0.003	mg/L	0.003	11/26/00	11/21/00	SH	200.7
Sodium	26 4	mg/L	0.050	11/26/00	11/21/00	SH	200.7
Nickel	<0.020	mg/L	0.020	11/26/00	11/21/00	SH	200 7
Lead	<0.060	mg/L	0.060	11/26/00	11/21/00	SH	200 7
Antimony	<0.040	mg/L	0.040	11/26/00	11/21/00	SH	200.7
Selenium	<0.100	mg/L	0.100	11/26/00	11/21/00	SH	200.7
Thallium	<0 065	mg/L	0.065	11/26/00	11/21/00	SH	200.7
Vanadium	<0.010	mg/L	0.010	11/26/00	11/21/00	SH	200.7
Zinc	0.023	mg/L	0.010	11/26/00	11/21/00	SH	200.7

CJ
Data Validator

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 602

Client Name: Sverdrup/Jacobs Eng.
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID: Memphis Depot
Dunn Field

Date Arrived: 11/20/00
ETC Order Number: 0011593

ETC Lab ID : 0011593-02
Field ID : RW-08-Y2Q4

Matrix : AQUEOUS
Sample Date : 11/20/00

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE PREPARED	BY	METHOD
Mercury Digestion Batch	V7-AQ-70			11/22/00	11/22/00	JF	245 1
Metals Digestion Batch	V23-AQ-37			11/21/00	11/21/00	NR	3030K
Silver	<0.009	mg/L	0 009	11/26/00	11/21/00	SH	200.7
Aluminum	<0.060	mg/L	0 060	11/26/00	11/21/00	SH	200.7
Arsenic	<0.003	mg/L	0 003	11/26/00	11/21/00	SH	200 7
Barium	0.103	mg/L	0.003	11/26/00	11/21/00	SH	200 7
Beryllium	<0.002	mg/L	0.002	11/26/00	11/21/00	SH	200 7
Calcium	21.2	mg/L	0.015	11/26/00	11/21/00	SH	200 7
Cadmium	<0.005	mg/L	0.005	11/26/00	11/21/00	SH	200 7
Cobalt	<0.009	mg/L	0.009	11/26/00	11/21/00	SH	200 7
Chromium	<0 009	mg/L	0.009	11/26/00	11/21/00	SH	200.7
Copper	<0.008	mg/L	0.008	11/26/00	11/21/00	SH	200.7
Iron	0 042	mg/L	0.009	11/26/00	11/21/00	SH	200.7
Mercury	<0 0002	mg/L	0.0002	11/22/00	11/22/00	JF	245 1
Potassium	0.734	mg/L	0.250	11/26/00	11/21/00	SH	200.7
[redacted]esium	10.8	mg/L	0.040	11/26/00	11/21/00	SH	200.7
[redacted]anese	<0.003	mg/L	0.003	11/26/00	11/21/00	SH	200.7
Sodium	23.5	mg/L	0.050	11/26/00	11/21/00	SH	200.7
Nickel	<0 020	mg/L	0.020	11/26/00	11/21/00	SH	200.7
Lead	<0 060	mg/L	0.060	11/26/00	11/21/00	SH	200 7
Antimony	<0 040	mg/L	0.040	11/26/00	11/21/00	SH	200.7
Selenium	<0.100	mg/L	0.100	11/26/00	11/21/00	SH	200.7
Thallium	<0.065	mg/L	0.065	11/26/00	11/21/00	SH	200.7
Vanadium	<0.010	mg/L	0.010	11/26/00	11/21/00	SH	200.7
Zinc	0.023	mg/L	0.010	11/26/00	11/21/00	SH	200.7

C)
Data Validator

ND - Not Detected

613 603

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name: Sverdrup/Jacobs Eng.
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID: Memphis Depot
Dunn Field

Date Arrived: 11/20/00
ETC Order Number: 0011593

ETC Lab ID : 0011593-03
Field ID : RW-07-Y2Q4

Matrix : AQUEOUS
Sample Date : 11/20/00

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE PREPARED	BY	METHOD
Mercury Digestion Batch	V7-AQ-70			11/22/00	11/22/00	JF	245 1
Metals Digestion Batch	V23-AQ-37			11/21/00	11/21/00	NR	3030K
Silver	<0 009	mg/L	0.009	11/26/00	11/21/00	SH	200.7
Aluminum	<0.060	mg/L	0 060	11/26/00	11/21/00	SH	200 7
Arsenic	<0.003	mg/L	0.003	11/26/00	11/21/00	SH	200 7
Barium	0.077	mg/L	0.003	11/26/00	11/21/00	SH	200.7
Beryllium	<0.002	mg/L	0.002	11/26/00	11/21/00	SH	200.7
Calcium	14.5	mg/L	0 015	11/26/00	11/21/00	SH	200 7
Cadmium	<0.005	mg/L	0 005	11/26/00	11/21/00	SH	200 7
Cobalt	<0 009	mg/L	0.009	11/26/00	11/21/00	SH	200.7
Chromium	<0.009	mg/L	0.009	11/26/00	11/21/00	SH	200.7
Copper	<0.008	mg/L	0.008	11/26/00	11/21/00	SH	200.7
Iron	0.015	mg/L	0.009	11/26/00	11/21/00	SH	200.7
Mercury	<0 0002	mg/L	0.0002	11/22/00	11/22/00	JF	245.1
Potassium	0.689	mg/L	0.250	11/26/00	11/21/00	SH	200.7
Magnesium	7.15	mg/L	0 040	11/26/00	11/21/00	SH	200 7
Manganese	<0 003	mg/L	0.003	11/26/00	11/21/00	SH	200 7
Sodium	24.0	mg/L	0.050	11/26/00	11/21/00	SH	200.7
Nickel	<0.020	mg/L	0.020	11/26/00	11/21/00	SH	200.7
Lead	<0.060	mg/L	0 060	11/26/00	11/21/00	SH	200 7
Antimony	<0.040	mg/L	0.040	11/26/00	11/21/00	SH	200.7
Selenium	<0 100	mg/L	0.100	11/26/00	11/21/00	SH	200 7
Thallium	<0.065	mg/L	0.065	11/26/00	11/21/00	SH	200 7
Vanadium	<0.010	mg/L	0.010	11/26/00	11/21/00	SH	200.7
Zinc	0.015	mg/L	0.010	11/26/00	11/21/00	SH	200 7

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Data Validator

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 604

Client Name: **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID: **Memphis Depot**
Dunn Field

Date Arrived: **11/20/00**
ETC Order Number: **0011593**

ETC Lab ID : **0011593-04**
Field ID : **RW-06-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/20/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE PREPARED	BY	METHOD
Mercury Digestion Batch	V7-AQ-70			11/22/00	11/22/00	JF	245.1
Metals Digestion Batch	V23-AQ-37			11/21/00	11/21/00	NR	3030K
Silver	<0.009	mg/L	0.009	11/26/00	11/21/00	SH	200.7
Aluminum	<0 060	mg/L	0.060	11/26/00	11/21/00	SH	200.7
Arsenic	<0.003	mg/L	0.003	11/26/00	11/21/00	SH	200 7
Barium	0.088	mg/L	0.003	11/26/00	11/21/00	SH	200 7
Beryllium	<0.002	mg/L	0.002	11/26/00	11/21/00	SH	200 7
Calcium	15.9	mg/L	0.015	11/26/00	11/21/00	SH	200 7
Cadmium	<0.005	mg/L	0.005	11/26/00	11/21/00	SH	200 7
Cobalt	<0.009	mg/L	0 009	11/26/00	11/21/00	SH	200 7
Chromium	<0.009	mg/L	0 009	11/26/00	11/21/00	SH	200 7
Copper	<0.008	mg/L	0.008	11/26/00	11/21/00	SH	200 7
Iron	0.031	mg/L	0.009	11/26/00	11/21/00	SH	200.7
Mercury	<0.0002	mg/L	0.0002	11/22/00	11/22/00	JF	245 1
Potassium	0.783	mg/L	0.250	11/26/00	11/21/00	SH	200 7
[redacted]esium	7.72	mg/L	0.040	11/26/00	11/21/00	SH	200 7
[redacted]ganese	<0.003	mg/L	0.003	11/26/00	11/21/00	SH	200.7
Sodium	23.6	mg/L	0.050	11/26/00	11/21/00	SH	200 7
Nickel	<0.020	mg/L	0.020	11/26/00	11/21/00	SH	200 7
Lead	<0.060	mg/L	0.060	11/26/00	11/21/00	SH	200.7
Antimony	<0.040	mg/L	0.040	11/26/00	11/21/00	SH	200.7
Selenium	<0.100	mg/L	0.100	11/26/00	11/21/00	SH	200.7
Thallium	<0.065	mg/L	0.065	11/26/00	11/21/00	SH	200.7
Vanadium	<0.010	mg/L	0.010	11/26/00	11/21/00	SH	200.7
Zinc	0.040	mg/L	0.010	11/26/00	11/21/00	SH	200.7

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Data Validator

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 605

Client Name: **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID: **Memphis Depot**
Dunn Field

Date Arrived: **11/20/00**
ETC Order Number: **0011593**

ETC Lab ID : **0011593-05**
Field ID : **RW-05-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/20/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE PREPARED	BY	METHOD
Mercury Digestion Batch	V7-AQ-70			11/22/00	11/22/00	JF	245.1
Metals Digestion Batch	V23-AQ-37			11/21/00	11/21/00	NR	3030K
Silver	<0.009	mg/L	0.009	11/26/00	11/21/00	SH	200 7
Aluminum	<0.060	mg/L	0 060	11/26/00	11/21/00	SH	200.7
Arsenic	<0.003	mg/L	0.003	11/26/00	11/21/00	SH	200.7
Barium	0 100	mg/L	0.003	11/26/00	11/21/00	SH	200 7
Beryllium	<0.002	mg/L	0.002	11/26/00	11/21/00	SH	200.7
Calcium	13.9	mg/L	0.015	11/26/00	11/21/00	SH	200.7
Cadmium	<0 005	mg/L	0.005	11/26/00	11/21/00	SH	200.7
Cobalt	<0.009	mg/L	0.009	11/26/00	11/21/00	SH	200.7
Chromium	<0.009	mg/L	0.009	11/26/00	11/21/00	SH	200.7
Copper	<0.008	mg/L	0.008	11/26/00	11/21/00	SH	200 7
Iron	0.016	mg/L	0.009	11/26/00	11/21/00	SH	200.7
Mercury	<0.0002	mg/L	0.0002	11/22/00	11/22/00	JF	245 1
Potassium	0 749	mg/L	0.250	11/26/00	11/21/00	SH	200 7
Magnesium	6.70	mg/L	0.040	11/26/00	11/21/00	SH	200.7
Manganese	<0 003	mg/L	0 003	11/26/00	11/21/00	SH	200.7
Sodium	18.1	mg/L	0.050	11/26/00	11/21/00	SH	200.7
Nickel	<0 020	mg/L	0.020	11/26/00	11/21/00	SH	200 7
Lead	<0.060	mg/L	0 060	11/26/00	11/21/00	SH	200.7
Antimony	<0.040	mg/L	0.040	11/26/00	11/21/00	SH	200.7
Selenium	<0.100	mg/L	0.100	11/26/00	11/21/00	SH	200.7
Thallium	<0 065	mg/L	0.065	11/26/00	11/21/00	SH	200.7
Vanadium	<0.010	mg/L	0.010	11/26/00	11/21/00	SH	200 7
Zinc	0.022	mg/L	0.010	11/26/00	11/21/00	SH	200.7

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Data Validator

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 606

Client Name [redacted]
Sverdrup/Jacobs Eng.
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID Memphis Depot
Dunn Field

Date Arrived 11/20/00
ETC Order Number 0011593

ETC Lab ID : 0011593-06
Field ID : RW-10-Y2Q4

Matrix : AQUEOUS
Sample Date : 11/20/00

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE PREPARED	BY	METHOD
Mercury Digestion Batch	V7-AQ-70			11/22/00	11/22/00	JF	245 1
Metals Digestion Batch	V23-AQ-37			11/21/00	11/21/00	NR	3030K
Silver	<0.009	mg/L	0.009	11/26/00	11/21/00	SH	200 7
Aluminum	<0 060	mg/L	0.060	11/26/00	11/21/00	SH	200 7
Arsenic	<0.003	mg/L	0.003	11/26/00	11/21/00	SH	200.7
Barium	0 101	mg/L	0 003	11/26/00	11/21/00	SH	200.7
Beryllium	<0.002	mg/L	0 002	11/26/00	11/21/00	SH	200 7
Calcium	14 0	mg/L	0.015	11/26/00	11/21/00	SH	200.7
Cadmium	<0.005	mg/L	0 005	11/26/00	11/21/00	SH	200.7
Cobalt	<0.009	mg/L	0 009	11/26/00	11/21/00	SH	200.7
Chromium	<0.009	mg/L	0 009	11/26/00	11/21/00	SH	200.7
Copper	<0.008	mg/L	0 008	11/26/00	11/21/00	SH	200 7
Iron	0.027	mg/L	0.009	11/26/00	11/21/00	SH	200 7
Mercury	<0.0002	mg/L	0 0002	11/22/00	11/22/00	JF	245.1
P[redacted]ium	0.751	mg/L	0 250	11/26/00	11/21/00	SH	200.7
M[redacted]esium	6 73	mg/L	0 040	11/26/00	11/21/00	SH	200 7
Manganese	<0.003	mg/L	0 003	11/26/00	11/21/00	SH	200 7
Sodium	18.3	mg/L	0 050	11/26/00	11/21/00	SH	200.7
Nickel	<0.020	mg/L	0.020	11/26/00	11/21/00	SH	200 7
Lead	<0.060	mg/L	0 060	11/26/00	11/21/00	SH	200.7
Antimony	<0.040	mg/L	0 040	11/26/00	11/21/00	SH	200.7
Selenium	<0.100	mg/L	0.100	11/26/00	11/21/00	SH	200 7
Thallium	<0.065	mg/L	0.065	11/26/00	11/21/00	SH	200.7
Vanadium	<0.010	mg/L	0.010	11/26/00	11/21/00	SH	200.7
Zinc	0.021	mg/L	0.010	11/26/00	11/21/00	SH	200 7

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Data Validator

ND - Not Detected

613 607

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name: Sverdrup/Jacobs Eng.
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID: Memphis Depot
Dunn Field

Date Arrived: 11/20/00
ETC Order Number: 0011593

ETC Lab ID : 0011593-07
Field ID : RW-04-Y2Q4

Matrix : AQUEOUS
Sample Date . 11/20/00

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE PREPARED	BY	METHOD
Mercury Digestion Batch	V7-AQ-70			11/22/00	11/22/00	JF	245 1
Metals Digestion Batch	V23-AQ-37			11/21/00	11/21/00	NR	3030K
Silver	<0.009	mg/L	0.009	11/26/00	11/21/00	SH	200 7
Aluminum	0.400	mg/L	0 060	11/26/00	11/21/00	SH	200 7
Arsenic	<0.003	mg/L	0.003	11/26/00	11/21/00	SH	200.7
Barium	0.108	mg/L	0.003	11/26/00	11/21/00	SH	200.7
Beryllium	<0.002	mg/L	0 002	11/26/00	11/21/00	SH	200.7
Calcium	14.6	mg/L	0.015	11/26/00	11/21/00	SH	200.7
Cadmium	<0 005	mg/L	0.005	11/26/00	11/21/00	SH	200.7
Cobalt	<0.009	mg/L	0.009	11/26/00	11/21/00	SH	200.7
Chromium	<0.009	mg/L	0.009	11/26/00	11/21/00	SH	200.7
Copper	<0.008	mg/L	0.008	11/26/00	11/21/00	SH	200.7
Iron	0 019	mg/L	0.009	11/26/00	11/21/00	SH	200 7
Mercury	<0.0002	mg/L	0 0002	11/22/00	11/22/00	JF	245.1
Potassium	0.746	mg/L	0.250	11/26/00	11/21/00	SH	200.7
Magnesium	7 15	mg/L	0.040	11/26/00	11/21/00	SH	200.7
Manganese	<0.003	mg/L	0 003	11/26/00	11/21/00	SH	200 7
Sodium	19.8	mg/L	0 050	11/26/00	11/21/00	SH	200.7
Nickel	<0.020	mg/L	0.020	11/26/00	11/21/00	SH	200.7
Lead	<0 060	mg/L	0.060	11/26/00	11/21/00	SH	200.7
Antimony	<0 040	mg/L	0.040	11/26/00	11/21/00	SH	200.7
Selenium	<0.100	mg/L	0.100	11/26/00	11/21/00	SH	200.7
Thallium	<0.065	mg/L	0.065	11/26/00	11/21/00	SH	200.7
Vanadium	<0.010	mg/L	0.010	11/26/00	11/21/00	SH	200 7
Zinc	0.011	mg/L	0 010	11/26/00	11/21/00	SH	200.7

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Data Validator

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 608

Client Name: Sverdrup/Jacobs Eng.
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID: Memphis Depot
Dunn Field

Date Arrived: 11/20/00
ETC Order Number: 0011593

ETC Lab ID : 0011593-08
Field ID : RW-03-Y2Q4

Matrix : AQUEOUS
Sample Date : 11/20/00

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE PREPARED	BY	METHOD
Mercury Digestion Batch	V7-AQ-70			11/22/00	11/22/00	JF	245 1
Metals Digestion Batch	V23-AQ-37			11/21/00	11/21/00	NR	3030K
Silver	<0.009	mg/L	0.009	11/26/00	11/21/00	SH	200 7
Aluminum	<0.060	mg/L	0.060	11/26/00	11/21/00	SH	200 7
Arsenic	<0.003	mg/L	0.003	11/26/00	11/21/00	SH	200.7
Barium	0.295	mg/L	0.003	11/26/00	11/21/00	SH	200.7
Beryllium	<0.002	mg/L	0.002	11/26/00	11/21/00	SH	200.7
Calcium	72.2	mg/L	0.015	11/26/00	11/21/00	SH	200 7
Cadmium	<0.005	mg/L	0.005	11/26/00	11/21/00	SH	200.7
Cobalt	<0.009	mg/L	0.009	11/26/00	11/21/00	SH	200 7
Chromium	<0.009	mg/L	0.009	11/26/00	11/21/00	SH	200.7
Copper	<0.008	mg/L	0.008	11/26/00	11/21/00	SH	200 7
Iron	0.065	mg/L	0 009	11/26/00	11/21/00	SH	200.7
Mercury	<0 0002	mg/L	0.0002	11/22/00	11/22/00	JF	245 1
Potassium	1 02	mg/L	0.250	11/26/00	11/21/00	SH	200 7
[redacted]esium	23 6	mg/L	0.040	11/26/00	11/21/00	SH	200 7
M[redacted]ganese	0 542	mg/L	0.003	11/26/00	11/21/00	SH	200 7
Sodium	28.1	mg/L	0 050	11/26/00	11/21/00	SH	200 7
Nickel	<0.020	mg/L	0 020	11/26/00	11/21/00	SH	200.7
Lead	<0.060	mg/L	0 060	11/26/00	11/21/00	SH	200.7
Antimony	<0.040	mg/L	0 040	11/26/00	11/21/00	SH	200.7
Selenium	<0.100	mg/L	0 100	11/26/00	11/21/00	SH	200.7
Thallium	<0.065	mg/L	0 065	11/26/00	11/21/00	SH	200.7
Vanadium	<0.010	mg/L	0 010	11/26/00	11/21/00	SH	200.7
Zinc	<0.010	mg/L	0.010	11/26/00	11/21/00	SH	200.7

CS

Data Validator

ND - Not Detected

613 609

FORM 3A
WATER METHOD BLANK
METALS

Lab Name Environmental Testing and Consulting, Inc

		QC Batch
Laboratory ID ICP/GFAA Metals	V23-AQ-37 BLK	V23-AQ-37
Laboratory ID Mercury	V7-AQ-70 BLK	V7-AQ-70

Date Sample Prepared	11/21/00 ICP/GFAA Metals
	11/22/00 Mercury

Metals	Concentration mg/L	Detection Limit mg/L	Date Analyzed	Method
Silver	ND	0 009	11/26/00	200 7
Aluminum	ND	0 060	11/26/00	200.7
Arsenic	ND	0 003	11/26/00	200 7
Barium	ND	0 003	11/26/00	200 7
Beryllium	ND	0 002	11/26/00	200 7
Calcium	ND	0 015	11/26/00	200 7
Cadmium	ND	0 005	11/26/00	200 7
Cobalt	ND	0.009	11/26/00	200 7
Chromium	ND	0 009	11/26/00	200 7
Copper	ND	0 008	11/26/00	200 7
Iron	ND	0 009	11/26/00	200 7
Potassium	ND	0 250	11/26/00	200 7
Magnesium	ND	0 040	11/26/00	200 7
Manganese	ND	0 003	11/26/00	200 7
Sodium	ND	0 050	11/26/00	200 7
Nickel	ND	0 020	11/26/00	200 7
Lead	ND	0 060	11/26/00	200 7
Antimony	ND	0 040	11/26/00	200 7
Selenium	ND	0 100	11/26/00	200 7
Thallium	ND	0 065	11/26/00	200 7
Vanadium	ND	0 010	11/26/00	200 7
Zinc	ND	0 010	11/26/00	200 7
Mercury	ND	0 0002	11/22/00	245 1

ND - Not Detected

Reviewed by CS

0011-593 mqc BLANK

FORM 7
WATER LABORATORY CONTROL SAMPLE
METALS

Lab Name Environmental Testing and Consulting, Inc

			QC Batch
Laboratory Control ID	ICP/GFAA Metals	V23-AQ-37 LCS	V23-AQ-37
	Mercury	V7-AQ-70 LCS	V7-AQ-70
Date Prepared	ICP/GFAA Metals	11/21/00	
	Mercury	11/22/00	

Metals	Spike Added mg/L	Found mg/L	% R	#	QC Limits	
Silver	0 200	0 203	102		80	120
Aluminum	2 00	2 02	101		80	120
Arsenic	0 080	0 082	103		80	120
Barium	2 00	2.11	106		80	120
Beryllium	0 200	0 209	105		80	120
Calcium	4 00	4 24	106		80	120
Cadmium	0 016	0 017	106		80	120
Cobalt	1 00	1 04	104		80	120
Chromium	0 400	0 417	104		80	120
Copper	0 400	0 413	103		80	120
Iron	2 00	2 12	106		80	120
Potassium	4 00	4 14	104		80	120
Magnesium	4 00	3 95	99		80	120
Manganese	0 200	0 211	106		80	120
Sodium	4 00	4 14	104		80	120
Nickel	1 00	1 03	103		80	120
Lead	0 080	0 085	106		80	120
Antimony	0 160	0 166	104		80	120
Selenium	0 080	0 083	104		80	120
Thallium	0 080	0 084	105		80	120
Vanadium	1 00	1 04	104		80	120
Zinc	0 200	0 212	106		80	120
Mercury	0 0050	0 0046	92		85	115

Column to be used to flag recovery values with an asterisk
* Values outside of QC limits

Reviewed by CS

613 611

FORM 6
WATER MATRIX SPIKE / MATRIX SPIKE DUPLICATE
METALS

Lab Name Environmental Testing and Consulting, Inc

		QC Batch
Laboratory ID MS ICP/GFAA Metals	0011-593-01	V23-AQ-37
Laboratory ID MS Mercury	0011-593-01	V7-AQ-70

Date Sample Prepared	11/21/00	ICP/GFAA Metals
	11/22/00	Mercury

Metals	SPIKE Added mg/L	SAMPLE Conc mg/L	MS Conc mg/L	RPD <20% #	MS % Rec #	QC Limits	
Silver	0 200	ND	0 113	5	57 *	75	125
Aluminum	2 00	ND	2 04	0	102	75	125
Arsenic	0 080	ND	0 081	1	101	75	125
Barium	2 00	0 127	2 24	1	106	75	125
Beryllium	0 200	ND	0 212	0	106	75	125
Calcium	4 00	27.8	31 9	2	103	75	125
Cadmium	0 016	ND	0 017	0	106	75	125
Cobalt	1 00	ND	1 04	0	104	75	125
Chromium	0 400	ND	0 418	0	105	75	125
Copper	0 400	ND	0 416	0	104	75	125
Iron	2 00	0 099	2 22	1	106	75	125
Potassium	4 00	1 09	5 28	1	105	75	125
Magnesium	4 00	13 6	17 5	1	98	75	125
Manganese	0 200	ND	0 214	0	107	75	125
Sodium	4 00	26 4	30 9	2	113	75	125
Nickel	1 00	ND	1 03	0	103	75	125
Lead	0 080	ND	0 084	1	105	75	125
Antimony	0 160	ND	0 167	0	104	75	125
Selenium	0 080	ND	0 084	4	105	75	125
Thallium	0 080	ND	0 085	0	106	75	125
Vanadium	1 00	ND	1 05	1	105	75	125
Zinc	0 200	0 023	0 240	1	109	75	125
Mercury	0 0050	ND	0 0045	2	90	80	120

ND - Not Detected
Column to be used to flag recovery values with an asterisk
* Values outside of QC limits

Reviewed by CJ

613 612

FORM 6
WATER MATRIX SPIKE / MATRIX SPIKE DUPLICATE
METALS

Lab Name Environmental Testing and Consulting, Inc

		QC Batch
Laboratory ID MS ICP/GFAA Metals	0011-593-01	V23-AQ-37
Laboratory ID MS Mercury	0011-593-01	V7-AQ-70

Date Sample Prepared	11/21/00	ICP/GFAA Metals
	11/22/00	Mercury

Metals	SPIKE Added mg/L	SAMPLE Conc mg/L	MSD Conc mg/L		MSD % Rec #	QC Limits	
Silver	0 200	ND	0 108		54 *	75	125
Aluminum	2.00	ND	2 04		102	75	125
Arsenic	0 080	ND	0 082		103	75	125
Barium	2 00	0 127	2 22		105	75	125
Beryllium	0 200	ND	0.212		106	75	125
Calcium	4 00	27 8	31 3		88	75	125
Cadmium	0 016	ND	0 017		106	75	125
Cobalt	1 00	ND	1 04		104	75	125
Chromium	0 400	ND	0 417		104	75	125
Copper	0 400	ND	0 416		104	75	125
Iron	2 00	0 099	2 20		105	75	125
Potassium	4 00	1 09	5 24		104	75	125
Magnesium	4 00	13 6	17 3		93	75	125
Manganese	0 200	ND	0 213		107	75	125
Sodium	4 00	26 4	30 2		95	75	125
Nickel	1 00	ND	1 03		103	75	125
Lead	0 080	ND	0 085		106	75	125
Antimony	0 160	ND	0 167		104	75	125
Selenium	0 080	ND	0 081		101	75	125
Thallium	0 080	ND	0 085		106	75	125
Vanadium	1 00	ND	1 04		104	75	125
Zinc	0.200	0 023	0 238		108	75	125
Mercury	0 0050	ND	0 0044		88	80	120

ND - Not Detected
Column to be used to flag recovery values with an asterisk
* Values outside of QC limits

Reviewed by ES

613 613

FORM 5B
POST DIGESTION SPIKE
METALS

Lab Name. Enviornmental Testing and Consulting, Inc

QC Batch ICP/GFAA Metals V23-AQ-37

Date Sample Prepared 11/21/00 ICP/GFAA Metals

Metals	Spike Expected ug/L	Spike Found ug/L	% Recovery	QC Limits	
Silver	0 025	0 024	96	75	125

Post Digestion Spikes (PDS) were performed on those analytes with recoveries outside QC limits for both the MS and MSD that are less than 25 times the method detection limit

Reviewed by CJ

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750 613 614

Client Name: Sverdrup/Jacobs Eng.
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID: Memphis Depot
Dunn Field

FID #

Date Arrived: 11/20/00
ETC Order Number: 0011593

ETC Lab ID: 0011593-01
Field ID : RW-09-Y2Q4

Matrix : AQUEOUS
Sample Date : 11/20/00

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
GC/MS Volatile Organics				12/04/00	EM	8260B 5030B
QC Batch	V1120401					
Dilution Factor	1					
Acetone	ND	ug/L	20.0			
Benzene	ND	ug/L	1.00			
Bromodichloromethane	ND	ug/L	1.00			
Bromoform	ND	ug/L	1.00			
Bromomethane	ND	ug/L	1.00			
2-Butanone (MEK)	131	ug/L	20.0			
Carbon Disulfide	ND	ug/L	1.00			
Carbon Tetrachloride	ND	ug/L	1 00			
Chlorobenzene	ND	ug/L	1 00			
Chlorodibromomethane	ND	ug/L	1 00			
Chloroethane	ND	ug/L	1 00			
Chloroform	13.3	ug/L	1 00			
[redacted]oromethane	ND	ug/L	1 00			
[redacted]-Dichloroethane	1 82	ug/L	1.00			
1,2-Dichloroethane	ND	ug/L	1.00			
1,1-Dichloroethene	52.5	ug/L	1.00			
trans-1,2-Dichloroethene	ND	ug/L	1.00			
1,2-Dichloropropane	ND	ug/L	1 00			
cis-1,3-Dichloropropene	ND	ug/L	1.00			
trans-1,3-Dichloropropene	ND	ug/L	1.00			
Ethylbenzene	ND	ug/L	1.00			
2-Hexanone (MBK)	ND	ug/L	5.00			
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5 00			
Methylene Chloride	ND	ug/L	5.00			
Styrene	ND	ug/L	1 00			
1,1,2,2-Tetrachloroethane	ND	ug/L	1.00			
Tetrachloroethene	54 3	ug/L	1.00			
Toluene	ND	ug/L	1.00			
1,1,1-Trichloroethane	1.92	ug/L	1.00			
1,1,2-Trichloroethane	ND	ug/L	1.00			
Trichloroethene	36.3	ug/L	1.00			
Vinyl Acetate	ND	ug/L	20.0			
Vinyl Chloride	ND	ug/L	1.00			
Xylenes-m,p	ND	ug/L	1.00			
Xylenes-o	ND	ug/L	1.00			
cis-1,2-Dichloroethene	2 02	ug/L	1.00			

Surrogate Standard	% Recovery	QC Limits	
S1 - Dibromofluoromethane	97	74	123
S2 - Toluene-d8	103	86	112
S3 - 4-Bromofluorobenzene	94	81	115
S4 - 1,2-Dichloroethane-d4	92	80	120

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

613 615

FORM 1
VOA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

0011-593-1

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-593

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 0701008

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 12/04/00

GC Column: ID: 2.00 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
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ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 616

Client Name: Sverdrup/Jacobs Eng.
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID: Memphis Depot
Dunn Field

FID #

Date Arrived: 11/20/00
ETC Order Number: 0011593

ETC Lab ID: 0011593-02
Field ID : RW-08-Y2Q4

Matrix : AQUEOUS
Sample Date : 11/20/00

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
GC/MS Volatile Organics				12/04/00	EM	8260B 5030B
QC Batch	**V1120401**					
Dilution Factor	**1**					
Acetone	ND	ug/L	20 0			
Benzene	ND	ug/L	1 00			
Bromodichloromethane	ND	ug/L	1.00			
Bromoform	ND	ug/L	1.00			
Bromomethane	ND	ug/L	1.00			
2-Butanone (MEK)	43.4	ug/L	20.0			
Carbon Disulfide	ND	ug/L	1.00			
Carbon Tetrachloride	ND	ug/L	1.00			
Chlorobenzene	ND	ug/L	1.00			
Chlorodibromomethane	ND	ug/L	1.00			
Chloroethane	ND	ug/L	1.00			
Chloroform	6.53	ug/L	1.00			
[redacted]oromethane	ND	ug/L	1.00			
[redacted]-Dichloroethane	ND	ug/L	1 00			
1,2-Dichloroethane	ND	ug/L	1.00			
1,1-Dichloroethene	ND	ug/L	1.00			
trans-1,2-Dichloroethene	11.9	ug/L	1 00			
1,2-Dichloropropane	ND	ug/L	1 00			
cis-1,3-Dichloropropene	ND	ug/L	1.00			
trans-1,3-Dichloropropene	ND	ug/L	1.00			
Ethylbenzene	ND	ug/L	1 00			
2-Hexanone (MBK)	ND	ug/L	5.00			
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.00			
Methylene Chloride	ND	ug/L	5.00			
Styrene	ND	ug/L	1.00			
1,1,2,2-Tetrachloroethane	ND	ug/L	1.00			
Tetrachloroethene	2.02	ug/L	1 00			
Toluene	ND	ug/L	1.00			
1,1,1-Trichloroethane	ND	ug/L	1.00			
1,1,2-Trichloroethane	ND	ug/L	1.00			
Trichloroethene	56 9	ug/L	1.00			
Vinyl Acetate	ND	ug/L	20.0			
Vinyl Chloride	ND	ug/L	1.00			
Xylenes-m,p	ND	ug/L	1.00			
Xylenes-o	ND	ug/L	1.00			
cis-1,2-Dichloroethene	40.1	ug/L	1.00			

Surrogate Standard	% Recovery	QC Limits	
S1 - Dibromofluoromethane	95	74	123
S2 - Toluene-d8	101	86	112
S3 - 4-Bromofluorobenzene	97	81	115
S4 - 1,2-Dichloroethane-d4	92	80	120

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

613 617

FORM 1
VOA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

0011-593-2

Lab Name: ETC,INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-593

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 0801009

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 12/04/00

GC Column: ID: 2.00 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
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ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 618

Client Name: Sverdrup/Jacobs Eng.
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID: Memphis Depot
Dunn Field

FID #

Date Arrived: 11/20/00
ETC Order Number: 0011593

ETC Lab ID: 0011593-03
Field ID : RW-07-Y2Q4

Matrix : AQUEOUS
Sample Date : 11/20/00

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
GC/MS Volatile Organics				12/04/00	EM	8260B 5030B
QC Batch	**V1120401**					
Dilution Factor	**1**					
Acetone	ND	ug/L	20 0			
Benzene	ND	ug/L	1.00			
Bromodichloromethane	ND	ug/L	1.00			
Bromoform	ND	ug/L	1.00			
Bromomethane	ND	ug/L	1.00			
2-Butanone (MEK)	ND	ug/L	20.0			
Carbon Disulfide	ND	ug/L	1.00			
Carbon Tetrachloride	0 43J	ug/L	1.00			
Chlorobenzene	ND	ug/L	1.00			
Chlorodibromomethane	ND	ug/L	1 00			
Chloroethane	ND	ug/L	1 00			
Chloroform	3.08	ug/L	1 00			
[redacted]romethane	ND	ug/L	1 00			
[redacted]Dichloroethane	ND	ug/L	1 00			
1,2-Dichloroethane	ND	ug/L	1.00			
1,1-Dichloroethene	ND	ug/L	1.00			
trans-1,2-Dichloroethene	22 9	ug/L	1.00			
1,2-Dichloropropane	ND	ug/L	1.00			
cis-1,3-Dichloropropene	ND	ug/L	1 00			
trans-1,3-Dichloropropene	ND	ug/L	1.00			
Ethylbenzene	ND	ug/L	1.00			
2-Hexanone (MBK)	ND	ug/L	5.00			
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.00			
Methylene Chloride	ND	ug/L	5.00			
Styrene	ND	ug/L	1.00			
1,1,2,2-Tetrachloroethane	49.8	ug/L	1.00			
Tetrachloroethene	9.30	ug/L	1.00			
Toluene	ND	ug/L	1.00			
1,1,1-Trichloroethane	ND	ug/L	1.00			
1,1,2-Trichloroethane	1.88	ug/L	1.00			
Trichloroethene	101	ug/L	1.00			
Vinyl Acetate	ND	ug/L	20.0			
Vinyl Chloride	ND	ug/L	1 00			
Xylenes-m,p	ND	ug/L	1 00			
Xylenes-o	ND	ug/L	1.00			
cis-1,2-Dichloroethene	86.6	ug/L	1.00			

Surrogate Standard	% Recovery	QC Limits	
S1 - Dibromofluoromethane	94	74	123
S2 - Toluene-d8	103	86	112
S3 - 4-Bromofluorobenzene	94	81	115
S4 - 1,2-Dichloroethane-d4	92	80	120

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

613 619

FORM 1
VOA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

0011-593-3

Lab Name: ETC,INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-593

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 0901010

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 12/04/00

GC Column: ID: 2.00 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
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ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 620

Client Name: Sverdrup/Jacobs Eng.
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID: Memphis Depot
Dunn Field

FID #

Date Arrived: 11/20/00
ETC Order Number: 0011593

ETC Lab ID: 0011593-04
Field ID : RW-06-Y2Q4

Matrix : AQUEOUS
Sample Date . 11/20/00

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
GC/MS Volatile Organics				12/04/00	EM	8260B 5030B
QC Batch	**V1120401**					
Dilution Factor	**1**					
Acetone	ND	ug/L	20 0			
Benzene	ND	ug/L	1.00			
Bromodichloromethane	ND	ug/L	1 00			
Bromoform	ND	ug/L	1 00			
Bromomethane	ND	ug/L	1 00			
2-Butanone (MEK)	47.9	ug/L	20 0			
Carbon Disulfide	ND	ug/L	1 00			
Carbon Tetrachloride	ND	ug/L	1 00			
Chlorobenzene	ND	ug/L	1 00			
Chlorodibromomethane	ND	ug/L	1.00			
Chloroethane	ND	ug/L	1.00			
Chloroform	2.38	ug/L	1.00			
[redacted]promethane	ND	ug/L	1.00			
[redacted]-Dichloroethane	ND	ug/L	1.00			
1,2-Dichloroethane	ND	ug/L	1.00			
1,1-Dichloroethene	ND	ug/L	1.00			
trans-1,2-Dichloroethene	1.25	ug/L	1.00			
1,2-Dichloropropane	ND	ug/L	1.00			
cis-1,3-Dichloropropene	ND	ug/L	1.00			
trans-1,3-Dichloropropene	ND	ug/L	1.00			
Ethylbenzene	ND	ug/L	1.00			
2-Hexanone (MBK)	ND	ug/L	5.00			
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.00			
Methylene Chloride	ND	ug/L	5.00			
Styrene	ND	ug/L	1.00			
1,1,2,2-Tetrachloroethane	ND	ug/L	1 00			
Tetrachloroethene	2 18	ug/L	1.00			
Toluene	ND	ug/L	1 00			
1,1,1-Trichloroethane	ND	ug/L	1 00			
1,1,2-Trichloroethane	ND	ug/L	1 00			
Trichloroethene	11.3	ug/L	1.00			
Vinyl Acetate	ND	ug/L	20.0			
Vinyl Chloride	ND	ug/L	1.00			
Xylenes-m,p	ND	ug/L	1.00			
Xylenes-o	ND	ug/L	1.00			
cis-1,2-Dichloroethene	3.14	ug/L	1.00			

Surrogate Standard	% Recovery	QC Limits	
S1 - Dibromofluoromethane	94	74	123
S2 - Toluene-d8	109	86	112
S3 - 4-Bromofluorobenzene	93	81	115
S4 - 1,2-Dichloroethane-d4	100	80	120

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

613 621

FORM 1
VOA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

0011-593-4

Lab Name: ETC,INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-593

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 1001011

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 12/04/00

GC Column: ID: 2.00 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
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ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 622

Client Name: Sverdrup/Jacobs Eng.
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID: Memphis Depot
Dunn Field

FID #

Date Arrived: 11/20/00
ETC Order Number: 0011593

ETC Lab ID: 0011593-05
Field ID : RW-05-Y2Q4

Matrix : AQUEOUS
Sample Date : 11/20/00

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
GC/MS Volatile Organics				12/04/00	EM	8260B 5030B
QC Batch	**V1120401**					
Dilution Factor	**1**					
Acetone	ND	ug/L	20.0			
Benzene	ND	ug/L	1 00			
Bromodichloromethane	ND	ug/L	1 00			
Bromoform	ND	ug/L	1 00			
Bromomethane	ND	ug/L	1.00			
2-Butanone (MEK)	76.4	ug/L	20.0			
Carbon Disulfide	ND	ug/L	1.00			
Carbon Tetrachloride	ND	ug/L	1.00			
Chlorobenzene	ND	ug/L	1.00			
Chlorodibromomethane	ND	ug/L	1.00			
Chloroethane	ND	ug/L	1.00			
Chloroform	ND	ug/L	1.00			
[redacted]oromethane	ND	ug/L	1.00			
[redacted]-Dichloroethane	ND	ug/L	1.00			
1,2-Dichloroethane	ND	ug/L	1.00			
1,1-Dichloroethene	ND	ug/L	1.00			
trans-1,2-Dichloroethene	ND	ug/L	1 00			
1,2-Dichloropropane	ND	ug/L	1.00			
cis-1,3-Dichloropropene	ND	ug/L	1.00			
trans-1,3-Dichloropropene	ND	ug/L	1 00			
Ethylbenzene	ND	ug/L	1.00			
2-Hexanone (MBK)	ND	ug/L	5 00			
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5 00			
Methylene Chloride	ND	ug/L	5.00			
Styrene	ND	ug/L	1.00			
1,1,2,2-Tetrachloroethane	ND	ug/L	1.00			
Tetrachloroethene	ND	ug/L	1.00			
Toluene	ND	ug/L	1 00			
1,1,1-Trichloroethane	ND	ug/L	1.00			
1,1,2-Trichloroethane	ND	ug/L	1.00			
Trichloroethene	1.89	ug/L	1 00			
Vinyl Acetate	ND	ug/L	20 0			
Vinyl Chloride	ND	ug/L	1.00			
Xylenes-m,p	ND	ug/L	1.00			
Xylenes-o	ND	ug/L	1.00			
cis-1,2-Dichloroethene	ND	ug/L	1.00			

Surrogate Standard	% Recovery	QC Limits	
S1 - Dibromofluoromethane	98	74	123
S2 - Toluene-d8	100	86	112
S3 - 4-Bromofluorobenzene	99	81	115
S4 - 1,2-Dichloroethane-d4	90	80	120

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

613 623

FORM 1
VOA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

0011-593-5

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-593

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 1301014

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 12/04/00

GC Column: ID: 2.00 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
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ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 624

Client Name: Sverdrup/Jacobs Eng.
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID: Memphis Depot
Dunn Field

FID #

Date Arrived: 11/20/00
ETC Order Number: 0011593

ETC Lab ID: 0011593-06
Field ID : RW-10-Y2Q4

Matrix : AQUEOUS
Sample Date : 11/20/00

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
GC/MS Volatile Organics				12/04/00	EM	8260B 5030B
QC Batch	**V1120401**					
Dilution Factor	**1**					
Acetone	ND	ug/L	20.0			
Benzene	ND	ug/L	1 00			
Bromodichloromethane	ND	ug/L	1 00			
Bromoform	ND	ug/L	1.00			
Bromomethane	ND	ug/L	1.00			
2-Butanone (MEK)	51.2	ug/L	20.0			
Carbon Disulfide	ND	ug/L	1 00			
Carbon Tetrachloride	ND	ug/L	1.00			
Chlorobenzene	ND	ug/L	1.00			
Chlorodibromomethane	ND	ug/L	1.00			
Chloroethane	ND	ug/L	1.00			
Chloroform	ND	ug/L	1.00			
[redacted]romethane	ND	ug/L	1.00			
[redacted]-Dichloroethane	ND	ug/L	1.00			
1,2-Dichloroethane	ND	ug/L	1.00			
1,1-Dichloroethene	ND	ug/L	1.00			
trans-1,2-Dichloroethene	ND	ug/L	1 00			
1,2-Dichloropropane	ND	ug/L	1 00			
cis-1,3-Dichloropropene	ND	ug/L	1.00			
trans-1,3-Dichloropropene	ND	ug/L	1.00			
Ethylbenzene	ND	ug/L	1.00			
2-Hexanone (MBK)	ND	ug/L	5 00			
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.00			
Methylene Chloride	ND	ug/L	5.00			
Styrene	ND	ug/L	1.00			
1,1,2,2-Tetrachloroethane	ND	ug/L	1.00			
Tetrachloroethene	ND	ug/L	1.00			
Toluene	ND	ug/L	1.00			
1,1,1-Trichloroethane	ND	ug/L	1.00			
1,1,2-Trichloroethane	ND	ug/L	1 00			
Trichloroethene	1.61	ug/L	1.00			
Vinyl Acetate	ND	ug/L	20.0			
Vinyl Chloride	ND	ug/L	1.00			
Xylenes-m,p	ND	ug/L	1.00			
Xylenes-o	ND	ug/L	1.00			
cis-1,2-Dichloroethene	ND	ug/L	1.00			

Surrogate Standard	% Recovery	QC Limits	
S1 - Dibromofluoromethane	102	74	123
S2 - Toluene-d8	98	86	112
S3 - 4-Bromofluorobenzene	97	81	115
S4 - 1,2-Dichloroethane-d4	93	80	120

[redacted]

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

FORM 1

613 625 VOA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

0011-593-6

Lab Name: ETC,INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-593

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 1501016

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 12/04/00

GC Column: ID: 2.00 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 626

Client Name: Sverdrup/Jacobs Eng.
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID: Memphis Depot
Dunn Field

FID #

Date Arrived: 11/20/00
ETC Order Number: 0011593

ETC Lab ID: 0011593-07
Field ID : RW-04-Y2Q4

Matrix : AQUEOUS
Sample Date : 11/20/00

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
GC/MS Volatile Organics				12/04/00	EM	8260B 5030B
QC Batch	**V1120401**					
Dilution Factor	**10**					
Acetone	180	ug/L	20.0			
Benzene	ND	ug/L	1.00			
Bromodichloromethane	ND	ug/L	1.00			
Bromoform	ND	ug/L	1.00			
Bromomethane	ND	ug/L	1.00			
2-Butanone (MEK)	2,950E	ug/L	20.0			
Carbon Disulfide	ND	ug/L	1.00			
Carbon Tetrachloride	ND	ug/L	1.00			
Chlorobenzene	ND	ug/L	1.00			
Chlorodibromomethane	ND	ug/L	1.00			
Chloroethane	ND	ug/L	1.00			
Chloroform	ND	ug/L	1.00			
[redacted]romethane	ND	ug/L	1.00			
[redacted]-Dichloroethane	ND	ug/L	1.00			
1,2-Dichloroethane	ND	ug/L	1 00			
1,1-Dichloroethene	ND	ug/L	1 00			
trans-1,2-Dichloroethene	3.08	ug/L	1 00			
1,2-Dichloropropane	ND	ug/L	1.00			
cis-1,3-Dichloropropene	ND	ug/L	1.00			
trans-1,3-Dichloropropene	ND	ug/L	1 00			
Ethylbenzene	ND	ug/L	1.00			
2-Hexanone (MBK)	ND	ug/L	5.00			
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.00			
Methylene Chloride	ND	ug/L	5.00			
Styrene	ND	ug/L	1.00			
1,1,2,2-Tetrachloroethane	14.9	ug/L	1.00			
Tetrachloroethene	ND	ug/L	1.00			
Toluene	ND	ug/L	1.00			
1,1,1-Trichloroethane	ND	ug/L	1.00			
1,1,2-Trichloroethane	ND	ug/L	1.00			
Trichloroethene	204	ug/L	1.00			
Vinyl Acetate	ND	ug/L	20.0			
Vinyl Chloride	ND	ug/L	1.00			
Xylenes-m,p	ND	ug/L	1 00			
Xylenes-o	ND	ug/L	1 00			
cis-1,2-Dichloroethene	17.8	ug/L	1 00			

Surrogate Standard	% Recovery	QC Limits	
S1 - Dibromofluoromethane	105	74	123
S2 - Toluene-d8	94	86	112
S3 - 4-Bromofluorobenzene	97	81	115
S4 - 1,2-Dichloroethane-d4	94	80	120

[redacted]

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

613 627

FORM 1
VOA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

0011-593-7

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-593

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 1601017

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 12/04/00

GC Column: ID: 2.00 (mm) Dilution Factor: 10.0

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

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 623

Client Name: Sverdrup/Jacobs Eng.
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID: Memphis Depot
Dunn Field

FID #

Date Arrived: 11/20/00
ETC Order Number: 0011593

ETC Lab ID: 0011593-07
Field ID : RW-04-Y2Q4-DIL

Matrix : AQUEOUS
Sample Date : 11/20/00

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
GC/MS Volatile Organics				12/05/00	LS	8260B 5030B
QC Batch	**V1120501**					
Dilution Factor	**100**					
Acetone	ND	ug/L	2000			
Benzene	ND	ug/L	100			
Bromodichloromethane	ND	ug/L	100			
Bromoform	ND	ug/L	100			
Bromomethane	ND	ug/L	100			
2-Butanone (MEK)	2,760	ug/L	2000			
Carbon Disulfide	ND	ug/L	100			
Carbon Tetrachloride	ND	ug/L	100			
Chlorobenzene	ND	ug/L	100			
Chlorodibromomethane	ND	ug/L	100			
Chloroethane	ND	ug/L	100			
Chloroform	ND	ug/L	100			
[redacted]oromethane	ND	ug/L	100			
[redacted]Dichloroethane	ND	ug/L	100			
1,2-Dichloroethane	ND	ug/L	100			
1,1-Dichloroethene	ND	ug/L	100			
trans-1,2-Dichloroethene	ND	ug/L	100			
1,2-Dichloropropane	ND	ug/L	100			
cis-1,3-Dichloropropene	ND	ug/L	100			
trans-1,3-Dichloropropene	ND	ug/L	100			
Ethylbenzene	ND	ug/L	100			
2-Hexanone (MBK)	ND	ug/L	500			
4-Methyl-2-pentanone (MIBK)	ND	ug/L	500			
Methylene Chloride	ND	ug/L	500			
Styrene	ND	ug/L	100			
1,1,2,2-Tetrachloroethane	ND	ug/L	100			
Tetrachloroethene	ND	ug/L	100			
Toluene	ND	ug/L	100			
1,1,1-Trichloroethane	ND	ug/L	100			
1,1,2-Trichloroethane	ND	ug/L	100			
Trichloroethene	204	ug/L	100			
Vinyl Acetate	ND	ug/L	2000			
Vinyl Chloride	ND	ug/L	100			
Xylenes-m,p	ND	ug/L	100			
Xylenes-o	ND	ug/L	100			
cis-1,2-Dichloroethene	ND	ug/L	100			

Surrogate Standard	% Recovery	QC Limits	
S1 - Dibromofluoromethane	103	74	123
S2 - Toluene-d8	100	86	112
S3 - 4-Bromofluorobenzene	101	81	115
S4 - 1,2-Dichloroethane-d4	92	80	120

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 629

Client Name: Sverdrup/Jacobs Eng.
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID: Memphis Depot

FID #

Date Arrived: 11/10/00
ETC Order Number: 0011335

ETC Lab ID: 0011335-06
Field ID : RW-1A-Y2Q4

Matrix : AQUEOUS
Sample Date : 11/09/00

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Base/Neutral & Acid				11/18/00		PF	8270C
					11/13/00		3510C
4-Methylphenol (p-cresol)	ND	ug/L	5.00				
Naphthalene	ND	ug/L	2 00				
Nitrobenzene	ND	ug/L	5.00				
2-Nitroaniline	ND	ug/L	5.00				
3-Nitroaniline	ND	ug/L	10 0				
4-Nitroaniline	ND	ug/L	5.00				
2-Nitrophenol	ND	ug/L	5.00				
4-Nitrophenol	ND	ug/L	5.00				
N-Nitrosodiphenylamine	ND	ug/L	5.00				
N-Nitrosodipropylamine	ND	ug/L	5.00				
Pentachlorophenol	ND	ug/L	10.0				
Phenanthrene	ND	ug/L	2.00				
Phenol	ND	ug/L	5 00				
Pyrene	ND	ug/L	2.00				
2,4,5-Trichlorphenol	ND	ug/L	5.00				
2,4,6-Trichlorophenol	ND	ug/L	5.00				

Surrogate Standard	% Recovery	QC Limits	
S1 - Nitrobenzene-d5	67	29	110
S2 - 2-Fluorobiphenyl	66	38	107
S3 - 4-Terphenyl-d14	94	33	122
S4 - Phenol-d6	27	7	58
S5 - 2,4,6-Tribromophenol	92	16	138
S6 - 2-Fluorophenol	40	8	88

CJ

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

FORM 1 613 630 CLIENT SAMPLE NO.

VOA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

0011-593-7'

Lab Name: ETC,INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-593

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 0601009

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 12/05/00

GC Column: ID: 2.00 (mm) Dilution Factor: 100.0

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

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 631

Client Name: Sverdrup/Jacobs Eng.
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID: Memphis Depot
Dunn Field

FID #

Date Arrived: 11/20/00
ETC Order Number: 0011593

ETC Lab ID: 0011593-08
Field ID : RW-03-Y2Q4

Matrix : AQUEOUS
Sample Date : 11/20/00

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Volatile Organics				12/04/00		LS	8260B 5030B
QC Batch	**V1120401**						
Dilution Factor	**1**						
Acetone	ND	ug/L	20.0				
Benzene	ND	ug/L	1.00				
Bromodichloromethane	ND	ug/L	1.00				
Bromoform	ND	ug/L	1.00				
Bromomethane	ND	ug/L	1 00				
2-Butanone (MEK)	ND	ug/L	20.0				
Carbon Disulfide	ND	ug/L	1.00				
Carbon Tetrachloride	16.0	ug/L	1.00				
Chlorobenzene	ND	ug/L	1.00				
Chlorodibromomethane	ND	ug/L	1.00				
Chloroethane	ND	ug/L	1.00				
Chloroform	5.36	ug/L	1 00				
Chloromethane	ND	ug/L	1.00				
1,1-Dichloroethane	ND	ug/L	1.00				
1,2-Dichloroethane	ND	ug/L	1 00				
1,1-Dichloroethene	ND	ug/L	1.00				
trans-1,2-Dichloroethene	7.53	ug/L	1.00				
1,2-Dichloropropane	ND	ug/L	1 00				
cis-1,3-Dichloropropene	ND	ug/L	1.00				
trans-1,3-Dichloropropene	ND	ug/L	1.00				
Ethylbenzene	ND	ug/L	1 00				
2-Hexanone (MBK)	ND	ug/L	5.00				
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.00				
Methylene Chloride	ND	ug/L	5.00				
Styrene	ND	ug/L	1.00				
1,1,2,2-Tetrachloroethane	97.5	ug/L	1.00				
Tetrachloroethene	ND	ug/L	1.00				
Toluene	ND	ug/L	1.00				
1,1,1-Trichloroethane	ND	ug/L	1.00				
1,1,2-Trichloroethane	ND	ug/L	1 00				
Trichloroethene	62.1	ug/L	1.00				
Vinyl Acetate	ND	ug/L	20.0				
Vinyl Chloride	ND	ug/L	1.00				
Xylenes-m,p	ND	ug/L	1 00				
Xylenes-o	ND	ug/L	1.00				
cis-1,2-Dichloroethene	160	ug/L	1.00				

Surrogate Standard	% Recovery	QC Limits	
S1 - Dibromofluoromethane	102	74	123
S2 - Toluene-d8	96	86	112
S3 - 4-Bromofluorobenzene	97	81	115
S4 - 1,2-Dichloroethane-d4	90	80	120

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

613 632

FORM 1
VOA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

0011-593-8

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-593

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 1701018

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 12/04/00

GC Column: ID: 2.00 (mm) Dilution Factor: 5.0

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

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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613 633

FORM 2

WATER VOA-GCMS SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-593

	CLIENT SAMPLE NO.	SMC1 (DCE) #	SMC2 (DFM) #	SMC3 (TOL) #	OTHER (BFB) #	TOT OUT
01	V2120411LCS	92	99	100	98	0
02	V2120411LB	87	96	99	105	0
03	V1120412LCS	88	93	98	83	0
04	V1120411LCS	92	95	104	86	0
05	V1120411LB	90	97	102	93	0
06	0011-593-5	90	98	100	99	0
07	0011-593-1	92	97	103	94	0
08	0011-593-6	93	102	98	97	0
09	0011-593-2	92	95	101	97	0
10	0011-593-7	94	105	94	97	0
11	0011-593-3	92	94	103	94	0
12	0011-593-8	90	102	96	97	0
13	0011-593-4	100	94	109	93	0
14	0011-593-6MS	90	99	96	81# cs	1
15	0011-593-6MS	91	102	98	90	0
16	0011-593-4MS	112	102	131*	120*	2
17	0011-593-4MS	103	94	118*	123*	2
18	V2120511LCS	99	108	97	96	0
19	V2120511LB	91	101	102	100	0
20	0011-593-7	92	103	100	101	0
21						
22						
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		QC LIMITS
SMC1 (DCE)	= 1,2-Dichloroethane-d4	(80-120)
SMC2 (DFM)	= Dibromofluoromethane	(74-123)
SMC3 (TOL)	= Toluene-d8	(86-112)
OTHER(BFB)	= Bromofluorobenzene	(81-115)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

FORM 4 613 634 CLIENT SAMPLE NO.

VOA-GCMS METHOD BLANK SUMMARY

V1120411LB

Lab Name: ETC,INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-593

Lab File ID: 0402005 Lab Prep Batch: V1120401

Date Analyzed: 12/04/00 Time Analyzed: 1755

GC Column: ID: 2 (mm) Heated Purge: (Y/N) Y

Instrument ID: VOC1

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

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	V1120412LCS	V1120401	0202003LCS	1615
02	V1120411LCS	V1120401	0203004LCS	1650
03	0011-593-1	V1120401	0701008	1920
04	0011-593-2	V1120401	0801009	1948
05	0011-593-3	V1120401	0901010	2016
06	0011-593-4	V1120401	1001011	2044
07	0011-593-4MS	V1120401	1902021	0125
08	0011-593-4MS	V1120401	2001022	0153
09				
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COMMENTS:

FORM 1

613 635 VOA-GCMS ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

V1120411LB

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-593

Matrix: (soil/water) WATER Lab Prep Batch: V1120401

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 0402005

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 12/04/00

GC Column: ID: 2.00 (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
67-64-1	Acetone	20.00	U
75-05-8	Acetonitrile	20.00	U
107-02-8	Acrolein	20.00	U
107-13-1	Acrylonitrile	20.00	U
107-05-1	Allyl chloride	1.00	U
71-43-2	Benzene	1.00	U
108-86-1	Bromobenzene	1.00	U
74-97-5	Bromochloromethane	1.00	U
75-27-4	Bromodichloromethane	1.00	U
75-25-2	Bromoform	1.00	U
78-93-3	2-Butanone	20.00	U
74-83-9	Bromomethane	1.00	U
104-51-8	n-Butylbenzene	1.00	U
135-98-8	sec-Butylbenzene	1.00	U
98-06-6	tert-Butylbenzene	1.00	U
75-15-0	Carbon Disulfide	1.00	U
56-23-5	Carbon Tetrachloride	1.00	U
108-90-7	Chlorobenzene	1.00	U
124-48-1	Chlorodibromomethane	1.00	U
75-00-3	Chloroethane	1.00	U
110-75-0	2-Chloroethyl vinyl ether	20.00	U
67-66-3	Chloroform	1.00	U
74-87-3	Chloromethane	1.00	U
126-99-8	Chloroprene	1.00	U
95-49-8	2-Chlorotoluene	1.00	U
106-43-4	4-Chlorotoluene	1.00	U
96-12-8	1,2-Dibromo-3-chloropropane	1.00	U
106-93-4	1,2-Dibromoethane	1.00	U
74-95-3	Dibromomethane	1.00	U
95-50-1	1,2-Dichlorobenzene	1.00	U
541-73-1	1,3-Dichlorobenzene	1.00	U
106-46-7	1,4-Dichlorobenzene	1.00	U
110-57-6	trans-1,4-Dichloro-2-butene	1.00	U

FORM 1
VOA-GCMS ORGANICS ANALYSIS DATA SHEET

613 636

CLIENT SAMPLE NO.

V1120411LB

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-593

Matrix: (soil/water) WATER Lab Prep Batch: V1120401

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 0402005

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 12/04/00

GC Column: ID: 2.00 (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
1868-53-7	Dichlorodifluoromethane	1.00	U
75-34-3	1,1-Dichloroethane	1.00	U
107-06-2	1,2-Dichloroethane	1.00	U
75-35-4	1,1-Dichloroethene	1.00	U
156-59-4	cis-1,2-Dichloroethene	1.00	U
156-60-5	trans-1,2-Dichloroethene	1.00	U
78-87-5	1,2-Dichloropropane	1.00	U
142-28-9	1,3-Dichloropropane	1.00	U
590-20-7	2,2-Dichloropropane	1.00	U
563-58-6	1,1-Dichloropropene	1.00	U
10061-01-5	cis-1,3-Dichloropropene	1.00	U
10061-02-6	trans-1,3-Dichloropropene	1.00	U
108-20-3	Di isopropyl ether	5.00	U
123-91-1	1,4-Dioxane	100.0	U
141-78-6	Ethyl Acetate	5.00	U
100-41-4	Ethylbenzene	1.00	U
97-63-2	Ethyl methacrylate	1.00	U
110-00-9	Furan	1.00	U
87-63-3	Hexachlorobutadiene	1.00	U
110-54-3	Hexane	1.00	U
591-78-6	2-Hexanone	5.00	U
74-88-4	Iodomethane	1.00	U
78-83-1	Isobutyl Alcohol	100.0	U
98-82-8	Isopropylbenzene	1.00	U
99-87-6	4-Isopropyltoluene	1.00	U
126-98-7	Methacrylonitrile	10.00	U
75-09-2	Methylene Chloride	5.00	U
80-62-6	Methyl methacrylate	1.00	U
108-10-1	4-Methyl-2-Pentanone	5.00	U
1634-04-4	Methyl-tertbutyl-Ether	5.00	U
91-20-3	Naphthalene	1.00	U
76-01-7	Pentachloroethane	1.00	U
107-12-0	Propionitrile	10.00	U

FORM 1

613 637 VOA-GCMS ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

V1120411LB

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-593

Matrix: (soil/water) WATER Lab Prep Batch: V1120401

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 0402005

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 12/04/00

GC Column: ID: 2.00 (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
109-60-4	n-Propyl Acetate	1.00	U
103-65-1	n-Propylbenzene	1.00	U
100-42-5	Styrene	1.00	U
630-20-6	1,1,1,2-Tetrachloroethane	1.00	U
79-34-5	1,1,2,2-Tetrachloroethane	1.00	U
127-18-4	Tetrachloroethene	1.00	U
109-99-9	Tetrahydrofuran	1.00	U
87-61-6	1,2,3-Trichlorobenzene	1.00	U
108-88-3	Toluene	1.00	U
71-55-6	1,1,1-Trichloroethane	1.00	U
79-00-5	1,1,2-Trichloroethane	1.00	U
76-13-1	1,1,2-trichloro-1,2,2-triflu	1.00	U
79-01-6	Trichloroethene	1.00	U
75-69-4	Trichlorofluoromethane	1.00	U
96-18-4	1,2,3-Trichloropropane	1.00	U
120-82-1	1,2,4-Trichlorobenzene	1.00	U
95-63-6	1,2,4-Trimethylbenzene	1.00	U
108-67-8	1,3,5-Trimethylbenzene	1.00	U
108-05-4	Vinyl Acetate	20.00	U
75-01-4	Vinyl Chloride	1.00	U
1330-20-7	Xylene-mp	1.00	U
95-47-6	Xylene-o	1.00	U
1476-11-5	cis-1,4-Dichloro-2-butene	1.00	U

FORM 1 613 638

VOA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

V1120411LB

Lab Name: ETC,INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-593

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 0402005

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 12/04/00

GC Column: ID: 2.00 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
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FORM 3

613 639 WATER VOA-GCMS LAB CONTROL SAMPLE

Lab Name: ETC,INC. Lab Prep Batch: V1120401

Lab Code: Case No.: SAS No.: SDG No.: 0011-593

Matrix Spike - Sample No.: V1120411LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.	
Acetone	100.0		117.3	117	59-151	
Acetonitrile	1000		1242	124	57-143	
Acrolein	100.0		198.7	199*	59-134	NT
Acrylonitrile	100.0		113.8	114	60-146	
Allyl chloride	100.0		99.61	100	74-120	
Benzene	100.0		87.34	87	72-124	
Bromobenzene	100.0		105.6	106	77-120	
Bromochloromethane	100.0		102.4	102	74-120	
Bromodichloromethane	100.0		103.7	104	68-119	
Bromoform	100.0		117.8	118	66-136	
2-Butanone	100.0		111.0	111	55-151	
Bromomethane	100.0		95.98	96	40-134	
n-Butylbenzene	100.0		102.0	102	69-129	
sec-Butylbenzene	100.0		85.94	86	72-127	
tert-Butylbenzene	100.0		104.6	105	73-126	
Carbon Disulfide	100.0		96.01	96	60-133	
Carbon Tetrachloride	100.0		97.27	97	64-123	
Chlorobenzene	100.0		88.86	89	77-112	
Chlorodibromomethane	100.0		96.81	97	72-118	
Chloroethane	100.0		110.1	110	64-142	
2-Chloroethyl vinyl eth	100.0		51.71	52	22-165	
Chloroform	100.0		88.71	89	70-115	
Chloromethane	100.0		91.29	91	58-139	
Chloroprene	100.0		93.64	94	73-118	
2-Chlorotoluene	100.0		103.2	103	65-132	
4-Chlorotoluene	100.0		104.4	104	67-127	
1,2-Dibromo-3-chloropro	100.0		120.8	121	56-134	
1,2-Dibromoethane	100.0		117.8	118	74-118	

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER VOA-GCMS LAB CONTROL SAMPLE

613 640

Lab Name: ETC,INC. Lab Prep Batch: V1120401

Lab Code: Case No.: SAS No.: SDG No.: 0011-593

Matrix Spike - Sample No.: V1120411LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.	
Dibromomethane	100.0		100.5	100	75-114	
1,2-Dichlorobenzene	100.0		101.5	102	80-113	
1,3-Dichlorobenzene	100.0		98.06	98	77-119	
1,4-Dichlorobenzene	100.0		102.6	103	78-116	
trans-1,4-Dichloro-2-bu	100.0		109.4	109	62-138	
Dichlorodifluoromethane	100.0		95.96	96	48-145	
1,1-Dichloroethane	100.0		99.04	99	76-118	
1,2-Dichloroethane	100.0		98.13	98	62-124	
1,1-Dichloroethene	100.0		101.6	102	69-121	
cis-1,2-Dichloroethene	100.0		94.87	95	76-114	
trans-1,2-Dichloroethen	100.0		90.59	90	72-121	
1,2-Dichloropropane	100.0		97.69	98	64-133	
1,3-Dichloropropane	100.0		106.6	107	68-128	
2,2-Dichloropropane	100.0		98.75	99	67-132	
1,1-Dichloropropene	100.0		88.79	89	76-117	
cis-1,3-Dichloropropene	100.0		119.7	120	77-120	
trans-1,3-Dichloroprope	100.0		107.8	108	73-124	
Di isopropyl ether	100.0		93.41	93	62-160	
1,4-Dioxane	2000		2705	135*	56-131	NT
Ethyl Acetate	100.0		100.2	100	52-151	
Ethylbenzene	100.0		95.08	95	77-111	
Ethyl methacrylate	200.0		236.1	118	57-140	
Furan	100.0		158.3	158*	52-124	NT
Hexachlorobutadiene	100.0		127.6	128	69-137	
Hexane	100.0		103.9	104	70-130	
2-Hexanone	100.0		127.3	127	53-144	
Iodomethane	100.0		83.03	83	51-153	
Isobutyl Alcohol	2000		2143	107	60-134	

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER VOA-GCMS LAB CONTROL SAMPLE

Lab Name: ETC,INC. Lab Prep Batch: V1120401

Lab Code: Case No.: SAS No.: SDG No.: 0011-593

Matrix Spike - Sample No.: V1120411LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Isopropylbenzene	100.0		99.85	100	74-125
4-Isopropyltoluene	100.0		109.8	110	72-127
Methacrylonitrile	1000		1047	105	70-125
Methylene Chloride	100.0		123.4	123*	76-115
Methyl methacrylate	200.0		209.8	105	57-147
4-Methyl-2-Pentanone	100.0		115.6	116	42-144
Methyl-tertbutyl-Ether	100.0		97.71	98	62-122
Naphthalene	100.0		117.4	117	53-124
Pentachloroethane	100.0		257.8	258*	78-126
Propionitrile	1000		1213	121	58-139
n-Propyl Acetate	100.0		169.6	170	88-170
n-Propylbenzene	100.0		97.47	97	75-125
Styrene	100.0		103.4	103	77-117
1,1,1,2-Tetrachloroetha	100.0		101.1	101	79-113
1,1,2,2-Tetrachloroetha	100.0		92.55	92	67-126
Tetrachloroethene	100.0		75.57	76*	77-115
Tetrahydrofuran	100.0		89.62	90	76-181
1,2,3-Trichlorobenzene	100.0		129.7	130	62-132
Toluene	100.0		106.4	106	77-115
1,1,1-Trichloroethane	100.0		95.18	95	63-122
1,1,2-Trichloroethane	100.0		109.3	109	69-117
1,1,2-trichloro-1,2,2-t	100.0		84.37	84	70-130
Trichloroethene	100.0		95.01	95	75-113
Trichlorofluoromethane	100.0		107.3	107	55-130
1,2,3-Trichloropropane	100.0		110.0	110	62-130
1,2,4-Trichlorobenzene	100.0		124.8	125	68-132
1,2,4-Trimethylbenzene	100.0		106.4	106	69-126
1,3,5-Trimethylbenzene	100.0		104.5	104	69-128

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER VOA-GCMS LAB CONTROL SAMPLE

613 642

Lab Name: ETC,INC. Lab Prep Batch: V1120401

Lab Code: Case No.: SAS No.: SDG No.: 0011-593

Matrix Spike - Sample No.: V1120411LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Vinyl Acetate	100.0		126.3	126	28-146
Vinyl Chloride	100.0		111.4	111	65-134
Xylene-mp	200.0		191.9	96	77-115
Xylene-o	100.0		95.65	96	77-115
cis-1,4-Dichloro-2-bute	100.0		119.9	120	70-130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 6 out of 89 outside limits

COMMENTS: _____

613 643

FORM 3
WATER VOA-GCMS LAB CONTROL SAMPLE

Lab Name: ETC, INC. Lab Prep Batch: V1120401

Lab Code: Case No.: SAS No.: SDG No.: 0011-593

Matrix Spike - Sample No.: V1120412LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
1,4-Dioxane	2000		2070	104	77-115
Methylene Chloride	100.0		94.98	95	76-115
Tetrachloroethene	100.0		58.43	58*	76-115

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 1 out of 3 outside limits

COMMENTS: _____

FORM 3
WATER VOA-GCMS MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: ETC,INC. Lab Prep Batch: V1120401

Lab Code: Case No.: SAS No.: SDG No.: 0011-593

Matrix Spike - Sample No.: 0011-593-4

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
Benzene	100.0	0.000	106.5	106	72-124
Chlorobenzene	100.0	0.000	109.2	109	77-112
1,1-Dichloroethene	100.0	0.000	167.9	168*	69-121
Toluene	100.0	0.000	141.1	141*	77-115
Trichloroethene	100.0	11.26	159.1	148*	75-113

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Benzene	100.0	113.2	113	6	20	72-124
Chlorobenzene	100.0	125.9	126*	14	20	77-112
1,1-Dichloroethene	100.0	173.3	173*	3	20	69-121
Toluene	100.0	144.3	144*	2	20	77-115
Trichloroethene	100.0	156.0	145*	2	20	75-113

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 5 outside limits
Spike Recovery: 7 out of 10 outside limits

COMMENTS: _____

FORM 4
VOA-GCMS METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

V2120411LB

Lab Name: ETC,INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-593

Lab File ID: 0302004 Lab Prep Batch: V2120401

Date Analyzed: 12/04/00 Time Analyzed: 1334

GC Column: ID: 2 (mm) Heated Purge: (Y/N) Y

Instrument ID: VOC2

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

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	V2120411LCS	V2120401	0202003LCS	1224
02	0011-593-5	V2120401	1301014	1840
03	0011-593-6	V2120401	1501016	1941
04	0011-593-7	V2120401	1601017	2011
05	0011-593-8	V2120401	1701018	2041
06	0011-593-6MS	V2120401	2001021	2212
07	0011-593-6MS	V2120401	2101022	2242
08				
09				
10				
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COMMENTS:

FORM 1 613 646 CLIENT SAMPLE NO.

VOA-GCMS ORGANICS ANALYSIS DATA SHEET

V2120411LB

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-593

Matrix: (soil/water) WATER Lab Prep Batch: V2120401

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 0302004

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 12/04/00

GC Column: ID: 2.00 (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
67-64-1	Acetone	20.00	U
75-05-8	Acetonitrile	20.00	U
107-02-8	Acrolein	20.00	U
107-13-1	Acrylonitrile	20.00	U
107-05-1	Allyl chloride	1.00	U
71-43-2	Benzene	1.00	U
108-86-1	Bromobenzene	1.00	U
74-97-5	Bromochloromethane	1.00	U
75-27-4	Bromodichloromethane	1.00	U
75-25-2	Bromoform	1.00	U
78-93-3	2-Butanone	20.00	U
74-83-9	Bromomethane	1.00	U
104-51-8	n-Butylbenzene	1.00	U
135-98-8	sec-Butylbenzene	1.00	U
98-06-6	tert-Butylbenzene	1.00	U
75-15-0	Carbon Disulfide	1.00	U
56-23-5	Carbon Tetrachloride	1.00	U
108-90-7	Chlorobenzene	1.00	U
124-48-1	Chlorodibromomethane	1.00	U
75-00-3	Chloroethane	1.00	U
110-75-0	2-Chloroethyl vinyl ether	20.00	U
67-66-3	Chloroform	1.00	U
74-87-3	Chloromethane	1.00	U
126-99-8	Chloroprene	1.00	U
95-49-8	2-Chlorotoluene	1.00	U
106-43-4	4-Chlorotoluene	1.00	U
96-12-8	1,2-Dibromo-3-chloropropane	1.00	U
106-93-4	1,2-Dibromoethane	1.00	U
74-95-3	Dibromomethane	1.00	U
95-50-1	1,2-Dichlorobenzene	1.00	U
541-73-1	1,3-Dichlorobenzene	1.00	U
106-46-7	1,4-Dichlorobenzene	1.00	U
110-57-6	trans-1,4-Dichloro-2-butene	1.00	U

FORM 1
VOA-GCMS ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.
V2120411LB

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-593

Matrix: (soil/water) WATER Lab Prep Batch: V2120401

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 0302004

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 12/04/00

GC Column: ID: 2.00 (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
1868-53-7	Dichlorodifluoromethane	1.00	U
75-34-3	1,1-Dichloroethane	1.00	U
107-06-2	1,2-Dichloroethane	1.00	U
75-35-4	1,1-Dichloroethene	1.00	U
156-59-4	cis-1,2-Dichloroethene	1.00	U
156-60-5	trans-1,2-Dichloroethene	1.00	U
78-87-5	1,2-Dichloropropane	1.00	U
142-28-9	1,3-Dichloropropane	1.00	U
590-20-7	2,2-Dichloropropane	1.00	U
563-58-6	1,1-Dichloropropene	1.00	U
10061-01-5	cis-1,3-Dichloropropene	1.00	U
10061-02-6	trans-1,3-Dichloropropene	1.00	U
108-20-3	Di isopropyl ether	5.00	U
123-91-1	1,4-Dioxane	100.0	U
141-78-6	Ethyl Acetate	5.00	U
100-41-4	Ethylbenzene	1.00	U
97-63-2	Ethyl methacrylate	1.00	U
110-00-9	Furan	1.00	U
87-63-3	Hexachlorobutadiene	1.00	U
110-54-3	Hexane	1.00	U
591-78-6	2-Hexanone	5.00	U
74-88-4	Iodomethane	1.00	U
78-83-1	Isobutyl Alcohol	100.0	U
98-82-8	Isopropylbenzene	1.00	U
99-87-6	4-Isopropyltoluene	1.00	U
126-98-7	Methacrylonitrile	10.00	U
75-09-2	Methylene Chloride	1.32	J
80-62-6	Methyl methacrylate	1.00	U
108-10-1	4-Methyl-2-Pentanone	5.00	U
1634-04-4	Methyl-tertbutyl-Ether	5.00	U
91-20-3	Naphthalene	1.00	U
76-01-7	Pentachloroethane	1.00	U
107-12-0	Propionitrile	10.00	U

FORM 1 613 643 CLIENT SAMPLE NO.

VOA-GCMS ORGANICS ANALYSIS DATA SHEET

V2120411LB

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-593

Matrix: (soil/water) WATER Lab Prep Batch: V2120401

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 0302004

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 12/04/00

GC Column: ID: 2.00 (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
109-60-4	n-Propyl Acetate	1.00	U
103-65-1	n-Propylbenzene	1.00	U
100-42-5	Styrene	1.00	U
630-20-6	1,1,1,2-Tetrachloroethane	1.00	U
79-34-5	1,1,2,2-Tetrachloroethane	1.00	U
127-18-4	Tetrachloroethene	1.00	U
109-99-9	Tetrahydrofuran	1.00	U
87-61-6	1,2,3-Trichlorobenzene	1.00	U
108-88-3	Toluene	1.00	U
71-55-6	1,1,1-Trichloroethane	1.00	U
79-00-5	1,1,2-Trichloroethane	1.00	U
76-13-1	1,1,2-trichloro-1,2,2-triflu	1.00	U
79-01-6	Trichloroethene	1.00	U
75-69-4	Trichlorofluoromethane	1.00	U
96-18-4	1,2,3-Trichloropropane	1.00	U
120-82-1	1,2,4-Trichlorobenzene	1.00	U
95-63-6	1,2,4-Trimethylbenzene	1.00	U
108-67-8	1,3,5-Trimethylbenzene	1.00	U
108-05-4	Vinyl Acetate	20.00	U
75-01-4	Vinyl Chloride	1.00	U
1330-20-7	Xylene-mp	1.00	U
95-47-6	Xylene-o	1.00	U
1476-11-5	cis-1,4-Dichloro-2-butene	1.00	U

FORM 1
VOA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

613 649

CLIENT SAMPLE NO.

V2120411LB

Lab Name: ETC,INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-593

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 0302004

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 12/04/00

GC Column: ID: 2.00 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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FORM 3
WATER VOA-GCMS LAB CONTROL SAMPLE

613 650

Lab Name: ETC, INC. Lab Prep Batch: V2120401

Lab Code: Case No.: SAS No.: SDG No.: 0011-593

Matrix Spike - Sample No.: V2120411LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Acetone	100.0		74.63	75	59-151
Acetonitrile	1000		714.9	71	57-143
Acrolein	100.0		82.51	82	59-134
Acrylonitrile	100.0		72.22	72	60-146
Allyl chloride	100.0		75.23	75	74-120
Benzene	100.0		85.30	85	72-124
Bromobenzene	100.0		85.65	86	77-120
Bromochloromethane	100.0		86.92	87	74-120
Bromodichloromethane	100.0		84.78	85	68-119
Bromoform	100.0		86.66	87	66-136
2-Butanone	100.0		83.65	84	55-151
Bromomethane	100.0		81.23	81	40-134
n-Butylbenzene	100.0		88.81	89	69-129
sec-Butylbenzene	100.0		83.27	83	72-127
tert-Butylbenzene	100.0		82.71	83	73-126
Carbon Disulfide	100.0		83.34	83	60-133
Carbon Tetrachloride	100.0		85.96	86	64-123
Chlorobenzene	100.0		78.70	79	77-112
Chlorodibromomethane	100.0		81.62	82	72-118
Chloroethane	100.0		80.78	81	64-142
2-Chloroethyl vinyl eth	100.0		58.91	59	22-165
Chloroform	100.0		84.58	84	70-115
Chloromethane	100.0		72.86	73	58-139
Chloroprene	100.0		82.42	82	73-118
2-Chlorotoluene	100.0		74.82	75	65-132
4-Chlorotoluene	100.0		84.82	85	67-127
1,2-Dibromo-3-chloropro	100.0		85.32	85	56-134
1,2-Dibromoethane	100.0		85.13	85	74-118

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER VOA-GCMS LAB CONTROL SAMPLE

Lab Name: ETC,INC. Lab Prep Batch: V2120401

Lab Code: Case No.: SAS No.: SDG No.: 0011-593

Matrix Spike - Sample No.: V2120411LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Dibromomethane	100.0		83.85	84	75-114
1,2-Dichlorobenzene	100.0		87.99	88	80-113
1,3-Dichlorobenzene	100.0		87.84	88	77-119
1,4-Dichlorobenzene	100.0		81.82	82	78-116
trans-1,4-Dichloro-2-bu	100.0		81.88	82	62-138
Dichlorodifluoromethane	100.0		70.16	70	48-145
1,1-Dichloroethane	100.0		80.11	80	76-118
1,2-Dichloroethane	100.0		77.98	78	62-124
1,1-Dichloroethene	100.0		81.26	81	69-121
cis-1,2-Dichloroethene	100.0		90.20	90	76-114
trans-1,2-Dichloroethen	100.0		84.65	85	72-121
1,2-Dichloropropane	100.0		81.84	82	64-133
1,3-Dichloropropane	100.0		81.23	81	68-128
2,2-Dichloropropane	100.0		88.69	89	67-132
1,1-Dichloropropene	100.0		84.61	85	76-117
cis-1,3-Dichloropropene	100.0		84.26	84	77-120
trans-1,3-Dichloroprope	100.0		82.81	83	73-124
Di isopropyl ether	100.0		79.45	79	62-160
1,4-Dioxane	2000		1762	88	56-131
Ethyl Acetate	100.0		87.85	88	52-151
Ethylbenzene	100.0		84.81	85	77-111
Ethyl methacrylate	200.0		166.0	83	57-140
Furan	100.0		118.9	119	52-124
Hexachlorobutadiene	100.0		94.34	94	69-137
Hexane	100.0		95.69	96	70-130
2-Hexanone	100.0		81.12	81	53-144
Iodomethane	100.0		88.76	89	51-153
Isobutyl Alcohol	2000		1667	83	60-134

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER VOA-GCMS LAB CONTROL SAMPLE

613 652

Lab Name: ETC,INC. Lab Prep Batch: V2120401

Lab Code: Case No.: SAS No.: SDG No.: 0011-593

Matrix Spike - Sample No.: V2120411LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.	
Isopropylbenzene	100.0		83.23	83	74-125	
4-Isopropyltoluene	100.0		102.2	102	72-127	
Methacrylonitrile	1000		829.2	83	70-125	
Methylene Chloride	100.0		79.13	79	76-115	
Methyl methacrylate	200.0		165.0	82	57-147	
4-Methyl-2-Pentanone	100.0		80.34	80	42-144	
Methyl-tertbutyl-Ether	100.0		76.79	77	62-122	
Naphthalene	100.0		86.70	87	53-124	
Pentachloroethane	100.0		106.7	107	78-126	
Propionitrile	1000		731.6	73	58-139	
n-Propyl Acetate	100.0		118.8	119	88-170	
n-Propylbenzene	100.0		86.15	86	75-125	
Styrene	100.0		83.80	84	77-117	
1,1,1,2-Tetrachloroetha	100.0		80.33	80	79-113	
1,1,2,2-Tetrachloroetha	100.0		84.94	85	67-126	
Tetrachloroethene	100.0		79.24	79	77-115	
Tetrahydrofuran	100.0		71.24	71*	76-181	NT
1,2,3-Trichlorobenzene	100.0		92.09	92	62-132	
Toluene	100.0		82.02	82	77-115	
1,1,1-Trichloroethane	100.0		87.67	88	63-122	
1,1,2-Trichloroethane	100.0		83.13	83	69-117	
1,1,2-trichloro-1,2,2-t	100.0		82.38	82	70-130	
Trichloroethene	100.0		83.15	83	75-113	
Trichlorofluoromethane	100.0		80.72	81	55-130	
1,2,3-Trichloropropane	100.0		81.90	82	62-130	
1,2,4-Trichlorobenzene	100.0		95.10	95	68-132	
1,2,4-Trimethylbenzene	100.0		83.98	84	69-126	
1,3,5-Trimethylbenzene	100.0		84.02	84	69-128	

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

613 653

FORM 3
WATER VOA-GCMS LAB CONTROL SAMPLE

Lab Name: ETC,INC. Lab Prep Batch: V2120401

Lab Code: Case No.: SAS No.: SDG No.: 0011-593

Matrix Spike - Sample No.: V2120411LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Vinyl Acetate	100.0		79.99	80	28-146
Vinyl Chloride	100.0		81.57	82	65-134
Xylene-mp	200.0		163.8	82	77-115
Xylene-o	100.0		81.17	81	77-115
cis-1,4-Dichloro-2-bute	100.0		85.90	86	70-130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 1 out of 89 outside limits

COMMENTS: _____

FORM 3
WATER VOA-GCMS MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: ETC,INC. Lab Prep Batch: V2120401

Lab Code: Case No.: SAS No.: SDG No.: 0011-593

Matrix Spike - Sample No.: 0011-593-6

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
Benzene	100.0	0.000	84.82	85	72-124
Chlorobenzene	100.0	0.000	78.69	79	77-112
1,1-Dichloroethene	100.0	0.000	81.04	81	69-121
Toluene	100.0	0.000	89.31	89	77-115
Trichloroethene	100.0	1.61	90.18	88	75-113

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Benzene	100.0	82.52	82	4	20	72-124
Chlorobenzene	100.0	83.98	84	6	20	77-112
1,1-Dichloroethene	100.0	78.77	79	2	20	69-121
Toluene	100.0	84.58	84	6	20	77-115
Trichloroethene	100.0	86.50	85	3	20	75-113

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

COMMENTS: _____

613 655

FORM 4
VOA-GCMS METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

V2120511LB

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-593

Lab File ID: 0302006A Lab Prep Batch: V2120501

Date Analyzed: 12/05/00 Time Analyzed: 1344

GC Column: ID: 2 (mm) Heated Purge: (Y/N) Y

Instrument ID: VOC2

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

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	V2120511LCS	V2120501	0202002LCS	1113
02	0011-593-7	V2120501	0601009	1515
03	0011-705-1T	V2120501	1201015	1834
04	0011-705-1TM	V2120501	2001023R	2242
05	0011-705-1TM	V2120501	2101024R	2312
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COMMENTS:

FORM 1 613 656 CLIENT SAMPLE NO.

VOA-GCMS ORGANICS ANALYSIS DATA SHEET

V2120511LB

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-593

Matrix: (soil/water) WATER Lab Prep Batch: V2120501

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 0302006A

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 12/05/00

GC Column: ID: 2.00 (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
67-64-1	Acetone	20.00	U
75-05-8	Acetonitrile	20.00	U
107-02-8	Acrolein	20.00	U
107-13-1	Acrylonitrile	20.00	U
107-05-1	Allyl chloride	1.00	U
71-43-2	Benzene	1.00	U
108-86-1	Bromobenzene	1.00	U
74-97-5	Bromochloromethane	1.00	U
75-27-4	Bromodichloromethane	1.00	U
75-25-2	Bromoform	1.00	U
78-93-3	2-Butanone	20.00	U
74-83-9	Bromomethane	1.00	U
104-51-8	n-Butylbenzene	1.00	U
135-98-8	sec-Butylbenzene	1.00	U
98-06-6	tert-Butylbenzene	1.00	U
75-15-0	Carbon Disulfide	1.00	U
56-23-5	Carbon Tetrachloride	1.00	U
108-90-7	Chlorobenzene	1.00	U
124-48-1	Chlorodibromomethane	1.00	U
75-00-3	Chloroethane	1.00	U
110-75-0	2-Chloroethyl vinyl ether	20.00	U
67-66-3	Chloroform	1.00	U
74-87-3	Chloromethane	1.00	U
126-99-8	Chloroprene	1.00	U
95-49-8	2-Chlorotoluene	1.00	U
106-43-4	4-Chlorotoluene	1.00	U
96-12-8	1,2-Dibromo-3-chloropropane	1.00	U
106-93-4	1,2-Dibromoethane	1.00	U
74-95-3	Dibromomethane	1.00	U
95-50-1	1,2-Dichlorobenzene	1.00	U
541-73-1	1,3-Dichlorobenzene	1.00	U
106-46-7	1,4-Dichlorobenzene	1.00	U
110-57-6	trans-1,4-Dichloro-2-butene	1.00	U

FORM 1
VOA-GCMS ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

V2120511LB

613 657

Lab Name: ETC,INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-593

Matrix: (soil/water) WATER Lab Prep Batch: V2120501

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 0302006A

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 12/05/00

GC Column: ID: 2.00 (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
1868-53-7	Dichlorodifluoromethane	1.00	U
75-34-3	1,1-Dichloroethane	1.00	U
107-06-2	1,2-Dichloroethane	1.00	U
75-35-4	1,1-Dichloroethene	1.00	U
156-59-4	cis-1,2-Dichloroethene	1.00	U
156-60-5	trans-1,2-Dichloroethene	1.00	U
78-87-5	1,2-Dichloropropane	1.00	U
142-28-9	1,3-Dichloropropane	1.00	U
590-20-7	2,2-Dichloropropane	1.00	U
563-58-6	1,1-Dichloropropene	1.00	U
10061-01-5	cis-1,3-Dichloropropene	1.00	U
10061-02-6	trans-1,3-Dichloropropene	1.00	U
108-20-3	Di isopropyl ether	5.00	U
123-91-1	1,4-Dioxane	100.0	U
141-78-6	Ethyl Acetate	5.00	U
100-41-4	Ethylbenzene	1.00	U
97-63-2	Ethyl methacrylate	1.00	U
110-00-9	Furan	1.00	U
87-63-3	Hexachlorobutadiene	1.00	U
110-54-3	Hexane	1.00	U
591-78-6	2-Hexanone	5.00	U
74-88-4	Iodomethane	1.00	U
78-83-1	Isobutyl Alcohol	100.0	U
98-82-8	Isopropylbenzene	1.00	U
99-87-6	4-Isopropyltoluene	1.00	U
126-98-7	Methacrylonitrile	10.00	U
75-09-2	Methylene Chloride	5.00	U
80-62-6	Methyl methacrylate	1.00	U
108-10-1	4-Methyl-2-Pentanone	5.00	U
1634-04-4	Methyl-tertbutyl-Ether	5.00	U
91-20-3	Naphthalene	1.00	U
76-01-7	Pentachloroethane	1.00	U
107-12-0	Propionitrile	10.00	U

FORM 1 613 658 CLIENT SAMPLE NO.
VOA-GCMS ORGANICS ANALYSIS DATA SHEET

V2120511LB

Lab Name: ETC,INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-593

Matrix: (soil/water) WATER Lab Prep Batch: V2120501

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 0302006A

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 12/05/00

GC Column: ID: 2.00 (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
109-60-4	n-Propyl Acetate	1.00	U
103-65-1	n-Propylbenzene	1.00	U
100-42-5	Styrene	1.00	U
630-20-6	1,1,1,2-Tetrachloroethane	1.00	U
79-34-5	1,1,2,2-Tetrachloroethane	1.00	U
127-18-4	Tetrachloroethene	1.00	U
109-99-9	Tetrahydrofuran	1.00	U
87-61-6	1,2,3-Trichlorobenzene	1.00	U
108-88-3	Toluene	1.00	U
71-55-6	1,1,1-Trichloroethane	1.00	U
79-00-5	1,1,2-Trichloroethane	1.00	U
76-13-1	1,1,2-trichloro-1,2,2-triflu	1.00	U
79-01-6	Trichloroethene	1.00	U
75-69-4	Trichlorofluoromethane	1.00	U
96-18-4	1,2,3-Trichloropropane	1.00	U
120-82-1	1,2,4-Trichlorobenzene	1.00	U
95-63-6	1,2,4-Trimethylbenzene	1.00	U
108-67-8	1,3,5-Trimethylbenzene	1.00	U
108-05-4	Vinyl Acetate	20.00	U
75-01-4	Vinyl Chloride	1.00	U
1330-20-7	Xylene-mp	1.00	U
95-47-6	Xylene-o	1.00	U
1476-11-5	cis-1,4-Dichloro-2-butene	1.00	U

613 659

FORM 1
VOA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

V2120511LB

Lab Name: ETC,INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-593

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 0302006A

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 12/05/00

GC Column: ID: 2.00 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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FORM 3
WATER VOA-GCMS LAB CONTROL SAMPLE

613 660

Lab Name: ETC,INC. Lab Prep Batch: V2120501

Lab Code: Case No.: SAS No.: SDG No.: 0011-593

Matrix Spike - Sample No.: V2120511LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Acetone	100.0		107.4	107	59-151
Acetonitrile	1000		747.1	75	57-143
Acrolein	100.0		78.46	78	59-134
Acrylonitrile	100.0		77.68	78	60-146
Allyl chloride	100.0		76.69	77	74-120
Benzene	100.0		83.17	83	72-124
Bromobenzene	100.0		88.73	89	77-120
Bromochloromethane	100.0		85.57	86	74-120
Bromodichloromethane	100.0		80.94	81	68-119
Bromoform	100.0		91.46	91	66-136
2-Butanone	100.0		95.70	96	55-151
Bromomethane	100.0		78.12	78	40-134
n-Butylbenzene	100.0		90.34	90	69-129
sec-Butylbenzene	100.0		85.53	86	72-127
tert-Butylbenzene	100.0		86.02	86	73-126
Carbon Disulfide	100.0		78.74	79	60-133
Carbon Tetrachloride	100.0		88.14	88	64-123
Chlorobenzene	100.0		81.24	81	77-112
Chlorodibromomethane	100.0		83.95	84	72-118
Chloroethane	100.0		78.86	79	64-142
2-Chloroethyl vinyl eth	100.0		80.11	80	22-165
Chloroform	100.0		81.05	81	70-115
Chloromethane	100.0		70.21	70	58-139
Chloroprene	100.0		77.82	78	73-118
2-Chlorotoluene	100.0		72.95	73	65-132
4-Chlorotoluene	100.0		89.50	90	67-127
1,2-Dibromo-3-chloropro	100.0		93.10	93	56-134
1,2-Dibromoethane	100.0		87.26	87	74-118

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

613 661

FORM 3
WATER VOA-GCMS LAB CONTROL SAMPLE

Lab Name: ETC,INC. Lab Prep Batch: V2120501

Lab Code: Case No.: SAS No.: SDG No.: 0011-593

Matrix Spike - Sample No.: V2120511LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Dibromomethane	100.0		84.66	85	75-114
1,2-Dichlorobenzene	100.0		92.45	92	80-113
1,3-Dichlorobenzene	100.0		98.38	98	77-119
1,4-Dichlorobenzene	100.0		98.48	98	78-116
trans-1,4-Dichloro-2-bu	100.0		87.08	87	62-138
Dichlorodifluoromethane	100.0		66.86	67	48-145
1,1-Dichloroethane	100.0		79.96	80	76-118
1,2-Dichloroethane	100.0		83.39	83	62-124
1,1-Dichloroethene	100.0		80.18	80	69-121
cis-1,2-Dichloroethene	100.0		83.14	83	76-114
trans-1,2-Dichloroethen	100.0		82.03	82	72-121
1,2-Dichloropropane	100.0		80.43	80	64-133
1,3-Dichloropropane	100.0		81.93	82	68-128
2,2-Dichloropropane	100.0		88.91	89	67-132
1,1-Dichloropropene	100.0		85.62	86	76-117
cis-1,3-Dichloropropene	100.0		85.56	86	77-120
trans-1,3-Dichloroprope	100.0		83.04	83	73-124
Di isopropyl ether	100.0		76.46	76	62-160
1,4-Dioxane	2000		1724	86	56-131
Ethyl Acetate	100.0		78.95	79	52-151
Ethylbenzene	100.0		83.20	83	77-111
Ethyl methacrylate	200.0		166.7	83	57-140
Furan	100.0		115.4	115	52-124
Hexachlorobutadiene	100.0		99.18	99	69-137
Hexane	100.0		92.90	93	70-130
2-Hexanone	100.0		91.47	91	53-144
Iodomethane	100.0		92.55	92	51-153
Isobutyl Alcohol	2000		1758	88	60-134

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER VOA-GCMS LAB CONTROL SAMPLE

613 662

Lab Name: ETC,INC. Lab Prep Batch: V2120501

Lab Code: Case No.: SAS No.: SDG No.: 0011-593

Matrix Spike - Sample No.: V2120511LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.	
Isopropylbenzene	100.0		83.52	84	74-125	
4-Isopropyltoluene	100.0		105.3	105	72-127	
Methacrylonitrile	1000		758.6	76	70-125	
Methylene Chloride	100.0		79.43	79	76-115	
Methyl methacrylate	200.0		165.9	83	57-147	
4-Methyl-2-Pentanone	100.0		81.18	81	42-144	
Methyl-tertbutyl-Ether	100.0		79.71	80	62-122	
Naphthalene	100.0		96.01	96	53-124	
Pentachloroethane	100.0		110.8	111	78-126	
Propionitrile	1000		775.3	78	58-139	
n-Propyl Acetate	100.0		118.3	118	88-170	
n-Propylbenzene	100.0		84.27	84	75-125	
Styrene	100.0		83.15	83	77-117	
1,1,1,2-Tetrachloroetha	100.0		83.69	84	79-113	
1,1,2,2-Tetrachloroetha	100.0		86.72	87	67-126	
Tetrachloroethene	100.0		81.69	82	77-115	
Tetrahydrofuran	100.0		73.54	74*	76-181	NT
1,2,3-Trichlorobenzene	100.0		98.56	98	62-132	
Toluene	100.0		82.67	83	77-115	
1,1,1-Trichloroethane	100.0		84.37	84	63-122	
1,1,2-Trichloroethane	100.0		84.13	84	69-117	
1,1,2-trichloro-1,2,2-t	100.0		84.29	84	70-130	
Trichloroethene	100.0		80.42	80	75-113	
Trichlorofluoromethane	100.0		83.26	83	55-130	
1,2,3-Trichloropropane	100.0		87.11	87	62-130	
1,2,4-Trichlorobenzene	100.0		102.4	102	68-132	
1,2,4-Trimethylbenzene	100.0		86.49	86	69-126	
1,3,5-Trimethylbenzene	100.0		86.49	86	69-128	

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER VOA-GCMS LAB CONTROL SAMPLE

613 663

Lab Name: ETC,INC. Lab Prep Batch: V2120501

Lab Code: Case No.: SAS No.: SDG No.: 0011-593

Matrix Spike - Sample No.: V2120511LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Vinyl Acetate	100.0		81.76	82	28-146
Vinyl Chloride	100.0		81.51	82	65-134
Xylene-mp	200.0		163.6	82	77-115
Xylene-o	100.0		83.08	83	77-115
cis-1,4-Dichloro-2-bute	100.0		90.21	90	70-130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 1 out of 89 outside limits

COMMENTS: _____

FORM 3
WATER VOA-GCMS MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

613 664

Lab Name: ETC,INC. Lab Prep Batch: V2120501

Lab Code: Case No.: SAS No.: SDG No.: 0011-593

Matrix Spike - Sample No.: 0011-705-1T

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
Benzene	100.0	0.000	84.13	84	72-124
Chlorobenzene	100.0	0.000	90.86	91	77-112
1,1-Dichloroethene	100.0	0.000	68.04	68*	69-121
Toluene	100.0	0.000	95.96	96	77-115
Trichloroethene	100.0	0.000	93.30	93	75-113

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Benzene	100.0	86.50	86	2	20	72-124
Chlorobenzene	100.0	92.65	93	2	20	77-112
1,1-Dichloroethene	100.0	67.01	67*	1	20	69-121
Toluene	100.0	98.09	98	2	20	77-115
Trichloroethene	100.0	94.33	94	1	20	75-113

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 5 outside limits
Spike Recovery: 2 out of 10 outside limits

COMMENTS: _____

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 665

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**
Dunn Field

FID #

Date Arrived **11/20/00**
ETC Order Number **0011593**

ETC Lab ID **0011593-01**
Field ID : **RW-09-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/20/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Base/Neutral & Acid				11/28/00		PF	8270C
					11/27/00		3510C
QC Batch	**P06015**						
Dilution Factor	**1**						
Acenaphthene	ND	ug/L	2.00				
Acenaphthylene	ND	ug/L	2.00				
Anthracene	ND	ug/L	2.00				
Benzo(a)anthracene	ND	ug/L	2.00				
Benzo(b)fluoranthene	ND	ug/L	2 00				
Benzo(k)fluoranthene	ND	ug/L	2.00				
Benzo(g,h,i)perylene	ND	ug/L	2.00				
Benzo(a)pyrene	ND	ug/L	2.00				
Benzoic Acid	ND	ug/L	50 0				
Benzyl Alcohol	ND	ug/L	10.0				
Bis(2-chloroethoxy)methane	ND	ug/L	5.00				
Bis(2-chloroethyl)ether	ND	ug/L	5.00				
Bis(2-chloroisopropyl)ether	ND	ug/L	5 00				
Bis(2-ethylhexyl)phthalate	ND	ug/L	10.0				
4-Bromophenyl phenyl ether	ND	ug/L	5.00				
Butyl benzyl phthalate	ND	ug/L	5.00				
4-Chloroaniline	ND	ug/L	5 00				
2-Chloronaphthalene	ND	ug/L	5 00				
4-Chloro-3-methylphenol	ND	ug/L	5 00				
2-Chlorophenol	ND	ug/L	5.00				
4-Chlorophenyl phenyl ether	ND	ug/L	5.00				
Chrysene	ND	ug/L	2.00				
Dibenzo(a,h)anthracene	ND	ug/L	2.00				
Dibenzofuran	ND	ug/L	5.00				
Di-n-butyl phthalate	ND	ug/L	5.00				
3,3'-Dichlorobenzidine	ND	ug/L	10.0				
2,4-Dichlorophenol	ND	ug/L	5.00				
Diethyl phthalate	ND	ug/L	5.00				
2,4-Dimethylphenol	ND	ug/L	5.00				
Dimethyl phthalate	ND	ug/L	5.00				
4,6-Dinitro-2-methylphenol	ND	ug/L	10.0				
2,4-Dinitrophenol	ND	ug/L	50.0				
2,4-Dinitrotoluene	ND	ug/L	5.00				
2,6-Dinitrotoluene	ND	ug/L	5.00				
Di-n-octyl phthalate	ND	ug/L	5.00				
Fluoranthene	ND	ug/L	2.00				
Fluorene	ND	ug/L	2.00				
Hexachlorobenzene	ND	ug/L	5.00				
Hexachlorobutadiene	ND	ug/L	5 00				
Hexachlorocyclopentadiene	ND	ug/L	5 00				
Hexachloroethane	ND	ug/L	5.00				
Indeno(1,2,3-cd)pyrene	ND	ug/L	2.00				
Isophorone	ND	ug/L	5.00				
2-Methylnaphthalene	ND	ug/L	2.00				
2-Methylphenol (o-cresol)	ND	ug/L	5.00				

CS
Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 666

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**
Dunn Field

FID #

Date Arrived **11/20/00**
ETC Order Number **0011593**

ETC Lab ID **0011593-01**
Field ID : **RW-09-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/20/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Base/Neutral & Acid				11/28/00	11/27/00	PF	8270C 3510C
4-Methylphenol (p-cresol)	ND	ug/L	5.00				
Naphthalene	ND	ug/L	2.00				
Nitrobenzene	ND	ug/L	5.00				
2-Nitroaniline	ND	ug/L	5.00				
3-Nitroaniline	ND	ug/L	10 0				
4-Nitroaniline	ND	ug/L	5 00				
2-Nitrophenol	ND	ug/L	5 00				
4-Nitrophenol	ND	ug/L	5 00				
N-Nitrosodiphenylamine	ND	ug/L	5.00				
N-Nitrosodipropylamine	ND	ug/L	5.00				
Pentachlorophenol	ND	ug/L	10.0				
Phenanthrene	ND	ug/L	2.00				
[redacted]nol	ND	ug/L	5.00				
[redacted]ene	ND	ug/L	2.00				
2,4,5-Trichlorphenol	ND	ug/L	5.00				
2,4,6-Trichlorophenol	ND	ug/L	5.00				

Surrogate Standard	% Recovery	QC Limits	
S1 - Nitrobenzene-d5	61	29	110
S2 - 2-Fluorobiphenyl	59	38	107
S3 - 4-Terphenyl-d14	62	33	122
S4 - Phenol-d6	53	7	58
S5 - 2,4,6-Tribromophenol	174 Q	16	138
S6 - 2-Fluorophenol	96 Q	8	88

CJ
Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

FORM 1

BNA-GCMS ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

613 667

CLIENT SAMPLE NO.

0011-593-1

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-593

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 1301013

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/28/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 663

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**
Dunn Field
FID #

Date Arrived **11/20/00**
ETC Order Number **0011593**

ETC Lab ID **0011593-02**
Field ID : **RW-08-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/20/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Base/Neutral & Acid				11/28/00	11/27/00	PF	8270C 3510C
QC Batch	**P06015**						
Dilution Factor	**1**						
Acenaphthene	ND	ug/L	2.00				
Acenaphthylene	ND	ug/L	2.00				
Anthracene	ND	ug/L	2.00				
Benzo(a)anthracene	ND	ug/L	2.00				
Benzo(b)fluoranthene	ND	ug/L	2.00				
Benzo(k)fluoranthene	ND	ug/L	2.00				
Benzo(g,h,i)perylene	ND	ug/L	2.00				
Benzo(a)pyrene	ND	ug/L	2.00				
Benzoic Acid	ND	ug/L	50.0				
Benzyl Alcohol	ND	ug/L	10.0				
[redacted](2-chloroethoxy)methane	ND	ug/L	5.00				
[redacted](2-chloroethyl)ether	ND	ug/L	5.00				
Bis(2-chloroisopropyl)ether	ND	ug/L	5.00				
Bis(2-ethylhexyl)phthalate	ND	ug/L	10.0				
4-Bromophenyl phenyl ether	ND	ug/L	5.00				
Butyl benzyl phthalate	ND	ug/L	5.00				
4-Chloroaniline	ND	ug/L	5.00				
2-Chloronaphthalene	ND	ug/L	5 00				
4-Chloro-3-methylphenol	ND	ug/L	5.00				
2-Chlorophenol	ND	ug/L	5 00				
4-Chlorophenyl phenyl ether	ND	ug/L	5.00				
Chrysene	ND	ug/L	2.00				
Dibenzo(a,h)anthracene	ND	ug/L	2 00				
Dibenzofuran	ND	ug/L	5 00				
Di-n-butyl phthalate	ND	ug/L	5.00				
3,3'-Dichlorobenzidine	ND	ug/L	10.0				
2,4-Dichlorophenol	ND	ug/L	5.00				
Diethyl phthalate	ND	ug/L	5 00				
2,4-Dimethylphenol	ND	ug/L	5 00				
Dimethyl phthalate	ND	ug/L	5 00				
4,6-Dinitro-2-methylphenol	ND	ug/L	10.0				
2,4-Dinitrophenol	ND	ug/L	50.0				
2,4-Dinitrotoluene	ND	ug/L	5.00				
2,6-Dinitrotoluene	ND	ug/L	5.00				
Di-n-octyl phthalate	ND	ug/L	5.00				
Fluoranthene	ND	ug/L	2.00				
Fluorene	ND	ug/L	2 00				
Hexachlorobenzene	ND	ug/L	5 00				
Hexachlorobutadiene	ND	ug/L	5 00				
Hexachlorocyclopentadiene	ND	ug/L	5 00				
Hexachloroethane	ND	ug/L	5.00				
[redacted]eno(1,2,3-cd)pyrene	ND	ug/L	2.00				
[redacted]phorone	ND	ug/L	5.00				
2-Methylnaphthalene	ND	ug/L	2.00				
2-Methylphenol (o-cresol)	ND	ug/L	5.00				

CJ

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 669

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**
Dunn Field

FID #

Date Arrived **11/20/00**
ETC Order Number **0011593**

ETC Lab ID **0011593-02**
Field ID : **RW-08-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/20/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Base/Neutral & Acid				11/28/00		PF	8270C
					11/27/00		3510C
4-Methylphenol (p-cresol)	ND	ug/L	5.00				
Naphthalene	ND	ug/L	2.00				
Nitrobenzene	ND	ug/L	5.00				
2-Nitroaniline	ND	ug/L	5.00				
3-Nitroaniline	ND	ug/L	10.0				
4-Nitroaniline	ND	ug/L	5.00				
2-Nitrophenol	ND	ug/L	5.00				
4-Nitrophenol	ND	ug/L	5.00				
N-Nitrosodiphenylamine	ND	ug/L	5.00				
N-Nitrosodipropylamine	ND	ug/L	5.00				
Pentachlorophenol	ND	ug/L	10 0				
Phenanthrene	ND	ug/L	2 00				
Phenol	ND	ug/L	5.00				
Pyrene	ND	ug/L	2.00				
2,4,5-Trichlorphenol	ND	ug/L	5.00				
2,4,6-Trichlorophenol	ND	ug/L	5 00				

Surrogate Standard	% Recovery	QC Limits	
S1 - Nitrobenzene-d5	64	29	110
S2 - 2-Fluorobiphenyl	63	38	107
S3 - 4-Terphenyl-d14	63	33	122
S4 - Phenol-d6	27	7	58
S5 - 2,4,6-Tribromophenol	85	16	138
S6 - 2-Fluorophenol	44	8	88

( )
Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

FORM 1 613 670 CLIENT SAMPLE NO.

BNA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

0011-593-2

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-593

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 990.0 (g/mL) ML Lab File ID: 1401014

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/28/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
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FORM I BNA-GCMS-TIC

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 671

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**
Dunn Field

FID #

Date Arrived **11/20/00**
ETC Order Number **0011593**

ETC Lab ID **0011593-03**
Field ID : **RW-07-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/20/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Base/Neutral & Acid				11/28/00		PF	8270C
					11/27/00		3510C
QC Batch	**P06015**						
Dilution Factor	**1**						
Acenaphthene	ND	ug/L	2.00				
Acenaphthylene	ND	ug/L	2.00				
Anthracene	ND	ug/L	2.00				
Benzo(a)anthracene	ND	ug/L	2.00				
Benzo(b)fluoranthene	ND	ug/L	2 00				
Benzo(k)fluoranthene	ND	ug/L	2.00				
Benzo(g,h,i)perylene	ND	ug/L	2.00				
Benzo(a)pyrene	ND	ug/L	2.00				
Benzoic Acid	ND	ug/L	50.0				
Benzyl Alcohol	ND	ug/L	10.0				
Bis(2-chloroethoxy)methane	ND	ug/L	5.00				
Bis(2-chloroethyl)ether	ND	ug/L	5 00				
Bis(2-chloroisopropyl)ether	ND	ug/L	5.00				
Bis(2-ethylhexyl)phthalate	ND	ug/L	10.0				
4-Bromophenyl phenyl ether	ND	ug/L	5 00				
Butyl benzyl phthalate	ND	ug/L	5 00				
4-Chloroaniline	ND	ug/L	5.00				
2-Chloronaphthalene	ND	ug/L	5.00				
4-Chloro-3-methylphenol	ND	ug/L	5.00				
2-Chlorophenol	ND	ug/L	5.00				
4-Chlorophenyl phenyl ether	ND	ug/L	5.00				
Chrysene	ND	ug/L	2 00				
Dibenzo(a,h)anthracene	ND	ug/L	2.00				
Dibenzofuran	ND	ug/L	5.00				
Di-n-butyl phthalate	ND	ug/L	5.00				
3,3'-Dichlorobenzidine	ND	ug/L	10.0				
2,4-Dichlorophenol	ND	ug/L	5.00				
Diethyl phthalate	ND	ug/L	5.00				
2,4-Dimethylphenol	ND	ug/L	5.00				
Dimethyl phthalate	ND	ug/L	5 00				
4,6-Dinitro-2-methylphenol	ND	ug/L	10.0				
2,4-Dinitrophenol	ND	ug/L	50.0				
2,4-Dinitrotoluene	ND	ug/L	5.00				
2,6-Dinitrotoluene	ND	ug/L	5.00				
Di-n-octyl phthalate	ND	ug/L	5.00				
Fluoranthene	ND	ug/L	2.00				
Fluorene	ND	ug/L	2.00				
Hexachlorobenzene	ND	ug/L	5.00				
Hexachlorobutadiene	ND	ug/L	5 00				
Hexachlorocyclopentadiene	ND	ug/L	5 00				
Hexachloroethane	ND	ug/L	5 00				
Indeno(1,2,3-cd)pyrene	ND	ug/L	2.00				
Isophorone	ND	ug/L	5.00				
2-Methylnaphthalene	ND	ug/L	2.00				
2-Methylphenol (o-cresol)	ND	ug/L	5 00				

Data Validator CS

ND - Not Detected

Q - Recovery Outside QC Limits

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 672

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**
Dunn Field

FID #

Date Arrived **11/20/00**
ETC Order Number **0011593**

ETC Lab ID **0011593-03**
Field ID : **RW-07-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/20/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
GC/MS Base/Neutral & Acid				11/28/00	PF 11/27/00	8270C 3510C
4-Methylphenol (p-cresol)	ND	ug/L	5.00			
Naphthalene	ND	ug/L	2.00			
Nitrobenzene	ND	ug/L	5.00			
2-Nitroaniline	ND	ug/L	5 00			
3-Nitroaniline	ND	ug/L	10.0			
4-Nitroaniline	ND	ug/L	5 00			
2-Nitrophenol	ND	ug/L	5.00			
4-Nitrophenol	ND	ug/L	5 00			
N-Nitrosodiphenylamine	ND	ug/L	5 00			
N-Nitrosodipropylamine	ND	ug/L	5.00			
Pentachlorophenol	ND	ug/L	10.0			
Phenanthrene	ND	ug/L	2.00			
[redacted]enol	ND	ug/L	5.00			
[redacted]ene	ND	ug/L	2.00			
2,4,5-Trichlorphenol	ND	ug/L	5.00			
2,4,6-Trichlorophenol	ND	ug/L	5.00			

Surrogate Standard	% Recovery	QC Limits	
S1 - Nitrobenzene-d5	76	29	110
S2 - 2-Fluorobiphenyl	73	38	107
S3 - 4-Terphenyl-d14	72	33	122
S4 - Phenol-d6	33	7	58
S5 - 2,4,6-Tribromophenol	95	16	138
S6 - 2-Fluorophenol	54	8	88

CS

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

FORM 1

BNA-GCMS ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

613 673

CLIENT SAMPLE NO.

0011-593-3

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-593

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 970.0 (g/mL) ML Lab File ID: 1501015

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/28/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
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ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 674

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**
Dunn Field

FID #

Date Arrived **11/20/00**
ETC Order Number **0011593**

ETC Lab ID **0011593-04**
Field ID : **RW-06-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/20/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Base/Neutral & Acid				11/28/00	11/27/00	PF	8270C 3510C
QC Batch	**P06015**						
Dilution Factor	**1**						
Acenaphthene	ND	ug/L	2.00				
Acenaphthylene	ND	ug/L	2.00				
Anthracene	ND	ug/L	2.00				
Benzo(a)anthracene	ND	ug/L	2.00				
Benzo(b)fluoranthene	ND	ug/L	2.00				
Benzo(k)fluoranthene	ND	ug/L	2.00				
Benzo(g,h,i)perylene	ND	ug/L	2 00				
Benzo(a)pyrene	ND	ug/L	2.00				
Benzoic Acid	ND	ug/L	50.0				
Benzyl Alcohol	ND	ug/L	10.0				
[redacted](2-chloroethoxy)methane	ND	ug/L	5 00				
[redacted](2-chloroethyl)ether	ND	ug/L	5 00				
Bis(2-chloroisopropyl)ether	ND	ug/L	5 00				
Bis(2-ethylhexyl)phthalate	ND	ug/L	10.0				
4-Bromophenyl phenyl ether	ND	ug/L	5.00				
Butyl benzyl phthalate	ND	ug/L	5.00				
4-Chloroaniline	ND	ug/L	5.00				
2-Chloronaphthalene	ND	ug/L	5.00				
4-Chloro-3-methylphenol	ND	ug/L	5.00				
2-Chlorophenol	ND	ug/L	5.00				
4-Chlorophenyl phenyl ether	ND	ug/L	5.00				
Chrysene	ND	ug/L	2.00				
Dibenzo(a,h)anthracene	ND	ug/L	2.00				
Dibenzofuran	ND	ug/L	5.00				
Di-n-butyl phthalate	ND	ug/L	5 00				
3,3'-Dichlorobenzidine	ND	ug/L	10 0				
2,4-Dichlorophenol	ND	ug/L	5.00				
Diethyl phthalate	ND	ug/L	5.00				
2,4-Dimethylphenol	ND	ug/L	5.00				
Dimethyl phthalate	ND	ug/L	5.00				
4,6-Dinitro-2-methylphenol	ND	ug/L	10.0				
2,4-Dinitrophenol	ND	ug/L	50.0				
2,4-Dinitrotoluene	ND	ug/L	5 00				
2,6-Dinitrotoluene	ND	ug/L	5 00				
Di-n-octyl phthalate	ND	ug/L	5 00				
Fluoranthene	ND	ug/L	2 00				
Fluorene	ND	ug/L	2.00				
Hexachlorobenzene	ND	ug/L	5 00				
Hexachlorobutadiene	ND	ug/L	5 00				
Hexachlorocyclopentadiene	ND	ug/L	5.00				
Hexachloroethane	ND	ug/L	5.00				
[redacted]eno(1,2,3-cd)pyrene	ND	ug/L	2.00				
[redacted]phorone	ND	ug/L	5.00				
2-Methylnaphthalene	ND	ug/L	2.00				
2-Methylphenol (o-cresol)	ND	ug/L	5.00				

CS
Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 · 675

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**
Dunn Field

FID #

Date Arrived **11/20/00**
ETC Order Number **0011593**

ETC Lab ID **0011593-04**
Field ID : **RW-06-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/20/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Base/Neutral & Acid				11/28/00		PF	8270C
					11/27/00		3510C
4-Methylphenol (p-cresol)	ND	ug/L	5.00				
Naphthalene	ND	ug/L	2.00				
Nitrobenzene	ND	ug/L	5 00				
2-Nitroaniline	ND	ug/L	5.00				
3-Nitroaniline	ND	ug/L	10.0				
4-Nitroaniline	ND	ug/L	5.00				
2-Nitrophenol	ND	ug/L	5.00				
4-Nitrophenol	ND	ug/L	5.00				
N-Nitrosodiphenylamine	ND	ug/L	5.00				
N-Nitrosodipropylamine	ND	ug/L	5.00				
Pentachlorophenol	ND	ug/L	10.0				
Phenanthrene	ND	ug/L	2.00				
Phenol	ND	ug/L	5 00				
Pyrene	ND	ug/L	2.00				
2,4,5-Trichlorphenol	ND	ug/L	5.00				
2,4,6-Trichlorophenol	ND	ug/L	5 00				

Surrogate Standard	% Recovery	QC Limits	
S1 - Nitrobenzene-d5	65	29	110
S2 - 2-Fluorobiphenyl	67	38	107
S3 - 4-Terphenyl-d14	63	33	122
S4 - Phenol-d6	26	7	58
S5 - 2,4,6-Tribromophenol	84	16	138
S6 - 2-Fluorophenol	39	8	88

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

FORM 1 613 676 CLIENT SAMPLE NO.

BNA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

0011-593-4

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-593

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 960.0 (g/mL) ML Lab File ID: 1601016

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/28/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	123-42-2	2-PENTANONE, 4-HYDROXY-4-MET	3.69	7.74	NJ
2.					
3.					
4.					
5.					
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7.					
8.					
9.					
10.					
11.					
12.					
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ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 677

Client Name: **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID: **Memphis Depot**
Dunn Field

FID #

Date Arrived: **11/20/00**
ETC Order Number: **0011593**

ETC Lab ID: **0011593-05**
Field ID : **RW-05-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/20/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Base/Neutral & Acid				11/28/00		PF	8270C
					11/27/00		3510C
QC Batch	**P06015**						
Dilution Factor	**1**						
Acenaphthene	ND	ug/L	2.00				
Acenaphthylene	ND	ug/L	2.00				
Anthracene	ND	ug/L	2.00				
Benzo(a)anthracene	ND	ug/L	2.00				
Benzo(b)fluoranthene	ND	ug/L	2.00				
Benzo(k)fluoranthene	ND	ug/L	2.00				
Benzo(g,h,i)perylene	ND	ug/L	2.00				
Benzo(a)pyrene	ND	ug/L	2.00				
Benzoic Acid	ND	ug/L	50 0				
Benzyl Alcohol	ND	ug/L	10 0				
Bis(2-chloroethoxy)methane	ND	ug/L	5.00				
Bis(2-chloroethyl)ether	ND	ug/L	5.00				
Bis(2-chloroisopropyl)ether	ND	ug/L	5.00				
Bis(2-ethylhexyl)phthalate	ND	ug/L	10.0				
4-Bromophenyl phenyl ether	ND	ug/L	5.00				
Butyl benzyl phthalate	ND	ug/L	5 00				
4-Chloroaniline	ND	ug/L	5 00				
2-Chloronaphthalene	ND	ug/L	5.00				
4-Chloro-3-methylphenol	ND	ug/L	5.00				
2-Chlorophenol	ND	ug/L	5.00				
4-Chlorophenyl phenyl ether	ND	ug/L	5.00				
Chrysene	ND	ug/L	2.00				
Dibenzo(a,h)anthracene	ND	ug/L	2.00				
Dibenzofuran	ND	ug/L	5.00				
Di-n-butyl phthalate	ND	ug/L	5.00				
3,3'-Dichlorobenzidine	ND	ug/L	10 0				
2,4-Dichlorophenol	ND	ug/L	5.00				
Diethyl phthalate	ND	ug/L	5.00				
2,4-Dimethylphenol	ND	ug/L	5 00				
Dimethyl phthalate	ND	ug/L	5.00				
4,6-Dinitro-2-methylphenol	ND	ug/L	10.0				
2,4-Dinitrophenol	ND	ug/L	50 0				
2,4-Dinitrotoluene	ND	ug/L	5.00				
2,6-Dinitrotoluene	ND	ug/L	5.00				
Di-n-octyl phthalate	ND	ug/L	5.00				
Fluoranthene	ND	ug/L	2 00				
Fluorene	ND	ug/L	2.00				
Hexachlorobenzene	ND	ug/L	5.00				
Hexachlorobutadiene	ND	ug/L	5.00				
Hexachlorocyclopentadiene	ND	ug/L	5.00				
Hexachloroethane	ND	ug/L	5 00				
Indeno(1,2,3-cd)pyrene	ND	ug/L	2 00				
Isophorone	ND	ug/L	5.00				
2-Methylnaphthalene	ND	ug/L	2.00				
2-Methylphenol (o-cresol)	ND	ug/L	5.00				

CS
Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 673

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**
Dunn Field

FID #

Date Arrived **11/20/00**
ETC Order Number **0011593**

ETC Lab ID **0011593-05**
Field ID : **RW-05-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/20/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Base/Neutral & Acid				11/28/00	11/27/00	PF	8270C 3510C
4-Methylphenol (p-cresol)	ND	ug/L	5.00				
Naphthalene	ND	ug/L	2.00				
Nitrobenzene	ND	ug/L	5.00				
2-Nitroaniline	ND	ug/L	5 00				
3-Nitroaniline	ND	ug/L	10 0				
4-Nitroaniline	ND	ug/L	5 00				
2-Nitrophenol	ND	ug/L	5.00				
4-Nitrophenol	ND	ug/L	5.00				
N-Nitrosodiphenylamine	ND	ug/L	5 00				
N-Nitrosodipropylamine	ND	ug/L	5.00				
Pentachlorophenol	ND	ug/L	10 0				
Phenanthrene	ND	ug/L	2.00				
[redacted]nol	ND	ug/L	5 00				
[redacted]ene	ND	ug/L	2 00				
2,4,5-Trichlorphenol	ND	ug/L	5.00				
2,4,6-Trichlorophenol	ND	ug/L	5 00				

Surrogate Standard	% Recovery	QC Limits	
S1 - Nitrobenzene-d5	74	29	110
S2 - 2-Fluorobiphenyl	76	38	107
S3 - 4-Terphenyl-d14	79	33	122
S4 - Phenol-d6	30	7	58
S5 - 2,4,6-Tribromophenol	103	16	138
S6 - 2-Fluorophenol	47	8	88

CS

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

FORM 1

BNA-GCMS ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

613 679

CLIENT SAMPLE NO.

0011-593-5

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-593

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 940.0 (g/mL) ML Lab File ID: 1701017

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/28/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

Number TICs found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	108-94-1	CYCLOHEXANONE	4.12	5.36	NJ
2.	~~541-02-6~~	~~CYCLOPENTASILOXANE, DECAMETH~~ COLUMN BLEED	~~5.51~~	~~4.27~~	~~NJ~~
3.					
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FORM I BNA-GCMS-TIC

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 680

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**
Dunn Field
FID #

Date Arrived **11/20/00**
ETC Order Number **0011593**

ETC Lab ID **0011593-06**
Field ID : **RW-10-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/20/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Base/Neutral & Acid				11/28/00	11/27/00	PF	8270C 3510C
QC Batch	**P06015**						
Dilution Factor	**1**						
Acenaphthene	ND	ug/L	2.00				
Acenaphthylene	ND	ug/L	2.00				
Anthracene	ND	ug/L	2.00				
Benzo(a)anthracene	ND	ug/L	2.00				
Benzo(b)fluoranthene	ND	ug/L	2.00				
Benzo(k)fluoranthene	ND	ug/L	2.00				
Benzo(g,h,i)perylene	ND	ug/L	2 00				
Benzo(a)pyrene	ND	ug/L	2.00				
Benzoic Acid	ND	ug/L	50.0				
Benzyl Alcohol	ND	ug/L	10 0				
[redacted](2-chloroethoxy)methane	ND	ug/L	5.00				
[redacted]2-chloroethyl)ether	ND	ug/L	5.00				
Bis(2-chloroisopropyl)ether	ND	ug/L	5.00				
Bis(2-ethylhexyl)phthalate	ND	ug/L	10.0				
4-Bromophenyl phenyl ether	ND	ug/L	5 00				
Butyl benzyl phthalate	ND	ug/L	5.00				
4-Chloroaniline	ND	ug/L	5.00				
2-Chloronaphthalene	ND	ug/L	5.00				
4-Chloro-3-methylphenol	ND	ug/L	5.00				
2-Chlorophenol	ND	ug/L	5.00				
4-Chlorophenyl phenyl ether	ND	ug/L	5.00				
Chrysene	ND	ug/L	2.00				
Dibenzo(a,h)anthracene	ND	ug/L	2 00				
Dibenzofuran	ND	ug/L	5.00				
Di-n-butyl phthalate	ND	ug/L	5.00				
3,3'-Dichlorobenzidine	ND	ug/L	10.0				
2,4-Dichlorophenol	ND	ug/L	5.00				
Diethyl phthalate	ND	ug/L	5 00				
2,4-Dimethylphenol	ND	ug/L	5.00				
Dimethyl phthalate	ND	ug/L	5.00				
4,6-Dinitro-2-methylphenol	ND	ug/L	10.0				
2,4-Dinitrophenol	ND	ug/L	50.0				
2,4-Dinitrotoluene	ND	ug/L	5.00				
2,6-Dinitrotoluene	ND	ug/L	5 00				
Di-n-octyl phthalate	ND	ug/L	5.00				
Fluoranthene	ND	ug/L	2.00				
Fluorene	ND	ug/L	2.00				
Hexachlorobenzene	ND	ug/L	5.00				
Hexachlorobutadiene	ND	ug/L	5.00				
Hexachlorocyclopentadiene	ND	ug/L	5.00				
Hexachloroethane	ND	ug/L	5 00				
[redacted]no(1,2,3-cd)pyrene	ND	ug/L	2.00				
[redacted]phorone	ND	ug/L	5.00				
2-Methylnaphthalene	ND	ug/L	2.00				
2-Methylphenol (o-cresol)	ND	ug/L	5.00				

CS
Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 681

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**
Dunn Field

FID #

Date Arrived **11/20/00**
ETC Order Number **0011593**

ETC Lab ID **0011593-06**
Field ID : **RW-10-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/20/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Base/Neutral & Acid				11/28/00	11/27/00	PF	8270C 3510C
4-Methylphenol (p-cresol)	ND	ug/L	5.00				
Naphthalene	ND	ug/L	2 00				
Nitrobenzene	ND	ug/L	5.00				
2-Nitroaniline	ND	ug/L	5.00				
3-Nitroaniline	ND	ug/L	10.0				
4-Nitroaniline	ND	ug/L	5.00				
2-Nitrophenol	ND	ug/L	5.00				
4-Nitrophenol	ND	ug/L	5.00				
N-Nitrosodiphenylamine	ND	ug/L	5.00				
N-Nitrosodipropylamine	ND	ug/L	5.00				
Pentachlorophenol	ND	ug/L	10.0				
Phenanthrene	ND	ug/L	2.00				
Phenol	ND	ug/L	5.00				
Pyrene	ND	ug/L	2 00				
2,4,5-Trichlorphenol	ND	ug/L	5 00				
2,4,6-Trichlorophenol	ND	ug/L	5.00				

Surrogate Standard	% Recovery	QC Limits	
S1 - Nitrobenzene-d5	80	29	110
S2 - 2-Fluorobiphenyl	79	38	107
S3 - 4-Terphenyl-d14	81	33	122
S4 - Phenol-d6	32	7	58
S5 - 2,4,6-Tribromophenol	105	16	138
S6 - 2-Fluorophenol	51	8	88

C)
Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

FORM 1 613 682 CLIENT SAMPLE NO.

BNA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

0011-593-6

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-593

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 970.0 (g/mL) ML Lab File ID: 1801018

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/28/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	108-94-1	CYCLOHEXANONE	4.12	4.56	NJ
2.					
3.					
4.					
5.					
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ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 683

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**
Dunn Field

FID #

Date Arrived **11/20/00**
ETC Order Number **0011593**

ETC Lab ID **0011593-07**
Field ID : **RW-04-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/20/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Base/Neutral & Acid				11/28/00		PF	8270C
					11/27/00		3510C
QC Batch	**P06015**						
Dilution Factor	**1**						
Acenaphthene	ND	ug/L	2.00				
Acenaphthylene	ND	ug/L	2 00				
Anthracene	ND	ug/L	2.00				
Benzo(a)anthracene	ND	ug/L	2.00				
Benzo(b)fluoranthene	ND	ug/L	2.00				
Benzo(k)fluoranthene	ND	ug/L	2.00				
Benzo(g,h,i)perylene	ND	ug/L	2.00				
Benzo(a)pyrene	ND	ug/L	2.00				
Benzoic Acid	ND	ug/L	50.0				
Benzyl Alcohol	ND	ug/L	10 0				
Bis(2-chloroethoxy)methane	ND	ug/L	5.00				
Bis(2-chloroethyl)ether	ND	ug/L	5.00				
Bis(2-chloroisopropyl)ether	ND	ug/L	5.00				
Bis(2-ethylhexyl)phthalate	ND	ug/L	10.0				
4-Bromophenyl phenyl ether	ND	ug/L	5.00				
Butyl benzyl phthalate	ND	ug/L	5 00				
4-Chloroaniline	ND	ug/L	5 00				
2-Chloronaphthalene	ND	ug/L	5.00				
4-Chloro-3-methylphenol	ND	ug/L	5.00				
2-Chlorophenol	ND	ug/L	5.00				
4-Chlorophenyl phenyl ether	ND	ug/L	5.00				
Chrysene	ND	ug/L	2.00				
Dibenzo(a,h)anthracene	ND	ug/L	2.00				
Dibenzofuran	ND	ug/L	5.00				
Di-n-butyl phthalate	ND	ug/L	5.00				
3,3'-Dichlorobenzidine	ND	ug/L	10.0				
2,4-Dichlorophenol	ND	ug/L	5.00				
Diethyl phthalate	ND	ug/L	5.00				
2,4-Dimethylphenol	ND	ug/L	5.00				
Dimethyl phthalate	ND	ug/L	5.00				
4,6-Dinitro-2-methylphenol	ND	ug/L	10.0				
2,4-Dinitrophenol	ND	ug/L	50 0				
2,4-Dinitrotoluene	ND	ug/L	5.00				
2,6-Dinitrotoluene	ND	ug/L	5.00				
Di-n-octyl phthalate	ND	ug/L	5 00				
Fluoranthene	ND	ug/L	2 00				
Fluorene	ND	ug/L	2.00				
Hexachlorobenzene	ND	ug/L	5.00				
Hexachlorobutadiene	ND	ug/L	5.00				
Hexachlorocyclopentadiene	ND	ug/L	5.00				
Hexachloroethane	ND	ug/L	5.00				
Indeno(1,2,3-cd)pyrene	ND	ug/L	2.00				
Isophorone	ND	ug/L	5.00				
2-Methylnaphthalene	ND	ug/L	2.00				
2-Methylphenol (o-cresol)	ND	ug/L	5.00				

C)
Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

ENVIRONMENTAL TESTING & CONSULTING, INC.
2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 684

Client Name: **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID: **Memphis Depot**
Dunn Field
FID #

Date Arrived: **11/20/00**
ETC Order Number: **0011593**

ETC Lab ID: **0011593-07**
Field ID : **RW-04-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/20/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Base/Neutral & Acid				11/28/00	11/27/00	PF	8270C 3510C
Naphthalene	ND	ug/L	2.00				
Nitrobenzene	ND	ug/L	5.00				
2-Nitroaniline	ND	ug/L	5.00				
3-Nitroaniline	ND	ug/L	10.0				
4-Nitroaniline	ND	ug/L	5.00				
2-Nitrophenol	ND	ug/L	5.00				
4-Nitrophenol	ND	ug/L	5.00				
N-Nitrosodiphenylamine	ND	ug/L	5.00				
N-Nitrosodipropylamine	ND	ug/L	5.00				
Pentachlorophenol	ND	ug/L	10.0				
Phenanthrene	ND	ug/L	2.00				
Phenol	ND	ug/L	5.00				
[redacted]rene	ND	ug/L	2.00				
[redacted],5-Trichlorphenol	ND	ug/L	5.00				
2,4,6-Trichlorophenol	ND	ug/L	5.00				

Surrogate Standard	% Recovery	QC Limits	
S1 - Nitrobenzene-d5	76	29	110
S2 - 2-Fluorobiphenyl	75	38	107
S3 - 4-Terphenyl-d14	72	33	122
S4 - Phenol-d6	31	7	58
S5 - 2,4,6-Tribromophenol	102	16	138
S6 - 2-Fluorophenol	49	8	88

CS

Data Validator

ND - Not Detected Q - Recovery Outside QC Limits

613 685

FORM 1
BNA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

0011-593-7

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-593

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 960.0 (g/mL) ML Lab File ID: 1901019

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/28/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
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ENVIRONMENTAL TESTING & CONSULTING, INC.
2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**
Dunn Field
FID #

Date Arrived **11/20/00**
ETC Order Number **0011593**

ETC Lab ID **0011593-08**
Field ID : **RW-03-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/20/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Base/Neutral & Acid				11/28/00	11/27/00	PF	8270C 3510C
QC Batch	**P06015**						
Dilution Factor	**1**						
Acenaphthene	ND	ug/L	2.00				
Acenaphthylene	ND	ug/L	2.00				
Anthracene	ND	ug/L	2.00				
Benzo(a)anthracene	ND	ug/L	2.00				
Benzo(b)fluoranthene	ND	ug/L	2.00				
Benzo(k)fluoranthene	ND	ug/L	2.00				
Benzo(g,h,i)perylene	ND	ug/L	2.00				
Benzo(a)pyrene	ND	ug/L	2.00				
Benzoic Acid	ND	ug/L	50.0				
Benzyl Alcohol	ND	ug/L	10 0				
[redacted](2-chloroethoxy)methane	ND	ug/L	5.00				
[redacted](2-chloroethyl)ether	ND	ug/L	5.00				
Bis(2-chloroisopropyl)ether	ND	ug/L	5 00				
Bis(2-ethylhexyl)phthalate	ND	ug/L	10.0				
4-Bromophenyl phenyl ether	ND	ug/L	5.00				
Butyl benzyl phthalate	ND	ug/L	5.00				
4-Chloroaniline	ND	ug/L	5.00				
2-Chloronaphthalene	ND	ug/L	5.00				
4-Chloro-3-methylphenol	ND	ug/L	5.00				
2-Chlorophenol	ND	ug/L	5.00				
4-Chlorophenyl phenyl ether	ND	ug/L	5.00				
Chrysene	ND	ug/L	2 00				
Dibenzo(a,h)anthracene	ND	ug/L	2 00				
Dibenzofuran	ND	ug/L	5.00				
Di-n-butyl phthalate	ND	ug/L	5.00				
3,3'-Dichlorobenzidine	ND	ug/L	10.0				
2,4-Dichlorophenol	ND	ug/L	5 00				
Diethyl phthalate	ND	ug/L	5.00				
2,4-Dimethylphenol	ND	ug/L	5.00				
Dimethyl phthalate	ND	ug/L	5.00				
4,6-Dinitro-2-methylphenol	ND	ug/L	10.0				
2,4-Dinitrophenol	ND	ug/L	50 0				
2,4-Dinitrotoluene	ND	ug/L	5 00				
2,6-Dinitrotoluene	ND	ug/L	5 00				
Di-n-octyl phthalate	ND	ug/L	5 00				
Fluoranthene	ND	ug/L	2.00				
Fluorene	ND	ug/L	2.00				
Hexachlorobenzene	ND	ug/L	5.00				
Hexachlorobutadiene	ND	ug/L	5 00				
Hexachlorocyclopentadiene	ND	ug/L	5 00				
Hexachloroethane	ND	ug/L	5.00				
[redacted]eno(1,2,3-cd)pyrene	ND	ug/L	2.00				
[redacted]phorone	ND	ug/L	5.00				
2-Methylnaphthalene	ND	ug/L	2.00				
2-Methylphenol (o-cresol)	ND	ug/L	5.00				

CS
Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 687

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**
Dunn Field

FID #

Date Arrived **11/20/00**
ETC Order Number **0011593**

ETC Lab ID **0011593-08**
Field ID : **RW-03-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/20/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Base/Neutral & Acid				11/28/00		PF	8270C
					11/27/00		3510C
4-Methylphenol (p-cresol)	ND	ug/L	5 00				
Naphthalene	ND	ug/L	2.00				
Nitrobenzene	ND	ug/L	5.00				
2-Nitroaniline	ND	ug/L	5.00				
3-Nitroaniline	ND	ug/L	10 0				
4-Nitroaniline	ND	ug/L	5.00				
2-Nitrophenol	ND	ug/L	5.00				
4-Nitrophenol	ND	ug/L	5.00				
N-Nitrosodiphenylamine	ND	ug/L	5.00				
N-Nitrosodipropylamine	ND	ug/L	5.00				
Pentachlorophenol	ND	ug/L	10.0				
Phenanthrene	ND	ug/L	2 00				
Phenol	ND	ug/L	5.00				
Pyrene	ND	ug/L	2.00				
2,4,5-Trichlorphenol	ND	ug/L	5 00				
2,4,6-Trichlorophenol	ND	ug/L	5.00				

Surrogate Standard	% Recovery	QC Limits	
S1 - Nitrobenzene-d5	70	29	110
S2 - 2-Fluorobiphenyl	66	38	107
S3 - 4-Terphenyl-d14	72	33	122
S4 - Phenol-d6	31	7	58
S5 - 2,4,6-Tribromophenol	87	16	138
S6 - 2-Fluorophenol	50	8	88

C S

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

FORM 1 613 688 CLIENT SAMPLE NO.

BNA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

0011-593-8

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-593

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 960.0 (g/mL) ML Lab File ID: 2001020

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/28/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	29006-06-2	BUTYRIC ACID, 4-BUTOXY-, MET	13.68	7.38	NJ
2.					
3.					
4.					
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7.					
8.					
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FORM I BNA-GCMS-TIC

613 689

FORM 2
WATER BNA-GCMS SURROGATE RECOVERY

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-593

	CLIENT SAMPLE NO.	S1 (NBZ) #	S2 (FBP) #	S3 (TPH) #	S4 (PHL) #	S5 (TBP) #	S6 (2FP) #	S7 #	S8 #	TOT OUT
01	P06015LB	68	68	60	29	88	46			0
02	P06015LCS	53	55	67	23	69	36			0
03	P06015LCSD	63	62	74	26	80	40			0
04	0011-593-1	61	59	62	53	174*	96*			2
05	0011-593-2	64	63	63	27	85	44			0
06	0011-593-3	76	73	72	33	95	54			0
07	0011-593-4	65	66	63	26	84	39			0
08	0011-593-5	74	76	79	30	103	47			0
09	0011-593-6	80	79	81	32	105	51			0
10	0011-593-7	76	75	72	31	102	49			0
11	0011-593-8	70	66	72	31	87	50			0
12										
13										
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22										
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24										
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27										
28										
29										
30										

		QC LIMITS
S1 (NBZ)	= Nitrobenzene-d5	(29-110)
S2 (FBP)	= 2-Fluorobiphenyl	(38-107)
S3 (TPH)	= Terphenyl-d14	(33-122)
S4 (PHL)	= Phenol-d6	(7- 58)
S5 (TBP)	= 2,4,6-Tribromophenol	(16-138)
S6 (2FP)	= 2-Fluorophenol	(8- 88)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogate diluted out

FORM 4 613 690 CLIENT SAMPLE NO.

BNA-GCMS METHOD BLANK SUMMARY

P06015LB

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-593

Lab File ID: 1001010 Lab Prep Batch: P06015

Instrument ID: BNA2 Date Extracted:

Matrix: (soil/water) WATER Date Analyzed: 11/28/00

Level: (low/med) LOW Time Analyzed: 1508

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

	SAMPLE NO.	TIME ANALYZED	LAB FILE ID	DATE ANALYZED
01	P06015LCS	1538	1101011	11/28/00
02	P06015LCSD	1608	1201012	11/28/00
03	0011-593-1	1638	1301013	11/28/00
04	0011-593-2	1708	1401014	11/28/00
05	0011-593-3	1737	1501015	11/28/00
06	0011-593-4	1807	1601016	11/28/00
07	0011-593-5	1837	1701017	11/28/00
08	0011-593-6	1907	1801018	11/28/00
09	0011-593-7	1937	1901019	11/28/00
10	0011-593-8	2007	2001020	11/28/00
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COMMENTS:

FORM 1
BNA-GCMS ORGANICS ANALYSIS DATA SHEET

613 691

CLIENT SAMPLE NO.

P06015LB

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-593

Matrix: (soil/water) WATER Lab Prep Batch: P06015

Sample wt/vol: _____ (g/mL) ML Lab File ID: 1001010

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/28/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
83-32-9	Acenaphthene	2.00	U
208-96-8	Acenaphthylene	2.00	U
98-86-2	Acetophenone	5.00	U
62-53-3	Aniline	5.00	U
120-12-7	Anthracene	2.00	U
92-87-5	Benzidine	20.00	U
56-55-3	Benz(a)Anthracene	2.00	U
205-99-2	Benzo(b)fluoranthene	2.00	U
207-08-9	Benzo(k)fluoranthene	2.00	U
191-24-2	Benzo(ghi)perylene	2.00	U
50-32-8	Benzo(a)pyrene	2.00	U
65-85-0	Benzoic acid	50.00	U
100-51-6	Benzyl alcohol	5.00	U
111-91-1	Bis(2-chloroethoxy)methane	5.00	U
111-44-4	Bis(2-chloroethyl)ether	5.00	U
108-60-1	Bis(2-chloroisopropyl)ether	5.00	U
117-81-7	Bis(2-ethylhexyl)phthalate	3.66	J
101-55-3	4-Bromophenyl phenyl ether	5.00	U
85-68-7	Butyl benzyl phthalate	5.00	U
86-74-8	Carbazole	2.00	U
106-47-8	4-Chloroaniline	5.00	U
510-15-6	Chlorobenzilate	5.00	U
59-50-7	4-Chloro-3-methylphenol	5.00	U
91-58-7	2-Chloronaphthalene	2.00	U
95-57-8	2-Chlorophenol	5.00	U
7005-72-3	4-Chlorophenyl phenyl ether	5.00	U
218-01-9	Chrysene	2.00	U
53-70-3	Dibenz(a,h)anthracene	2.00	U
132-64-9	Dibenzofuran	5.00	U
84-74-2	Di-n-butyl phthalate	1.35	J
95-50-1	1,2-Dichlorobenzene	5.00	U
541-73-1	1,3-Dichlorobenzene	5.00	U
106-46-7	1,4-Dichlorobenzene	5.00	U

FORM 1 613 692 CLIENT SAMPLE NO.

BNA-GCMS ORGANICS ANALYSIS DATA SHEET

P06015LB

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-593

Matrix: (soil/water) WATER Lab Prep Batch: P06015

Sample wt/vol: _____ (g/mL) ML Lab File ID: 1001010

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/28/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-94-1	3,3'-Dichlorobenzidine	10.00	U
120-83-2	2,4-Dichlorophenol	5.00	U
87-65-0	2,6-Dichlorophenol	5.00	U
84-66-2	Diethyl phthalate	5.00	U
119-93-7	3,3-Dimethylbenzidine	10.00	U
105-67-9	2,4-Dimethyphenol	5.00	U
131-11-3	Dimethyl phthalate	5.00	U
534-52-1	4,6-Dinitro-2-methylphenol	10.00	U
51-28-5	2,4-Dinitrophenol	20.00	U
121-14-2	2,4-Dinitrotoluene	5.00	U
606-20-2	2,6-Dinitrotoluene	5.00	U
122-39-4	N-NitrsdiphylAm/Diphenylamin	5.00	U
117-84-0	Di-n-octyl phthalate	5.00	U
62-50-0	Ethyl methanesulfonate	5.00	U
206-44-0	Fluoranthene	2.00	U
86-73-7	Fluorene	2.00	U
118-74-1	Hexachlorobenzene	5.00	U
87-68-3	Hexachlorobutadiene	5.00	U
77-47-4	Hexachlorocyclopentadiene	5.00	U
67-72-1	Hexachloroethane	5.00	U
193-39-5	Indeno(1,2,3-cd)pyrene	2.00	U
78-59-1	Isophorone	5.00	U
66-27-3	Methyl methanesulfonate	5.00	U
91-57-6	2-Methylnaphthalene	2.00	U
95-48-7	2-Methylphenol	5.00	U
108-39-4	3&4-Methylphenol	5.00	U
91-20-3	Naphthalene	2.00	U
88-74-4	2-Nitroaniline	10.00	U
99-09-2	3-Nitroaniline	10.00	U
100-01-6	4-Nitroaniline	10.00	U
98-95-3	Nitrobenzene	5.00	U
88-75-5	2-Nitrophenol	10.00	U
100-02-7	4-Nitrophenol	5.00	U

FORM 1
BNA-GCMS ORGANICS ANALYSIS DATA SHEET

613 693

CLIENT SAMPLE NO.

P06015LB

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-593

Matrix: (soil/water) WATER Lab Prep Batch: P06015

Sample wt/vol: _____ (g/mL) ML Lab File ID: 1001010

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/28/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
924-16-3	N-Nitrosodibutylamine	5.00	U
55-18-5	N-Nitrosodiethylamine	5.00	U
129-00-0	N-Nitrosodimethylamine	5.00	U
621-64-7	N-Nitrosodi-n-propylamine	5.00	U
82-68-8	Pentachloronitrobenzene	10.00	U
87-86-5	Pentachlorophenol	5.00	U
62-44-2	Phenacetin	5.00	U
85-01-8	Phenanthrene	2.00	U
108-95-2	Phenol	5.00	U
129-00-0	Pyrene	2.00	U
110-86-1	Pyridine	5.00	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.00	U
58-90-2	2,3,4,6-Tetrachlorophenol	5.00	U
120-82-1	1,2,4-Trichlorobenzene	5.00	U
95-95-4	2,4,5-Trichlorophenol	5.00	U
88-06-2	2,4,6-Trichlorophenol	5.00	U
103-33-3	1,2-Dphnylhydrzine/Azobenzen	5.00	U

FORM 1 613 694 CLIENT SAMPLE NO.

BNA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

P06015LB

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-593

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 0.000 (g/mL) ML Lab File ID: 1001010

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/28/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

FORM 3
WATER BNA-GCMS LAB CONTROL SAMPLE

613 695

Lab Name: ETC, INC. Lab Prep Batch: P06015

Lab Code: Case No.: SAS No.: SDG No.: 0011-593

Matrix Spike - Sample No.: P06015LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Acenaphthene	50.00		24.58	49	38-117
Acenaphthylene	50.00		24.09	48	37-114
Acetophenone	50.00		23.78	48	32-108
Aniline	50.00		22.61	45	16-133
Anthracene	50.00		26.76	54	34-128
Benzidine	50.00		5.51	11*	22-176
Benz(a)Anthracene	50.00		26.83	54	36-127
Benzo(b)fluoranthene	50.00		26.08	52	36-131
Benzo(k)fluoranthene	50.00		25.42	51	32-132
Benzo(ghi)perylene	50.00		27.33	55	26-123
Benzo(a)pyrene	50.00		24.80	50	34-131
Benzoic acid	50.00		14.16	28	11- 58
Benzyl alcohol	50.00		24.76	50	20-109
Bis(2-chloroethoxy)meth	50.00		25.41	51	20-126
Bis(2-chloroethyl)ether	50.00		25.84	52	16-122
Bis(2-chloroisopropyl)e	50.00		25.54	51	28-108
Bis(2-ethylhexyl)phthal	50.00		26.53	53	21-162
4-Bromophenyl phenyl et	50.00		24.52	49	31-124
Butyl benzyl phthalate	50.00		28.06	56	33-142
Carbazole	50.00		28.03	56	20-147
4-Chloroaniline	50.00		23.35	47	24-127
Chlorobenzilate	50.00		29.66	59	35-118
4-Chloro-3-methylphenol	50.00		27.36	55	35-117
2-Chloronaphthalene	50.00		30.24	60	29-137
2-Chlorophenol	50.00		25.75	52	27-102
4-Chlorophenyl phenyl e	50.00		25.50	51	39-110
Chrysene	50.00		27.78	56	30-124
Dibenz(a,h)anthracene	50.00		23.59	47	27-124

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER BNA-GCMS LAB CONTROL SAMPLE

Lab Name: ETC, INC. Lab Prep Batch: P06015

Lab Code: Case No.: SAS No.: SDG No.: 0011-593

Matrix Spike - Sample No.: P06015LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Dibenzofuran	50.00		25.20	50	40-108
Di-n-butyl phthalate	50.00		32.05	64	19-158
1,2-Dichlorobenzene	50.00		22.72	45	26-100
1,3-Dichlorobenzene	50.00		22.12	44	21-102
1,4-Dichlorobenzene	50.00		21.99	44	24- 99
3,3'-Dichlorobenzidine	50.00		27.65	55	6-192
2,4-Dichlorophenol	50.00		23.95	48	32-110
2,6-Dichlorophenol	50.00		23.38	47	31-112
Diethyl phthalate	50.00		28.38	57	36-130
3,3-Dimethylbenzidine	50.00		11.63	23	6-192
2,4-Dimethyphenol	50.00		22.65	45	34-105
Dimethyl phthalate	50.00		27.54	55	34-123
4,6-Dinitro-2-methylphe	50.00		33.46	67	27-128
2,4-Dinitrophenol	50.00		28.08	56	10-132
2,4-Dinitrotoluene	50.00		27.85	56	24-147
2,6-Dinitrotoluene	50.00		26.71	53	36-125
N-NitrsdiphylAm/Dipheny	100.0		47.54	48	35-116
Di-n-octyl phthalate	50.00		29.12	58	29-136
Ethyl methanesulfonate	50.00		27.75	56	20-121
Fluoranthene	50.00		25.70	51	28-127
Fluorene	50.00		25.25	50	41-116
Hexachlorobenzene	50.00		26.82	54	18-136
Hexachlorobutadiene	50.00		21.40	43	22-109
Hexachlorocyclopentadie	50.00		21.40	43	10-102
Hexachloroethane	50.00		22.05	44	16-107
Indeno(1,2,3-cd)pyrene	50.00		27.77	56	22-126
Isophorone	50.00		25.78	52	31-116
Methyl methanesulfonate	50.00		13.15	26	15- 82

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER BNA-GCMS LAB CONTROL SAMPLE

Lab Name: ETC, INC. Lab Prep Batch: P06015

Lab Code: Case No.: SAS No.: SDG No.: 0011-593

Matrix Spike - Sample No.: P06015LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
2-Methylnaphthalene	50.00		23.04	46	34-108
2-Methylphenol	50.00		24.91	50	22- 97
3&4-Methylphenol	50.00		22.84	46	21- 96
Naphthalene	50.00		22.83	46	33-108
2-Nitroaniline	50.00		27.07	54	32-127
3-Nitroaniline	50.00		26.50	53	28-142
4-Nitroaniline	50.00		28.14	56	23-139
Nitrobenzene	50.00		22.77	46	27-117
2-Nitrophenol	50.00		23.47	47	25-114
4-Nitrophenol	50.00		26.34	53	1- 76
N-Nitrosodibutylamine	50.00		27.81	56	31-126
N-Nitrosodiethylamine	50.00		22.60	45	28-107
N-Nitrosodimethylamine	50.00		17.96	36	14- 84
N-Nitrosodi-n-propylami	50.00		24.79	50	29-114
Pentachloronitrobenzene	50.00		29.59	59	34-135
Pentachlorophenol	50.00		27.11	54	17-142
Phenacetin	50.00		33.46	67	29-141
Phenanthrene	50.00		26.75	54	40-120
Phenol	50.00		11.91	24	11- 55
Pyrene	50.00		26.34	53	20-154
Pyridine	50.00		9.84	20	10- 71
1,2,4,5-Tetrachlorobenz	50.00		23.72	47	28-110
2,3,4,6-Tetrachlorophen	50.00		27.77	56	28-118
1,2,4-Trichlorobenzene	50.00		21.13	42	23-106
2,4,5-Trichlorophenol	50.00		27.79	56	26-118
2,4,6-Trichlorophenol	50.00		26.43	53	26-115
1,2-Dphnylhydrzine/Azob	50.00		26.69	53	45-135

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER BNA-GCMS LAB CONTROL SAMPLE

Lab Name: ETC, INC. Lab Prep Batch: P06015

Lab Code: Case No.: SAS No.: SDG No.: 0011-593

Matrix Spike - Sample No.: P06015LCS

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Acenaphthene	50.00	27.58	55	12	20	38-117
Acenaphthylene	50.00	27.26	54	12	20	37-114
Acetophenone	50.00	27.99	56	15	20	32-108
Aniline	50.00	26.33	53	16	20	16-133
Anthracene	50.00	30.03	60	10	20	34-128
Benzidine	50.00	6.89	14*	24*	20	22-176
Benz(a)Anthracene	50.00	28.40	57	5	20	36-127
Benzo(b)fluoranthene	50.00	29.94	60	14	20	36-131
Benzo(k)fluoranthene	50.00	27.16	54	6	20	32-132
Benzo(ghi)perylene	50.00	29.04	58	5	20	26-123
Benzo(a)pyrene	50.00	27.48	55	10	20	34-131
Benzoic acid	50.00	5.55	11	87*	20	11- 58
Benzyl alcohol	50.00	27.84	56	11	20	20-109
Bis(2-chloroethoxy)meth	50.00	29.55	59	14	20	20-126
Bis(2-chloroethyl)ether	50.00	30.06	60	14	20	16-122
Bis(2-chloroisopropyl)e	50.00	29.06	58	13	20	28-108
Bis(2-ethylhexyl)phthal	50.00	28.66	57	7	20	21-162
4-Bromophenyl phenyl et	50.00	27.71	55	12	20	31-124
Butyl benzyl phthalate	50.00	29.09	58	4	20	33-142
Carbazole	50.00	30.60	61	8	20	20-147
4-Chloroaniline	50.00	27.80	56	17	20	24-127
Chlorobenzilate	50.00	30.32	61	3	20	35-118
4-Chloro-3-methylphenol	50.00	31.75	64	15	20	35-117
2-Chloronaphthalene	50.00	33.81	68	12	20	29-137
2-Chlorophenol	50.00	29.19	58	11	20	27-102
4-Chlorophenyl phenyl e	50.00	29.53	59	14	20	39-110
Chrysene	50.00	29.73	59	5	20	30-124
Dibenz(a,h)anthracene	50.00	29.18	58	21*	20	27-124

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER BNA-GCMS LAB CONTROL SAMPLE

Lab Name: ETC, INC. Lab Prep Batch: P06015

Lab Code: Case No.: SAS No.: SDG No.: 0011-593

Matrix Spike - Sample No.: P06015LCS

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Dibenzofuran	50.00	28.11	56	11	20	40-108
Di-n-butyl phthalate	50.00	34.00	68	6	20	19-158
1,2-Dichlorobenzene	50.00	26.40	53	16	20	26-100
1,3-Dichlorobenzene	50.00	25.71	51	15	20	21-102
1,4-Dichlorobenzene	50.00	24.77	50	13	20	24- 99
3,3'-Dichlorobenzidine	50.00	30.49	61	10	20	6-192
2,4-Dichlorophenol	50.00	27.97	56	15	20	32-110
2,6-Dichlorophenol	50.00	27.22	54	14	20	31-112
Diethyl phthalate	50.00	31.06	62	8	20	36-130
3,3-Dimethylbenzidine	50.00	16.66	33	36*	20	6-192
2,4-Dimethyphenol	50.00	26.69	53	16	20	34-105
Dimethyl phthalate	50.00	30.58	61	10	20	34-123
4,6-Dinitro-2-methylphe	50.00	35.27	70	4	20	27-128
2,4-Dinitrophenol	50.00	32.34	65	15	20	10-132
2,4-Dinitrotoluene	50.00	30.10	60	7	20	24-147
2,6-Dinitrotoluene	50.00	29.53	59	11	20	36-125
N-NitrsdiphylAm/Dipheny	100.0	55.05	55	14	20	35-116
Di-n-octyl phthalate	50.00	32.02	64	10	20	29-136
Ethyl methanesulfonate	50.00	31.84	64	13	20	20-121
Fluoranthene	50.00	26.61	53	4	20	28-127
Fluorene	50.00	28.53	57	13	20	41-116
Hexachlorobenzene	50.00	30.20	60	10	20	18-136
Hexachlorobutadiene	50.00	24.66	49	13	20	22-109
Hexachlorocyclopentadie	50.00	23.00	46	7	20	10-102
Hexachloroethane	50.00	26.16	52	17	20	16-107
Indeno(1,2,3-cd)pyrene	50.00	30.36	61	8	20	22-126
Isophorone	50.00	29.66	59	13	20	31-116
Methyl methanesulfonate	50.00	14.94	30	14	20	15- 82

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS: _____

FORM III BNA-GCMS

FORM 3
WATER BNA-GCMS LAB CONTROL SAMPLE

Lab Name: ETC, INC. Lab Prep Batch: P06015

Lab Code: Case No.: SAS No.: SDG No.: 0011-593

Matrix Spike - Sample No.: P06015LCS

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
2-Methylnaphthalene	50.00	27.03	54	16	20	34-108
2-Methylphenol	50.00	28.63	57	13	20	22- 97
3&4-Methylphenol	50.00	24.60	49	6	20	21- 96
Naphthalene	50.00	26.77	54	16	20	33-108
2-Nitroaniline	50.00	29.10	58	7	20	32-127
3-Nitroaniline	50.00	29.86	60	12	20	28-142
4-Nitroaniline	50.00	30.72	61	8	20	23-139
Nitrobenzene	50.00	25.96	52	12	20	27-117
2-Nitrophenol	50.00	27.08	54	14	20	25-114
4-Nitrophenol	50.00	29.98	60	12	20	1- 76
N-Nitrosodibutylamine	50.00	31.92	64	13	20	31-126
N-Nitrosodiethylamine	50.00	25.62	51	12	20	28-107
N-Nitrosodimethylamine	50.00	21.54	43	18	20	14- 84
N-Nitrosodi-n-propylami	50.00	30.18	60	18	20	29-114
Pentachloronitrobenzene	50.00	31.65	63	6	20	34-135
Pentachlorophenol	50.00	30.52	61	12	20	17-142
Phenacetin	50.00	35.37	71	6	20	29-141
Phenanthrene	50.00	29.82	60	10	20	40-120
Phenol	50.00	13.05	26	8	20	11- 55
Pyrene	50.00	27.85	56	6	20	20-154
Pyridine	50.00	10.39	21	5	20	10- 71
1,2,4,5-Tetrachlorobenz	50.00	26.78	54	14	20	28-110
2,3,4,6-Tetrachlorophen	50.00	31.61	63	12	20	28-118
1,2,4-Trichlorobenzene	50.00	25.12	50	17	20	23-106
2,4,5-Trichlorophenol	50.00	30.88	62	10	20	26-118
2,4,6-Trichlorophenol	50.00	29.96	60	12	20	26-115
1,2-Dphnylhydrzine/Azob	50.00	29.63	59	11	20	45-135

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 4 out of 83 outside limits
Spike Recovery: 2 out of 166 outside limits

COMMENTS: _____

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 701

Client Name: **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID: **Memphis Depot**
Dunn Field

FID #

Date Arrived: **11/20/00**
ETC Order Number: **0011593**

ETC Lab ID: **0011593-01**
Field ID : **RW-09-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/20/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
Organochlorine Pesticides				11/27/00		RG	8081A
					11/21/00		3510C
QC Batch	**P07190**						
Dilution Factor	**1**						
Aldrin	ND	ug/L	0.040				
Alpha-BHC	ND	ug/L	0.040				
Beta-BHC	ND	ug/L	0 040				
Delta-BHC	ND	ug/L	0.040				
Gamma-BHC (Lindane)	ND	ug/L	0 040				
Alpha-Chlordane	ND	ug/L	0 040				
Gamma-Chlordane	ND	ug/L	0.040				
Chlordane	ND	ug/L	0.250				
4,4'-DDD	ND	ug/L	0.040				
4,4'-DDE	ND	ug/L	0.040				
4,4'-DDT	ND	ug/L	0.040				
Dieldrin	ND	ug/L	0.040				
Endosulfan I	ND	ug/L	0.040				
Endosulfan II	ND	ug/L	0.040				
Endosulfan Sulfate	ND	ug/L	0.040				
Endrin	ND	ug/L	0 040				
Endrin Aldehyde	ND	ug/L	0.040				
Endrin Ketone	ND	ug/L	0.040				
Heptachlor	ND	ug/L	0.040				
Heptachlor Epoxide	ND	ug/L	0.040				
Methoxychlor	ND	ug/L	0.040				
Toxaphene	ND	ug/L	3.00				

Surrogate Standard	% Recovery	QC Limits	
S1 - Decachlorobiphenyl	101	34	115
S2 - Tetrachloro-m-xylene	62	31	96

Q S

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 702

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**
Dunn Field

FID #

Date Arrived **11/20/00**
ETC Order Number **0011593**

ETC Lab ID **0011593-02**
Field ID : **RW-08-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/20/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
Organochlorine Pesticides				11/27/00	RG	8081A
					11/21/00	3510C
QC Batch	**P07190**					
Dilution Factor	**1**					
Aldrin	ND	ug/L	0.040			
Alpha-BHC	ND	ug/L	0.040			
Beta-BHC	ND	ug/L	0.040			
Delta-BHC	ND	ug/L	0.040			
Gamma-BHC (Lindane)	ND	ug/L	0.040			
Alpha-Chlordane	ND	ug/L	0.040			
Gamma-Chlordane	ND	ug/L	0.040			
Chlordane	ND	ug/L	0.250			
4,4'-DDD	ND	ug/L	0.040			
4,4'-DDE	ND	ug/L	0.040			
[illegible]'-DDT	ND	ug/L	0.040			
[illegible]ldrin	ND	ug/L	0.040			
Endosulfan I	ND	ug/L	0.040			
Endosulfan II	ND	ug/L	0.040			
Endosulfan Sulfate	ND	ug/L	0.040			
Endrin	ND	ug/L	0 040			
Endrin Aldehyde	ND	ug/L	0 040			
Endrin Ketone	ND	ug/L	0.040			
Heptachlor	ND	ug/L	0.040			
Heptachlor Epoxide	ND	ug/L	0.040			
Methoxychlor	ND	ug/L	0.040			
Toxaphene	ND	ug/L	3.00			

Surrogate Standard	% Recovery	QC Limits	
S1 - Decachlorobiphenyl	94	34	115
S2 - Tetrachloro-m-xylene	58	31	96

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 703

Client Name: **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID: **Memphis Depot**
Dunn Field

FID #

Date Arrived: **11/20/00**
ETC Order Number: **0011593**

ETC Lab ID: **0011593-03**
Field ID : **RW-07-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/20/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
Organochlorine Pesticides				11/27/00		RG	8081A
					11/21/00		3510C
QC Batch	**P07190**						
Dilution Factor	**1**						
Aldrin	ND	ug/L	0 040				
Alpha-BHC	ND	ug/L	0.040				
Beta-BHC	ND	ug/L	0.040				
Delta-BHC	ND	ug/L	0 040				
Gamma-BHC (Lindane)	ND	ug/L	0.040				
Alpha-Chlordane	ND	ug/L	0.040				
Gamma-Chlordane	ND	ug/L	0.040				
Chlordane	ND	ug/L	0.250				
4,4'-DDD	ND	ug/L	0.040				
4,4'-DDE	ND	ug/L	0.040				
4,4'-DDT	ND	ug/L	0 040				
Dieldrin	ND	ug/L	0.040				
Endosulfan I	ND	ug/L	0.040				
Endosulfan II	ND	ug/L	0.040				
Endosulfan Sulfate	ND	ug/L	0.040				
Endrin	ND	ug/L	0.040				
Endrin Aldehyde	ND	ug/L	0.040				
Endrin Ketone	ND	ug/L	0.040				
Heptachlor	ND	ug/L	0.040				
Heptachlor Epoxide	ND	ug/L	0 040				
Methoxychlor	ND	ug/L	0 040				
Toxaphene	ND	ug/L	3 00				

Surrogate Standard	% Recovery	QC Limits	
S1 - Decachlorobiphenyl	130 Q	34	115
S2 - Tetrachloro-m-xylene	61	31	96

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 704

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**
Dunn Field

FID #

Date Arrived **11/20/00**
ETC Order Number **0011593**

ETC Lab ID **0011593-04**
Field ID : **RW-06-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/20/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
Organochlorine Pesticides				11/27/00	11/21/00	RG	8081A 3510C
QC Batch	**P07190**						
Dilution Factor	**1**						
Aldrin	ND	ug/L	0 040				
Alpha-BHC	ND	ug/L	0.040				
Beta-BHC	ND	ug/L	0 040				
Delta-BHC	ND	ug/L	0.040				
Gamma-BHC (Lindane)	ND	ug/L	0.040				
Alpha-Chlordane	ND	ug/L	0.040				
Gamma-Chlordane	ND	ug/L	0.040				
Chlordane	ND	ug/L	0.250				
4,4'-DDD	ND	ug/L	0.040				
4,4'-DDE	ND	ug/L	0.040				
[redacted]'-DDT	ND	ug/L	0 040				
[redacted]drin	ND	ug/L	0 040				
Endosulfan I	ND	ug/L	0.040				
Endosulfan II	ND	ug/L	0 040				
Endosulfan Sulfate	ND	ug/L	0.040				
Endrin	ND	ug/L	0.040				
Endrin Aldehyde	ND	ug/L	0 040				
Endrin Ketone	ND	ug/L	0.040				
Heptachlor	ND	ug/L	0.040				
Heptachlor Epoxide	ND	ug/L	0 040				
Methoxychlor	ND	ug/L	0.040				
Toxaphene	ND	ug/L	3.00				

Surrogate Standard	% Recovery	QC Limits	
S1 - Decachlorobiphenyl	110	34	115
S2 - Tetrachloro-m-xylene	88	31	96

CS
Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 705

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**
Dunn Field

FID #

Date Arrived **11/20/00**
ETC Order Number **0011593**

ETC Lab ID **0011593-05**
Field ID : **RW-05-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/20/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
Organochlorine Pesticides				11/27/00		RG	8081A
					11/21/00		3510C
QC Batch	**P07190**						
Dilution Factor	**1**						
Aldrin	ND	ug/L	0.040				
Alpha-BHC	ND	ug/L	0.040				
Beta-BHC	ND	ug/L	0.040				
Delta-BHC	ND	ug/L	0.040				
Gamma-BHC (Lindane)	ND	ug/L	0 040				
Alpha-Chlordane	ND	ug/L	0.040				
Gamma-Chlordane	ND	ug/L	0.040				
Chlordane	ND	ug/L	0 250				
4,4'-DDD	ND	ug/L	0.040				
4,4'-DDE	ND	ug/L	0 040				
4,4'-DDT	ND	ug/L	0.040				
Dieldrin	0.068	ug/L	0.040				
Endosulfan I	ND	ug/L	0 040				
Endosulfan II	ND	ug/L	0.040				
Endosulfan Sulfate	ND	ug/L	0 040				
Endrin	ND	ug/L	0.040				
Endrin Aldehyde	ND	ug/L	0.040				
Endrin Ketone	ND	ug/L	0 040				
Heptachlor	ND	ug/L	0.040				
Heptachlor Epoxide	ND	ug/L	0 040				
Methoxychlor	ND	ug/L	0.040				
Toxaphene	ND	ug/L	3.00				

Surrogate Standard	% Recovery	QC Limits	
S1 - Decachlorobiphenyl	121 Q	34	115
S2 - Tetrachloro-m-xylene	71	31	96

05

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 706

Client Name [redacted]
Sverdrup/Jacobs Eng.
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID Memphis Depot
Dunn Field

FID #

Date Arrived 11/20/00
ETC Order Number 0011593

ETC Lab ID 0011593-06
Field ID : RW-10-Y2Q4

Matrix : AQUEOUS
Sample Date : 11/20/00

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
Organochlorine Pesticides				11/28/00	11/21/00	RG	8081A 3510C
QC Batch	**P07190**						
Dilution Factor	**1**						
Aldrin	ND	ug/L	0.040				
Alpha-BHC	ND	ug/L	0 040				
Beta-BHC	ND	ug/L	0.040				
Delta-BHC	ND	ug/L	0.040				
Gamma-BHC (Lindane)	ND	ug/L	0.040				
Alpha-Chlordane	ND	ug/L	0.040				
Gamma-Chlordane	ND	ug/L	0.040				
Chlordane	ND	ug/L	0.250				
4,4'-DDD	ND	ug/L	0.040				
4,4'-DDE	ND	ug/L	0.040				
[redacted]-DDT	ND	ug/L	0.040				
[redacted]drin	0.068	ug/L	0.040				
Endosulfan I	ND	ug/L	0.040				
Endosulfan II	ND	ug/L	0.040				
Endosulfan Sulfate	ND	ug/L	0.040				
Endrin	ND	ug/L	0 040				
Endrin Aldehyde	ND	ug/L	0.040				
Endrin Ketone	ND	ug/L	0 040				
Heptachlor	ND	ug/L	0.040				
Heptachlor Epoxide	ND	ug/L	0 040				
Methoxychlor	ND	ug/L	0 040				
Toxaphene	ND	ug/L	3.00				

Surrogate Standard	% Recovery	QC Limits	
S1 - Decachlorobiphenyl	118 Q	34	115
S2 - Tetrachloro-m-xylene	88	31	96

CS
Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 707

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**
Dunn Field

FID #

Date Arrived **11/20/00**
ETC Order Number **0011593**

ETC Lab ID **0011593-07**
Field ID : **RW-04-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/20/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
Organochlorine Pesticides				11/28/00		RG	8081A
					11/21/00		3510C
QC Batch	**P07190**						
Dilution Factor	**1**						
Aldrin	ND	ug/L	0 040				
Alpha-BHC	ND	ug/L	0.040				
Beta-BHC	ND	ug/L	0.040				
Delta-BHC	ND	ug/L	0 040				
Gamma-BHC (Lindane)	ND	ug/L	0.040				
Alpha-Chlordane	ND	ug/L	0 040				
Gamma-Chlordane	ND	ug/L	0.040				
Chlordane	ND	ug/L	0.250				
4,4'-DDD	ND	ug/L	0 040				
4,4'-DDE	ND	ug/L	0 040				
4,4'-DDT	ND	ug/L	0.040				
Dieldrin	0.036J	ug/L	0.040				
Endosulfan I	ND	ug/L	0.040				
Endosulfan II	ND	ug/L	0.040				
Endosulfan Sulfate	ND	ug/L	0.040				
Endrin	ND	ug/L	0.040				
Endrin Aldehyde	ND	ug/L	0 040				
Endrin Ketone	ND	ug/L	0.040				
Heptachlor	ND	ug/L	0.040				
Heptachlor Epoxide	ND	ug/L	0.040				
Methoxychlor	ND	ug/L	0.040				
Toxaphene	ND	ug/L	3.00				

Surrogate Standard	% Recovery	QC Limits	
S1 - Decachlorobiphenyl	117 Q	34	115
S2 - Tetrachloro-m-xylene	85	31	96

CS
Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 708

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**
Dunn Field

FID #

Date Arrived **11/20/00**
ETC Order Number **0011593**

ETC Lab ID **0011593-08**
Field ID : **RW-03-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/20/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
Organochlorine Pesticides				11/28/00	11/21/00	RG	8081A 3510C
QC Batch	**P07190**						
Dilution Factor	**1**						
Aldrin	ND	ug/L	0.040				
Alpha-BHC	ND	ug/L	0.040				
Beta-BHC	ND	ug/L	0.040				
Delta-BHC	ND	ug/L	0 040				
Gamma-BHC (Lindane)	ND	ug/L	0.040				
Alpha-Chlordane	ND	ug/L	0.040				
Gamma-Chlordane	ND	ug/L	0.040				
Chlordane	ND	ug/L	0.250				
4,4'-DDD	ND	ug/L	0.040				
4,4'-DDE	ND	ug/L	0.040				
[illegible]'-DDT	ND	ug/L	0.040				
[illegible]drin	ND	ug/L	0.040				
Endosulfan I	ND	ug/L	0 040				
Endosulfan II	ND	ug/L	0.040				
Endosulfan Sulfate	ND	ug/L	0.040				
Endrin	ND	ug/L	0.040				
Endrin Aldehyde	ND	ug/L	0.040				
Endrin Ketone	ND	ug/L	0.040				
Heptachlor	ND	ug/L	0.040				
Heptachlor Epoxide	ND	ug/L	0 040				
Methoxychlor	ND	ug/L	0 040				
Toxaphene	ND	ug/L	3.00				

Surrogate Standard	% Recovery	QC Limits	
S1 - Decachlorobiphenyl	26 Q	34	115
S2 - Tetrachloro-m-xylene	18 Q	31	96

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

FORM 2
WATER PESTICIDE SURROGATE RECOVERY

613 709

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-593

	CLIENT SAMPLE NO.	S1 (DCB)#	S2 (TCX)#	S3 #	S4 #	S5 #	S6 #	S7 #	S8 #	TOT OUT
01	P07190LB	99	59							0
02	P07190LCS	85	79							0
03	P07190LCSD	87	75							0
04	0011-593-1	101	62							0
05	0011-593-2	94	58							0
06	0011-593-3	86	77							0
07	0011-593-3	130*	61							1
08	0011-593-4	110	88							0
09	0011-593-5	86	73							0
10	0011-593-5	121*	71							1
11	0011-593-6	118*	88							1
12	0011-593-6	93	81							0
13	0011-593-7	117*	85							1
14	0011-593-7	81	76							0
15	0011-593-8	26*	18*							2
16	0011-593-8	16*	23*							2
17										
18										
19										
20										
21										
22										
23										
24										
25										
26										
27										
28										
29										
30										

	QC LIMITS
S1 (DCB) = Decachlorobiphenyl	(34-115)
S2 (TCX) = Tetrachloro-m-xylene	(31- 96)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogate diluted out

FORM 4 613 710 CLIENT SAMPLE NO.

PESTICIDE METHOD BLANK SUMMARY

P07190LB

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-593

Lab File ID: P311271A-13R Lab Prep Batch: P07190

Instrument ID: PEST3A Date Extracted:

Matrix: (soil/water) WATER Date Analyzed: 11/27/00

Level: (low/med) LOW Time Analyzed: 1806

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

	SAMPLE NO.	TIME ANALYZED	LAB FILE ID	DATE ANALYZED
01	P07190LCS	1834	P311271A-14R	11/27/00
02	P07190LCSD	1901	P311271A-15R	11/27/00
03	0011-593-1	2145	P311271A-21R	11/27/00
04	0011-593-2	2212	P311271A-22R	11/27/00
05	0011-593-3	2240	P311271B-23R	11/27/00
06	0011-593-3	2240	P311271A-23R	11/27/00
07	0011-593-4	2307	P311271A-24R	11/27/00
08	0011-593-5	2334	P311271B-25R	11/27/00
09	0011-593-5	2334	P311271A-25R	11/27/00
10	0011-593-6	0002	P311271A-26R	11/28/00
11	0011-593-6	0002	P311271B-26R	11/28/00
12	0011-593-7	0029	P311271A-27R	11/28/00
13	0011-593-7	0029	P311271B-27R	11/28/00
14	0011-593-8	0056	P311271B-28R	11/28/00
15	0011-593-8	0056	P311271A-28R	11/28/00
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

COMMENTS:

613 711

FORM 1
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

P07190LB

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-593

Matrix: (soil/water) WATER Lab Prep Batch: P07190

Sample wt/vol: 1000 (g/mL) ML Lab File ID: P311271A-13R

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:

Concentrated Extract Volume: 10(mL) Date Analyzed: 11/27/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
309-00-2	Aldrin	0.04000	U
319-84-6	alpha-BHC	0.04000	U
319-85-7	beta-BHC	0.04000	U
319-86-8	delta-BHC	0.04000	U
58-89-9	gamma-BHC (Lindane)	0.04000	U
5103-71-9	alpha-chlordane	0.04000	U
5103-74-2	gamma-chlordane	0.04000	U
57-74-9	Chlordane	0.25000	U
2921-88-2	Chlorpyrifos	0.04000	U
72-54-8	4,4'-DDD	0.04000	U
72-55-9	4,4'-DDE	0.04000	U
50-29-3	4,4'-DDT	0.04000	U
60-57-1	Dieldrin	0.04000	U
959-98-8	Endosulfan I	0.04000	U
33213-65-9	Endosulfan II	0.04000	U
1031-07-8	Endosulfan sulfate	0.04000	U
72-20-8	Endrin	0.04000	U
7421-93-4	Endrin aldehyde	0.04000	U
53494-70-5	Endrin ketone	0.04000	U
76-44-8	Heptachlor	0.04000	U
1024-57-3	Heptachlor epoxide	0.04000	U
72-43-5	Methoxychlor	0.04000	U
8001-35-2	Toxaphene	2.50000	U

FORM 3
WATER PESTICIDE LAB CONTROL SAMPLE

Lab Name: ETC, INC. Lab Prep Batch: P07190

Lab Code: Case No.: SAS No.: SDG No.: 0011-593

Matrix Spike - Sample No.: P07190LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Aldrin	1.00000		0.76375	76	34-105
alpha-BHC	1.00000		0.95016	95	41-102
beta-BHC	1.00000		0.83944	84	26-151
delta-BHC	1.00000		0.54806	55	21- 92
gamma-BHC (Lindane)	1.00000		0.94070	94	41-102
alpha-chlordane	1.00000		0.83153	83	48-117
gamma-chlordane	1.00000		0.83488	83	51-108
Chlorpyrifos	1.00000		0.82976	83	70-130
4,4'-DDD	1.00000		0.88343	88	39-124
4,4'-DDE	1.00000		0.82622	83	41-111
4,4'-DDT	1.00000		0.96945	97	39-123
Dieldrin	1.00000		0.82888	83	42-111
Endosulfan I	1.00000		0.85498	85	48-117
Endosulfan II	1.00000		0.87803	88	52-114
Endosulfan sulfate	1.00000		0.93534	94	46-111
Endrin	1.00000		0.86536	86	45-117
Endrin aldehyde	1.00000		0.83244	83	48-125
Endrin ketone	1.00000		0.92991	93	51-112
Heptachlor	1.00000		0.84304	84	43-114
Heptachlor epoxide	1.00000		0.82540	82	42-115
Methoxychlor	1.00000		0.86043	86	39-140

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER PESTICIDE LAB CONTROL SAMPLE

Lab Name: ETC, INC. Lab Prep Batch: P07190

Lab Code: Case No.: SAS No.: SDG No.: 0011-593

Matrix Spike - Sample No.: P07190LCS

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Aldrin	1.00000	0.73665	74	3	20	34-105
alpha-BHC	1.00000	0.91472	91	4	20	41-102
beta-BHC	1.00000	0.80803	81	4	20	26-151
delta-BHC	1.00000	0.54403	54	2	20	21- 92
gamma-BHC (Lindane)	1.00000	0.89535	90	4	20	41-102
alpha-chlordane	1.00000	0.79326	79	5	20	48-117
gamma-chlordane	1.00000	0.79384	79	5	20	51-108
Chlorpyrifos	1.00000	0.79095	79	5	20	70-130
4,4'-DDD	1.00000	0.84000	84	5	20	39-124
4,4'-DDE	1.00000	0.78701	79	5	20	41-111
4,4'-DDT	1.00000	0.91449	91	6	20	39-123
Dieldrin	1.00000	0.79585	80	4	20	42-111
Endosulfan I	1.00000	0.82627	83	2	20	48-117
Endosulfan II	1.00000	0.83565	84	5	20	52-114
Endosulfan sulfate	1.00000	0.90087	90	4	20	46-111
Endrin	1.00000	0.82453	82	5	20	45-117
Endrin aldehyde	1.00000	0.79512	80	4	20	48-125
Endrin ketone	1.00000	0.89947	90	3	20	51-112
Heptachlor	1.00000	0.79707	80	5	20	43-114
Heptachlor epoxide	1.00000	0.81286	81	1	20	42-115
Methoxychlor	1.00000	0.80829	81	6	20	39-140

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 21 outside limits
Spike Recovery: 0 out of 42 outside limits

COMMENTS: _____

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 714

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**
Dunn Field
FID #

Date Arrived **11/20/00**
ETC Order Number **0011593**

ETC Lab ID **0011593-01**
Field ID : **RW-09-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/20/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
Chlorinated Herbicides				12/05/00		RG	8151A
					11/28/00		8151A
QC Batch	**P13002**						
Dilution Factor	**1**						
2,4-D	ND	ug/L	0.100				
2,4,-DB	ND	ug/L	0.100				
2,4,5-TP(Silvex)	ND	ug/L	0.030				
2,4,5-T	ND	ug/L	0.200				
Dalapon	ND	ug/L	0.750				
Dicamba	ND	ug/L	0.800				
Dichlorprop	ND	ug/L	0.100				
Dinoseb	ND	ug/L	2 70				
MCPA	ND	ug/L	180				
MCPP	ND	ug/L	20 0				

Surrogate Standard	% Recovery	QC Limits	
S1 - 2,4 DCAA	77	20	150

( )

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 '715

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**
Dunn Field

FID #

Date Arrived **11/20/00**
ETC Order Number **0011593**

ETC Lab ID **0011593-02**
Field ID : **RW-08-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/20/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
Chlorinated Herbicides				12/05/00		RG	8151A
					11/28/00		8151A
QC Batch	**P13002**						
2,4-D	ND	ug/L	0.100				
2,4,-DB	ND	ug/L	0.100				
2,4,5-TP(Silvex)	ND	ug/L	0 030				
2,4,5-T	ND	ug/L	0.200				
Dalapon	ND	ug/L	0.750				
Dicamba	ND	ug/L	0.800				
Dichlorprop	ND	ug/L	0.100				
Dinoseb	ND	ug/L	2.70				
MCPA	ND	ug/L	180				
MCPP	ND	ug/L	20.0				

Surrogate Standard	% Recovery	QC Limits	
S1 - 2,4 DCAA	70	20	150

CS
Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 716

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**
Dunn Field
FID #

Date Arrived **11/20/00**
ETC Order Number **0011593**

ETC Lab ID **0011593-03**
Field ID : **RW-07-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/20/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
Chlorinated Herbicides				12/05/00		RG	8151A
					11/28/00		8151A
QC Batch	**P13002**						
Dilution Factor	**1**						
2,4-D	ND	ug/L	0.100				
2,4,-DB	ND	ug/L	0.100				
2,4,5-TP(Silvex)	ND	ug/L	0 030				
2,4,5-T	ND	ug/L	0.200				
Dalapon	ND	ug/L	0.750				
Dicamba	ND	ug/L	0.800				
Dichlorprop	ND	ug/L	0.100				
Dinoseb	ND	ug/L	2.70				
MCPA	ND	ug/L	180				
MCPP	ND	ug/L	20.0				

Surrogate Standard	% Recovery	QC Limits	
S1 - 2,4 DCAA	78	20	150

C)
Data Validator

ND - Not Detected Q - Recovery Outside QC Limits

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 717

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**
Dunn Field

FID #

Date Arrived **11/20/00**
ETC Order Number **0011593**

ETC Lab ID **0011593-04**
Field ID : **RW-06-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/20/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
Chlorinated Herbicides				12/05/00		RG	8151A
					11/28/00		8151A
QC Batch	**P13002**						
Dilution Factor	**1**						
2,4-D	ND	ug/L	0.100				
2,4,-DB	ND	ug/L	0.100				
2,4,5-TP(Silvex)	ND	ug/L	0 030				
2,4,5-T	ND	ug/L	0.200				
Dalapon	ND	ug/L	0.750				
Dicamba	ND	ug/L	0 800				
Dichlorprop	ND	ug/L	0.100				
Dinoseb	ND	ug/L	2.70				
MCPA	ND	ug/L	180				
MCPP	ND	ug/L	20.0				

Surrogate Standard	% Recovery	QC Limits	
S1 - 2,4 DCAA	78	20	150

CJ

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 718

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**
Dunn Field

FID #

Date Arrived **11/20/00**
ETC Order Number **0011593**

ETC Lab ID **0011593-05**
Field ID : **RW-05-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/20/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
Chlorinated Herbicides				12/05/00		RG	8151A
					11/28/00		8151A
QC Batch	**P13002**						
Dilution Factor	**1**						
2,4-D	ND	ug/L	0.100				
2,4,-DB	ND	ug/L	0.100				
2,4,5-TP(Silvex)	ND	ug/L	0.030				
2,4,5-T	ND	ug/L	0.200				
Dalapon	ND	ug/L	0.750				
Dicamba	ND	ug/L	0.800				
Dichlorprop	ND	ug/L	0.100				
Dinoseb	ND	ug/L	2.70				
MCPA	ND	ug/L	180				
MCPP	ND	ug/L	20.0				

Surrogate Standard	% Recovery	QC Limits	
S1 - 2,4 DCAA	74	20	150

CS

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

ENVIRONMENTAL TESTING & CONSULTING, INC.

613 719

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**
Dunn Field

FID #

Date Arrived **11/20/00**
ETC Order Number **0011593**

ETC Lab ID **0011593-06**
Field ID : **RW-10-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/20/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
Chlorinated Herbicides				12/05/00		RG	8151A
					11/28/00		8151A
QC Batch	**P13002**						
Dilution Factor	**1**						
2,4-D	ND	ug/L	0 100				
2,4,-DB	ND	ug/L	0.100				
2,4,5-TP(Silvex)	ND	ug/L	0.030				
2,4,5-T	ND	ug/L	0.200				
Dalapon	ND	ug/L	0.750				
Dicamba	ND	ug/L	0.800				
Dichlorprop	ND	ug/L	0.100				
Dinoseb	ND	ug/L	2.70				
MCPA	ND	ug/L	180				
MCPP	ND	ug/L	20.0				

Surrogate Standard	% Recovery	QC Limits	
S1 - 2,4 DCAA	66	20	150

( )

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

ENVIRONMENTAL TESTING & CONSULTING, INC.
2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**
Dunn Field
FID #

Date Arrived **11/20/00**
ETC Order Number **0011593**

ETC Lab ID **0011593-07**
Field ID : **RW-04-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/20/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
Chlorinated Herbicides				12/05/00		RG	8151A
					11/28/00		8151A
QC Batch	**P13002**						
Dilution Factor	**1**						
2,4-D	ND	ug/L	0.100				
2,4,-DB	ND	ug/L	0 100				
2,4,5-TP(Silvex)	ND	ug/L	0.030				
2,4,5-T	ND	ug/L	0.200				
Dalapon	ND	ug/L	0.750				
Dicamba	ND	ug/L	0.800				
Dichlorprop	ND	ug/L	0.100				
Dinoseb	ND	ug/L	2.70				
MCPA	ND	ug/L	180				
MCPP	ND	ug/L	20.0				

Surrogate Standard	% Recovery	QC Limits	
S1 - 2,4 DCAA	67	20	150

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 721

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Depot**
Dunn Field

FID #

Date Arrived **11/20/00**
ETC Order Number **0011593**

ETC Lab ID **0011593-08**
Field ID : **RW-03-Y2Q4**

Matrix : **AQUEOUS**
Sample Date : **11/20/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
Chlorinated Herbicides				12/05/00		RG	8151A
					11/28/00		8151A
QC Batch	**P13002**						
Dilution Factor	**1**						
2,4-D	ND	ug/L	0.100				
2,4,-DB	ND	ug/L	0.100				
2,4,5-TP(Silvex)	ND	ug/L	0.030				
2,4,5-T	ND	ug/L	0.200				
Dalapon	ND	ug/L	0.750				
Dicamba	ND	ug/L	0.800				
Dichlorprop	ND	ug/L	0.100				
Dinoseb	ND	ug/L	2.70				
MCPA	ND	ug/L	180				
MCPP	ND	ug/L	20.0				

Surrogate Standard	% Recovery	QC Limits	
S1 - 2,4 DCAA	71	20	150

CS
Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

FORM 2
WATER HERBICIDE SURROGATE RECOVERY

613 722

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-593

	EPA GC SAMPLE NO.	S1 #	S2 #	S3 #	S4 #	S5 #	S6 #	S7 #	S8 #	TOT OUT
01	P13002LB	56								0
02	P13002LCS	28								0
03	0011-593-1	77								0
04	0011-593-2	70								0
05	0011-593-3	78								0
06	0011-593-4	78								0
07	0011-593-5	74								0
08	0011-593-6	66								0
09	0011-593-7	67								0
10	0011-593-8	71								0
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24										
25										
26										
27										
28										
29										
30										

S1 = DCAA surrogate QC LIMITS (20-150)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogate diluted out

613 723

FORM 4
HERBICIDE METHOD BLANK SUMMARY

EPA GC SAMPLE NO.

P13002LB

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-593

Lab File ID: H212041A-11R Lab Prep Batch: P13002

Instrument ID: PEST2A Date Extracted:

Matrix: (soil/water) WATER Date Analyzed: 12/04/00

Level: (low/med) LOW Time Analyzed: 2107

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

	EPA GC SAMPLE NO.	TIME ANALYZED	LAB FILE ID	DATE ANALYZED
01	P13002LCS	2157	H212041A-13R	12/04/00
02	0011-705-1MS	2222	H212041A-14R	12/04/00
03	0011-705-1MS	2247	H212041A-15R	12/04/00
04	0011-705-1	2312	H212041A-16R	12/04/00
05	0011-593-1	0052	H212041A-20R	12/05/00
06	0011-593-2	0117	H212041A-21R	12/05/00
07	0011-593-3	0142	H212041A-22R	12/05/00
08	0011-593-4	0207	H212041A-23R	12/05/00
09	0011-593-5	0232	H212041A-24R	12/05/00
10	0011-593-6	0257	H212041A-25R	12/05/00
11	0011-593-7	0322	H212041A-26R	12/05/00
12	0011-593-8	0347	H212041A-27R	12/05/00
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

COMMENTS:

FORM 1 613 724 EPA GC SAMPLE NO.

HERBICIDE ORGANICS ANALYSIS DATA SHEET

P13002LB

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-593

Matrix: (soil/water) WATER Lab Prep Batch: P13002

Sample wt/vol: 1000 (g/mL) ML Lab File ID: H212041A-11R

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:

Concentrated Extract Volume: 10(mL) Date Analyzed: 12/04/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-99-0	Dalapon	0.250	U
93-65-2	MCPP	10.00	U
1918-00-9	Dicamba	0.0100	U
94-74-6	MCPA	10.00	U
120-36-5	Dichloroprop	0.100	U
94-75-7	2,4-D	0.100	U
93-72-1	Silvex	0.0100	U
93-76-5	2,4,5-T	0.0100	U
88-85-7	Dinoseb	0.0500	U
94-82-6	2,4-DB	2.90	
87-86-5	Pentachlorophenol	0.0380	U
100-02-7	4-Nitrophenol	0.0380	U

FORM 3

613 725 WATER HERBICIDE LAB CONTROL SAMPLE

Lab Name: ETC, INC. Lab Prep Batch: P13002

Lab Code: Case No.: SAS No.: SDG No.: 0011-593

Matrix Spike - Sample No.: P13002LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Dalapon	5.00		11.93	239*	20-150
MCPP	500.0		307.7	62	20-150
Dicamba	5.00		1.71	34	20-150
MCPA	500.0		317.8	64	20-150
Dichloroprop	5.00		1.98	40	20-150
2,4-D	5.00		2.81	56	20-150
Silvex	5.00		2.00	40	20-150
2,4,5-T	5.00		2.54	51	20-150
Dinoseb	5.00		0.308	6*	20-150
2,4-DB	5.00		3.93	79	20-150

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 2 out of 10 outside limits

COMMENTS: _____

FORM 3
WATER HERBICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: ETC, INC. Lab Prep Batch: P13002

Lab Code: Case No.: SAS No.: SDG No.: 0011-593

Matrix Spike - Sample No.: 0011-705-1

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
Dalapon	20.00	0.000	25.53	128	20-150
MCPP	2000	0.000	887.0	44	20-150
Dicamba	20.00	0.000	7.81	39	20-150
MCPA	2000	0.000	993.2	50	20-150
Dichloroprop	20.00	0.000	6.76	34	20-150
2,4-D	20.00	0.000	10.94	55	20-150
Silvex	20.00	0.000	8.98	45	20-150
2,4,5-T	20.00	0.000	9.89	49	20-150
Dinoseb	20.00	0.000	0.698	3*	20-150
2,4-DB	20.00	14.05	18.07	20	20-150

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Dalapon	20.00	33.30	166*	26*	20	20-150
MCPP	2000	542.0	27	48*	20	20-150
Dicamba	20.00	3.39	17*	78*	20	20-150
MCPA	2000	779.9	39	25*	20	20-150
Dichloroprop	20.00	4.58	23	38*	20	20-150
2,4-D	20.00	9.37	47	16	20	20-150
Silvex	20.00	6.84	34	28*	20	20-150
2,4,5-T	20.00	8.59	43	13	20	20-150
Dinoseb	20.00	0.218	1*	100*	20	20-150
2,4-DB	20.00	18.95	24	18	20	20-150

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 7 out of 10 outside limits
Spike Recovery: 4 out of 20 outside limits

COMMENTS: _____

Environmental Testing & Consulting, Inc.

Login
Chain-of-Custody

613 728

CHAIN OF CUSTODY RECORD

Environmental Testing & Consulting, Inc.
2924 Walnut Grove Rd.
Memphis, TN 38111
(901)327-2750 FAX (901)327-6334

ETC Work Order : 0011593

000156

Company Name	Phone # : 615 305 6437	Fax Results
JACOBS	Fax # : 615 833 8328	RUSH
Project/Site: Memphis Depot - Dunn Field	FID # :	Ice
Project #	PO # :	
Project Manager/Contact: Kraig Smith	Matrix: 1 Wastewater, 2 Aqueous, 3 Soil/Sediment, 4 Sludge, 5 Oil/Solvent, 6 Other	

Analysis Requested (Note special detection limits or methods)

# of cont.	Sample ID/ Number	Depth	Sample Date	Sample Time	Matrix	Type Grab/Comp	VOC (8260)	SVOC (8270)	CN	TAL Metals (EPA 2007)	Pest/herb (8081)	Comments
9	RW-09-YZQ4		11-20-00	1130	2	GRAB	✓	✓	✓	✓	✓	
9	RW-08-YZQ4		"	1140	2	"	✓	✓	✓	✓	✓	
9	RW-07-YZQ4		"	1150	2	"	✓	✓	✓	✓	✓	
9	RW-06-YZQ4		"	1200	2	"	✓	✓	✓	✓	✓	
9	RW-05-YZQ4		"	1215	2	"	✓	✓	✓	✓	✓	
9	RW-10-YZQ4		"	1215	2	"	✓	✓	✓	✓	✓	
9	RW-04-YZQ4		"	1230	2	"	✓	✓	✓	✓	✓	
9	RW-03-YZQ4		"	1245	2	"	✓	✓	✓	✓	✓	

Sampled By	Method of Shipment	Blank/Cooler Temp	Remarks
Kraig Smith	Hand Delivery	4°C	

RELINQUISHED BY (sign)	DATE	TIME	RECEIVED BY (sign)	DATE	TIME	Sample Delivery Group ID
Kraig Smith	11-20-00	1400				
RELINQUISHED BY (sign)	DATE	TIME	RECEIVED BY (sign)	DATE	TIME	
RELINQUISHED BY (sign)	DATE	TIME	RECEIVED BY LAB (print/sign)	DATE	TIME	
				11/21/00	1400	

Distribution . Original and Yellow accompany samples to the laboratory Pink copy for Field
Original copy returned with results Yellow copy for ETC, Inc. files

F:\QAQC\SLOP\ 95 XLS

Chet Scheibel

From: "Kraig Smith" <urbansmith@hotmail.com>
To: <scheibel@etcmemphis com>
Sent: Monday, November 20, 2000 2 35 PM
Subject: Analysis for Dunn Field Quarterly Samples submitted 11-20-

Dear Mr. Scheibel,

As we discussed in our telephone conversation earlier today, please add a full scan of herbicides (Method SW8151A) to the samples which were delivered to you today.

Kraig Smith
Jacobs Engineering

Get Your Private, Free E-mail from MSN Hotmail at http //www.hotmail com

Share information about yourself, create your own public profile at http://profiles msn.com.

Environmental Testing & Consulting, Inc.
Cooler Receipt Form

LIMS# 0011-593
Project Memphis Depot
Dunn Field
Date Received 11/20/00
Date/Time Checked In 11/20/00-14:00
Carrier/Bill# ____Hand-Delivered_____
By Rebekah Barger

1.	Custody Seals?/Location-	**No**
2.	Samples are non-radioactive?	**Yes**
3.	Chain of Custody in plastic?	**No**
4.	Temperature at receipt (ok = 4 ± 2 °C)<4oC	**OK**
5.	Ice & Packing-Bags, Ice, Bubble Wrap	**Yes**
6.	Chain of Custody filled out properly?	**Yes**
7.	All containers in separate bags?	**No**
8.	Sample containers intact?	**Yes**
9.	Label(s) complete and in good condition?	**Yes**
10.	Label(s) agree with Chain of Custody?	**Yes**
11.	Correct containers used?	**Yes**
12.	Sufficient sample?	**Yes**
13.	VOA vials bubble-free (H_2O) or no head space (soil)?	**Yes**
14.	Preservation OK? TM pH____; TRPH pH____; TOC pH____; TOX pH____; CN pH____; N/P pH____; Other pH____	**Yes**

Comments _____

*Validated Date and Time of Sample Receipt (VDTSR)

APPENDIX C

MONTHLY EFFLUENT SAMPLES
ANALYTICAL LABORATY DATA

ENVIRONMENTAL TESTING & CONSULTING, INC.
2921 Walnut Grove Road • Memphis, TN 38111 • (901) 327-2750 • FAX (901) 327-6334
Founded 1972

October 25, 2000

Mr. Kraig Smith
Sverdrup/Jacobs Eng.
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Ref: Analytical Testing
ETC Order # 0010480
Project Description Memphis Defense Depot
Dunn Field

The above referenced project has been analyzed per your instructions. The analyses were performed in our laboratory in accordance with Standard Methods, The Solid Waste Manual SW-846, EPA Methods for Chemical Analysis of Water and Wastes and/or 40 CFR part 136.

The results are shown on the attached analysis sheet(s).

Please do not hesitate to contact our office if you have any questions.

Sincerely,

Nathan A. Pera, IV
Chief Executive Officer

rt
Attachment

SVE_MHDDMT

Certifications

Tennessee	*#TN02027*	*Mississippi*	
Arkansas	*#40730*	*Oklahoma*	*#9311*
Kentucky	*#90047*	*Virginia*	*#00106*
North Carolina	*#415*	*Washington*	*#C248*
South Carolina	*#84002002*	*US Army Corps of Engineers*	

Environmental Testing & Consulting, Inc.

Data Qualifiers for Organic Reporting

Within the attached report, some analytical data may be reported as "Qualified Data" as indicated by a "Data Qualifier" next to the result. This table summarizes the possible "Data Qualifiers" that may be associated with this report. These qualifiers do not apply for TIC reports.

Q	Surrogate Recovery Outside QC Limits
J	Estimated Value Presence of the compound was confirmed but less than the
	reported detection limit
E	Concentration exceeds the established method calibration range but is within
	the working range of the instrument.
B	Analyte detected in the associated Method Blank
U	Reported result was unconfirmed Refer to Case Narrative
N	Non-Compliance Report associated with this sample or project
C	Result reported from GC/MS confirmation analysis
M	Result reported represents a minimum value. Refer to Case Narrative
NC	Result reported from Primary Column Result did not confirm
*	QC Data (percent recovery/RPD for a particular analyte was outside QC Limits)

ENVIRONMENTAL TESTING AND CONSULTING, INC.
CASE NARRATIVE
METALS - AQUEOUS

Client Name Sverdrup/Jacobs Engineering
Project Name Memphis Defense Depot

ETC Order # 0010-480

HOLDING TIMES

QC Batch(s) for this order	ICP Metals	V22-AQ-74
	Mercury	V7-AQ-57
Sample Analysis	All samples digested and analyzed within 180 days of collection	
Mercury Analysis	All samples analyzed within 28 days of collection	

CALIBRATION

Initial Calibration	All criteria met
Continuing Calibration	All criteria met

SAMPLE ANALYSIS

Instrumentation: Thermo Jarrell Ash Enviro-I ICP
CETAC M-6000A Mercury Analyzer
Dilutions Required No dilutions required

QUALITY CONTROL

0010-480.MQCBLANK
Method Blank

V22-AQ-74BLK	ICP Metals
V7-AQ-57BLK	Mercury

Sodium was detected in V22-AQ-74BLK at 0 105 mg/L Sample concentration less than 5 times the method blank value (0 525 mg/L) should be attributed to Lab contamination. This analyte was detected in all associated samples at concentrations greater than 5 times the method blank value

Calcium was detected in V22-AQ-74BLK at 0.025 mg/L. Sample concentration less than 5 times the Method Blank value (0 125 mg/L) should be attributed to Lab contamination This analyte was detected in all samples at concentrations greater than 5 times the method blank value

0010-480.MQCLCS
Laboratory Control Sample(s)

V22-AQ-74LCS	ICP Metals
V7-AQ-57LCS	Mercury

All acceptance criteria met

0010-480.MQCMSMSD
Matrix Spike / Matrix Spike Dup - ICP Metals

0010-480-01	RPD	All analytes within QC limits.
ST-EFF-029	Spike Recovery	All analytes within QC limits, except as listed below

Sodium was flagged for high recovery in the MS/MSD due to the level of this analyte present relative to the spike amount A Dilution Test was performed for verification.

Refer to Form 9 Serial Dilution Refer to Laboratory Control Sample(s) for system verification.

613 735

ENVIRONMENTAL TESTING AND CONSULTING, INC.
CASE NARRATIVE
METALS - AQUEOUS

Client Name Sverdrup/Jacobs Engineering
Project Name Memphis Defense Depot

ETC Order # 0010-480

QUALITY CONTROL

Matrix Spike / Matrix Spike Dup - Hg

0010-480-01	RPD	All analytes within QC limits.
ST-EFF-029	Spike Recovery	All analytes within QC limits.

Refer to Laboratory Control Sample(s) for system verification.

Dilution Test Dilution result must agree within 10% of original result when sample is diluted by a factor of 5.

Post Digestion Spike Recovery must be +/-25% of expected value for ICP

C S

Project Manager

ENVIRONMENTAL TESTING AND CONSULTING, INC.
CASE NARRATIVE
GC/MS VOLATILE COMPOUNDS - AQUEOUS

Client Name Sverdrup/Jacobs Engineering
Project Name Memphis Defense Depot

ETC Order # 0010-480
Method (SW-846) 8260B/5030B

SAMPLE PRESERVATION (Verified at time of analysis)

All aqueous samples preserved to pH < 2.

HOLDING TIMES

Sample Analysis All samples analyzed within 14 days of collection.

QUALITY CONTROL

QC Batch	Form 4 Summary
V4102001	V4102011LB

System Monitoring Compounds FORM 2
Surrogate recoveries within QC limits, except as listed below

Surrogate Bromofluorobenzene was flagged for slightly low recovery in V4102011LCS and 0010-480-01MS/MSD These slightly low recoveries do not affect the data.

Method Blank FORM 4
V4102011LB

Target Analytes were not detected in the Method Blank, except as listed below.

Methylene Chloride was detected at a concentration of 1 35J ug/L. This analyte was not identified in associated project samples There is no effect on the data.

Laboratory Control Sample FORM 3
V4102011LCS

All acceptance criteria met, except as listed below

Three non-target analytes were flagged for high recovery in the LCS. There is no effect on the data

Matrix Spike / Matrix Spike Dup FORM 3
Batch V4102001

0010-480-01	RPD	All analytes within QC limits
ST-EFF-029	Spike Recovery	All analytes within QC limits, except as listed below.

Trichloroethene was flagged for low recovery in the Matrix Spike and Matrix Spike Duplicate. Sample results may be biased low

Refer to Laboratory Control Sample(s) for system verification

ENVIRONMENTAL TESTING AND CONSULTING, INC.
CASE NARRATIVE
GC/MS VOLATILE COMPOUNDS - AQUEOUS

Client Name Sverdrup/Jacobs Engineering
Project Name Memphis Defense Depot

ETC Order # 0010-480
Method (SW-846) 8260B/5030B

CALIBRATION

BFB Daily 12-Hour Tune	All criteria met FORM 5
Initial Calibration	All criteria met. FORM 6
Calibration Verification	All criteria met. FORM 7, except as listed below.

Calibration Verification (CV) Date 10/20/00 Time: 1213

Analyte	%Diff(30% Max)	Response
4-Methyl-2-Pentanone	+40.7	High

Samples affected by this CV include V4102011LB, V4102011LCS, 0010-480-01MS/MSD, and 0010-480-01 through 0010-480-03. High response indicates that reported levels for this analyte may be biased high This analyte was not identified in associated project samples. There is no effect on the data.

Volatile Internal Standard Area and RT FORM 8
Daily Check Standard(s) Internal Standard Areas and Retention Times within QC limits.

SAMPLE ANALYSIS

Instrumentation	HP 5890 Series II GC, 5971MSD
Dilutions Required	No dilutions required.

OTHER

The sample results for 0010-480-02, labeled as EQB-029, compare to sample 0010-480-01 (ST-EFF-029). The designation of the sample as EQB-029 indicates that this sample may be an equipment blank. The vial label was checked by laboratory personnel to insure that the vial(s) had not been mis-labeled at the lab.

CS
Project Manager

ENVIRONMENTAL TESTING AND CONSULTING, INC.
CASE NARRATIVE
GC/MS SEMI-VOLATILE COMPOUNDS - AQUEOUS

Client Name Sverdrup/Jacobs Engineering
Project Name Memphis Defense Depot

ETC Order # 0010-480
Method (SW-846) 8270C/3510C

HOLDING TIMES

Sample Extraction	All aqueous samples extracted within 7 days.
Sample Analysis	All samples analyzed within 40 days of extraction.

QUALITY CONTROL

QC Batch	Form 4 Summary
P05393	P05393LB

System Monitoring Compounds FORM 2
Surrogate recoveries within QC limits.

Method Blank FORM 4
P05393LB

Target analytes were not detected in the Method Blank, except as listed below.

Bis(2-ethylhexyl)phthalate was detected in the Method Blank at 6 53 ug/L. This analyte was not identified in associated project samples. There is no effect on the data.

Laboratory Control Sample FORM 3
P05393LCS

All acceptance criteria met

Matrix Spike / Matrix Spike Dup FORM 3
Batch P05393

0010-480-01	RPD	All analytes within QC limits
ST-EFF-029	Spike Recovery	All analytes within QC limits.

Refer to Laboratory Control Sample(s) for system verification

CALIBRATION

DFTPP Daily 12-Hour Tune	All criteria met FORM 5
Initial Calibration	All criteria met. FORM 6
Calibration Verification	All criteria met. FORM 7

Semi-Volatile Internal Standard Area and RT FORM 8
Daily Check Standard(s) Internal Standard Areas and Retention Times within QC limits.

ENVIRONMENTAL TESTING AND CONSULTING, INC.
CASE NARRATIVE
GC/MS SEMI-VOLATILE COMPOUNDS - AQUEOUS

Client Name	Sverdrup/Jacobs Engineering
Project Name	Memphis Defense Depot
ETC Order #	0010-480
Method (SW-846)	8270C/3510C

SAMPLE ANALYSIS

Instrumentation	HP 5890 Series II GC, 5971MSD
Dilutions Required	No dilutions required

Project Manager

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

ANALYTICAL SUMMARY/CROSS REFERENCE TABLE 613 740

[redacted]ent Name Sverdrup/Jacobs Eng. ETC Order #0010480
[redacted]e ID Memphis Defense Depot
Dunn Field

ETC Sample ID	Field ID	Matrix	Method	Method Description
001048001	ST-EFF-029	AQUEOUS	150.1	pH
001048001	ST-EFF-029	AQUEOUS	200.7	Silver
001048001	ST-EFF-029	AQUEOUS	200.7	Aluminum
001048001	ST-EFF-029	AQUEOUS	200.7	Arsenic
001048001	ST-EFF-029	AQUEOUS	200.7	Barium
001048001	ST-EFF-029	AQUEOUS	200.7	Beryllium
001048001	ST-EFF-029	AQUEOUS	200.7	Calcium
001048001	ST-EFF-029	AQUEOUS	200.7	Cadmium
001048001	ST-EFF-029	AQUEOUS	200 7	Cobalt
001048001	ST-EFF-029	AQUEOUS	200 7	Chromium
001048001	ST-EFF-029	AQUEOUS	200 7	Copper
001048001	ST-EFF-029	AQUEOUS	200 7	Iron
001048001	ST-EFF-029	AQUEOUS	245 1	Mercury
001048001	ST-EFF-029	AQUEOUS	200 7	Potassium
001048001	ST-EFF-029	AQUEOUS	200 7	Magnesium
001048001	ST-EFF-029	AQUEOUS	200 7	Manganese
001048001	ST-EFF-029	AQUEOUS	200.7	Sodium
001048001	ST-EFF-029	AQUEOUS	200 7	Nickel
001048001	ST-EFF-029	AQUEOUS	200 7	Lead
001048001	ST-EFF-029	AQUEOUS	200.7	Antimony
001048001	ST-EFF-029	AQUEOUS	200 7	Selenium
001048001	ST-EFF-029	AQUEOUS	200.7	Thallium
001048001	ST-EFF-029	AQUEOUS	200.7	Vanadium
[redacted]8001	ST-EFF-029	AQUEOUS	200 7	Zinc
[redacted]048001	ST-EFF-029	AQUEOUS	8260B	GC/MS Volatile Organics
001048001	ST-EFF-029	AQUEOUS	8270C	GC/MS Base/Neutral & Acid
001048002	EQB-029	AQUEOUS	150 1	pH
001048002	EQB-029	AQUEOUS	200 7	Silver
001048002	EQB-029	AQUEOUS	200 7	Aluminum
001048002	EQB-029	AQUEOUS	200 7	Arsenic
001048002	EQB-029	AQUEOUS	200.7	Barium
001048002	EQB-029	AQUEOUS	200.7	Beryllium
001048002	EQB-029	AQUEOUS	200 7	Calcium
001048002	EQB-029	AQUEOUS	200 7	Cadmium
001048002	EQB-029	AQUEOUS	200 7	Cobalt
001048002	EQB-029	AQUEOUS	200 7	Chromium
001048002	EQB-029	AQUEOUS	200.7	Copper
001048002	EQB-029	AQUEOUS	200 7	Iron
001048002	EQB-029	AQUEOUS	245 1	Mercury
001048002	EQB-029	AQUEOUS	200 7	Potassium
001048002	EQB-029	AQUEOUS	200 7	Magnesium
001048002	EQB-029	AQUEOUS	200.7	Manganese
001048002	EQB-029	AQUEOUS	200.7	Sodium
001048002	EQB-029	AQUEOUS	200 7	Nickel
001048002	EQB-029	AQUEOUS	200 7	Lead
001048002	EQB-029	AQUEOUS	200 7	Antimony
001048002	EQB-029	AQUEOUS	200 7	Selenium
001048002	EQB-029	AQUEOUS	200 7	Thallium
001048002	EQB-029	AQUEOUS	200.7	Vanadium
001048002	EQB-029	AQUEOUS	200.7	Zinc
001048002	EQB-029	AQUEOUS	8260B	GC/MS Volatile Organics
001048002	EQB-029	AQUEOUS	8270C	GC/MS Base/Neutral & Acid
[redacted]48003	Trip Blank	AQUEOUS	8260B	GC/MS Volatile Organics

c> 10/16/90

ENVIRONMENTAL TESTING & CONSULTING, INC.

613 741

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name: **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID: **Memphis Defense Depot**
Dunn Field

Date Arrived: **10/18/00**
ETC Order Number: **0010480**

ETC Lab ID : **0010480-01**
Field ID . **ST-EFF-029**

Matrix : **AQUEOUS**
Sample Date : **10/18/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	TIME ANALYZED	BY	METHOD
pH	6.2	SU		10/18/00	1655	RB	150.1
Mercury Digestion Batch	V7-AQ-57			10/20/00		JF	245 1
Metals Digestion Batch	V22-AQ-74			10/19/00		NR	3030K
Silver	<0.009	mg/L	0 009	10/22/00	1237	SH	200.7
Aluminum	<0.060	mg/L	0.060	10/22/00	1237	SH	200.7
Arsenic	<0.003	mg/L	0 003	10/22/00	1237	SH	200.7
Barium	0.108	mg/L	0 003	10/22/00	1237	SH	200.7
Beryllium	<0.002	mg/L	0 002	10/22/00	1237	SH	200 7
Calcium	21.1	mg/L	0.015	10/22/00	1237	SH	200 7
Cadmium	<0.005	mg/L	0 005	10/22/00	1237	SH	200.7
Cobalt	<0.009	mg/L	0 009	10/22/00	1237	SH	200.7
Chromium	<0 009	mg/L	0 009	10/22/00	1237	SH	200 7
Copper	<0 008	mg/L	0 008	10/22/00	1237	SH	200.7
Iron	0 061	mg/L	0 009	10/22/00	1237	SH	200.7
Mercury	<0 0002	mg/L	0 0002	10/21/00	0743	JF	245.1
Potassium	0.886	mg/L	0.250	10/22/00	1237	SH	200 7
Magnesium	10 3	mg/L	0.040	10/22/00	1237	SH	200 7
Manganese	<0 003	mg/L	0 003	10/22/00	1237	SH	200.7
Sodium	23.7	mg/L	0 050	10/22/00	1237	SH	200.7
Nickel	<0 020	mg/L	0 020	10/22/00	1237	SH	200.7
Lead	<0 060	mg/L	0.060	10/22/00	1237	SH	200 7
Antimony	<0 040	mg/L	0.040	10/22/00	1237	SH	200 7
Selenium	<0 100	mg/L	0 100	10/22/00	1237	SH	200 7
Thallium	<0.065	mg/L	0 065	10/22/00	1237	SH	200 7
Vanadium	<0 010	mg/L	0.010	10/22/00	1237	SH	200.7
Zinc	0 094	mg/L	0.010	10/22/00	1237	SH	200.7

ETC Lab ID **0010480-02**
Field ID . **EQB-029**

Matrix : **AQUEOUS**
Sample Date : **10/18/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	TIME ANALYZED	BY	METHOD
pH	6.0	SU		10/18/00	1655	RB	150.1
Mercury Digestion Batch	V7-AQ-57			10/20/00		JF	245.1
Metals Digestion Batch	V22-AQ-74			10/19/00		NR	3030K
Silver	<0 009	mg/L	0 009	10/22/00	1237	SH	200.7
Aluminum	<0 060	mg/L	0.060	10/22/00	1237	SH	200.7
Arsenic	<0.003	mg/L	0.003	10/22/00	1237	SH	200.7
Barium	0.109	mg/L	0 003	10/22/00	1237	SH	200.7
Beryllium	<0 002	mg/L	0 002	10/22/00	1237	SH	200.7
Calcium	21 4	mg/L	0.015	10/22/00	1237	SH	200.7
Cadmium	<0.005	mg/L	0.005	10/22/00	1237	SH	200.7
Cobalt	<0.009	mg/L	0.009	10/22/00	1237	SH	200.7
Chromium	<0 009	mg/L	0 009	10/22/00	1237	SH	200 7
Copper	<0 008	mg/L	0 008	10/22/00	1237	SH	200.7

Data Validator

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 742

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Defense Depot**
Dunn Field

Date Arrived **10/18/00**
ETC Order Number **0010480**

ETC Lab ID : **0010480-02**
Field ID : **EQB-029**

Matrix : **AQUEOUS**
Sample Date : **10/18/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	TIME ANALYZED	BY	METHOD
Iron	0.036	mg/L	0.009	10/22/00	1237	SH	200 7
Mercury	<0.0002	mg/L	0.0002	10/21/00	0743	JF	245.1
Potassium	0.872	mg/L	0.250	10/22/00	1237	SH	200 7
Magnesium	10.5	mg/L	0.040	10/22/00	1237	SH	200 7
Manganese	<0 003	mg/L	0.003	10/22/00	1237	SH	200.7
Sodium	25 4	mg/L	0 050	10/22/00	1237	SH	200 7
Nickel	<0.020	mg/L	0 020	10/22/00	1237	SH	200 7
Lead	<0.060	mg/L	0 060	10/22/00	1237	SH	200 7
Antimony	<0 040	mg/L	0.040	10/22/00	1237	SH	200 7
Selenium	<0.100	mg/L	0 100	10/22/00	1237	SH	200 7
Thallium	<0.065	mg/L	0 065	10/22/00	1237	SH	200 7
Vanadium	<0 010	mg/L	0.010	10/22/00	1237	SH	200.7
Zinc	0 074	mg/L	0.010	10/22/00	1237	SH	200 7

Data Validator

ND - Not Detected

006010

613 743

FORM 3A
WATER METHOD BLANK
METALS

Lab Name: Environmental Testing and Consulting, Inc

			QC Batch
Laboratory ID ICP/GFAA Metals	V22-AQ-74	BLK	V22-AQ-74
Laboratory ID Mercury	V7-AQ-57	BLK	V7-AQ-57
Date Sample Prepared	10/19/00	ICP/GFAA Metals	
	10/20/00	Mercury	

Metals	Concentration mg/L	Detection Limit mg/L	Date Analyzed	Method
Silver	ND	0.009	10/28/00	200.7
Aluminum	ND	0.060	10/28/00	200.7
Arsenic	ND	0.003	10/28/00	200.7
Barium	ND	0.003	10/28/00	200.7
Beryllium	ND	0 002	10/28/00	200.7
Calcium	0.025	0.015	10/28/00	200.7
Cadmium	ND	0 005	10/28/00	200.7
Cobalt	ND	0.009	10/28/00	200.7
Chromium	ND	0.009	10/28/00	200.7
Copper	ND	0.008	10/28/00	200.7
Iron	ND	0.009	10/28/00	200.7
Potassium	ND	0.250	10/28/00	200.7
Magnesium	ND	0.040	10/28/00	200.7
Manganese	ND	0.003	10/28/00	200 7
Sodium	0.105	0.050	10/28/00	200.7
Nickel	ND	0.020	10/28/00	200.7
Lead	ND	0.060	10/28/00	200.7
Antimony	ND	0.040	10/28/00	200.7
Selenium	ND	0.100	10/28/00	200.7
Thallium	ND	0.065	10/28/00	200.7
Vanadium	ND	0.010	10/28/00	200.7
Zinc	ND	0.010	10/28/00	200.7
Mercury	ND	0.0002	10/21/00	245.1

ND - Not Detected

Reviewed by C>

FORM 7
WATER LABORATORY CONTROL SAMPLE
METALS

Lab Name: Environmental Testing and Consulting, Inc

			QC Batch
Laboratory Control ID	ICP/GFAA Metals	V22-AQ-74 LCS	V22-AQ-74
	Mercury	V7-AQ-57 LCS	V7-AQ-57
Date Prepared	ICP/GFAA Metals	10/19/00	
	Mercury	10/20/00	

Metals	Spike Added mg/L	Found mg/L	% R	#	QC Limits	
Silver	0.250	0.266	106		80	120
Aluminum	2.50	2.63	105		80	120
Arsenic	0.100	0 105	105		80	120
Barium	2.50	2.74	110		80	120
Beryllium	0.250	0.279	112		80	120
Calcium	5.00	5.66	113		80	120
Cadmium	0.020	0 022	110		80	120
Cobalt	1 25	1.36	109		80	120
Chromium	0.500	0.544	109		80	120
Copper	0.500	0.536	107		80	120
Iron	2.50	2.83	113		80	120
Potassium	5.00	5.56	111		80	120
Magnesium	5.00	5.19	104		80	120
Manganese	0.250	0 279	112		80	120
Sodium	5.00	5.51	110		80	120
Nickel	1.25	1 36	109		80	120
Lead	0.100	0.113	113		80	120
Antimony	0.200	0.221	111		80	120
Selenium	0.100	0.105	105		80	120
Thallium	0.100	0.110	110		80	120
Vanadium	1.25	1.36	109		80	120
Zinc	0.250	0.298	119		80	120
Mercury	0 0050	0.0056	112		80	120

Column to be used to flag recovery values with an asterisk
* Values outside of QC limits

Reviewed by CS

FORM 6
WATER MATRIX SPIKE / MATRIX SPIKE DUPLICATE
METALS

Lab Name: Environmental Testing and Consulting, Inc

		QC Batch
Laboratory ID MS ICP/GFAA Metals	0010-480-01	V22-AQ-74
Laboratory ID MS Mercury	0010-480-01	V7-AQ-57

Date Sample Prepared	36818	ICP/GFAA Metals
	36819	Mercury

Metals	SPIKE Added mg/L	SAMPLE Conc mg/L	MS Conc mg/L	RPD <20% #	MS % Rec #	QC Limits	
Silver	0.250	ND	0.236	8	94	75	125
Aluminum	2.50	ND	2.67	1	107	75	125
Arsenic	0.100	ND	0.105	2	105	75	125
Barium	2.50	0.108	2.90	0	112	75	125
Beryllium	0.250	ND	0.285	0	114	75	125
Calcium	5.00	21.1	27.0	1	118	75	125
Cadmium	0.020	ND	0.022	0	110	75	125
Cobalt	1.25	ND	1.37	1	110	75	125
Chromium	0.500	ND	0.551	1	110	75	125
Copper	0.500	ND	0.553	1	111	75	125
Iron	2.50	0.061	2.97	3	116	75	125
Potassium	5.00	0.886	6.61	0	114	75	125
Magnesium	5.00	10.3	15.8	1	110	75	125
Manganese	0.250	ND	0.284	1	114	75	125
Sodium	5.00	23.7	30 0	1	126 *	75	125
Nickel	1.25	ND	1 38	1	110	75	125
Lead	0.100	ND	0.114	3	114	75	125
Antimony	0.200	ND	0 227	0	114	75	125
Selenium	0.100	ND	0.110	1	110	75	125
Thallium	0.100	ND	0.110	2	110	75	125
Vanadium	1.25	ND	1.38	0	110	75	125
Zinc	0.250	0.094	0.391	1	119	75	125
Mercury	0.0050	ND	0.0053	2	106	75	125

ND - Not Detected
Column to be used to flag recovery values with an asterisk
* Values outside of QC limits

Reviewed by CS

FORM 6
WATER MATRIX SPIKE / MATRIX SPIKE DUPLICATE
METALS

Lab Name: Environmental Testing and Consulting, Inc

		QC Batch
Laboratory ID MS ICP/GFAA Metals	0010-480-01	V22-AQ-74
Laboratory ID MS Mercury	0010-480-01	V7-AQ-57

Date Sample Prepared	36818	ICP/GFAA Metals
	36819	Mercury

Metals	SPIKE Added mg/L	SAMPLE Conc mg/L	MSD Conc mg/L		MSD % Rec	#	QC Limits	
Silver	0.250	ND	0.255		102		75	125
Aluminum	2.50	ND	2.70		108		75	125
Arsenic	0.100	ND	0.107		107		75	125
Barium	2.50	0 108	2.91		112		75	125
Beryllium	0.250	ND	0.285		114		75	125
Calcium	5.00	21 1	27.3		124		75	125
Cadmium	0.020	ND	0.022		110		75	125
Cobalt	1.25	ND	1.38		110		75	125
Chromium	0.500	ND	0.555		111		75	125
Copper	0.500	ND	0.557		111		75	125
Iron	2 50	0 061	3.05		120		75	125
Potassium	5.00	0.886	6.62		115		75	125
Magnesium	5.00	10.3	16.0		114		75	125
Manganese	0 250	ND	0.286		114		75	125
Sodium	5.00	23.7	30.4		134	*	75	125
Nickel	1.25	ND	1.39		111		75	125
Lead	0.100	ND	0.117		117		75	125
Antimony	0.200	ND	0.228		114		75	125
Selenium	0.100	ND	0 109		109		75	125
Thallium	0 100	ND	0 112		112		75	125
Vanadium	1 25	ND	1.38		110		75	125
Zinc	0.250	0 094	0.395		120		75	125
Mercury	0.0050	ND	0.0052		104		75	125

ND - Not Detected
Column to be used to flag recovery values with an asterisk
* Values outside of QC limits

Reviewed by _____

613 747

FORM 9
SERIAL DILUTIONS
METALS

Lab Name Enviornmental Testing and Consulting, Inc

QC Batch ICP/GFAA Metals V22-AQ-74

Date Sample Prepared 10/19/00 ICP/GFAA Metals

Analyte	Initial Sample Result	Serial Dilution Result	Serial Dilution	% Difference
Sodium	23 7	21 8	1 5	8

ND - Not Detected
% Difference should be within 10% of the undiluted/lowest dilution result

Reviewed by_____

Serial Dilution 0010-480 mqc

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 748

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Defense Depot**
Dunn Field

FID #

Date Arrived **10/18/00**
ETC Order Number **0010480**

ETC Lab ID **0010480-01**
Field ID : **ST-EFF-029**

Matrix **AQUEOUS**
Sample Date : **10/18/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Volatile Organics				10/20/00		EM	8260B 5030B
QC Batch	**V4102001**						
Dilution Factor	**1**						
Acetone	ND	ug/L	20 0				
Benzene	ND	ug/L	1.00				
Bromodichloromethane	ND	ug/L	1 00				
Bromoform	ND	ug/L	1 00				
Bromomethane	ND	ug/L	1 00				
Carbon Disulfide	ND	ug/L	1 00				
Carbon Tetrachloride	1.57	ug/L	1 00				
Chlorobenzene	ND	ug/L	1.00				
Chlorodibromomethane	ND	ug/L	1.00				
Chloroethane	ND	ug/L	1 00				
[redacted]loroform	9.69	ug/L	1 00				
[redacted]loromethane	ND	ug/L	1.00				
1,1-Dichloroethane	ND	ug/L	1.00				
1,2-Dichloroethane	ND	ug/L	1.00				
1,1-Dichloroethene	18.8	ug/L	1.00				
trans-1,2-Dichloroethene	16 0	ug/L	1 00				
1,2-Dichloropropane	ND	ug/L	1.00				
cis-1,3-Dichloropropene	ND	ug/L	1 00				
trans-1,3-Dichloropropene	ND	ug/L	1.00				
Ethylbenzene	ND	ug/L	1 00				
2-Hexanone (MBK)	ND	ug/L	5 00				
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.00				
2-Butanone (MEK)	ND	ug/L	20.0				
Methylene Chloride	ND	ug/L	5.00				
Styrene	ND	ug/L	1 00				
1,1,2,2-Tetrachloroethane	61 3	ug/L	1 00				
Tetrachloroethene	15 9	ug/L	1.00				
Toluene	ND	ug/L	1 00				
1,1,1-Trichloroethane	ND	ug/L	1 00				
1,1,2-Trichloroethane	ND	ug/L	1 00				
Trichloroethene	101	ug/L	1 00				
Vinyl Acetate	ND	ug/L	20 0				
Vinyl Chloride	ND	ug/L	1.00				
o-Xylenes	ND	ug/L	1 00				
m-Xylenes	ND	ug/L	1 00				
p-Xylenes	ND	ug/L	1 00				
cis-1,2-Dichloroethene	55.7	ug/L	1 00				

Surrogate Standard	% Recovery	QC Limits	
S1 - Dibromofluoromethane	98	74	123
[redacted] - Toluene-d8	98	86	112
[redacted] - 4-Bromofluorobenzene	96	81	115
S4 - 1,2-Dichloroethane-d4	94	80	120

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

FORM 1
VOA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

0010-480-1

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0010-480

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 1001012

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 10/20/00

GC Column: ID: 2.00 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
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ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 750

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Defense Depot**
Dunn Field

FID #

Date Arrived **10/18/00**
ETC Order Number **0010480**

ETC Lab ID **0010480-02**
Field ID **EQB-029**

Matrix : **AQUEOUS**
Sample Date : **10/18/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
GC/MS Volatile Organics				10/20/00	EM	8260B 5030B
QC Batch	**V4102001**					
Dilution Factor	**1**					
Acetone	ND	ug/L	20.0			
Benzene	ND	ug/L	1.00			
Bromodichloromethane	ND	ug/L	1 00			
Bromoform	ND	ug/L	1 00			
Bromomethane	ND	ug/L	1 00			
Carbon Disulfide	ND	ug/L	1 00			
Carbon Tetrachloride	1 65	ug/L	1 00			
Chlorobenzene	ND	ug/L	1 00			
Chlorodibromomethane	ND	ug/L	1 00			
Chloroethane	ND	ug/L	1 00			
[redacted]loroform	8 54	ug/L	1 00			
[redacted]oromethane	ND	ug/L	1 00			
1,1-Dichloroethane	ND	ug/L	1 00			
1,2-Dichloroethane	ND	ug/L	1 00			
1,1-Dichloroethene	18 0	ug/L	1.00			
trans-1,2-Dichloroethene	14 8	ug/L	1 00			
1,2-Dichloropropane	ND	ug/L	1 00			
cis-1,3-Dichloropropene	ND	ug/L	1 00			
trans-1,3-Dichloropropene	ND	ug/L	1 00			
Ethylbenzene	ND	ug/L	1 00			
2-Hexanone (MBK)	ND	ug/L	5 00			
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.00			
2-Butanone (MEK)	ND	ug/L	20 0			
Methylene Chloride	ND	ug/L	5 00			
Styrene	ND	ug/L	1.00			
1,1,2,2-Tetrachloroethane	58.7	ug/L	1 00			
Tetrachloroethene	15 9	ug/L	1 00			
Toluene	ND	ug/L	1.00			
1,1,1-Trichloroethane	ND	ug/L	1.00			
1,1,2-Trichloroethane	1 01	ug/L	1.00			
Trichloroethene	102	ug/L	1 00			
Vinyl Acetate	ND	ug/L	20.0			
Vinyl Chloride	ND	ug/L	1 00			
o-Xylenes	ND	ug/L	1 00			
m-Xylenes	ND	ug/L	1.00			
p-Xylenes	ND	ug/L	1 00			
cis-1,2-Dichloroethene	51 0	ug/L	1 00			

Surrogate Standard	% Recovery	QC Limits	
S1 - Dibromofluoromethane	93	74	123
[redacted] Toluene-d8	98	86	112
[redacted] 4-Bromofluorobenzene	95	81	115
S4 - 1,2-Dichloroethane-d4	89	80	120

( )
Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

613 751

FORM 1
VOA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

0010-480-2

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0010-480

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 0901011

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 10/20/00

GC Column: ID: 2.00 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
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ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 752

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Defense Depot**
Dunn Field

FID #

Date Arrived **10/18/00**
ETC Order Number **0010480**

ETC Lab ID **0010480-03**
Field ID : **Trip Blank**

Matrix : **AQUEOUS**
Sample Date : **10/18/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
GC/MS Volatile Organics				10/20/00	EM	8260B 5030B
QC Batch	**V4102001**					
Dilution Factor	**1**					
Acetone	ND	ug/L	20.0			
Benzene	ND	ug/L	1.00			
Bromodichloromethane	ND	ug/L	1 00			
Bromoform	ND	ug/L	1.00			
Bromomethane	ND	ug/L	1 00			
Carbon Disulfide	ND	ug/L	1 00			
Carbon Tetrachloride	ND	ug/L	1.00			
Chlorobenzene	ND	ug/L	1.00			
Chlorodibromomethane	ND	ug/L	1.00			
Chloroethane	ND	ug/L	1.00			
[redacted]loroform	ND	ug/L	1.00			
[redacted]oromethane	ND	ug/L	1.00			
1,1-Dichloroethane	ND	ug/L	1.00			
1,2-Dichloroethane	ND	ug/L	1.00			
1,1-Dichloroethene	ND	ug/L	1.00			
trans-1,2-Dichloroethene	ND	ug/L	1.00			
1,2-Dichloropropane	ND	ug/L	1 00			
cis-1,3-Dichloropropene	ND	ug/L	1 00			
trans-1,3-Dichloropropene	ND	ug/L	1 00			
Ethylbenzene	ND	ug/L	1 00			
2-Hexanone (MBK)	ND	ug/L	5 00			
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.00			
2-Butanone (MEK)	ND	ug/L	20.0			
Methylene Chloride	ND	ug/L	5 00			
Styrene	ND	ug/L	1 00			
1,1,2,2-Tetrachloroethane	ND	ug/L	1 00			
Tetrachloroethene	ND	ug/L	1.00			
Toluene	ND	ug/L	1.00			
1,1,1-Trichloroethane	ND	ug/L	1.00			
1,1,2-Trichloroethane	ND	ug/L	1.00			
Trichloroethene	ND	ug/L	1 00			
Vinyl Acetate	ND	ug/L	20 0			
Vinyl Chloride	ND	ug/L	1.00			
o-Xylenes	ND	ug/L	1.00			
m-Xylenes	ND	ug/L	1.00			
p-Xylenes	ND	ug/L	1.00			
cis-1,2-Dichloroethene	ND	ug/L	1 00			

Surrogate Standard	% Recovery	QC Limits	
S1 - Dibromofluoromethane	96	74	123
[redacted] Toluene-d8	99	86	112
[redacted] 4-Bromofluorobenzene	95	81	115
S4 - 1,2-Dichloroethane-d4	95	80	120

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

C06020

613 753

FORM 1
VOA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

0010-480-3

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0010-480

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 0801010

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 10/20/00

GC Column: ID: 2.00 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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FORM 2
WATER VOA-GCMS SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0010-480

	CLIENT SAMPLE NO.	SMC1 (DCE) #	SMC2 (DFM) #	SMC3 (TOL) #	OTHER (BFB) #	TOT OUT
01	V4102011LCS	88	86	94	76*	1
02	V4102011LB	87	94	98	90	0
03	0010-480-3	95	96	99	95	0
04	0010-480-2	89	93	98	95	0
05	0010-480-1	94	98	98	96	0
06	0010-480-1MS	88	90	92	76*	1
07	0010-480-1MS	83	90	91	77*	1
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		QC LIMITS
SMC1 (DCE)	= 1,2-Dichloroethane-d4	(80-120)
SMC2 (DFM)	= Dibromofluoromethane	(74-123)
SMC3 (TOL)	= Toluene-d8	(86-112)
OTHER(BFB)	= Bromofluorobenzene	(81-115)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

FORM 4
VOA-GCMS METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

V4102011LB

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0010-480

Lab File ID: 0302005 Lab Prep Batch: V4102001

Date Analyzed: 10/20/00 Time Analyzed: 1404

GC Column: ID: 2 (mm) Heated Purge: (Y/N) Y

Instrument ID: VOC4

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

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	V4102011LCS	V4102001	0202003LCS	1213
02	0010-480-3	V4102001	0801010	1639
03	0010-480-2	V4102001	0901011	1710
04	0010-480-1	V4102001	1001012	1741
05	0010-480-1MS	V4102001	2001022	2248
06	0010-480-1MS	V4102001	2101023	2319
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COMMENTS:

FORM IV VOA-GCMS

FORM 1
VOA-GCMS ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

V4102011LB

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0010-480

Matrix: (soil/water) WATER Lab Prep Batch: V4102001

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 0302005

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 10/20/00

GC Column: ID: 2.00 (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
67-64-1	Acetone	20.00	U
75-05-8	Acetonitrile	20.00	U
107-02-8	Acrolein	20.00	U
107-13-1	Acrylonitrile	20.00	U
107-05-1	Allyl chloride	1.00	U
71-43-2	Benzene	1.00	U
108-86-1	Bromobenzene	1.00	U
74-97-5	Bromochloromethane	1.00	U
75-27-4	Bromodichloromethane	1.00	U
75-25-2	Bromoform	1.00	U
78-93-3	2-Butanone	20.00	U
74-83-9	Bromomethane	1.00	U
104-51-8	n-Butylbenzene	1.00	U
135-98-8	sec-Butylbenzene	1.00	U
98-06-6	tert-Butylbenzene	1.00	U
75-15-0	Carbon Disulfide	1.00	U
56-23-5	Carbon Tetrachloride	1.00	U
108-90-7	Chlorobenzene	1.00	U
124-48-1	Chlorodibromomethane	1.00	U
75-00-3	Chloroethane	1.00	U
110-75-0	2-Chloroethyl vinyl ether	20.00	U
67-66-3	Chloroform	1.00	U
74-87-3	Chloromethane	1.00	U
126-99-8	Chloroprene	1.00	U
95-49-8	2-Chlorotoluene	1.00	U
106-43-4	4-Chlorotoluene	1.00	U
96-12-8	1,2-Dibromo-3-chloropropane	1.00	U
106-93-4	1,2-Dibromoethane	1.00	U
74-95-3	Dibromomethane	1.00	U
95-50-1	1,2-Dichlorobenzene	1.00	U
541-73-1	1,3-Dichlorobenzene	1.00	U
106-46-7	1,4-Dichlorobenzene	1.00	U
110-57-6	trans-1,4-Dichloro-2-butene	1.00	U

FORM 1
VOA-GCMS ORGANICS ANALYSIS DATA SHEET

613 757

CLIENT SAMPLE NO.

V4102011LB

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0010-480

Matrix: (soil/water) WATER Lab Prep Batch: V4102001

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 0302005

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 10/20/00

GC Column: ID: 2.00 (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
1868-53-7	Dichlorodifluoromethane	1.00	U
75-34-3	1,1-Dichloroethane	1.00	U
107-06-2	1,2-Dichloroethane	1.00	U
75-35-4	1,1-Dichloroethene	1.00	U
156-59-4	cis-1,2-Dichloroethene	1.00	U
156-60-5	trans-1,2-Dichloroethene	1.00	U
78-87-5	1,2-Dichloropropane	1.00	U
142-28-9	1,3-Dichloropropane	1.00	U
590-20-7	2,2-Dichloropropane	1.00	U
563-58-6	1,1-Dichloropropene	1.00	U
10061-01-5	cis-1,3-Dichloropropene	1.00	U
10061-02-6	trans-1,3-Dichloropropene	1.00	U
108-20-3	Di isopropyl ether	5.00	U
123-91-1	1,4-Dioxane	100.0	U
141-78-6	Ethyl Acetate	5.00	U
100-41-4	Ethylbenzene	1.00	U
97-63-2	Ethyl methacrylate	1.00	U
110-00-9	Furan	1.00	U
87-63-3	Hexachlorobutadiene	1.00	U
110-54-3	Hexane	1.00	U
591-78-6	2-Hexanone	5.00	U
74-88-4	Iodomethane	1.00	U
78-83-1	Isobutyl Alcohol	100.0	U
98-82-8	Isopropylbenzene	1.00	U
99-87-6	4-Isopropyltoluene	1.00	U
126-98-7	Methacrylonitrile	10.00	U
75-09-2	Methylene Chloride	1.35	J
80-62-6	Methyl methacrylate	1.00	U
108-10-1	4-Methyl-2-Pentanone	5.00	U
1634-04-4	Methyl-tertbutyl-Ether	5.00	U
91-20-3	Naphthalene	1.00	U
76-01-7	Pentachloroethane	1.00	U
107-12-0	Propionitrile	10.00	U

FORM 1 613 753 CLIENT SAMPLE NO.:

VOA-GCMS ORGANICS ANALYSIS DATA SHEET

V4102011LB

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0010-480

Matrix: (soil/water) WATER Lab Prep Batch: V4102001

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 0302005

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 10/20/00

GC Column: ID: 2.00 (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
109-60-4	n-Propyl Acetate	1.00	U
103-65-1	n-Propylbenzene	1.00	U
100-42-5	Styrene	1.00	U
630-20-6	1,1,1,2-Tetrachloroethane	1.00	U
79-34-5	1,1,2,2-Tetrachloroethane	1.00	U
127-18-4	Tetrachloroethene	1.00	U
109-99-9	Tetrahydrofuran	1.00	U
87-61-6	1,2,3-Trichlorobenzene	1.00	U
108-88-3	Toluene	1.00	U
71-55-6	1,1,1-Trichloroethane	1.00	U
79-00-5	1,1,2-Trichloroethane	1.00	U
76-13-1	1,1,2-trichloro-1,2,2-triflu	1.00	U
79-01-6	Trichloroethene	1.00	U
75-69-4	Trichlorofluoromethane	1.00	U
96-18-4	1,2,3-Trichloropropane	1.00	U
120-82-1	1,2,4-Trichlorobenzene	1.00	U
95-63-6	1,2,4-Trimethylbenzene	1.00	U
108-67-8	1,3,5-Trimethylbenzene	1.00	U
108-05-4	Vinyl Acetate	20.00	U
75-01-4	Vinyl Chloride	1.00	U
1330-20-7	Xylene-mp	1.00	U
95-47-6	Xylene-o	1.00	U
1476-11-5	cis-1,4-Dichloro-2-butene	1.00	U

613 759

FORM 1
VOA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

V4102011LB

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0010-480

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 0302005

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 10/20/00

GC Column: ID: 2.00 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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Lab Name: ETC, INC. Lab Prep Batch: V4102001

Lab Code: Case No.: SAS No.: SDG No.: 0010-480

Matrix Spike - Sample No.: V4102011LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Acetone	100.0		97.04	97	59-151
Acetonitrile	1000		1096	110	57-143
Acrolein	100.0		133.2	133	59-134
Acrylonitrile	100.0		109.0	109	60-146
Allyl chloride	100.0		93.38	93	74-120
Benzene	100.0		100.3	100	72-124
Bromobenzene	100.0		97.75	98	77-120
Bromochloromethane	100.0		119.0	119	74-120
Bromodichloromethane	100.0		86.33	86	68-119
Bromoform	100.0		91.32	91	66-136
2-Butanone	100.0		102.9	103	55-151
Bromomethane	100.0		107.5	108	40-134
n-Butylbenzene	100.0		112.4	112	69-129
sec-Butylbenzene	100.0		96.77	97	72-127
tert-Butylbenzene	100.0		92.70	93	73-126
Carbon Disulfide	100.0		90.77	91	60-133
Carbon Tetrachloride	100.0		96.99	97	64-123
Chlorobenzene	100.0		96.80	97	77-112
Chlorodibromomethane	100.0		98.12	98	72-118
Chloroethane	100.0		102.2	102	64-142
2-Chloroethyl vinyl eth	100.0		114.6	115	22-165
Chloroform	100.0		90.19	90	70-115
Chloromethane	100.0		86.94	87	58-139
Chloroprene	100.0		77.64	78	73-118
2-Chlorotoluene	100.0		86.37	86	65-132
4-Chlorotoluene	100.0		97.92	98	67-127
1,2-Dibromo-3-chloropro	100.0		93.98	94	56-134
1,2-Dibromoethane	100.0		96.88	97	74-118

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER VOA-GCMS LAB CONTROL SAMPLE

Lab Name: ETC, INC. Lab Prep Batch: V4102001

Lab Code: Case No.: SAS No.: SDG No.: 0010-480

Matrix Spike - Sample No.: V4102011LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Dibromomethane	100.0		88.69	89	75-114
1,2-Dichlorobenzene	100.0		115.3	115*	80-113
1,3-Dichlorobenzene	100.0		118.5	118	77-119
1,4-Dichlorobenzene	100.0		108.6	109	78-116
trans-1,4-Dichloro-2-bu	100.0		91.29	91	62-138
Dichlorodifluoromethane	100.0		70.56	70	48-145
1,1-Dichloroethane	100.0		88.46	88	76-118
1,2-Dichloroethane	100.0		90.49	90	62-124
1,1-Dichloroethene	100.0		97.91	98	69-121
cis-1,2-Dichloroethene	100.0		100.5	100	76-114
trans-1,2-Dichloroethen	100.0		100.6	101	72-121
1,2-Dichloropropane	100.0		92.79	93	64-133
1,3-Dichloropropane	100.0		92.15	92	68-128
2,2-Dichloropropane	100.0		94.90	95	67-132
1,1-Dichloropropene	100.0		98.04	98	76-117
cis-1,3-Dichloropropene	100.0		90.00	90	77-120
trans-1,3-Dichloroprope	100.0		93.41	93	73-124
Di isopropyl ether	100.0		84.86	85	62-160
1,4-Dioxane	2000		2390	120	56-131
Ethyl Acetate	100.0		92.75	93	52-151
Ethylbenzene	100.0		92.91	93	77-111
Ethyl methacrylate	200.0		198.8	99	57-140
Furan	100.0		142.1	142*	52-124
Hexachlorobutadiene	100.0		106.4	106	69-137
Hexane	100.0		115.6	116	70-130
2-Hexanone	100.0		101.8	102	53-144
Iodomethane	100.0		112.6	113	51-153
Isobutyl Alcohol	2000		2270	114	60-134

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

Lab Name: ETC, INC. Lab Prep Batch: V4102001

Lab Code: Case No.: SAS No.: SDG No.: 0010-480

Matrix Spike - Sample No.: V4102011LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Isopropylbenzene	100.0		95.17	95	74-125
4-Isopropyltoluene	100.0		81.67	82	72-127
Methacrylonitrile	1000		853.6	85	70-125
Methylene Chloride	100.0		104.4	104	76-115
Methyl methacrylate	200.0		194.8	97	57-147
4-Methyl-2-Pentanone	100.0		140.7	141	42-144
Methyl-tertbutyl-Ether	100.0		93.53	94	62-122
Naphthalene	100.0		116.9	117	53-124
Pentachloroethane	100.0		142.1	142*	78-126
Propionitrile	1000		1096	110	58-139
n-Propyl Acetate	100.0		109.0	109	88-170
n-Propylbenzene	100.0		97.41	97	75-125
Styrene	100.0		97.66	98	77-117
1,1,1,2-Tetrachloroetha	100.0		90.37	90	79-113
1,1,2,2-Tetrachloroetha	100.0		104.2	104	67-126
Tetrachloroethene	100.0		88.56	88	77-115
Tetrahydrofuran	100.0		117.8	118	76-181
1,2,3-Trichlorobenzene	100.0		118.8	119	62-132
Toluene	100.0		89.40	89	77-115
1,1,1-Trichloroethane	100.0		89.06	89	63-122
1,1,2-Trichloroethane	100.0		96.67	97	69-117
1,1,2-trichloro-1,2,2-t	100.0		92.78	93	70-130
Trichloroethene	100.0		89.41	89	75-113
Trichlorofluoromethane	100.0		82.92	83	55-130
1,2,3-Trichloropropane	100.0		88.62	89	62-130
1,2,4-Trichlorobenzene	100.0		124.0	124	68-132
1,2,4-Trimethylbenzene	100.0		91.39	91	69-126
1,3,5-Trimethylbenzene	100.0		91.68	92	69-128

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER VOA-GCMS LAB CONTROL SAMPLE

Lab Name: ETC, INC. Lab Prep Batch: V4102001

Lab Code: Case No.: SAS No.: SDG No.: 0010-480

Matrix Spike - Sample No.: V4102011LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Vinyl Acetate	100.0		83.06	83	28-146
Vinyl Chloride	100.0		97.12	97	65-134
Xylene-mp	200.0		197.0	98	77-115
Xylene-o	100.0		94.34	94	77-115

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 3 out of 88 outside limits

COMMENTS: _____

FORM 3
WATER VOA-GCMS MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: ETC, INC. Lab Prep Batch: V4102001

Lab Code: Case No.: SAS No.: SDG No.: 0010-480

Matrix Spike - Sample No.: 0010-480-1

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
Benzene	100.0	0.000	112.7	113	72-124
Chlorobenzene	100.0	0.000	97.76	98	77-112
1,1-Dichloroethene	100.0	18.75	122.9	104	69-121
Toluene	100.0	0.000	88.11	88	77-115
Trichloroethene	100.0	101.4	173.2	72*	75-113

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Benzene	100.0	114.5	114	1	20	72-124
Chlorobenzene	100.0	103.2	103	5	20	77-112
1,1-Dichloroethene	100.0	116.0	97	7	20	69-121
Toluene	100.0	89.94	90	2	20	77-115
Trichloroethene	100.0	168.6	67*	7	20	75-113

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 5 outside limits
Spike Recovery: 2 out of 10 outside limits

COMMENTS: _____

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 765

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Defense Depot**
Dunn Field

FID #

Date Arrived **10/18/00**
ETC Order Number **0010480**

ETC Lab ID **0010480-01**
Field ID : **ST-EFF-029**

Matrix . **AQUEOUS**
Sample Date : **10/18/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Base/Neutral & Acid				10/23/00		PF	8270C
					10/20/00		3510C
QC Batch	**P05393**						
Dilution Factor	**1**						
Acenaphthene	ND	ug/L	2.00				
Acenaphthylene	ND	ug/L	2.00				
Anthracene	ND	ug/L	2 00				
Benzo(a)anthracene	ND	ug/L	2 00				
Benzo(b)fluoranthene	ND	ug/L	2 00				
Benzo(k)fluoranthene	ND	ug/L	2 00				
Benzo(g,h,i)perylene	ND	ug/L	2.00				
Benzo(a)pyrene	ND	ug/L	2 00				
Benzoic Acid	ND	ug/L	50 0				
Benzyl Alcohol	ND	ug/L	10.0				
Bis(2-chloroethoxy)methane	ND	ug/L	5.00				
Bis(2-chloroethyl)ether	ND	ug/L	5 00				
Bis(2-chloroisopropyl)ether	ND	ug/L	5 00				
Bis(2-ethylhexyl)phthalate	ND	ug/L	10 0				
4-Bromophenyl phenyl ether	ND	ug/L	5 00				
Butyl benzyl phthalate	ND	ug/L	5 00				
4-Chloroaniline	ND	ug/L	5 00				
2-Chloronaphthalene	ND	ug/L	5.00				
4-Chloro-3-methylphenol	ND	ug/L	5 00				
2-Chlorophenol	ND	ug/L	5 00				
4-Chlorophenyl phenyl ether	ND	ug/L	5 00				
Chrysene	ND	ug/L	2 00				
Dibenzo(a,h)anthracene	ND	ug/L	2 00				
Dibenzofuran	ND	ug/L	5 00				
Di-n-butyl phthalate	ND	ug/L	5 00				
1,2-Dichlorobenzene	ND	ug/L	5 00				
1,3-Dichlorobenzene	ND	ug/L	5.00				
1,4-Dichlorobenzene	ND	ug/L	5 00				
3,3'-Dichlorobenzidine	ND	ug/L	10.0				
2 4-Dichlorophenol	ND	ug/L	5.00				
2,6-Dichlorophenol	ND	ug/L	5.00				
Diethyl phthalate	ND	ug/L	5.00				
2,4-Dimethylphenol	ND	ug/L	5 00				
Dimethyl phthalate	ND	ug/L	5.00				
4,6-Dinitro-2-methylphenol	ND	ug/L	10 0				
2,4-Dinitrophenol	ND	ug/L	50.0				
2,4-Dinitrotoluene	ND	ug/L	5 00				
2,6-Dinitrotoluene	ND	ug/L	5.00				
Di-n-octyl phthalate	ND	ug/L	5.00				
Fluoranthene	ND	ug/L	2.00				
Fluorene	ND	ug/L	2.00				
Hexachlorobenzene	ND	ug/L	5.00				
Hexachlorobutadiene	ND	ug/L	5 00				
Hexachlorocyclopentadiene	ND	ug/L	5 00				
Hexachloroethane	ND	ug/L	5 00				

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

ENVIRONMENTAL TESTING & CONSULTING, INC.
2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name: **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID: **Memphis Defense Depot**
Dunn Field
FID #

Date Arrived: **10/18/00**
ETC Order Number: **0010480**

ETC Lab ID: **0010480-01**
Field ID : **ST-EFF-029**

Matrix : **AQUEOUS**
Sample Date : **10/18/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Base/Neutral & Acid				10/23/00	10/20/00	PF	8270C 3510C
Indeno(1,2,3-cd)pyrene	ND	ug/L	2.00				
Isophorone	ND	ug/L	5.00				
2-Methylnaphthalene	ND	ug/L	2 00				
2-Methylphenol (o-cresol)	ND	ug/L	5.00				
3-Methylphenol (m-cresol)	ND	ug/L	5.00				
4-Methylphenol (p-cresol)	ND	ug/L	5 00				
Naphthalene	ND	ug/L	2.00				
Nitrobenzene	ND	ug/L	5 00				
2-Nitroaniline	ND	ug/L	5.00				
3-Nitroaniline	ND	ug/L	10.0				
4-Nitroaniline	ND	ug/L	5.00				
2-Nitrophenol	ND	ug/L	5.00				
[redacted]itrophenol	ND	ug/L	5.00				
[redacted]Nitrosodiphenylamine	ND	ug/L	5.00				
N-Nitrosodipropylamine	ND	ug/L	5.00				
Pentachlorophenol	ND	ug/L	10.0				
Phenanthrene	ND	ug/L	2 00				
Phenol	ND	ug/L	5 00				
Pyrene	ND	ug/L	2.00				
1,2,4-Trichlorobenzene	ND	ug/L	5.00				
2,4,5-Trichlorphenol	ND	ug/L	5 00				
2,4,6-Trichlorophenol	ND	ug/L	5 00				

Surrogate Standard	% Recovery	QC Limits	
S1 - Nitrobenzene-d5	59	29	110
S2 - 2-Fluorobiphenyl	60	38	107
S3 - 4-Terphenyl-d14	68	33	122
S4 - Phenol-d6	29	7	58
S5 - 2,4,6-Tribromophenol	80	16	138
S6 - 2-Fluorophenol	42	8	88

CS
Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

613 767

FORM 1
BNA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

0010-480-1

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0010-480

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 990.0 (g/mL) ML Lab File ID: 1201012

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:

Concentrated Extract Volume: 1(mL) Date Analyzed: 10/23/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
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ENVIRONMENTAL TESTING & CONSULTING, INC.
2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 763

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Defense Depot**
Dunn Field

FID #

Date Arrived **10/18/00**
ETC Order Number **0010480**

ETC Lab ID **0010480-02**
Field ID : **EQB-029**

Matrix : **AQUEOUS**
Sample Date : **10/18/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Base/Neutral & Acid				10/23/00	10/20/00	PF	8270C 3510C
QC Batch	**P05393**						
Dilution Factor	**1**						
Acenaphthene	ND	ug/L	2.00				
Acenaphthylene	ND	ug/L	2.00				
Anthracene	ND	ug/L	2.00				
Benzo(a)anthracene	ND	ug/L	2 00				
Benzo(b)fluoranthene	ND	ug/L	2.00				
Benzo(k)fluoranthene	ND	ug/L	2.00				
Benzo(g,h,i)perylene	ND	ug/L	2.00				
Benzo(a)pyrene	ND	ug/L	2 00				
Benzoic Acid	ND	ug/L	50 0				
Benzyl Alcohol	ND	ug/L	10 0				
[redacted](2-chloroethoxy)methane	ND	ug/L	5.00				
[redacted]2-chloroethyl)ether	ND	ug/L	5.00				
Bis(2-chloroisopropyl)ether	ND	ug/L	5.00				
Bis(2-ethylhexyl)phthalate	ND	ug/L	10.0				
4-Bromophenyl phenyl ether	ND	ug/L	5 00				
Butyl benzyl phthalate	ND	ug/L	5 00				
4-Chloroaniline	ND	ug/L	5 00				
2-Chloronaphthalene	ND	ug/L	5 00				
4-Chloro-3-methylphenol	ND	ug/L	5 00				
2-Chlorophenol	ND	ug/L	5.00				
4-Chlorophenyl phenyl ether	ND	ug/L	5 00				
Chrysene	ND	ug/L	2.00				
Dibenzo(a,h)anthracene	ND	ug/L	2 00				
Dibenzofuran	ND	ug/L	5 00				
Di-n-butyl phthalate	ND	ug/L	5.00				
1,2-Dichlorobenzene	ND	ug/L	5.00				
1,3-Dichlorobenzene	ND	ug/L	5.00				
1,4-Dichlorobenzene	ND	ug/L	5 00				
3,3'-Dichlorobenzidine	ND	ug/L	10 0				
2,4-Dichlorophenol	ND	ug/L	5 00				
2,6-Dichlorophenol	ND	ug/L	5.00				
Diethyl phthalate	ND	ug/L	5 00				
2,4-Dimethylphenol	ND	ug/L	5.00				
Dimethyl phthalate	ND	ug/L	5.00				
4,6-Dinitro-2-methylphenol	ND	ug/L	10.0				
2,4-Dinitrophenol	ND	ug/L	50 0				
2,4-Dinitrotoluene	ND	ug/L	5 00				
2,6-Dinitrotoluene	ND	ug/L	5 00				
Di-n-octyl phthalate	ND	ug/L	5 00				
Fluoranthene	ND	ug/L	2.00				
Fluorene	ND	ug/L	2 00				
[redacted]achlorobenzene	ND	ug/L	5 00				
[redacted]achlorobutadiene	ND	ug/L	5 00				
Hexachlorocyclopentadiene	ND	ug/L	5 00				
Hexachloroethane	ND	ug/L	5.00				

CL
Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

ENVIRONMENTAL TESTING & CONSULTING, INC.

613 769

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Defense Depot**
Dunn Field

FID #

Date Arrived **10/18/00**
ETC Order Number **0010480**

ETC Lab ID **0010480-02**
Field ID . **EQB-029**

Matrix : **AQUEOUS**
Sample Date : **10/18/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Base/Neutral & Acid				10/23/00		PF	8270C
					10/20/00		3510C
Indeno(1,2,3-cd)pyrene	ND	ug/L	2 00				
Isophorone	ND	ug/L	5 00				
2-Methylnaphthalene	ND	ug/L	2 00				
2-Methylphenol (o-cresol)	ND	ug/L	5.00				
3-Methylphenol (m-cresol)	ND	ug/L	5.00				
4-Methylphenol (p-cresol)	ND	ug/L	5.00				
Naphthalene	ND	ug/L	2.00				
Nitrobenzene	ND	ug/L	5.00				
2-Nitroaniline	ND	ug/L	5.00				
3-Nitroaniline	ND	ug/L	10.0				
4-Nitroaniline	ND	ug/L	5 00				
2-Nitrophenol	ND	ug/L	5 00				
4-Nitrophenol	ND	ug/L	5.00				
N-Nitrosodiphenylamine	ND	ug/L	5.00				
N-Nitrosodipropylamine	ND	ug/L	5 00				
Pentachlorophenol	ND	ug/L	10 0				
Phenanthrene	ND	ug/L	2.00				
Phenol	ND	ug/L	5.00				
Pyrene	ND	ug/L	2 00				
1,2,4-Trichlorobenzene	ND	ug/L	5.00				
2,4,5-Trichlorphenol	ND	ug/L	5 00				
2,4,6-Trichlorophenol	ND	ug/L	5 00				

Surrogate Standard	% Recovery	QC Limits	
S1 - Nitrobenzene-d5	60	29	110
S2 - 2-Fluorobiphenyl	61	38	107
S3 - 4-Terphenyl-d14	81	33	122
S4 - Phenol-d6	30	7	58
S5 - 2,4,6-Tribromophenol	85	16	138
S6 - 2-Fluorophenol	43	8	88

CS

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

FORM 1 613 770 CLIENT SAMPLE NO.

BNA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

0010-480-2

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0010-480

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 970.0 (g/mL) ML Lab File ID: 1301013

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:

Concentrated Extract Volume: 1(mL) Date Analyzed: 10/23/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
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613 771

FORM 2
WATER BNA-GCMS SURROGATE RECOVERY

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0010-480

	CLIENT SAMPLE NO.	S1 (NBZ) #	S2 (FBP) #	S3 (TPH) #	S4 (PHL) #	S5 (TBP) #	S6 (2FP) #	S7 #	S8 #	TOT OUT
01	P05393LB	61	58	58	30	76	46			0
02	P05393LCS	62	78	64	31	88	50			0
03	0010-480-1	59	60	68	29	80	42			0
04	0010-480-2	60	61	81	30	85	43			0
05	0010-480-1MS	59	56	99	29	84	42			0
06	0010-480-1MS	68	66	87	31	89	46			0
07										
08										
09										
10										
11										
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		QC LIMITS
S1 (NBZ)	= Nitrobenzene-d5	(29-110)
S2 (FBP)	= 2-Fluorobiphenyl	(38-107)
S3 (TPH)	= Terphenyl-d14	(33-122)
S4 (PHL)	= Phenol-d6	(7- 58)
S5 (TBP)	= 2,4,6-Tribromophenol	(16-138)
S6 (2FP)	= 2-Fluorophenol	(8- 88)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogate diluted out

FORM 4 613 772 CLIENT SAMPLE NO.

BNA-GCMS METHOD BLANK SUMMARY

P05393LB

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0010-480

Lab File ID: 0401004 Lab Prep Batch: P05393

Instrument ID: BNA1 Date Extracted:

Matrix: (soil/water) WATER Date Analyzed: 10/23/00

Level: (low/med) LOW Time Analyzed: 1008

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

	SAMPLE NO.	TIME ANALYZED	LAB FILE ID	DATE ANALYZED
01	P05393LCS	1126	0601006	10/23/00
02	0010-480-1	1520	1201012	10/23/00
03	0010-480-2	1559	1301013	10/23/00
04	0010-480-1MS	1954	1901019	10/23/00
05	0010-480-1MS	2032	2001020	10/23/00
06				
07				
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COMMENTS:

613 773

FORM 1
BNA-GCMS ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.
P05393LB

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0010-480

Matrix: (soil/water) WATER Lab Prep Batch: P05393

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 0401004

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:

Concentrated Extract Volume: 1(mL) Date Analyzed: 10/23/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
83-32-9	Acenaphthene	2.00	U
208-96-8	Acenaphthylene	2.00	U
98-86-2	Acetophenone	5.00	U
62-53-3	Aniline	5.00	U
120-12-7	Anthracene	2.00	U
92-87-5	Benzidine	20.00	U
56-55-3	Benz(a)Anthracene	2.00	U
205-99-2	Benzo(b)fluoranthene	2.00	U
207-08-9	Benzo(k)fluoranthene	2.00	U
191-24-2	Benzo(ghi)perylene	2.00	U
50-32-8	Benzo(a)pyrene	2.00	U
65-85-0	Benzoic acid	50.00	U
100-51-6	Benzyl alcohol	5.00	U
111-91-1	Bis(2-chloroethoxy)methane	5.00	U
111-44-4	Bis(2-chloroethyl)ether	5.00	U
108-60-1	Bis(2-chloroisopropyl)ether	5.00	U
117-81-7	Bis(2-ethylhexyl)phthalate	6.53	
101-55-3	4-Bromophenyl phenyl ether	5.00	U
85-68-7	Butyl benzyl phthalate	5.00	U
86-74-8	Carbazole	2.00	U
106-47-8	4-Chloroaniline	5.00	U
510-15-6	Chlorobenzilate	5.00	U
59-50-7	4-Chloro-3-methylphenol	5.00	U
91-58-7	2-Chloronaphthalene	2.00	U
95-57-8	2-Chlorophenol	5.00	U
7005-72-3	4-Chlorophenyl phenyl ether	5.00	U
218-01-9	Chrysene	2.00	U
53-70-3	Dibenz(a,h)anthracene	2.00	U
132-64-9	Dibenzofuran	5.00	U
84-74-2	Di-n-butyl phthalate	5.00	U
95-50-1	1,2-Dichlorobenzene	5.00	U
541-73-1	1,3-Dichlorobenzene	5.00	U
106-46-7	1,4-Dichlorobenzene	5.00	U

FORM 1 613 774 CLIENT SAMPLE NO.

BNA-GCMS ORGANICS ANALYSIS DATA SHEET

P05393LB

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0010-480

Matrix: (soil/water) WATER Lab Prep Batch: P05393

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 0401004

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:

Concentrated Extract Volume: 1(mL) Date Analyzed: 10/23/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-94-1	3,3'-Dichlorobenzidine	10.00	U
120-83-2	2,4-Dichlorophenol	5.00	U
87-65-0	2,6-Dichlorophenol	5.00	U
84-66-2	Diethyl phthalate	5.00	U
119-93-7	3,3-Dimethylbenzidine	10.00	U
105-67-9	2,4-Dimethyphenol	5.00	U
131-11-3	Dimethyl phthalate	5.00	U
534-52-1	4,6-Dinitro-2-methylphenol	10.00	U
51-28-5	2,4-Dinitrophenol	20.00	U
121-14-2	2,4-Dinitrotoluene	5.00	U
606-20-2	2,6-Dinitrotoluene	5.00	U
122-39-4	N-NitrsdiphylAm/Diphenylamin	5.00	U
117-84-0	Di-n-octyl phthalate	5.00	U
62-50-0	Ethyl methanesulfonate	5.00	U
206-44-0	Fluoranthene	2.00	U
86-73-7	Fluorene	2.00	U
118-74-1	Hexachlorobenzene	5.00	U
87-68-3	Hexachlorobutadiene	5.00	U
77-47-4	Hexachlorocyclopentadiene	5.00	U
67-72-1	Hexachloroethane	5.00	U
193-39-5	Indeno(1,2,3-cd)pyrene	2.00	U
78-59-1	Isophorone	5.00	U
66-27-3	Methyl methanesulfonate	5.00	U
91-57-6	2-Methylnaphthalene	2.00	U
95-48-7	2-Methylphenol	5.00	U
108-39-4	3&4-Methylphenol	5.00	U
91-20-3	Naphthalene	2.00	U
88-74-4	2-Nitroaniline	10.00	U
99-09-2	3-Nitroaniline	10.00	U
100-01-6	4-Nitroaniline	10.00	U
98-95-3	Nitrobenzene	5.00	U
88-75-5	2-Nitrophenol	10.00	U
100-02-7	4-Nitrophenol	5.00	U

613 775

FORM 1
BNA-GCMS ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

P05393LB

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0010-480

Matrix: (soil/water) WATER Lab Prep Batch: P05393

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 0401004

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:

Concentrated Extract Volume: 1(mL) Date Analyzed: 10/23/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
924-16-3	N-Nitrosodibutylamine	5.00	U
55-18-5	N-Nitrosodiethylamine	5.00	U
129-00-0	N-Nitrosodimethylamine	5.00	U
621-64-7	N-Nitrosodi-n-propylamine	5.00	U
82-68-8	Pentachloronitrobenzene	10.00	U
87-86-5	Pentachlorophenol	5.00	U
62-44-2	Phenacetin	5.00	U
85-01-8	Phenanthrene	2.00	U
108-95-2	Phenol	5.00	U
129-00-0	Pyrene	2.00	U
110-86-1	Pyridine	5.00	U
95-94-3	1,2,4,5-Tetrachlorobenzene	5.00	U
58-90-2	2,3,4,6-Tetrachlorophenol	5.00	U
120-82-1	1,2,4-Trichlorobenzene	5.00	U
95-95-4	2,4,5-Trichlorophenol	5.00	U
88-06-2	2,4,6-Trichlorophenol	5.00	U
103-33-3	1,2-Dphnylhydrzine/Azobenzen	5.00	U

FORM 1 613 776 CLIENT SAMPLE NO.

BNA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

P05393LB

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0010-480

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 0401004

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:

Concentrated Extract Volume: 1(mL) Date Analyzed: 10/23/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
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FORM 3
WATER BNA-GCMS LAB CONTROL SAMPLE

Lab Name: ETC, INC. Lab Prep Batch: P05393

Lab Code: Case No.: SAS No.: SDG No.: 0010-480

Matrix Spike - Sample No.: P05393LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Acenaphthene	50.00		33.78	68	38-117
Acenaphthylene	50.00		39.47	79	37-114
Acetophenone	50.00		29.49	59	32-108
Aniline	50.00		32.48	65	16-133
Anthracene	50.00		34.92	70	34-128
Benzidine	50.00		28.39	57	22-176
Benz(a)Anthracene	50.00		35.60	71	36-127
Benzo(b)fluoranthene	50.00		38.55	77	36-131
Benzo(k)fluoranthene	50.00		36.98	74	32-132
Benzo(ghi)perylene	50.00		44.28	88	26-123
Benzo(a)pyrene	50.00		41.93	84	34-131
Benzoic acid	50.00		10.39	21	11- 58
Benzyl alcohol	50.00		32.82	66	20-109
Bis(2-chloroethoxy)meth	50.00		28.90	58	20-126
Bis(2-chloroethyl)ether	50.00		32.13	64	16-122
Bis(2-chloroisopropyl)e	50.00		27.25	54	28-108
Bis(2-ethylhexyl)phthal	50.00		35.76	72	21-162
4-Bromophenyl phenyl et	50.00		33.39	67	31-124
Butyl benzyl phthalate	50.00		32.82	66	33-142
Carbazole	50.00		36.16	72	20-147
4-Chloroaniline	50.00		29.94	60	24-127
Chlorobenzilate	50.00		33.41	67	35-118
4-Chloro-3-methylphenol	50.00		29.79	60	35-117
2-Chloronaphthalene	50.00		40.22	80	29-137
2-Chlorophenol	50.00		34.16	68	27-102
4-Chlorophenyl phenyl e	50.00		33.98	68	39-110
Chrysene	50.00		35.58	71	30-124
Dibenz(a,h)anthracene	50.00		44.77	90	27-124

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER BNA-GCMS LAB CONTROL SAMPLE

Lab Name: ETC, INC. Lab Prep Batch: P05393

Lab Code: Case No.: SAS No.: SDG No.: 0010-480

Matrix Spike - Sample No.: P05393LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Dibenzofuran	50.00		34.74	69	40-108
Di-n-butyl phthalate	50.00		35.39	71	19-158
1,2-Dichlorobenzene	50.00		31.97	64	26-100
1,3-Dichlorobenzene	50.00		31.38	63	21-102
1,4-Dichlorobenzene	50.00		30.97	62	24- 99
3,3'-Dichlorobenzidine	50.00		38.34	77	6-192
2,4-Dichlorophenol	50.00		31.97	64	32-110
2,6-Dichlorophenol	50.00		29.73	59	31-112
Diethyl phthalate	50.00		36.49	73	36-130
3,3-Dimethylbenzidine	50.00		41.76	84	6-192
2,4-Dimethyphenol	50.00		26.23	52	34-105
Dimethyl phthalate	50.00		34.48	69	34-123
4,6-Dinitro-2-methylphe	50.00		32.16	64	27-128
2,4-Dinitrophenol	50.00		28.39	57	10-132
2,4-Dinitrotoluene	50.00		33.42	67	24-147
2,6-Dinitrotoluene	50.00		34.76	70	36-125
N-NitrsdiphylAm/Dipheny	100.0		73.01	73	35-116
Di-n-octyl phthalate	50.00		41.40	83	29-136
Ethyl methanesulfonate	50.00		33.24	66	20-121
Fluoranthene	50.00		35.39	71	28-127
Fluorene	50.00		34.49	69	41-116
Hexachlorobenzene	50.00		34.08	68	18-136
Hexachlorobutadiene	50.00		27.89	56	22-109
Hexachlorocyclopentadie	50.00		29.50	59	10-102
Hexachloroethane	50.00		31.11	62	16-107
Indeno(1,2,3-cd)pyrene	50.00		42.53	85	22-126
Isophorone	50.00		30.21	60	31-116
Methyl methanesulfonate	50.00		18.45	37	15- 82

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER BNA-GCMS LAB CONTROL SAMPLE

Lab Name: ETC, INC. Lab Prep Batch: P05393

Lab Code: Case No.: SAS No.: SDG No.: 0010-480

Matrix Spike - Sample No.: P05393LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
2-Methylnaphthalene	50.00		28.09	56	34-108
2-Methylphenol	50.00		31.45	63	22- 97
3&4-Methylphenol	50.00		30.04	60	21- 96
Naphthalene	50.00		28.24	56	33-108
2-Nitroaniline	50.00		33.65	67	32-127
3-Nitroaniline	50.00		32.85	66	28-142
4-Nitroaniline	50.00		31.96	64	23-139
Nitrobenzene	50.00		26.80	54	27-117
2-Nitrophenol	50.00		29.70	59	25-114
4-Nitrophenol	50.00		12.53	25	1- 76
N-Nitrosodibutylamine	50.00		30.00	60	31-126
N-Nitrosodiethylamine	50.00		28.87	58	28-107
N-Nitrosodimethylamine	50.00		24.22	48	14- 84
N-Nitrosodi-n-propylami	50.00		30.38	61	29-114
Pentachloronitrobenzene	50.00		40.72	81	34-135
Pentachlorophenol	50.00		27.41	55	17-142
Phenacetin	50.00		44.25	88	29-141
Phenanthrene	50.00		32.84	66	40-120
Phenol	50.00		13.32	27	11- 55
Pyrene	50.00		30.15	60	20-154
Pyridine	50.00		17.98	36	10- 71
1,2,4,5-Tetrachlorobenz	50.00		37.15	74	28-110
2,3,4,6-Tetrachlorophen	50.00		36.79	74	28-118
1,2,4-Trichlorobenzene	50.00		27.93	56	23-106
2,4,5-Trichlorophenol	50.00		37.14	74	26-118
2,4,6-Trichlorophenol	50.00		39.40	79	26-115
1,2-Dphnylhydrzine/Azob	50.00		40.14	80	45-135

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 0 out of 83 outside limits

COMMENTS: _____

FORM 3
WATER BNA-GCMS MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

613 780

Lab Name: ETC, INC. Lab Prep Batch: P05393

Lab Code: Case No.: SAS No.: SDG No.: 0010-480

Matrix Spike - Sample No.: 0010-480-1

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
Acenaphthene	100.0	0.000	66.15	66	37-123
4-Chloro-3-methylphenol	160.0	0.000	130.7	82	33-134
2-Chlorophenol	160.0	0.000	91.20	57	17-134
1,4-Dichlorobenzene	100.0	0.000	54.33	54	31- 97
2,4-Dinitrotoluene	100.0	0.000	117.7	118	34-130
4-Nitrophenol	160.0	0.000	91.84	57	20- 75
Pentachlorophenol	160.0	0.000	168.1	105	22-171
Phenol	160.0	0.000	49.55	31	12- 57
Pyrene	100.0	0.000	87.45	87	40-149
1,2,4-Trichlorobenzene	100.0	0.000	55.48	55	29-116

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Acenaphthene	100.0	74.24	74	11	20	37-123
4-Chloro-3-methylphenol	160.0	131.2	82	0	20	33-134
2-Chlorophenol	160.0	97.26	61	7	20	17-134
1,4-Dichlorobenzene	100.0	61.08	61	12	20	31- 97
2,4-Dinitrotoluene	100.0	117.3	117	1	20	34-130
4-Nitrophenol	160.0	77.64	48	17	20	20- 75
Pentachlorophenol	160.0	156.7	98	7	20	22-171
Phenol	160.0	53.01	33	6	20	12- 57
Pyrene	100.0	78.24	78	11	20	40-149
1,2,4-Trichlorobenzene	100.0	61.19	61	10	20	29-116

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 10 outside limits
Spike Recovery: 0 out of 20 outside limits

COMMENTS: _____

613 781

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CHAIN OF CUSTODY RECORD

Environmental Testing & Consulting, Inc.
2924 Walnut Grove Rd.
Memphis, TN 38111
(901)327-2750 FAX (901)327-6334

ETC Work Order : COC0480

000049

Company Name	Phone #	Fax Results	
Shaw Group (TTCorp)	Fax # 615-333-5328	RUSH	
Project/Site	FID #	Ice	
Memphis Defense Depot, Dunnfield	PO #		
Project/#	Matrix		
Dunnfield System O&M	1 Wastewater 4 Sludge		
Project Manager/Contact	2 Aqueous 5 Oil/Solvent		
Craig Smith	3 Soil/Sediment 6 Other		

Analysis Requested
(Note special detection limits or methods)

# of cont.	Sample ID/ Number	Depth	Sample Date	Sample Time	Matrix	Type Grab/Comp	VOCs	SVOCs	Metals	pH									Comments
12	ST-EFF-029	—	10/15/00	1445	water	Comb	6	1	1	1									MS/MSD
7	EQB-029	—	10/15/00	1455	water	Comb	3	2	1	1									
3	Trip Blank	—	10/15/00	1500	water	Comb	3												

Sampled By	Method of Shipment	Blank/Cooler Temp	Remarks
David R Reiter	Hand		

RELINQUISHED BY (sign)	DATE	TIME	RECEIVED BY (sign)	DATE	TIME	Sample Delivery Group ID
David R Reiter	10/15/00	1535				
RELINQUISHED BY (sign)	DATE	TIME	RECEIVED BY (sign)	DATE	TIME	
RELINQUISHED BY (sign)	DATE	TIME	RECEIVED BY LAB (print/sign)	DATE	TIME	
				10/16/00	1024	

Distribution · Original and Yellow accompany samples to the laboratory Pink copy for Field Crew
Original copy returned with results. Yellow copy for ETC, Inc files

F:\QAQC\SLOP\COC0995.XLS

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Environmental Testing & Consulting, Inc.
Cooler Receipt Form

Date Received 10/18/00
Date/Time Checked In 10/18/00-15:35
Carrier/Bill# Hand-Delivered

LIMS# 0010-480
Project Mphs. Defense Depot-Dunn Field
By RBaugh

1.	Custody Seals?/Location-	No
2.	Samples are non-radioactive?	Yes
3.	Chain of Custody in plastic?	Yes
4.	Temperature at receipt (ok = 4 ± 2 °C)	OK
5.	Ice & Packing-Bubble Wrap	Yes
6.	Chain of Custody filled out properly?	Yes
7.	All containers in separate bags?	Yes
8.	Sample containers intact?	Yes
9.	Label(s) complete and in good condition?	Yes
10.	Label(s) agree with Chain of Custody?	Yes
11.	Correct containers used?	Yes
12.	Sufficient sample?	Yes
13.	VOA vials bubble-free (H_2O) or no head space (soil)?	Yes
14.	Preservation OK? TM pH____; TRPH pH____; TOC pH____; TOX pH____, CN pH____, N/P pH____; Other pH____	Yes

Comments _____

*Validated Date and Time of Sample Receipt (VDTSR)

613 783

ENVIRONMENTAL TESTING & CONSULTING, INC.
2921 Walnut Grove Road • Memphis TN 38111 • (901) 327-2750 • FAX (901) 327-6834
Founded 1972

December 6, 2000

BEST AVAILABLE COPY

Mr. Kraig Smith
Sverdrup/Jacobs Eng.
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Ref: Analytical Testing
ETC Order # 0011634
Project Description Memphis Defense Depot
Dunn Field

The above referenced project has been analyzed per your instructions. The analyses were performed in our laboratory in accordance with Standard Methods, The Solid Waste Manual SW-846, EPA Methods for Chemical Analysis of Water and Wastes and/or 40 CFR part 136.

The results are shown on the attached analysis sheet(s).

Please do not hesitate to contact our office if you have any questions.

Sincerely,

Nathan A. Pera, IV
Chief Executive Officer

rt
Attachment

SVE_MHDDMT

Certifications

Tennessee	*#TN02027*	*Mississippi*	
Arkansas	*#40730*	*Oklahoma*	*#9311*
Kentucky	*#90047*	*Virginia*	*#00106*
North Carolina	*#411*	*Washington*	*#C248*
South Carolina	*#84002002*	*US Army Corps of Engineers*	

Environmental Testing & Consulting, Inc.

Data Qualifiers for Organic Reporting

Within the attached report, some analytical data may be reported as "Qualified Data" as indicated by a "Data Qualifier" next to the result. This table summarizes the possible "Data Qualifiers" that may be associated with this report These qualifiers do not apply for TIC reports

Q	Surrogate Recovery Outside QC Limits
J	Estimated Value Presence of the compound was confirmed but less than the
	reported detection limit.
E	Concentration exceeds the established method calibration range but is within
	the working range of the instrument
B	Analyte detected in the associated Method Blank
U	Reported result was unconfirmed Refer to Case Narrative
N	Non-Compliance Report associated with this sample or project
C	Result reported from GC/MS confirmation analysis.
M	Result reported represents a minimum value Refer to Case Narrative
NC	Result reported from Primary Column Result did not confirm
*	QC Data (percent recovery/RPD for a particular analyte was outside QC Limits)

613 785

ENVIRONMENTAL TESTING AND CONSULTING, INC.
CASE NARRATIVE
INORGANICS – AQUEOUS

Client Name Sverdrup/Jacobs Engineering
Project Name Memphis Depot

ETC Order # 0011-634

HOLDING TIMES

Sample Analysis — All samples analyzed within Method Specified Holding Times

METHOD

Preparation/Analysis: 335 2

QUALITY CONTROL

QC Batch
CY112901
PH112100

Method Blank
No Target Analytes detected above Detection Limit.

Laboratory Control Sample
Spike Recovery — All analytes within QC limits

Matrix Spike/Matrix Spike Duplicate
RPD — All analytes within QC limits
Spike Recovery — All analytes within QC limits

CALIBRATION

All acceptance criteria met.

SAMPLE ANALYSIS

Dilutions Required — No dilutions required

CS

Project Manager

ENVIRONMENTAL TESTING AND CONSULTING, INC.
CASE NARRATIVE
METALS - AQUEOUS

Client Name Sverdrup/Jacobs Engineering
Project Name Memphis Depot

ETC Order # 0011-634

HOLDING TIMES

QC Batch(s) for this order	ICP Metals	V23-AQ-43
	Mercury	V7-AQ-69

Sample Preparation/Analysis	All samples digested/ analyzed within holding time
Mercury Preparation/Analysis	All samples analyzed within 28 days of collection.

METHOD

Preparation:	SW-846 245 1/3030K
Analysis:	SW-846 200.7/245 1

CALIBRATION

Initial Calibration	All criteria met
Continuing Calibration	All criteria met

SAMPLE ANALYSIS

Instrumentation: Thermo Jarrell Ash Enviro-I ICP
CETAC M-6000A Mercury Analyzer
Dilutions Required No dilutions required

QUALITY CONTROL

0011-634.MQCBLANK
Method Blank

V23-AQ-43BLK	ICP Metals
V7-AQ-69BLK	Mercury

No analytes were detected in the method blank

0011-634.MQCLCS
Laboratory Control Sample(s)

V23-AQ-43LCS	ICP Metals
V7-AQ-69LCS	Mercury

All acceptance criteria met.

0011-634.MQCMSMSD
Matrix Spike / Matrix Spike Dup - ICP Metals

0011-634-01	RPD	All analytes within QC limits.
ST-EFF-030	Spike Recovery	All analytes within QC limits

Refer to Laboratory Control Sample(s) for system verification

ENVIRONMENTAL TESTING AND CONSULTING, INC.
CASE NARRATIVE
METALS - AQUEOUS

Client Name Sverdrup/Jacobs Engineering
Project Name Memphis Depot

ETC Order # 0011-634

QUALITY CONTROL

Matrix Spike / Matrix Spike Dup - Hg

0011-634-01	RPD	All analytes within QC limits.
ST-EFF-030	Spike Recovery	All analytes within QC limits.

Refer to Laboratory Control Sample(s) for system verification

Dilution Test Dilution result must agree within 10% of original result when sample is diluted by a factor of 5.

Post Digestion Spike Recovery must be +/-25% of expected value for ICP

C)

Project Manager

ENVIRONMENTAL TESTING AND CONSULTING, INC.
CASE NARRATIVE
GC/MS VOLATILE COMPOUNDS - AQUEOUS

Client Name Sverdrup/Jacobs Engineering
Project Name Memphis Depot

ETC Order # 0011-634

SAMPLE PRESERVATION (Verified at time of analysis)

All aqueous samples preserved to pH < 2

METHOD

Preparation	SW-846 5030B
Analysis	SW-846 8260B

HOLDING TIMES

Sample Analysis All samples analyzed within 14 days of collection

QUALITY CONTROL

QC Batch	Form 4 Summary
V1120501	V1120511LB

System Monitoring Compounds FORM 2
Surrogate recoveries within QC limits, except as listed below

Surrogate Toluene-d8 and Bromofluorobenzene were flagged for high recovery in sample 0011-634-01MS (ST-EFF-030). Surrogate Toluene-d8 was flagged for high recovery in 0011-634-01MSD There is no effect on the recovery data

Method Blank FORM 4
V1120511LB

Target Analytes were not detected in the Method Blank

Laboratory Control Sample FORM 3
V1120511LCS

All acceptance criteria met, except as listed below

Three non-target analytes were flagged for high recovery in the LCS. There is no effect on the data

Matrix Spike / Matrix Spike Dup FORM 3
Batch V1120501

0011-634-01	RPD	All analytes within QC limits, except as listed below
ST-EFF-030	Spike Recovery	All analytes within QC limits, except as listed below

Toluene was flagged for high recovery in the MS/MSD. Trichloroethene was flagged for low recovery in the MS/MSD Chlorobenzene was flagged for high recovery in the MS. MSD recovery was within control limits Trichloroethene results may be biased low. Other sample results should be considered as estimated

RPD for Trichloroethene was flagged for low recovery due to low MS/MSD recoveries.

Refer to Laboratory Control Sample(s) for system verification

ENVIRONMENTAL TESTING AND CONSULTING, INC.
CASE NARRATIVE
GC/MS VOLATILE COMPOUNDS - AQUEOUS

Client Name Sverdrup/Jacobs Engineering
Project Name Memphis Depot

ETC Order # 0011-634

CALIBRATION

BFB Daily 12-Hour Tune	All criteria met. FORM 5
Initial Calibration	All criteria met FORM 6
Calibration Verification	All criteria met. FORM 7, except as listed below.

Calibration Verification (CV): Date 00/00/00 Time: 0000

Analyte	%Diff(30% Max)	Response
Acetone	+37.2	High
2-Hexanone	+37.4	High

Samples affected by this CV include V1120511LB, V1120511LCS, 0011-634-01MS/MSD, 0011-634-01 and 0011-634-02 High response indicates that reported levels for this analyte may be biased high These analytes wee not identified in associated project samples. There is no effect on the data

Volatile Internal Standard Area and RT FORM 8
Daily Check Standard(s) Internal Standard Areas and Retention Times within QC limits.

SAMPLE ANALYSIS

Instrumentation	HP 5890 Series II GC, 5971MSD
Dilutions Required	No dilutions required.

( )
Project Manager

ENVIRONMENTAL TESTING AND CONSULTING, INC.
CASE NARRATIVE
GC/MS SEMIVOLATILES COMPOUNDS - AQUEOUS

Client Name Sverdrup/Jacobs Engineering
Project Name Memphis Depot

ETC Order # 0011-634

HOLDING TIMES

Sample Extraction	All aqueous samples extracted within 7 days
Sample Analysis	All samples analyzed within 40 days of extraction

METHOD

Sample Preparation.	SW-836 3510C
Sample Analysis	SW-846 8270C

QUALITY CONTROL

QC Batch	Form 4 Summary
P06016	P06016LB

System Monitoring Compounds FORM 2
Surrogate recoveries within QC limits.

Method Blank FORM 4
P06009LB

Target analytes were not detected in the Method Blank, except as listed below

Benzo (ghi) perylene was detected in the method blank at a concentration of 11.40 ug/L. Bis (2-ethylhexyl) phthalate was detected in the method blank at a concentration of 4.92J ug/L. Di-n-butyl phthalate was detected at a concentration of 3 44J ug/L Indeno(1,2,3-cd) pyrene was detected in the method blank at a concentration of 11 74 ug/L These analytes were not detected in the associated project sample There is no effect on the data.

Laboratory Control Sample FORM 3
P06016LCS

All acceptance criteria met, except as listed below.

4-Nitrophenol was flagged for slightly high recovery in the LCS This analyte was not detected in the associated project sample There is no effect on the data

Matrix Spike / Matrix Spike Dup FORM 3
Batch P06012

0011-634-01	RPD	All analytes within QC limits, except as listed below
ST-EFF-030	Spike Recovery	All analytes within QC limits, except as listed below

4-Nitrophenol was flagged for low recovery in the MS/MSD Target analytes were not detected in the associated project sample. There is no effect on the data

RPDs for 2,4-Dinitrotoluene, 4-Nitrophenol, and Pentachlorophenol were flagged for high recovery due to variances in the MS/MSD recoveries

Refer to Laboratory Control Samples(s) for system verification

ENVIRONMENTAL TESTING AND CONSULTING, INC.
CASE NARRATIVE
GC/MS SEMIVOLATILES COMPOUNDS - AQUEOUS

Client Name Sverdrup/Jacobs Engineering
Project Name Memphis Depot

ETC Order # 0011-634

CALIBRATION

DFTPP Daily 12-Hour Tune	All criteria met. FORM 5
Initial Calibration	All criteria met. FORM 6
Calibration Verification	All criteria met. FORM 7

Semi-Volatile Internal Standard Area and RT FORM 8
Daily Check Standard(s) Internal Standard Areas and Retention Times within QC limits

SAMPLE ANALYSIS

Instrumentation	HP 5890 Series II GC, 5971MSD
Dilutions Required	No dilutions required

CJ
Project Manager

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

ANALYTICAL SUMMARY/CROSS REFERENCE TABLE 613 792

[redacted]ent Name Sverdrup/Jacobs Eng. ETC Order #0011634
[redacted]e ID Memphis Defense Depot
Dunn Field

ETC Sample_ID	Field ID	Matrix	Method	Method Description
001163401	ST-EFF-030	AQUEOUS	335.2	Cyanide
001163401	ST-EFF-030	AQUEOUS	150.1	pH
001163401	ST-EFF-030	AQUEOUS	200 7	Silver
001163401	ST-EFF-030	AQUEOUS	200 7	Aluminum
001163401	ST-EFF-030	AQUEOUS	200.7	Arsenic
001163401	ST-EFF-030	AQUEOUS	200 7	Barium
001163401	ST-EFF-030	AQUEOUS	200.7	Beryllium
001163401	ST-EFF-030	AQUEOUS	200 7	Calcium
001163401	ST-EFF-030	AQUEOUS	200 7	Cadmium
001163401	ST-EFF-030	AQUEOUS	200.7	Cobalt
001163401	ST-EFF-030	AQUEOUS	200.7	Chromium
001163401	ST-EFF-030	AQUEOUS	200 7	Copper
001163401	ST-EFF-030	AQUEOUS	200.7	Iron
001163401	ST-EFF-030	AQUEOUS	245.1	Mercury
001163401	ST-EFF-030	AQUEOUS	200 7	Potassium
001163401	ST-EFF-030	AQUEOUS	200 7	Magnesium
001163401	ST-EFF-030	AQUEOUS	200 7	Manganese
001163401	ST-EFF-030	AQUEOUS	200 7	Sodium
001163401	ST-EFF-030	AQUEOUS	200.7	Nickel
001163401	ST-EFF-030	AQUEOUS	200.7	Lead
001163401	ST-EFF-030	AQUEOUS	200.7	Antimony
001163401	ST-EFF-030	AQUEOUS	200.7	Selenium
001163401	ST-EFF-030	AQUEOUS	200 7	Thallium
[redacted]63401	ST-EFF-030	AQUEOUS	200.7	Vanadium
[redacted]163401	ST-EFF-030	AQUEOUS	200 7	Zinc
001163401	ST-EFF-030	AQUEOUS	8260B	GC/MS Volatile Organics
001163401	ST-EFF-030	AQUEOUS	8270C	GC/MS Base/Neutral & Acid
001163402	Trip Blank	AQUEOUS	8260B	GC/MS Volatile Organics

CS 11/27/96

ENVIRONMENTAL TESTING & CONSULTING, INC.

613 793

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Defense Depot**
Dunn Field

Date Arrived **11/21/00**
ETC Order Number **0011634**

ETC Lab ID **0011634-01**
Field ID : **ST-EFF-030**

Matrix **AQUEOUS**
Sample Date : **11/21/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	BY	METHOD	QC BATCH
Cyanide	<0 010	mg/L	0.010	11/29/00	GD	335.2	CY112901
pH	5 8	SU		11/21/00	RT	150 1	PH112100

CS
Data Validator

ND - Not Detected

METHOD BLANK
INORGANICS

Lab Name Environmental Testing and Consulting, Inc

Analyte	QC Sample No	QC Batch	Result	Detection Limit	Units	Date Analyzed	Method
Cyanide	CY1129011 BLK	CY112901	ND	0 010	mg/L	11/29/00	9010

NA - Not Applicable per Method
ND - Not Detected

Reviewed by _____

LABORATORY CONTROL SAMPLE
INORGANICS

Lab Name Environmental Testing and Consulting, Inc

Analyte	QC Sample No	QC Batch	Spike Added	Found	Units	% Rec #	QC Limits	
Cyanide	CY1129011 CS	CY112901	0 200	0 189	mg/L	95	90	110

ND - Not Detected
Column to be used to flag recovery values with an asterisk
* Values outside of QC limits

Reviewed by CS

MATRIX SPIKE / MATRIX SPIKE DUPLICATE
INORGANICS

Lab Name Environmental Testing and Consulting, Inc

Analyte	QC Sample No	QC Batch	SPIKE Added	SAMPLE Result	MS Result	Units	MS % Rec #	QC Limits	
Cyanide	0011-634-01 MS	CY112901	0 200	ND	0 185	mg/L	93	64	114

Analyte	QC Sample No	QC Batch	SPIKE Added	SAMPLE Result	MSD Result	Units	MSD % Rec #	QC Limits	
Cyanide	0011-634-01 MSD	CY112901	0 200	ND	0 176	mg/L	88	64	114

ND - Not Detected
Column to be used to flag recovery values with an asterisk
* Values outside of QC limits

Reviewed by CS

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 797

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Defense Depot**
Dunn Field

Date Arrived **11/21/00**
ETC Order Number **0011634**

ETC Lab ID : **0011634-01**
Field ID : **ST-EFF-030**

Matrix : **AQUEOUS**
Sample Date : **11/21/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE PREPARED	BY	METHOD
Mercury Digestion Batch	V7-AQ-69			11/22/00	11/22/00	JF	245 1
Metals Digestion Batch	V23-AQ-43				11/22/00		3030K
Silver	<0 009	mg/L	0.009	11/29/00	11/22/00	SH	200 7
Aluminum	<0 060	mg/L	0.060	11/29/00	11/22/00	SH	200 7
Arsenic	<0.003	mg/L	0 003	11/29/00	11/22/00	SH	200.7
Barium	0.103	mg/L	0 003	11/29/00	11/22/00	SH	200.7
Beryllium	<0.002	mg/L	0.002	11/29/00	11/22/00	SH	200 7
Calcium	20.1	mg/L	0.015	11/29/00	11/22/00	SH	200.7
Cadmium	<0 005	mg/L	0 005	11/29/00	11/22/00	SH	200 7
Cobalt	<0 009	mg/L	0 009	11/29/00	11/22/00	SH	200.7
Chromium	<0 009	mg/L	0.009	11/29/00	11/22/00	SH	200.7
Copper	<0.008	mg/L	0.008	11/29/00	11/22/00	SH	200 7
Iron	0.053	mg/L	0 009	11/29/00	11/22/00	SH	200.7
Mercury	<0 0002	mg/L	0 0002	11/22/00	11/22/00	JF	245.1
Potassium	0.839	mg/L	0 250	11/29/00	11/22/00	SH	200.7
Magnesium	9 87	mg/L	0.040	11/29/00	11/22/00	SH	200.7
Manganese	<0 003	mg/L	0 003	11/29/00	11/22/00	SH	200.7
Sodium	23.1	mg/L	0 050	11/29/00	11/22/00	SH	200 7
Nickel	0 026	mg/L	0.020	11/29/00	11/22/00	SH	200 7
Lead	<0.060	mg/L	0.060	11/29/00	11/22/00	SH	200 7
Antimony	<0.040	mg/L	0 040	11/29/00	11/22/00	SH	200 7
Selenium	<0.100	mg/L	0 100	11/29/00	11/22/00	SH	200 7
Thallium	<0 065	mg/L	0 065	11/29/00	11/22/00	SH	200.7
Vanadium	<0 010	mg/L	0 010	11/29/00	11/22/00	SH	200 7
Zinc	0 059	mg/L	0 010	11/29/00	11/22/00	SH	200 7

CS
Data Validator

ND - Not Detected

FORM 3A
WATER METHOD BLANK
METALS

Lab Name Environmental Testing and Consulting, Inc

		QC Batch
Laboratory ID ICP/GFAA Metals	V23-AQ-43 BLK	V23-AQ-43
Laboratory ID Mercury	V7-AQ-69 BLK	V7-AQ-69

Date Sample Prepared	11/22/00 ICP/GFAA Metals
	11/22/00 Mercury

Metals	Concentration mg/L	Detection Limit mg/L	Date Analyzed	Method
Silver	ND	0 009	11/29/00	200 7
Aluminum	ND	0 060	11/29/00	200 7
Arsenic	ND	0 003	11/29/00	200 7
Barium	ND	0 003	11/29/00	200 7
Beryllium	ND	0 002	11/29/00	200 7
Calcium	ND	0 015	11/29/00	200 7
Cadmium	ND	0 005	11/29/00	200 7
Cobalt	ND	0 009	11/29/00	200 7
Chromium	ND	0 009	11/29/00	200 7
Copper	ND	0 008	11/29/00	200 7
Iron	ND	0 009	11/29/00	200 7
Potassium	ND	0 250	11/29/00	200 7
Magnesium	ND	0 040	11/29/00	200 7
Manganese	ND	0 003	11/29/00	200 7
Sodium	ND	0 050	11/29/00	200 7
Nickel	ND	0 020	11/29/00	200 7
Lead	ND	0 060	11/29/00	200 7
Antimony	ND	0 040	11/29/00	200 7
Selenium	ND	0 100	11/29/00	200 7
Thallium	ND	0 065	11/29/00	200 7
Vanadium	ND	0 010	11/29/00	200 7
Zinc	ND	0 010	11/29/00	200 7
Mercury	ND	0 0002	11/22/00	245 1

ND - Not Detected

Reviewed by CS

FORM 7
WATER LABORATORY CONTROL SAMPLE
METALS

Lab Name Environmental Testing and Consulting, Inc

			QC Batch
Laboratory Control ID	ICP/GFAA Metals	V23-AQ-43 LCS	V23-AQ-43
	Mercury	V7-AQ-69 LCS	V7-AQ-69
Date Prepared	ICP/GFAA Metals	11/22/00	
	Mercury	11/22/00	

Metals	Spike Added mg/L	Found mg/L	% R	#	QC Limits	
Silver	0 200	0 198	99		80	120
Aluminum	2 00	1 99	100		80	120
Arsenic	0 080	0 080	100		80	120
Barium	2 00	2 04	102		80	120
Beryllium	0 200	0 202	101		80	120
Calcium	4 00	4 23	106		80	120
Cadmium	0 016	0 016	100		80	120
Cobalt	1 00	0 996	100		80	120
Chromium	0 400	0 403	101		80	120
Copper	0 400	0 399	100		80	120
Iron	2 00	2 06	103		80	120
Potassium	4 00	4 07	102		80	120
Magnesium	4 00	3 90	98		80	120
Manganese	0 200	0 205	103		80	120
Sodium	4 00	4 00	100		80	120
Nickel	1 00	1 00	100		80	120
Lead	0 080	0 081	101		80	120
Antimony	0 160	0 161	101		80	120
Selenium	0 080	0 079	99		80	120
Thallium	0 080	0 079	99		80	120
Vanadium	1 00	1 01	101		80	120
Zinc	0 200	0 206	103		80	120
Mercury	0 0050	0 0043	86		85	115

Column to be used to flag recovery values with an asterisk
* Values outside of QC limits

Reviewed by CS

FORM 6
WATER MATRIX SPIKE / MATRIX SPIKE DUPLICATE
METALS

Lab Name Environmental Testing and Consulting, Inc

		QC Batch
Laboratory ID MS ICP/GFAA Metals	0011-634-01	V23-AQ-43
Laboratory ID MS Mercury	0011-634-01	V7-AQ-69

Date Sample Prepared	11/22/00	ICP/GFAA Metals
	11/22/00	Mercury

Metals	SPIKE Added mg/L	SAMPLE Conc mg/L	MS Conc mg/L	RPD <20% #	MS % Rec #	QC Limits	
Silver	0 200	ND	0 196	1	98	75	125
Aluminum	2 00	ND	2 01	0	101	75	125
Arsenic	0 080	ND	0 080	1	100	75	125
Barium	2 00	0 103	2 17	1	103	75	125
Beryllium	0 200	ND	0 207	1	104	75	125
Calcium	4 00	20 1	24 2	1	103	75	125
Cadmium	0 016	ND	0 016	6	100	75	125
Cobalt	1 00	ND	1 02	1	102	75	125
Chromium	0 400	ND	0 409	1	102	75	125
Copper	0 400	ND	0 413	1	103	75	125
Iron	2 00	0 053	2 16	3	105	75	125
Potassium	4 00	0 839	5 04	1	105	75	125
Magnesium	4 00	9 87	13 8	1	98	75	125
Manganese	0 200	ND	0 209	1	105	75	125
Sodium	4 00	23 1	27 5	1	110	75	125
Nickel	1 00	0 026	1 04	1	101	75	125
Lead	0 080	ND	0 082	2	103	75	125
Antimony	0 160	ND	0 164	1	103	75	125
Selenium	0 080	ND	0 081	0	101	75	125
Thallium	0 080	ND	0 082	0	103	75	125
Vanadium	1 00	ND	1 02	1	102	75	125
Zinc	0 200	0 059	0 267	2	104	75	125
Mercury	0 0050	ND	0 0045	0	90	80	120

ND - Not Detected
Column to be used to flag recovery values with an asterisk
* Values outside of QC limits

Reviewed by CS

FORM 6
WATER MATRIX SPIKE / MATRIX SPIKE DUPLICATE
METALS

Lab Name Environmental Testing and Consulting, Inc

		QC Batch
Laboratory ID MS ICP/GFAA Metals	0011-634-01	V23-AQ-43
Laboratory ID MS Mercury	0011-634-01	V7-AQ-69

Date Sample Prepared	11/22/00	ICP/GFAA Metals
	11/22/00	Mercury

Metals	SPIKE Added mg/L	SAMPLE Conc mg/L	MSD Conc mg/L		MSD % Rec #	QC Limits	
Silver	0 200	ND	0 197		99	75	125
Aluminum	2 00	ND	2 02		101	75	125
Arsenic	0 080	ND	0 081		101	75	125
Barium	2 00	0 103	2 19		104	75	125
Beryllium	0 200	ND	0 209		105	75	125
Calcium	4 00	20 1	24 5		110	75	125
Cadmium	0 016	ND	0 017		106	75	125
Cobalt	1 00	ND	1 03		103	75	125
Chromium	0 400	ND	0 412		103	75	125
Copper	0 400	ND	0 416		104	75	125
Iron	2 00	0 053	2 23		109	75	125
Potassium	4 00	0 839	5 08		106	75	125
Magnesium	4 00	9 87	14 0		103	75	125
Manganese	0 200	ND	0 211		106	75	125
Sodium	4 00	23 1	27 9		120	75	125
Nickel	1 00	0 026	1 05		102	75	125
Lead	0 080	ND	0 084		105	75	125
Antimony	0 160	ND	0 165		103	75	125
Selenium	0 080	ND	0 081		101	75	125
Thallium	0 080	ND	0 082		103	75	125
Vanadium	1 00	ND	1 03		103	75	125
Zinc	0 200	0 059	0 272		107	75	125
Mercury	0 0050	ND	0 0045		90	80	120

ND - Not Detected
Column to be used to flag recovery values with an asterisk
* Values outside of QC limits

Reviewed by C S

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750 613 802

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Defense Depot**
Dunn Field

FID #

Date Arrived **11/21/00**
ETC Order Number **0011634**

ETC Lab ID **0011634-01**
Field ID : **ST-EFF-030**

Matrix **AQUEOUS**
Sample Date **11/21/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Volatile Organics				12/05/00		EM	8260B 5030B
QC Batch	**V1120501**						
Dilution Factor	**1**						
Acetone	ND	ug/L	20.0				
Benzene	ND	ug/L	1.00				
Bromodichloromethane	ND	ug/L	1.00				
Bromoform	ND	ug/L	1 00				
Bromomethane	ND	ug/L	1 00				
2-Butanone (MEK)	ND	ug/L	20 0				
Carbon Disulfide	ND	ug/L	1 00				
Carbon Tetrachloride	1.82	ug/L	1 00				
Chlorobenzene	ND	ug/L	1 00				
Chlorodibromomethane	ND	ug/L	1 00				
Chloroethane	ND	ug/L	1.00				
Chloroform	7.88	ug/L	1.00				
[redacted]loromethane	ND	ug/L	1 00				
[redacted],1-Dichloroethane	ND	ug/L	1 00				
1,2-Dichloroethane	ND	ug/L	1 00				
1,1-Dichloroethene	16.7	ug/L	1.00				
trans-1,2-Dichloroethene	11 1	ug/L	1 00				
1,2-Dichloropropane	ND	ug/L	1 00				
cis-1,3-Dichloropropene	ND	ug/L	1 00				
trans-1,3-Dichloropropene	ND	ug/L	1 00				
Ethylbenzene	ND	ug/L	1 00				
2-Hexanone (MBK)	ND	ug/L	5 00				
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.00				
Methylene Chloride	ND	ug/L	5.00				
Styrene	ND	ug/L	1 00				
1,1,2,2-Tetrachloroethane	29.7	ug/L	1 00				
Tetrachloroethene	18.3	ug/L	1 00				
Toluene	ND	ug/L	1.00				
1,1,1-Trichloroethane	ND	ug/L	1 00				
1,1,2-Trichloroethane	1 05	ug/L	1 00				
Trichloroethene	99.3	ug/L	1 00				
Vinyl Acetate	ND	ug/L	20.0				
Vinyl Chloride	ND	ug/L	1.00				
Xylenes-m,p	ND	ug/L	1 00				
Xylenes-o	ND	ug/L	1 00				
cis-1,2-Dichloroethene	43.7	ug/L	1 00				

Surrogate Standard	% Recovery	QC Limits	
S1 - Dibromofluoromethane	96	74	123
S2 - Toluene-d8	104	86	112
S3 - 4-Bromofluorobenzene	97	81	115
S4 - 1,2-Dichloroethane-d4	96	80	120

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

ENVIRONMENTAL TESTING & CONSULTING, INC.

613 803

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name: **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID: **Memphis Defense Depot**
Dunn Field

FID #

Date Arrived: **11/21/00**
ETC Order Number: **0011634**

ETC Lab ID: **0011634-02**
Field ID : **Trip Blank**

Matrix : **AQUEOUS**
Sample Date : **11/21/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
GC/MS Volatile Organics				12/05/00	EM	8260B 5030B
QC Batch	**V1120501**					
Dilution Factor	**1**					
Acetone	ND	ug/L	20.0			
Benzene	ND	ug/L	1 00			
Bromodichloromethane	ND	ug/L	1 00			
Bromoform	ND	ug/L	1.00			
Bromomethane	ND	ug/L	1 00			
2-Butanone (MEK)	ND	ug/L	20 0			
Carbon Disulfide	ND	ug/L	1 00			
Carbon Tetrachloride	ND	ug/L	1 00			
Chlorobenzene	ND	ug/L	1 00			
Chlorodibromomethane	ND	ug/L	1 00			
Chloroethane	ND	ug/L	1 00			
Chloroform	ND	ug/L	1 00			
Chloromethane	ND	ug/L	1 00			
1,1-Dichloroethane	ND	ug/L	1 00			
1,2-Dichloroethane	ND	ug/L	1.00			
1,1-Dichloroethene	ND	ug/L	1 00			
trans-1,2-Dichloroethene	ND	ug/L	1.00			
1,2-Dichloropropane	ND	ug/L	1 00			
cis-1,3-Dichloropropene	ND	ug/L	1 00			
trans-1,3-Dichloropropene	ND	ug/L	1.00			
Ethylbenzene	ND	ug/L	1 00			
2-Hexanone (MBK)	ND	ug/L	5.00			
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.00			
Methylene Chloride	ND	ug/L	5.00			
Styrene	ND	ug/L	1.00			
1,1,2,2-Tetrachloroethane	ND	ug/L	1 00			
Tetrachloroethene	ND	ug/L	1 00			
Toluene	ND	ug/L	1.00			
1,1,1-Trichloroethane	ND	ug/L	1.00			
1,1,2-Trichloroethane	ND	ug/L	1 00			
Trichloroethene	ND	ug/L	1 00			
Vinyl Acetate	ND	ug/L	20.0			
Vinyl Chloride	ND	ug/L	1.00			
Xylenes-m,p	ND	ug/L	1 00			
Xylenes-o	ND	ug/L	1 00			
cis-1,2-Dichloroethene	ND	ug/L	1 00			

Surrogate Standard	% Recovery	QC Limits	
S1 - Dibromofluoromethane	94	74	123
S2 - Toluene-d8	107	86	112
S3 - 4-Bromofluorobenzene	93	81	115
S4 - 1,2-Dichloroethane-d4	90	80	120

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

FORM 2
WATER VOA-GCMS SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-634

	CLIENT SAMPLE NO.	SMC1 (DCE) #	SMC2 (DFM) #	SMC3 (TOL) #	OTHER (BFB) #	TOT OUT
01	V1120511LCS	86	87	107	97	0
02	V1120511LB	94	90	106	98	0
03	0011-634-2	90	94	107	93	0
04	0011-634-1	96	96	104	97	0
05	0011-634-1MS	117	100	126*	126*	2
06	0011-634-1MS	103	97	123*	113	1
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		QC LIMITS
SMC1 (DCE)	= 1,2-Dichloroethane-d4	(80-120)
SMC2 (DFM)	= Dibromofluoromethane	(74-123)
SMC3 (TOL)	= Toluene-d8	(86-112)
OTHER(BFB)	= Bromofluorobenzene	(81-115)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

FORM 4
VOA-GCMS METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

613 805

V1120511LB

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-634

Lab File ID: 0402005 Lab Prep Batch: V1120501

Date Analyzed: 12/05/00 Time Analyzed: 1255

GC Column: ID: 2 (mm) Heated Purge: (Y/N) Y

Instrument ID: VOC1

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

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	V1120511LCS	V1120501	0202003LCS	1108
02	0011-634-2	V1120501	0701008	1440
03	0011-634-1	V1120501	0801009	1510
04	0011-634-1MS	V1120501	2101022	2116
05	0011-634-1MS	V1120501	2201023	2144
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COMMENTS:

FORM 1 613 806 CLIENT SAMPLE NO.

VOA-GCMS ORGANICS ANALYSIS DATA SHEET

V1120511LB

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-634

Matrix: (soil/water) WATER Lab Prep Batch: V1120501

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 0402005

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 12/05/00

GC Column: ID: 2.00 (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
67-64-1	Acetone	20.00	U
75-05-8	Acetonitrile	20.00	U
107-02-8	Acrolein	20.00	U
107-13-1	Acrylonitrile	20.00	U
107-05-1	Allyl chloride	1.00	U
71-43-2	Benzene	1.00	U
108-86-1	Bromobenzene	1.00	U
74-97-5	Bromochloromethane	1.00	U
75-27-4	Bromodichloromethane	1.00	U
75-25-2	Bromoform	1.00	U
78-93-3	2-Butanone	20.00	U
74-83-9	Bromomethane	1.00	U
104-51-8	n-Butylbenzene	1.00	U
135-98-8	sec-Butylbenzene	1.00	U
98-06-6	tert-Butylbenzene	1.00	U
75-15-0	Carbon Disulfide	1.00	U
56-23-5	Carbon Tetrachloride	1.00	U
108-90-7	Chlorobenzene	1.00	U
124-48-1	Chlorodibromomethane	1.00	U
75-00-3	Chloroethane	1.00	U
110-75-0	2-Chloroethyl vinyl ether	20.00	U
67-66-3	Chloroform	1.00	U
74-87-3	Chloromethane	1.00	U
126-99-8	Chloroprene	1.00	U
95-49-8	2-Chlorotoluene	1.00	U
106-43-4	4-Chlorotoluene	1.00	U
96-12-8	1,2-Dibromo-3-chloropropane	1.00	U
106-93-4	1,2-Dibromoethane	1.00	U
74-95-3	Dibromomethane	1.00	U
95-50-1	1,2-Dichlorobenzene	1.00	U
541-73-1	1,3-Dichlorobenzene	1.00	U
106-46-7	1,4-Dichlorobenzene	1.00	U
110-57-6	trans-1,4-Dichloro-2-butene	1.00	U

FORM 1
VOA-GCMS ORGANICS ANALYSIS DATA SHEET

613 807

CLIENT SAMPLE NO.

V1120511LB

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-634

Matrix: (soil/water) WATER Lab Prep Batch: V1120501

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 0402005

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 12/05/00

GC Column: ID: 2.00 (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
1868-53-7	Dichlorodifluoromethane	1.00	U
75-34-3	1,1-Dichloroethane	1.00	U
107-06-2	1,2-Dichloroethane	1.00	U
75-35-4	1,1-Dichloroethene	1.00	U
156-59-4	cis-1,2-Dichloroethene	1.00	U
156-60-5	trans-1,2-Dichloroethene	1.00	U
78-87-5	1,2-Dichloropropane	1.00	U
142-28-9	1,3-Dichloropropane	1.00	U
590-20-7	2,2-Dichloropropane	1.00	U
563-58-6	1,1-Dichloropropene	1.00	U
10061-01-5	cis-1,3-Dichloropropene	1.00	U
10061-02-6	trans-1,3-Dichloropropene	1.00	U
108-20-3	Di isopropyl ether	5.00	U
123-91-1	1,4-Dioxane	100.0	U
141-78-6	Ethyl Acetate	5.00	U
100-41-4	Ethylbenzene	1.00	U
97-63-2	Ethyl methacrylate	1.00	U
110-00-9	Furan	1.00	U
87-63-3	Hexachlorobutadiene	1.00	U
110-54-3	Hexane	1.00	U
591-78-6	2-Hexanone	5.00	U
74-88-4	Iodomethane	1.00	U
78-83-1	Isobutyl Alcohol	100.0	U
98-82-8	Isopropylbenzene	1.00	U
99-87-6	4-Isopropyltoluene	1.00	U
126-98-7	Methacrylonitrile	10.00	U
75-09-2	Methylene Chloride	5.00	U
80-62-6	Methyl methacrylate	1.00	U
108-10-1	4-Methyl-2-Pentanone	5.00	U
1634-04-4	Methyl-tertbutyl-Ether	5.00	U
91-20-3	Naphthalene	1.00	U
76-01-7	Pentachloroethane	1.00	U
107-12-0	Propionitrile	10.00	U

FORM 1 613 808 CLIENT SAMPLE NO.
VOA-GCMS ORGANICS ANALYSIS DATA SHEET

V1120511LB

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-634

Matrix: (soil/water) WATER Lab Prep Batch: V1120501

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 0402005

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 12/05/00

GC Column: ID: 2.00 (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
109-60-4	n-Propyl Acetate	1.00	U
103-65-1	n-Propylbenzene	1.00	U
100-42-5	Styrene	1.00	U
630-20-6	1,1,1,2-Tetrachloroethane	1.00	U
79-34-5	1,1,2,2-Tetrachloroethane	1.00	U
127-18-4	Tetrachloroethene	1.00	U
109-99-9	Tetrahydrofuran	1.00	U
87-61-6	1,2,3-Trichlorobenzene	1.00	U
108-88-3	Toluene	1.00	U
71-55-6	1,1,1-Trichloroethane	1.00	U
79-00-5	1,1,2-Trichloroethane	1.00	U
76-13-1	1,1,2-trichloro-1,2,2-triflu	1.00	U
79-01-6	Trichloroethene	1.00	U
75-69-4	Trichlorofluoromethane	1.00	U
96-18-4	1,2,3-Trichloropropane	1.00	U
120-82-1	1,2,4-Trichlorobenzene	1.00	U
95-63-6	1,2,4-Trimethylbenzene	1.00	U
108-67-8	1,3,5-Trimethylbenzene	1.00	U
108-05-4	Vinyl Acetate	20.00	U
75-01-4	Vinyl Chloride	1.00	U
1330-20-7	Xylene-mp	1.00	U
95-47-6	Xylene-o	1.00	U
1476-11-5	cis-1,4-Dichloro-2-butene	1.00	U

FORM 1

VOA-GCMS ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

613 809

CLIENT SAMPLE NO.

V1120511LB

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-634

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 0402005

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 12/05/00

GC Column: ID: 2.00 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
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FORM 3
WATER VOA-GCMS LAB CONTROL SAMPLE

613 810

Lab Name: ETC, INC. Lab Prep Batch: V1120501

Lab Code: Case No.: SAS No.: SDG No.: 0011-634

Matrix Spike - Sample No.: V1120511LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Acetone	100.0		137.2	137	59-151
Acetonitrile	1000		1176	118	57-143
Acrolein	100.0		206.7	207*	59-134
Acrylonitrile	100.0		108.2	108	60-146
Allyl chloride	100.0		107.9	108	74-120
Benzene	100.0		89.32	89	72-124
Bromobenzene	100.0		103.7	104	77-120
Bromochloromethane	100.0		100.3	100	74-120
Bromodichloromethane	100.0		108.5	108	68-119
Bromoform	100.0		121.4	121	66-136
2-Butanone	100.0		116.1	116	55-151
Bromomethane	100.0		96.66	97	40-134
n-Butylbenzene	100.0		100.2	100	69-129
sec-Butylbenzene	100.0		91.84	92	72-127
tert-Butylbenzene	100.0		107.9	108	73-126
Carbon Disulfide	100.0		91.22	91	60-133
Carbon Tetrachloride	100.0		91.77	92	64-123
Chlorobenzene	100.0		89.58	90	77-112
Chlorodibromomethane	100.0		93.93	94	72-118
Chloroethane	100.0		113.1	113	64-142
2-Chloroethyl vinyl eth	100.0		128.2	128	22-165
Chloroform	100.0		89.66	90	70-115
Chloromethane	100.0		101.6	102	58-139
Chloroprene	100.0		89.42	89	73-118
2-Chlorotoluene	100.0		110.8	111	65-132
4-Chlorotoluene	100.0		111.9	112	67-127
1,2-Dibromo-3-chloropro	100.0		113.6	114	56-134
1,2-Dibromoethane	100.0		115.0	115	74-118

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER VOA-GCMS LAB CONTROL SAMPLE

613 811

Lab Name: ETC, INC. Lab Prep Batch: V1120501

Lab Code: Case No.: SAS No.: SDG No.: 0011-634

Matrix Spike - Sample No.: V1120511LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.	
Dibromomethane	100.0		105.0	105	75-114	
1,2-Dichlorobenzene	100.0		94.49	94	80-113	
1,3-Dichlorobenzene	100.0		93.56	94	77-119	
1,4-Dichlorobenzene	100.0		90.18	90	78-116	
trans-1,4-Dichloro-2-bu	100.0		121.6	122	62-138	
Dichlorodifluoromethane	100.0		112.9	113	48-145	
1,1-Dichloroethane	100.0		97.12	97	76-118	
1,2-Dichloroethane	100.0		100.6	101	62-124	
1,1-Dichloroethene	100.0		119.5	120	69-121	
cis-1,2-Dichloroethene	100.0		93.28	93	76-114	
trans-1,2-Dichloroethen	100.0		96.25	96	72-121	
1,2-Dichloropropane	100.0		100.2	100	64-133	
1,3-Dichloropropane	100.0		117.0	117	68-128	
2,2-Dichloropropane	100.0		96.27	96	67-132	
1,1-Dichloropropene	100.0		91.41	91	76-117	
cis-1,3-Dichloropropene	100.0		117.0	117	77-120	
trans-1,3-Dichloroprope	100.0		105.4	105	73-124	
Di isopropyl ether	100.0		96.07	96	62-160	
1,4-Dioxane	2000		2434	122	56-131	
Ethyl Acetate	100.0		97.80	98	52-151	
Ethylbenzene	100.0		97.64	98	77-111	
Ethyl methacrylate	200.0		245.5	123	57-140	
Furan	100.0		168.7	169*	52-124	vT
Hexachlorobutadiene	100.0		114.8	115	69-137	
Hexane	100.0		98.30	98	70-130	
2-Hexanone	100.0		137.4	137	53-144	
Iodomethane	100.0		91.20	91	51-153	
Isobutyl Alcohol	2000		2324	116	60-134	

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER VOA-GCMS LAB CONTROL SAMPLE 613 812

Lab Name: ETC, INC. Lab Prep Batch: V1120501

Lab Code: Case No.: SAS No.: SDG No.: 0011-634

Matrix Spike - Sample No.: V1120511LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Isopropylbenzene	100.0		105.4	105	74-125
4-Isopropyltoluene	100.0		113.8	114	72-127
Methacrylonitrile	1000		1032	103	70-125
Methylene Chloride	100.0		113.9	114	76-115
Methyl methacrylate	200.0		228.2	114	57-147
4-Methyl-2-Pentanone	100.0		129.4	129	42-144
Methyl-tertbutyl-Ether	100.0		99.66	100	62-122
Naphthalene	100.0		105.7	106	53-124
Pentachloroethane	100.0		241.2	241*	78-126
Propionitrile	1000		1236	124	58-139
n-Propyl Acetate	100.0		168.0	168	88-170
n-Propylbenzene	100.0		107.3	107	75-125
Styrene	100.0		105.1	105	77-117
1,1,1,2-Tetrachloroetha	100.0		100.9	101	79-113
1,1,2,2-Tetrachloroetha	100.0		92.36	92	67-126
Tetrachloroethene	100.0		77.09	77	77-115
Tetrahydrofuran	100.0		82.67	83	76-181
1,2,3-Trichlorobenzene	100.0		112.9	113	62-132
Toluene	100.0		109.0	109	77-115
1,1,1-Trichloroethane	100.0		92.17	92	63-122
1,1,2-Trichloroethane	100.0		115.3	115	69-117
1,1,2-trichloro-1,2,2-t	100.0		72.97	73	70-130
Trichloroethene	100.0		98.87	99	75-113
Trichlorofluoromethane	100.0		115.7	116	55-130
1,2,3-Trichloropropane	100.0		120.4	120	62-130
1,2,4-Trichlorobenzene	100.0		114.1	114	68-132
1,2,4-Trimethylbenzene	100.0		113.7	114	69-126
1,3,5-Trimethylbenzene	100.0		113.7	114	69-128

vf

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER VOA-GCMS LAB CONTROL SAMPLE

613 813

Lab Name: ETC, INC. Lab Prep Batch: V1120501

Lab Code: Case No.: SAS No.: SDG No.: 0011-634

Matrix Spike - Sample No.: V1120511LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Vinyl Acetate	100.0		111.0	111	28-146
Vinyl Chloride	100.0		119.4	119	65-134
Xylene-mp	200.0		203.2	102	77-115
Xylene-o	100.0		98.38	98	77-115
cis-1,4-Dichloro-2-bute	100.0		128.9	129	70-130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 3 out of 89 outside limits

COMMENTS: _____

FORM 3
WATER VOA-GCMS MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: ETC, INC. · Lab Prep Batch: V1120501

Lab Code: Case No.: SAS No.: SDG No.: 0011-634

Matrix Spike - Sample No.: 0011-634-1

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
Benzene	100.0	0.000	103.3	103	72-124
Chlorobenzene	100.0	0.000	115.0	115*	77-112
1,1-Dichloroethene	100.0	16.69	96.56	80	69-121
Toluene	100.0	0.000	139.7	140*	77-115
Trichloroethene	100.0	99.34	130.5	31*	75-113

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Benzene	100.0	94.20	94	9	20	72-124
Chlorobenzene	100.0	101.6	102	12	20	77-112
1,1-Dichloroethene	100.0	95.55	79	1	20	69-121
Toluene	100.0	127.5	128*	9	20	77-115
Trichloroethene	100.0	117.4	18*	53*	20	75-113

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 1 out of 5 outside limits
Spike Recovery: 5 out of 10 outside limits

COMMENTS: _____

ENVIRONMENTAL TESTING & CONSULTING, INC.

613 815

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Defense Depot**
Dunn Field

FID #

Date Arrived **11/21/00**
ETC Order Number **0011634**

ETC Lab ID **0011634-01**
Field ID : **ST-EFF-030**

Matrix : **AQUEOUS**
Sample Date . **11/21/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Base/Neutral & Acid				11/29/00	11/28/00	PF	8270C 3510C
QC Batch	**P06016**						
Dilution Factor	**1**						
Acenaphthene	ND	ug/L	2.00				
Acenaphthylene	ND	ug/L	2.00				
Anthracene	ND	ug/L	2.00				
Benzo(a)anthracene	ND	ug/L	2.00				
Benzo(b)fluoranthene	ND	ug/L	2 00				
Benzo(k)fluoranthene	ND	ug/L	2 00				
Benzo(g,h,i)perylene	ND	ug/L	2 00				
Benzo(a)pyrene	ND	ug/L	2 00				
Benzoic Acid	ND	ug/L	50 0				
Benzyl Alcohol	ND	ug/L	10 0				
Bis(2-chloroethoxy)methane	ND	ug/L	5 00				
Bis(2-chloroethyl)ether	ND	ug/L	5 00				
Bis(2-chloroisopropyl)ether	ND	ug/L	5 00				
Bis(2-ethylhexyl)phthalate	ND	ug/L	10 0				
4-Bromophenyl phenyl ether	ND	ug/L	5 00				
Butyl benzyl phthalate	ND	ug/L	5 00				
4-Chloroaniline	ND	ug/L	5.00				
2-Chloronaphthalene	ND	ug/L	5 00				
4-Chloro-3-methylphenol	ND	ug/L	5 00				
2-Chlorophenol	ND	ug/L	5 00				
4-Chlorophenyl phenyl ether	ND	ug/L	5 00				
Chrysene	ND	ug/L	2.00				
Dibenzo(a,h)anthracene	ND	ug/L	2.00				
Dibenzofuran	ND	ug/L	5.00				
Di-n-butyl phthalate	ND	ug/L	5.00				
3,3'-Dichlorobenzidine	ND	ug/L	10 0				
2,4-Dichlorophenol	ND	ug/L	5 00				
Diethyl phthalate	ND	ug/L	5 00				
2,4-Dimethylphenol	ND	ug/L	5 00				
Dimethyl phthalate	ND	ug/L	5 00				
4,6-Dinitro-2-methylphenol	ND	ug/L	10.0				
2,4-Dinitrophenol	ND	ug/L	50.0				
2,4-Dinitrotoluene	ND	ug/L	5 00				
2,6-Dinitrotoluene	ND	ug/L	5 00				
Di-n-octyl phthalate	ND	ug/L	5 00				
Fluoranthene	ND	ug/L	2 00				
Fluorene	ND	ug/L	2 00				
Hexachlorobenzene	ND	ug/L	5 00				
Hexachlorobutadiene	ND	ug/L	5 00				
Hexachlorocyclopentadiene	ND	ug/L	5 00				
Hexachloroethane	ND	ug/L	5 00				
Indeno(1,2,3-cd)pyrene	ND	ug/L	2.00				
Isophorone	ND	ug/L	5.00				
2-Methylnaphthalene	ND	ug/L	2.00				
2-Methylphenol (o-cresol)	ND	ug/L	5.00				

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 816

Client Name **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID **Memphis Defense Depot**
Dunn Field

FID #

Date Arrived **11/21/00**
ETC Order Number **0011634**

ETC Lab ID **0011634-01**
Field ID : **ST-EFF-030**

Matrix . **AQUEOUS**
Sample Date **11/21/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Base/Neutral & Acid				11/29/00	11/28/00	PF	8270C 3510C
4-Methylphenol (p-cresol)	ND	ug/L	5 00				
Naphthalene	ND	ug/L	2.00				
Nitrobenzene	ND	ug/L	5 00				
2-Nitroaniline	ND	ug/L	5 00				
3-Nitroaniline	ND	ug/L	10.0				
4-Nitroaniline	ND	ug/L	5.00				
2-Nitrophenol	ND	ug/L	5 00				
4-Nitrophenol	ND	ug/L	5 00				
N-Nitrosodiphenylamine	ND	ug/L	5 00				
N-Nitrosodipropylamine	ND	ug/L	5.00				
Pentachlorophenol	ND	ug/L	10 0				
Phenanthrene	ND	ug/L	2 00				
[redacted]nol	ND	ug/L	5 00				
[redacted]ene	ND	ug/L	2 00				
2,4,5-Trichlorphenol	ND	ug/L	5.00				
2,4,6-Trichlorophenol	ND	ug/L	5 00				

Surrogate Standard	% Recovery	QC Limits	
S1 - Nitrobenzene-d5	59	29	110
S2 - 2-Fluorobiphenyl	54	38	107
S3 - 4-Terphenyl-d14	58	33	122
S4 - Phenol-d6	26	7	58
S5 - 2,4,6-Tribromophenol	65	16	138
S6 - 2-Fluorophenol	42	8	88

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

613 817

FORM 2
WATER BNA-GCMS SURROGATE RECOVERY

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-634

	CLIENT SAMPLE NO.	S1 (NBZ)#	S2 (FBP)#	S3 (TPH)#	S4 #	S5 (TBP)#	S6 (2FP)#	S7 #	S8 #	TOT OUT
01	P06016LB	79	74	70	30	82	49			0
02	P06016LCS	79	74	84	31	91	47			0
03	0011-634-1	59	54	58	26	65	42			0
04	0011-634-1MS	59	53	61	27	64	40			0
05	0011-634-1MS	64	61	74	29	76	42			0
06										
07										
08										
09										
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11										
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		QC LIMITS
S1 (NBZ)	= Nitrobenzene-d5	(29-110)
S2 (FBP)	= 2-Fluorobiphenyl	(38-107)
S3 (TPH)	= Terphenyl-d14	(33-122)
S4	= Phenol-d6	(7- 58)
S5 (TBP)	= 2,4,6-Tribromophenol	(16-138)
S6 (2FP)	= 2-Fluorophenol	(8- 88)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogate diluted out

FORM 4 613 818 CLIENT SAMPLE NO.

BNA-GCMS METHOD BLANK SUMMARY

P06016LB

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-634

Lab File ID: 0301003 Lab Prep Batch: P06016

Instrument ID: BNA2 Date Extracted:

Matrix: (soil/water) WATER Date Analyzed: 11/29/00

Level: (low/med) LOW Time Analyzed: 1558

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

	SAMPLE NO.	TIME ANALYZED	LAB FILE ID	DATE ANALYZED
01	P06016LCS	1628	0401004	11/29/00
02	0011-634-1	1657	0501005	11/29/00
03	0011-634-1MS	2255	1701017	11/29/00
04	0011-634-1MS	2325	1801018	11/29/00
05				
06				
07				
08				
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10				
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COMMENTS:

613 819

FORM 1
BNA-GCMS ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

P06016LB

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-634

Matrix: (soil/water) WATER Lab Prep Batch: P06016

Sample wt/vol: 250.0 (g/mL) ML Lab File ID: 0301003

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/29/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
83-32-9	Acenaphthene	8.00	U
208-96-8	Acenaphthylene	8.00	U
98-86-2	Acetophenone	20.00	U
62-53-3	Aniline	20.00	U
120-12-7	Anthracene	8.00	U
92-87-5	Benzidine	80.00	U
56-55-3	Benz(a)Anthracene	8.00	U
205-99-2	Benzo(b)fluoranthene	8.00	U
207-08-9	Benzo(k)fluoranthene	8.00	U
191-24-2	Benzo(ghi)perylene	11.40	
50-32-8	Benzo(a)pyrene	8.00	U
65-85-0	Benzoic acid	200.0	U
100-51-6	Benzyl alcohol	20.00	U
111-91-1	Bis(2-chloroethoxy)methane	20.00	U
111-44-4	Bis(2-chloroethyl)ether	20.00	U
108-60-1	Bis(2-chloroisopropyl)ether	20.00	U
117-81-7	Bis(2-ethylhexyl)phthalate	4.92	J
101-55-3	4-Bromophenyl phenyl ether	20.00	U
85-68-7	Butyl benzyl phthalate	20.00	U
86-74-8	Carbazole	8.00	U
106-47-8	4-Chloroaniline	20.00	U
510-15-6	Chlorobenzilate	20.00	U
59-50-7	4-Chloro-3-methylphenol	20.00	U
91-58-7	2-Chloronaphthalene	8.00	U
95-57-8	2-Chlorophenol	20.00	U
7005-72-3	4-Chlorophenyl phenyl ether	20.00	U
218-01-9	Chrysene	8.00	U
53-70-3	Dibenz(a,h)anthracene	8.00	U
132-64-9	Dibenzofuran	20.00	U
84-74-2	Di-n-butyl phthalate	3.44	J
95-50-1	1,2-Dichlorobenzene	20.00	U
541-73-1	1,3-Dichlorobenzene	20.00	U
106-46-7	1,4-Dichlorobenzene	20.00	U

FORM 1
BNA-GCMS ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

P06016LB

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-634

Matrix: (soil/water) WATER Lab Prep Batch: P06016

Sample wt/vol: 250.0 (g/mL) ML Lab File ID: 0301003

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/29/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
91-94-1	3,3'-Dichlorobenzidine	40.00	U
120-83-2	2,4-Dichlorophenol	20.00	U
87-65-0	2,6-Dichlorophenol	20.00	U
84-66-2	Diethyl phthalate	20.00	U
119-93-7	3,3-Dimethylbenzidine	40.00	U
105-67-9	2,4-Dimethyphenol	20.00	U
131-11-3	Dimethyl phthalate	20.00	U
534-52-1	4,6-Dinitro-2-methylphenol	40.00	U
51-28-5	2,4-Dinitrophenol	80.00	U
121-14-2	2,4-Dinitrotoluene	20.00	U
606-20-2	2,6-Dinitrotoluene	20.00	U
122-39-4	N-Nitrsdiphylam/Diphenylamin	20.00	U
117-84-0	Di-n-octyl phthalate	20.00	U
62-50-0	Ethyl methanesulfonate	20.00	U
206-44-0	Fluoranthene	8.00	U
86-73-7	Fluorene	8.00	U
118-74-1	Hexachlorobenzene	20.00	U
87-68-3	Hexachlorobutadiene	20.00	U
77-47-4	Hexachlorocyclopentadiene	20.00	U
67-72-1	Hexachloroethane	20.00	U
193-39-5	Indeno(1,2,3-cd)pyrene	11.74	
78-59-1	Isophorone	20.00	U
66-27-3	Methyl methanesulfonate	20.00	U
91-57-6	2-Methylnaphthalene	8.00	U
95-48-7	2-Methylphenol	20.00	U
108-39-4	3&4-Methylphenol	20.00	U
91-20-3	Naphthalene	8.00	U
88-74-4	2-Nitroaniline	40.00	U
99-09-2	3-Nitroaniline	40.00	U
100-01-6	4-Nitroaniline	40.00	U
98-95-3	Nitrobenzene	20.00	U
88-75-5	2-Nitrophenol	40.00	U
100-02-7	4-Nitrophenol	20.00	U

FORM 1
BNA-GCMS ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

P06016LB

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0011-634

Matrix: (soil/water) WATER Lab Prep Batch: P06016

Sample wt/vol: 250.0 (g/mL) ML Lab File ID: 0301003

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:

Concentrated Extract Volume: 1(mL) Date Analyzed: 11/29/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
924-16-3	N-Nitrosodibutylamine	20.00	U
55-18-5	N-Nitrosodiethylamine	20.00	U
129-00-0	N-Nitrosodimethylamine	20.00	U
621-64-7	N-Nitrosodi-n-propylamine	20.00	U
82-68-8	Pentachloronitrobenzene	40.00	U
87-86-5	Pentachlorophenol	20.00	U
62-44-2	Phenacetin	20.00	U
85-01-8	Phenanthrene	8.00	U
108-95-2	Phenol	20.00	U
129-00-0	Pyrene	8.00	U
110-86-1	Pyridine	20.00	U
95-94-3	1,2,4,5-Tetrachlorobenzene	20.00	U
58-90-2	2,3,4,6-Tetrachlorophenol	20.00	U
120-82-1	1,2,4-Trichlorobenzene	20.00	U
95-95-4	2,4,5-Trichlorophenol	20.00	U
88-06-2	2,4,6-Trichlorophenol	20.00	U
103-33-3	1,2-Dphnylhydrzine/Azobenzen	20.00	U

FORM 3
WATER BNA-GCMS LAB CONTROL SAMPLE

Lab Name: ETC, INC. Lab Prep Batch: P06016

Lab Code: Case No.: SAS No.: SDG No.: 0011-634

Matrix Spike - Sample No.: P06016LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Acenaphthene	50.00		34.19	68	38-117
Acenaphthylene	50.00		33.60	67	37-114
Acetophenone	50.00		34.97	70	32-108
Aniline	50.00		26.40	53	16-133
Anthracene	50.00		35.51	71	34-128
Benzidine	50.00		13.62	27	22-176
Benz(a)Anthracene	50.00		33.59	67	36-127
Benzo(b)fluoranthene	50.00		34.72	69	36-131
Benzo(k)fluoranthene	50.00		30.80	62	32-132
Benzo(ghi)perylene	50.00		35.45	71	26-123
Benzo(a)pyrene	50.00		31.14	62	34-131
Benzoic acid	50.00		16.83	34	11- 58
Benzyl alcohol	50.00		32.73	65	20-109
Bis(2-chloroethoxy)meth	50.00		36.08	72	20-126
Bis(2-chloroethyl)ether	50.00		36.74	73	16-122
Bis(2-chloroisopropyl)e	50.00		35.48	71	28-108
Bis(2-ethylhexyl)phthal	50.00		32.27	64	21-162
4-Bromophenyl phenyl et	50.00		31.06	62	31-124
Butyl benzyl phthalate	50.00		31.59	63	33-142
Carbazole	50.00		34.77	70	20-147
4-Chloroaniline	50.00		34.78	70	24-127
Chlorobenzilate	50.00		34.37	69	35-118
4-Chloro-3-methylphenol	50.00		38.46	77	35-117
2-Chloronaphthalene	50.00		39.45	79	29-137
2-Chlorophenol	50.00		36.84	74	27-102
4-Chlorophenyl phenyl e	50.00		36.89	74	39-110
Chrysene	50.00		34.18	68	30-124
Dibenz(a,h)anthracene	50.00		34.97	70	27-124

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER BNA-GCMS LAB CONTROL SAMPLE

Lab Name: ETC, INC. Lab Prep Batch: P06016

Lab Code: Case No.: SAS No.: SDG No.: 0011-634

Matrix Spike - Sample No.: P06016LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Dibenzofuran	50.00		36.49	73	40-108
Di-n-butyl phthalate	50.00		33.74	67	19-158
1,2-Dichlorobenzene	50.00		30.39	61	26-100
1,3-Dichlorobenzene	50.00		31.94	64	21-102
1,4-Dichlorobenzene	50.00		31.13	62	24- 99
3,3'-Dichlorobenzidine	50.00		34.32	69	6-192
2,4-Dichlorophenol	50.00		33.30	67	32-110
2,6-Dichlorophenol	50.00		33.91	68	31-112
Diethyl phthalate	50.00		38.06	76	36-130
3,3-Dimethylbenzidine	50.00		22.54	45	6-192
2,4-Dimethyphenol	50.00		32.91	66	34-105
Dimethyl phthalate	50.00		36.09	72	34-123
4,6-Dinitro-2-methylphe	50.00		39.76	80	27-128
2,4-Dinitrophenol	50.00		43.65	87	10-132
2,4-Dinitrotoluene	50.00		40.15	80	24-147
2,6-Dinitrotoluene	50.00		37.64	75	36-125
N-NitrsdiphylAm/Dipheny	100.0		65.24	65	35-116
Di-n-octyl phthalate	50.00		36.23	72	29-136
Ethyl methanesulfonate	50.00		38.51	77	20-121
Fluoranthene	50.00		27.60	55	28-127
Fluorene	50.00		36.19	72	41-116
Hexachlorobenzene	50.00		34.36	69	18-136
Hexachlorobutadiene	50.00		30.65	61	22-109
Hexachlorocyclopentadie	50.00		26.57	53	10-102
Hexachloroethane	50.00		32.54	65	16-107
Indeno(1,2,3-cd)pyrene	50.00		37.37	75	22-126
Isophorone	50.00		34.69	69	31-116
Methyl methanesulfonate	50.00		18.69	37	15- 82

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER BNA-GCMS LAB CONTROL SAMPLE

Lab Name: ETC, INC. Lab Prep Batch: P06016

Lab Code: Case No.: SAS No.: SDG No.: 0011-634

Matrix Spike - Sample No.: P06016LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
2-Methylnaphthalene	50.00		32.72	65	34-108
2-Methylphenol	50.00		33.47	67	22- 97
3&4-Methylphenol	50.00		29.90	60	21- 96
Naphthalene	50.00		33.56	67	33-108
2-Nitroaniline	50.00		39.34	79	32-127
3-Nitroaniline	50.00		39.77	80	28-142
4-Nitroaniline	50.00		44.61	89	23-139
Nitrobenzene	50.00		35.21	70	27-117
2-Nitrophenol	50.00		33.76	68	25-114
4-Nitrophenol	50.00		39.19	78*	1- 76
N-Nitrosodibutylamine	50.00		36.97	74	31-126
N-Nitrosodiethylamine	50.00		31.55	63	28-107
N-Nitrosodimethylamine	50.00		27.48	55	14- 84
N-Nitrosodi-n-propylami	50.00		36.14	72	29-114
Pentachloronitrobenzene	50.00		35.12	70	34-135
Pentachlorophenol	50.00		34.23	68	17-142
Phenacetin	50.00		38.33	77	29-141
Phenanthrene	50.00		34.81	70	40-120
Phenol	50.00		15.86	32	11- 55
Pyrene	50.00		33.94	68	20-154
Pyridine	50.00		16.45	33	10- 71
1,2,4,5-Tetrachlorobenz	50.00		31.66	63	28-110
2,3,4,6-Tetrachlorophen	50.00		40.53	81	28-118
1,2,4-Trichlorobenzene	50.00		30.69	61	23-106
2,4,5-Trichlorophenol	50.00		38.76	78	26-118
2,4,6-Trichlorophenol	50.00		37.45	75	26-115
1,2-Dphnylhydrzine/Azob	50.00		32.18	64	45-135

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 1 out of 83 outside limits

COMMENTS: _____

FORM 3

WATER BNA-GCMS MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: ETC, INC. Lab Prep Batch: P06016

Lab Code: Case No.: SAS No.: SDG No.: 0011-634

Matrix Spike - Sample No.: 0011-634-1

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
Acenaphthene	103.1	0.000	51.59	50	37-123
4-Chloro-3-methylphenol	164.9	0.000	121.0	73	33-134
2-Chlorophenol	164.9	0.000	109.4	66	17-134
1,4-Dichlorobenzene	103.1	0.000	43.00	42	31- 97
2,4-Dinitrotoluene	103.1	0.000	62.42	60	34-130
4-Nitrophenol	164.9	0.000	14.05	8*	20- 75
Pentachlorophenol	164.9	0.000	110.9	67	22-171
Phenol	164.9	0.000	41.19	25	12- 57
Pyrene	103.1	0.000	52.03	50	40-149
1,2,4-Trichlorobenzene	103.1	0.000	42.84	42	29-116

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Acenaphthene	103.1	59.43	58	15	20	37-123
4-Chloro-3-methylphenol	164.9	136.6	83	13	20	33-134
2-Chlorophenol	164.9	118.6	72	9	20	17-134
1,4-Dichlorobenzene	103.1	50.24	49	15	20	31- 97
2,4-Dinitrotoluene	103.1	78.80	76	24*	20	34-130
4-Nitrophenol	164.9	17.99	11*	32*	20	20- 75
Pentachlorophenol	164.9	137.4	83	21*	20	22-171
Phenol	164.9	43.96	27	8	20	12- 57
Pyrene	103.1	62.30	60	18	20	40-149
1,2,4-Trichlorobenzene	103.1	50.80	49	15	20	29-116

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 3 out of 10 outside limits
Spike Recovery: 2 out of 20 outside limits

COMMENTS: _____

_____

613 826

CHAIN OF CUSTODY RECORD

BEST AVAILABLE COPY

Environmental Testing & Consulting, Inc
2924 Walnut Grove Rd.
Memphis, TN 38111
(901)327-2750 FAX (901)327-6334

ETC Work Order : 1211-634

Company Name	Phone #	Fax Results
Jacobs Eng. Group	Fax #	RUSH
Project/Site: Memphis Depot – Dunn Field	FID #	Ice
Project #	PO #	
Project Manager/Contact: Kraig Smith	Matrix: 1 Wastewater, 2 Aqueous, 3 Soil/Sediment, 4 Sludge, 5 Oil/Solvent, 6 Other	

Analysis Requested (Note special detection limits or methods)

# of cont	Sample ID/ Number	Depth	Sample Date	Sample Time	Matrix	Type Grab/Comp	PH	TAL Met	Cyanide	TCL VOCs	TCL SVOCs					Comments
14	ST-EFF-0326		11-21-00	1500	Water	Grab	✓	✓	✓	✓	✓					
3	Trip Blank									✓						

Sampled By: Kraig Smith | Method of Shipment: Hand Deliver | Blank/Cooler Temp | Remarks: Need results by Dec. 3

RELINQUISHED BY (sign)	DATE	TIME	RECEIVED BY (sign)	DATE	TIME	Sample Delivery Group ID
Kraig Smith	11-21-00	1515				
RELINQUISHED BY (sign)	DATE	TIME	RECEIVED BY (sign)	DATE	TIME	
RELINQUISHED BY (sign)	DATE 11/21/00	TIME 1515	RECEIVED BY LAB (print/sign) RAndy Thomas	DATE	TIME	

Distribution: Original and Yellow accompany samples to the laboratory Pink copy for Field Crew
Original copy returned with results. Yellow copy for ETC, Inc. files

F:\QAQC\SLOP\COC0995.XLS

BEST AVAILABLE COPY

Environmental Testing & Consulting, Inc.
Cooler Receipt Form

Date Received 11/21/00
Date/Time Checked In 11/21/00-15:15
Carrier/Bill# Hand-Delivered

LIMS# 0011-634
Project Memphis Depot
Dunn Field
By Randy Thomas

1	Custody Seals?/Location-	No
2.	Samples are non-radioactive?	Yes
3.	Chain of Custody in plastic?	Yes
4.	Temperature at receipt (ok = 4 ± 2 °C)<4oC	OK
5.	Ice & Packing-Bags. Ice, Bubble Wrap	Yes
6.	Chain of Custody filled out properly?	Yes
7.	All containers in separate bags?	No
8.	Sample containers intact?	Yes
9.	Label(s) complete and in good condition?	Yes
10.	Label(s) agree with Chain of Custody?	Yes
11.	Correct containers used?	Yes
12.	Sufficient sample?	Yes
13.	VOA vials bubble-free (H_2O) or no head space (soil)?	Yes
14.	Preservation OK? TM pH____; TRPH pH____; TOC pH____; TOX pH____; CN pH____; N/P pH____; Other pH____	Yes

Comments _____

*Validated Date and Time of Sample Receipt (VDTSR)

613 828

ENVIRONMENTAL TESTING & CONSULTING, INC.
2924 Walnut Grove Road • Memphis, TN 38111 • (901) 327-2750 • FAX (901) 327-6334
Founded 1972

December 28, 2000

Mr. Kraig Smith
Sverdrup/Jacobs Eng.
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Ref: Analytical Testing
ETC Order # 0012504
Project Description Memphis Depot
Dunn Field

The above referenced project has been analyzed per your instructions. The analyses were performed in our laboratory in accordance with Standard Methods, The Solid Waste Manual SW-846, EPA Methods for Chemical Analysis of Water and Wastes and/or 40 CFR part 136.

The results are shown on the attached analysis sheet(s).

Please do not hesitate to contact our office if you have any questions.

Sincerely,

Nathan A. Pera, IV
Chief Executive Officer

rt
Attachment

SVE_MHDDMT

Certifications

Tennessee	*#TN02027*	*Mississippi*	
Arkansas	*#40730*	*Oklahoma*	*#9311*
Kentucky	*#90047*	*Virginia*	*#00106*
North Carolina	*#415*	*Washington*	*#C248*
South Carolina	*#84002002*	*US Army Corps of Engineers*	

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name: Sverdrup/Jacobs Eng.
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID: Memphis Depot
Dunn Field

Date Arrived: 12/20/00
ETC Order Number: 0012504

ETC Lab ID : 0012504-01
Field ID : ST-EFF-031

Matrix : AQUEOUS
Sample Date : 12/20/00

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	BY	METHOD	QC BATCH
pH	6.5	SU		12/20/00	RB	150.1	PH122000

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 830

[redacted] Name: Sverdrup/Jacobs Eng.
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID: Memphis Depot
Dunn Field

Date Arrived: 12/20/00
ETC Order Number: 0012504

ETC Lab ID : 0012504-02
Field ID : EQB-031

Matrix : AQUEOUS
Sample Date : 12/20/00

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	BY	METHOD	QC BATCH
pH	7.3	SU		12/20/00	RB	150 1	PH122000

ENVIRONMENTAL TESTING & CONSULTING, INC.
2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 831

Client Name: **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID: **Memphis Depot**
Dunn Field

Date Arrived: **12/20/00**
ETC Order Number: **0012504**

ETC Lab ID : **0012504-01**
Field ID : **ST-EFF-031**

Matrix : **AQUEOUS**
Sample Date : **12/20/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE PREPARED	BY	METHOD
Mercury Digestion Batch	V7-AQ-81			12/26/00	12/26/00	JF	245.1
Metals Digestion Batch	V23-AQ-85			12/21/00	12/21/00	NR	3030K
Silver	<0.009	mg/L	0 009	12/26/00	12/21/00	SH	200.7
Aluminum	<0.060	mg/L	0.060	12/26/00	12/21/00	SH	200.7
Arsenic	<0.003	mg/L	0.003	12/26/00	12/21/00	SH	200.7
Barium	0.117	mg/L	0.003	12/26/00	12/21/00	SH	200.7
Beryllium	<0.002	mg/L	0.002	12/26/00	12/21/00	SH	200.7
Calcium	23.4	mg/L	0.015	12/26/00	12/21/00	SH	200.7
Cadmium	<0.005	mg/L	0 005	12/26/00	12/21/00	SH	200.7
Cobalt	<0.009	mg/L	0.009	12/26/00	12/21/00	SH	200.7
Chromium	<0.009	mg/L	0.009	12/26/00	12/21/00	SH	200.7
Copper	<0.008	mg/L	0.008	12/26/00	12/21/00	SH	200.7
Iron	0.211	mg/L	0 009	12/26/00	12/21/00	SH	200.7
Mercury	<0.0002	mg/L	0.0002	12/26/00	12/26/00	JF	245.1
Potassium	0.978	mg/L	0 250	12/26/00	12/21/00	SH	200.7
Magnesium	11 5	mg/L	0.040	12/26/00	12/21/00	SH	200.7
Manganese	0.009	mg/L	0.003	12/26/00	12/21/00	SH	200.7
Sodium	21.8	mg/L	0.050	12/26/00	12/21/00	SH	200.7
Nickel	<0.020	mg/L	0 020	12/26/00	12/21/00	SH	200.7
Lead	<0.060	mg/L	0.060	12/26/00	12/21/00	SH	200 7
Antimony	<0.040	mg/L	0 040	12/26/00	12/21/00	SH	200 7
Selenium	<0.100	mg/L	0.100	12/26/00	12/21/00	SH	200.7
Thallium	<0 065	mg/L	0.065	12/26/00	12/21/00	SH	200.7
Vanadium	<0.010	mg/L	0.010	12/26/00	12/21/00	SH	200.7
Zinc	0.063	mg/L	0.010	12/26/00	12/21/00	SH	200.7

ENVIRONMENTAL TESTING & CONSULTING, INC.
2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 832

[redacted] Name: **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID: **Memphis Depot**
Dunn Field

Date Arrived: **12/20/00**
ETC Order Number: **0012504**

ETC Lab ID : **0012504-02**
Field ID : **EQB-031**

Matrix : **AQUEOUS**
Sample Date : **12/20/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE PREPARED	BY	METHOD
Mercury Digestion Batch	V7-AQ-81			12/26/00	12/26/00	JF	245.1
Metals Digestion Batch	V23-AQ-85			12/21/00	12/21/00	NR	3030K
Silver	<0.009	mg/L	0 009	12/26/00	12/21/00	SH	200.7
Aluminum	<0.060	mg/L	0.060	12/26/00	12/21/00	SH	200.7
Arsenic	<0.003	mg/L	0.003	12/26/00	12/21/00	SH	200 7
Barium	<0.003	mg/L	0.003	12/26/00	12/21/00	SH	200.7
Beryllium	<0.002	mg/L	0.002	12/26/00	12/21/00	SH	200.7
Calcium	<0.015	mg/L	0.015	12/26/00	12/21/00	SH	200.7
Cadmium	<0 005	mg/L	0.005	12/26/00	12/21/00	SH	200 7
Cobalt	<0.009	mg/L	0.009	12/26/00	12/21/00	SH	200.7
Chromium	<0.009	mg/L	0.009	12/26/00	12/21/00	SH	200.7
Copper	<0.008	mg/L	0.008	12/26/00	12/21/00	SH	200.7
[redacted]	0.012	mg/L	0 009	12/26/00	12/21/00	SH	200.7
[redacted]ury	<0.0002	mg/L	0.0002	12/26/00	12/26/00	JF	245.1
Potassium	<0.250	mg/L	0 250	12/26/00	12/21/00	SH	200.7
Magnesium	<0.040	mg/L	0.040	12/26/00	12/21/00	SH	200 7
Manganese	<0 003	mg/L	0.003	12/26/00	12/21/00	SH	200.7
Sodium	0.072	mg/L	0.050	12/26/00	12/21/00	SH	200.7
Nickel	<0.020	mg/L	0.020	12/26/00	12/21/00	SH	200 7
Lead	<0.060	mg/L	0.060	12/26/00	12/21/00	SH	200.7
Antimony	<0.040	mg/L	0.040	12/26/00	12/21/00	SH	200.7
Selenium	<0.100	mg/L	0.100	12/26/00	12/21/00	SH	200 7
Thallium	<0.065	mg/L	0 065	12/26/00	12/21/00	SH	200.7
Vanadium	<0 010	mg/L	0.010	12/26/00	12/21/00	SH	200.7
Zinc	<0.010	mg/L	0 010	12/26/00	12/21/00	SH	200.7

ENVIRONMENTAL TESTING & CONSULTING, INC.

613 833

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name: **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID: **Memphis Depot**
Dunn Field

FID #

Date Arrived: **12/20/00**
ETC Order Number: **0012504**

ETC Lab ID: **0012504-01**
Field ID: **ST-EFF-031**

Matrix : **AQUEOUS**
Sample Date : **12/20/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
GC/MS Volatile Organics				12/21/00	EM	8260B 5030B
QC Batch	**V412211**					
Dilution Factor	**1**					
Acetone	ND	ug/L	20 0			
Benzene	ND	ug/L	1 00			
Bromodichloromethane	ND	ug/L	1 00			
Bromoform	ND	ug/L	1.00			
Bromomethane	ND	ug/L	1 00			
2-Butanone (MEK)	ND	ug/L	20 0			
Carbon Disulfide	ND	ug/L	1 00			
Carbon Tetrachloride	ND	ug/L	1.00			
Chlorobenzene	ND	ug/L	1 00			
Chlorodibromomethane	ND	ug/L	1 00			
Chloroethane	ND	ug/L	1 00			
Chloroform	7.15	ug/L	1 00			
Chloromethane	ND	ug/L	1 00			
1,1-Dichloroethane	0.51J	ug/L	1 00			
1,2-Dichloroethane	ND	ug/L	1 00			
1,1-Dichloroethene	14 6	ug/L	1 00			
trans-1,2-Dichloroethene	3 61	ug/L	1 00			
1,2-Dichloropropane	ND	ug/L	1 00			
cis-1,3-Dichloropropene	ND	ug/L	1.00			
trans-1,3-Dichloropropene	ND	ug/L	1 00			
Ethylbenzene	ND	ug/L	1 00			
2-Hexanone (MBK)	ND	ug/L	5.00			
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5 00			
Methylene Chloride	ND	ug/L	5.00			
Styrene	ND	ug/L	1.00			
1,1,2,2-Tetrachloroethane	ND	ug/L	1.00			
Tetrachloroethene	20 7	ug/L	1.00			
Toluene	ND	ug/L	1 00			
1,1,1-Trichloroethane	0 52J	ug/L	1.00			
1,1,2-Trichloroethane	ND	ug/L	1 00			
Trichloroethene	57 6	ug/L	1 00			
Vinyl Acetate	ND	ug/L	20 0			
Vinyl Chloride	ND	ug/L	1.00			
Xylenes-m,p	ND	ug/L	1.00			
Xylenes-o	ND	ug/L	1 00			
cis-1,2-Dichloroethene	14 6	ug/L	1 00			

Surrogate Standard	% Recovery	QC Limits	
S1 - Dibromofluoromethane	98	74	123
S2 - Toluene-d8	97	86	112
S3 - 4-Bromofluorobenzene	93	81	115
S4 - 1,2-Dichloroethane-d4	84	80	120

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

CLIENT SAMPLE NO.

0012-504-1

FORM 1
VOA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0012-504

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 0501006

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 12/21/00

GC Column: ID: 2.00 (mm) Dilution Factor: 1.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

Number TICs found: 0

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

ENVIRONMENTAL TESTING & CONSULTING, INC.

613 835

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name: **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID: **Memphis Depot**
Dunn Field

FID #

Date Arrived: **12/20/00**
ETC Order Number: **0012504**

ETC Lab ID: **0012504-02**
Field ID : **EQB-031**

Matrix · **AQUEOUS**
Sample Date · **12/20/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Volatile Organics				12/02/00		EM	8260B 5030B
QC Batch	**V412211**						
Dilution Factor	**1**						
Acetone	ND	ug/L	20 0				
Benzene	ND	ug/L	1.00				
Bromodichloromethane	ND	ug/L	1.00				
Bromoform	ND	ug/L	1 00				
Bromomethane	ND	ug/L	1 00				
2-Butanone (MEK)	ND	ug/L	20 0				
Carbon Disulfide	ND	ug/L	1.00				
Carbon Tetrachloride	ND	ug/L	1.00				
Chlorobenzene	ND	ug/L	1 00				
Chlorodibromomethane	ND	ug/L	1 00				
Chloroethane	ND	ug/L	1.00				
Chloroform	ND	ug/L	1 00				
Chloromethane	ND	ug/L	1.00				
1,1-Dichloroethane	ND	ug/L	1 00				
1,2-Dichloroethane	ND	ug/L	1 00				
1,1-Dichloroethene	ND	ug/L	1.00				
trans-1,2-Dichloroethene	ND	ug/L	1 00				
1,2-Dichloropropane	ND	ug/L	1.00				
cis-1,3-Dichloropropene	ND	ug/L	1.00				
trans-1,3-Dichloropropene	ND	ug/L	1.00				
Ethylbenzene	ND	ug/L	1 00				
2-Hexanone (MBK)	ND	ug/L	5 00				
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5 00				
Methylene Chloride	ND	ug/L	5 00				
Styrene	ND	ug/L	1 00				
1,1,2,2-Tetrachloroethane	ND	ug/L	1 00				
Tetrachloroethene	ND	ug/L	1 00				
Toluene	ND	ug/L	1.00				
1,1,1-Trichloroethane	ND	ug/L	1.00				
1,1,2-Trichloroethane	ND	ug/L	1 00				
Trichloroethene	ND	ug/L	1.00				
Vinyl Acetate	ND	ug/L	20.0				
Vinyl Chloride	ND	ug/L	1.00				
Xylenes-m,p	ND	ug/L	1 00				
Xylenes-o	ND	ug/L	1.00				
cis-1,2-Dichloroethene	ND	ug/L	1.00				

Surrogate Standard	% Recovery	QC Limits	
S1 - Dibromofluoromethane	98	74	123
S2 - Toluene-d8	99	86	112
S3 - 4-Bromofluorobenzene	93	81	115
S4 - 1,2-Dichloroethane-d4	88	80	120

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

CLIENT SAMPLE NO.

0012-504-2

FORM 1
VOA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0012-504

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 0601007

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 12/21/00

GC Column: ID: 2.00 (mm) Dilution Factor: 1.0

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

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
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ENVIRONMENTAL TESTING & CONSULTING, INC.

613 837

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

Client Name: **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID: **Memphis Depot**
Dunn Field

FID #

Date Arrived: **12/20/00**
ETC Order Number: **0012504**

ETC Lab ID: **0012504-03**
Field ID : **Trip Blank**

Matrix : **AQUEOUS**
Sample Date: **12/20/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
GC/MS Volatile Organics				12/21/01	EM	8260B 5030B
QC Batch	**V412211**					
Acetone	ND	ug/L	20 0			
Benzene	ND	ug/L	1.00			
Bromodichloromethane	ND	ug/L	1.00			
Bromoform	ND	ug/L	1 00			
Bromomethane	ND	ug/L	1 00			
2-Butanone (MEK)	ND	ug/L	20 0			
Carbon Disulfide	ND	ug/L	1.00			
Carbon Tetrachloride	ND	ug/L	1.00			
Chlorobenzene	ND	ug/L	1.00			
Chlorodibromomethane	ND	ug/L	1 00			
Chloroethane	ND	ug/L	1 00			
Chloroform	ND	ug/L	1.00			
Chloromethane	ND	ug/L	1.00			
1,1-Dichloroethane	ND	ug/L	1 00			
1,2-Dichloroethane	ND	ug/L	1 00			
1,1-Dichloroethene	ND	ug/L	1.00			
trans-1,2-Dichloroethene	ND	ug/L	1 00			
1,2-Dichloropropane	ND	ug/L	1 00			
cis-1,3-Dichloropropene	ND	ug/L	1 00			
trans-1,3-Dichloropropene	ND	ug/L	1 00			
Ethylbenzene	ND	ug/L	1 00			
2-Hexanone (MBK)	ND	ug/L	5 00			
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5 00			
Methylene Chloride	ND	ug/L	5.00			
Styrene	ND	ug/L	1.00			
1,1,2,2-Tetrachloroethane	ND	ug/L	1.00			
Tetrachloroethene	ND	ug/L	1 00			
Toluene	ND	ug/L	1.00			
1,1,1-Trichloroethane	ND	ug/L	1 00			
1,1,2-Trichloroethane	ND	ug/L	1 00			
Trichloroethene	ND	ug/L	1 00			
Vinyl Acetate	ND	ug/L	20 0			
Vinyl Chloride	ND	ug/L	1 00			
Xylenes-m,p	ND	ug/L	1 00			
Xylenes-o	ND	ug/L	1 00			
cis-1,2-Dichloroethene	ND	ug/L	1 00			

Surrogate Standard	% Recovery	QC Limits	
S1 - Dibromofluoromethane	100	74	123
S2 - Toluene-d8	98	86	112
S3 - 4-Bromofluorobenzene	93	81	115
S4 - 1,2-Dichloroethane-d4	84	80	120

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

613 838

FORM 1
VOA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

0012-504-3

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0012-504

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 0403005

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 12/21/00

GC Column: ID: 2.00 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
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ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 839

Client Name: **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID: **Memphis Depot**
Dunn Field

FID #

Date Arrived: **12/20/00**
ETC Order Number: **0012504**

ETC Lab ID: **0012504-01**
Field ID: **ST-EFF-031**

Matrix: **AQUEOUS**
Sample Date: **12/20/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Base/Neutral & Acid				12/28/00	12/21/00	PF	8270C 3510C
QC Batch	**P06026**						
Dilution Factor	**1**						
Acenaphthene	ND	ug/L	2.00				
Acenaphthylene	ND	ug/L	2.00				
Anthracene	ND	ug/L	2.00				
Benzo(a)anthracene	ND	ug/L	2.00				
Benzo(b)fluoranthene	ND	ug/L	2.00				
Benzo(k)fluoranthene	ND	ug/L	2 00				
Benzo(g,h,i)perylene	ND	ug/L	2 00				
Benzo(a)pyrene	ND	ug/L	2.00				
Benzoic Acid	ND	ug/L	50 0				
Benzyl Alcohol	ND	ug/L	10.0				
Bis(2-chloroethoxy)methane	ND	ug/L	5 00				
Bis(2-chloroethyl)ether	ND	ug/L	5.00				
Bis(2-chloroisopropyl)ether	ND	ug/L	5.00				
Bis(2-ethylhexyl)phthalate	ND	ug/L	10.0				
4-Bromophenyl phenyl ether	ND	ug/L	5.00				
Butyl benzyl phthalate	ND	ug/L	5.00				
4-Chloroaniline	ND	ug/L	5.00				
2-Chloronaphthalene	ND	ug/L	5.00				
4-Chloro-3-methylphenol	ND	ug/L	5 00				
2-Chlorophenol	ND	ug/L	5.00				
4-Chlorophenyl phenyl ether	ND	ug/L	5.00				
Chrysene	ND	ug/L	2.00				
Dibenzo(a,h)anthracene	ND	ug/L	2.00				
Dibenzofuran	ND	ug/L	5.00				
Di-n-butyl phthalate	ND	ug/L	5.00				
3,3'-Dichlorobenzidine	ND	ug/L	10.0				
2,4-Dichlorophenol	ND	ug/L	5.00				
Diethyl phthalate	ND	ug/L	5.00				
2,4-Dimethylphenol	ND	ug/L	5 00				
Dimethyl phthalate	ND	ug/L	5.00				
4,6-Dinitro-2-methylphenol	ND	ug/L	10.0				
2,4-Dinitrophenol	ND	ug/L	50.0				
2,4-Dinitrotoluene	ND	ug/L	5.00				
2,6-Dinitrotoluene	ND	ug/L	5.00				
Di-n-octyl phthalate	ND	ug/L	5.00				
Fluoranthene	ND	ug/L	2.00				
Fluorene	ND	ug/L	2.00				
Hexachlorobenzene	ND	ug/L	5.00				
Hexachlorobutadiene	ND	ug/L	5.00				
Hexachlorocyclopentadiene	ND	ug/L	5.00				
Hexachloroethane	ND	ug/L	5.00				
Indeno(1,2,3-cd)pyrene	ND	ug/L	2.00				
Isophorone	ND	ug/L	5.00				
2-Methylnaphthalene	ND	ug/L	2.00				
2-Methylphenol (o-cresol)	ND	ug/L	5 00				
4-Methylphenol (p-cresol)	ND	ug/L	5.00				
Naphthalene	ND	ug/L	2.00				

Outside QC Limits

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 840

Client Name [redacted]
Sverdrup/Jacobs Eng.
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID Memphis Depot
Dunn Field

FID #

Date Arrived 12/20/00
ETC Order Number 0012504

ETC Lab ID 0012504-01
Field ID : ST-EFF-031

Matrix : AQUEOUS
Sample Date : 12/20/00

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Base/Neutral & Acid				12/28/00	12/21/00	PF	8270C 3510C
Nitrobenzene	ND	ug/L	5 00				
2-Nitroaniline	ND	ug/L	5.00				
3-Nitroaniline	ND	ug/L	10.0				
4-Nitroaniline	ND	ug/L	5.00				
2-Nitrophenol	ND	ug/L	5 00				
4-Nitrophenol	ND	ug/L	5.00				
N-Nitrosodiphenylamine	ND	ug/L	5.00				
N-Nitrosodipropylamine	ND	ug/L	5.00				
Pentachlorophenol	ND	ug/L	10.0				
Phenanthrene	ND	ug/L	2.00				
Phenol	ND	ug/L	5 00				
Pyrene	ND	ug/L	2.00				
[redacted]5-Trichlorphenol	ND	ug/L	5 00				
[redacted],6-Trichlorophenol	ND	ug/L	5.00				

Surrogate Standard	% Recovery	QC Limits	
S1 - Nitrobenzene-d5	60	29	110
S2 - 2-Fluorobiphenyl	50	38	107
S3 - 4-Terphenyl-d14	83	33	122
S4 - Phenol-d6	28	7	58
S5 - 2,4,6-Tribromophenol	81	16	138
S6 - 2-Fluorophenol	42	8	88

613 841

FORM 1
BNA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.
0012-504-1

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0012-504

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 940.0 (g/mL) ML Lab File ID: 2101021

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:

Concentrated Extract Volume: 1(mL) Date Analyzed: 12/28/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	503-86-6	GLYCOCYANIDINE	4.43	38.28	NJ
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
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27.					
28.					
29.					
30.					

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 842

Client Name: Sverdrup/Jacobs Eng.
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID: Memphis Depot
Dunn Field

FID #

Date Arrived: 12/20/00
ETC Order Number: 0012504

ETC Lab ID: 0012504-02
Field ID: EQB-031

Matrix: AQUEOUS
Sample Date: 12/20/00

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Base/Neutral & Acid				12/28/00	12/21/00	PF	8270C 3510C
QC Batch	**P06026**						
Dilution Factor	**1**						
Acenaphthene	ND	ug/L	2.00				
Acenaphthylene	ND	ug/L	2.00				
Anthracene	ND	ug/L	2.00				
Benzo(a)anthracene	ND	ug/L	2.00				
Benzo(b)fluoranthene	ND	ug/L	2 00				
Benzo(k)fluoranthene	ND	ug/L	2.00				
Benzo(g,h,i)perylene	ND	ug/L	2.00				
Benzo(a)pyrene	ND	ug/L	2.00				
Benzoic Acid	ND	ug/L	50.0				
Benzyl Alcohol	ND	ug/L	10 0				
[illegible]2-chloroethoxy)methane	ND	ug/L	5.00				
[illegible]2-chloroethyl)ether	ND	ug/L	5.00				
Bis(2-chloroisopropyl)ether	ND	ug/L	5.00				
Bis(2-ethylhexyl)phthalate	ND	ug/L	10.0				
4-Bromophenyl phenyl ether	ND	ug/L	5.00				
Butyl benzyl phthalate	ND	ug/L	5.00				
4-Chloroaniline	ND	ug/L	5.00				
2-Chloronaphthalene	ND	ug/L	5.00				
4-Chloro-3-methylphenol	ND	ug/L	5.00				
2-Chlorophenol	ND	ug/L	5 00				
4-Chlorophenyl phenyl ether	ND	ug/L	5.00				
Chrysene	ND	ug/L	2 00				
Dibenzo(a,h)anthracene	ND	ug/L	2.00				
Dibenzofuran	ND	ug/L	5.00				
Di-n-butyl phthalate	ND	ug/L	5.00				
3,3'-Dichlorobenzidine	ND	ug/L	10.0				
2,4-Dichlorophenol	ND	ug/L	5 00				
Diethyl phthalate	ND	ug/L	5.00				
2,4-Dimethylphenol	ND	ug/L	5 00				
Dimethyl phthalate	ND	ug/L	5.00				
4,6-Dinitro-2-methylphenol	ND	ug/L	10.0				
2,4-Dinitrophenol	ND	ug/L	50 0				
2,4-Dinitrotoluene	ND	ug/L	5.00				
2,6-Dinitrotoluene	ND	ug/L	5.00				
Di-n-octyl phthalate	ND	ug/L	5 00				
Fluoranthene	ND	ug/L	2.00				
Fluorene	ND	ug/L	2.00				
Hexachlorobenzene	ND	ug/L	5.00				
Hexachlorobutadiene	ND	ug/L	5.00				
Hexachlorocyclopentadiene	ND	ug/L	5 00				
[illegible]xachloroethane	ND	ug/L	5 00				
[illegible]no(1,2,3-cd)pyrene	ND	ug/L	2 00				
[illegible]ophorone	ND	ug/L	5.00				
2-Methylnaphthalene	ND	ug/L	2.00				
2-Methylphenol (o-cresol)	ND	ug/L	5 00				
4-Methylphenol (p-cresol)	ND	ug/L	5.00				
Naphthalene	ND	ug/L	2.00				

ND - No Detect

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750

613 843

Client Name: **Sverdrup/Jacobs Eng.**
Memphis Defense Depot
3354 Perimeter Hill Drive,
Suite 310
Nashville, TN 37211

Site ID: **Memphis Depot**
Dunn Field

FID #

Date Arrived: **12/20/00**
ETC Order Number: **0012504**

ETC Lab ID: **0012504-02**
Field ID : **EQB-031**

Matrix : **AQUEOUS**
Sample Date : **12/20/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED	BY	METHOD
GC/MS Base/Neutral & Acid				12/28/00	12/21/00	PF	8270C 3510C
Nitrobenzene	ND	ug/L	5.00				
2-Nitroaniline	ND	ug/L	5.00				
3-Nitroaniline	ND	ug/L	10.0				
4-Nitroaniline	ND	ug/L	5.00				
2-Nitrophenol	ND	ug/L	5 00				
4-Nitrophenol	ND	ug/L	5.00				
N-Nitrosodiphenylamine	ND	ug/L	5 00				
N-Nitrosodipropylamine	ND	ug/L	5 00				
Pentachlorophenol	ND	ug/L	10.0				
Phenanthrene	ND	ug/L	2.00				
Phenol	ND	ug/L	5 00				
Pyrene	ND	ug/L	2.00				
2,4,5-Trichlorphenol	ND	ug/L	5 00				
2,4,6-Trichlorophenol	ND	ug/L	5 00				

Surrogate Standard	% Recovery	QC Limits	
S1 - Nitrobenzene-d5	69	29	110
S2 - 2-Fluorobiphenyl	52	38	107
S3 - 4-Terphenyl-d14	86	33	122
S4 - Phenol-d6	26	7	58
S5 - 2,4,6-Tribromophenol	85	16	138
S6 - 2-Fluorophenol	40	8	88

FORM 1
BNA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.
0012-504-2

Lab Name: ETC, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.: 0012-504

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 960.0 (g/mL) ML Lab File ID: 2201022

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:

Concentrated Extract Volume: 1(mL) Date Analyzed: 12/28/00

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	503-86-6	GLYCOCYANIDINE	4.43	35.90	NJ
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
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CHAIN OF CUSTODY RECORD

Environmental Testing & Consulting, Inc.
2924 Walnut Grove Rd.
Memphis, TN 38111
(901)327-2750 FAX (901)327-6334

ETC Work Order : 0012504

Company Name: JACOBS	Phone # 615 331 9232	Fax Results	✓
	Fax # 615 833 8328	RUSH	
Project/Site: Memphis Depot - Dunn Field	FID # :	Ice	
	PO # :		
Project #	Matrix: 1 Wastewater, 2 Aqueous, 3 Soil/Sediment, 4 Sludge, 5 Oil/Solvent, 6 Other		
Project Manager/Contact: Kraig Smith / 615 305 6437			

Analysis Requested (Note special detection limits or methods)

# of cont.	Sample ID/ Number	Depth	Sample Date	Sample Time	Matrix	Type Grab/Comp	VOC	SVOC	metals	pH	Comments
12	ST-EFF-031		12-20-00	1500	Water	Comp	✓	✓	✓	✓	MS/MSD per K. Smith
7	EQB-031		12-20-00	1500	Water	Comp	✓	✓	✓	✓	
3	Trip Blank		12-20-00	1500	Water	—	✓				

Sampled By	Method of Shipment	Blank/Cooler Temp	Remarks
KRAIG SMITH	FED EX DELIVERY		NEED RESULTS BY JAN 2.

	DATE	TIME		DATE	TIME	Sample Delivery Group ID
RELINQUISHED BY (sign) Kraig Smith	12-20-00	1525	RECEIVED BY (sign)			
RELINQUISHED BY (sign)	DATE	TIME	RECEIVED BY (sign)	DATE	TIME	
RELINQUISHED BY (sign)	DATE	TIME	RECEIVED BY LAB (print/sign) R Barger	DATE 12/20/00	TIME 1525	

Distribution: Original and Yellow accompany samples to the laboratory. Pink copy for Field Crew. Original returned with results. Yellow copy for ETC Inc. files.

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PAGE 10

12/29/2000 13:34 9013276334 613 845 ETC

APPENDIX D

DATA EVALUATION OF QUARTERLY GROUNDWATER AND MONTHLY EFFLUENT SAMPLES

Data Evaluation

Field Quality Control – Monitoring and Recovery Well Sampling

The second year fourth quarter monitoring well sampling events for the Defense Depot in Memphis, Tennessee took place in November 2000. The required analyses were volatiles (EPA 8260B), semi-volatiles (EPA 8270C), metals (EPA 200.7 and 245.1), and pesticdes herbicides (recovery wells only). Submitted with the samples were three trip blanks, two equipment blanks, two field blank and three duplicate samples. All blanks yielded non-detect results for each analyzed compound, except for low concentrations of the metals calcium, iron, sodium and zinc.

The three samples taken in duplicate were RW-05, MW-54 and MW-71. The duplicates were analyzed for the same tests as the original samples. The following table lists the duplicate relative percent difference (RPD) calculations. A blank space indicates that compound was not found in the sample or its duplicate.

Analyte	RW-05	MW-54	MW-71
Bromodichloromethane		200	
2-Butanone (MEK)	39		
Carbon Tetrachloride		39	29
Chloroform		34	26
Trans-1,2-Dichloroethene		34	37
1,1,2,2-Tetrachloroethane		11	30
Tetrachloroethene		36	26
1,1,2-Trichloroethane		19	38
Trichloroethene	16	25	24
Cis-1,2-Dichloroethene		37	32
Vinyl Chloride			
Aluminum		28	32
Arsenic			33
Barium	1	2	19
Beryllium			NC
Calcium	1	1	6
Cobalt			52
Chromium			13
Copper			38
Iron	51	21	38
Potassium	<1	6	17
Magnesium	<1	2	1
Manganese		22	56
Sodium	1	1	11
Nickel			30
Vanadium			16
Zinc	5	NC	25

The criteria for determining acceptable field duplicate RPD were based on project specific goals. Since no published EPA procedure exists for evaluation of field duplicate results, the following overview is included to document the evaluation procedure used for this report.

Duplicate results for liquid sample matrices which differ by more than a factor of two (RPD > 67) were considered to be in 'disagreement'. In the special case where one or both sample results were less than five times the laboratory practical quantitation limit (PQL), a difference of ± two times the reported PQL was used. Duplicate samples found in disagreement do not necessarily indicate an error has been made or inappropriate procedures used. Factors including the natural variability of the sample matrix, high or extremely low analyte concentrations, or the presence of compounds which interfere with analysis can each contribute to duplicate disagreement.

Most importantly, data found in disagreement were examined to determine if the disagreements were extreme, isolated occurrences, or if any negative trends existed. Negative trends may indicate systematic errors made in sampling, handling, or analytical procedures; or may indicate the selection of an inappropriate protocol. If negative trends or extreme non-conformances exists, associated data were evaluated carefully to determine their validity.

VOC RPD was found outside criteria in one of three duplicate pairs (MW-54) for bromodichloromethane. The non-conformance appeared to be isolated and was not indicative of a trend.

Laboratory Quality Control

A method blank and a laboratory control sample were analyzed in each batch containing a sample from this project. Surrogates were used by the laboratory to show control of organic analyses. Matrix spike and matrix spike duplicate samples were analyzed on project samples as sufficient amounts of sample were available.

Laboratory QC reports are included with the analytical data sheets in Appendix B.

Field Quality Control – Effluent Sampling

Three effluent samples were collected during the fourth quarter 2000 at the Defense Depot in Memphis, Tennessee. The required analyses included volatiles (EPA 8260B), semi-volatiles (EPA 8270C) and metals (EPA 200 series). Submitted with the samples were three trip blanks, one equipment blank, and one duplicate sample.

Trip blanks were submitted with all effluent samples and analyzed for volatiles (EPA 8260B). All trip blanks were non-detect for target compounds.

The equipment blank was associated with sample ST-EFF-031. This equipment blank yielded detectable concentrations of iron and sodium (0.012 and 0.072 mg/L). All other equipment blank recoveries were non-detect.

APPENDIX E

GROUNDWATER INTERPOLATION EXPLANATION

Groundwater Interpolation of November 7, 2000 Data – Memphis DDMT

by US ERDC at Waterways Experiment Station, Earl V. Edris, Jr.

Groundwater elevation data was collected for the Dunn Field area of Memphis DDMT on November 7, 2000. The groundwater elevations are presented in Table 1. Included in Table 1 are the groundwater elevations for June 6, 1999, February 7, 2000, and August 30, 2000 readings. The November 7 readings occurred during the recovery well maintenance period (Oct 30 through Nov 12) and thus the recovery wells were not pumping. During the two-week shutdown, daily water level readings were taken. All wells listed in Table 1 contain a groundwater elevation for November 7, 2000. A –999 values indicates that the reading for one of the other dates was not taken.

Two interpolations were performed for the November 7 data set. Monitoring wells MW-36 and MW-37 are not located in the fluvial aquifer and therefore are not included in any of the interpolations. The first interpolation did not include monitoring wells that may be located in an aquifer below the fluvial aquifer These "deep" monitoring wells include MW-18, MW-38, MW-40, MW-34, and MW-43. The second interpolation included this subset of wells.

The interpolations used the ordinary kriging technique to interpolate from spatial data points to a more regular spaced mesh or grid. A mesh was used so that resolution can be varied within the interpolation domain. For the mesh, refine points with 30 foot resolution were created at the extraction wells. A series of arcs around the recovery well area was established with a resolution of 100 foot. The outside arc had a resolution of 250 feet. Figures 1 and 2 show the mesh resolution. The ordinary kriging interpolation technique is based on the assumption that the water level elevation varies in a continuous manner and that locations near data points have a certain degree of spatial correlation Points that are widely separated are statistically independent. This technique uses a variogram to relate the variance of the spatial data points and to develop a relationship that describes this variance. The two variograms used for the interpolations are shown in Figure 3. The variogram parameters used for these interpolations are the same parameters that were used for the previous quarterly interpolation.

A number of figures were prepared for each data set. Figures 4 through 6 present the November 7 data set without the "deep" wells. These figures show a fairly uniform water elevation around Dunn Field that dips considerably to the south. Figures 7 through 9 presents the interpolated results of this data set Figures 10 and 11 show the data set with the "deep" monitoring wells 18, 38, 40, 34, and 43. Figures 12 through 14 presents the interpolated results of this data set. These figures show drops in the water elevation around each of the "deep" monitoring wells. Since each "deep" well is represented by only one data point, the drops in the water elevations are represented by ovals and circles. In the immediate area of the recovery wells, there is very little difference in either interpolation

Table 1. Groundwater elevations

Well ID	EASTING	NORTHING	Top of Casing Elevation	Groundwater Elevation November 7, 2000	Groundwater Elevation August 30, 2000	Groundwater Elevation February 7, 2000	Groundwater Elevation June 6, 1999
MW-03	802100.69	281596.25	292.35	223.04	221 15	221.09	221.89
MW-04	802369.19	281278.87	301.61	224.93	224.82	225.31	226.11
MW-06	802069.13	280604.17	289.11	225.50	225.59	226.17	226.56
MW-07	802481.70	281839.88	295 10	226.20	226.10	226 62	228.24
MW-08	802727.91	282001.04	292 59	228.02	215.52	228 71	230.79
MW-09	802516.42	281641 18	304.32	226 32	226.14	226.68	228 02
MW-10	802201.26	281662 55	288.83	223 97	222.52	222.92	223.81
MW-11	802099.00	281353.10	299.47	223.14	222.57	222.80	223.41
MW-12	802071.22	281067.19	301.35	223 89	223.54	223.85	224.40
MW-13	802369 21	281033.56	299.73	225 33	225.31	225.69	226.61
MW-14	802288 95	280003.37	302.22	227 83	228 35	228.12	228.82
MW-15	801985 36	280348.88	295 12	226 16	226.79	226 92	227.72
MW-18	802448 08	279136 41	308 02	175 64	171.19	172.76	176.47
MW-19	800782 26	278945.87	290.57	201.70	202.27	203.26	-999
MW-28	803154.48	281568.58	294.79	233.43	233.76	234.30	236.09
MW-29	802863 96	282104 92	273.22	231 82	232.12	232.49	234.54
MW-30	802013 96	282229.19	274 87	225.54	225 86	226.42	228 31
MW-31	801783.90	281651.53	290.17	218 02	218 20	218.92	220 39
MW-32	801615 51	280834.37	284.88	221.97	221.93	222.04	-999
MW-33	801561.30	280398.10	280.56	224 81	225 2	225 60	226.46
MW-34	801917.96	279411.21	299.72	160.98	159.46	160 39	-999
MW-35	802070.44	281072.31	300.52	223.92	223 57	223.87	224 37
MW-36	802887.01	279531.02	310 24	149.79	142.05	156.44	153.24
MW-37	801616.58	280831.22	284.89	157.79	153 68	156 13	-999
MW-38	802450.43	279141 38	307 44	168.41	169.67	172.75	176 49
MW-40	800948 23	282460 42	262.45	170.35	172.33	177.98	183
MW-41	800457 21	279621 65	283.81	217.65	217.75	218.21	218 81
MW-42	800182 40	281883 92	274.87	217.87	217.95	219.12	221.27
MW-43	800111.73	280284.33	284.99	149 47	146 24	156.40	128 65

Well ID	EASTING	NORTHING	Top of Casing Elevation	Groundwater Elevation November 7, 2000	Groundwater Elevation August 30, 2000	Groundwater Elevation February 7, 2000	Groundwater Elevation June 6, 1999
MW-44	800601 09	281073.71	269.07	213.10	213 66	214.77	-999
MW-45	804125 99	280728.08	292.81	235 99	236.48	236.81	238.39
MW-46	803115.96	281256.81	287.56	231 80	232.14	232.79	234.16
MW-49	803051.31	280211.84	310 49	230 53	230.87	231.49	232.14
MW-51	802828.62	282345.86	275.24	231.44	231.97	232 38	235.24
MW-53	805136.05	279176.66	306.38	232.26	232 49	232 82	233.20
MW-54	801183.32	281160.10	295.36	213 70	214.32	215.46	217.46
MW-55	801204 62	279301.05	292 05	220.75	221 22	221.00	222.18
MW-56	801971 55	279708.26	293 62	225 75	226.16	226.45	-999
MW-57	802006 19	280184.05	290.79	226.60	226.99	227.25	228.38
MW-58	802066.44	279845.07	290 52	226 52	226.78	227.07	227.89
MW-59	802252.00	281333.67	300.12	224.16	223 90	224 24	225 07
MW-60	802282.05	281424.39	296 85	224.36	224 01	224.30	225 25
MW-62	801858 16	278289.89	293 60	200 64	199.53	199.50	-999
MW-63	803585 83	278192.29	304 58	197 99	198.98	200.42	-999
MW-65	803887.68	283529.72	263 22	245.99	247.27	249.33	-999
MW-68	802040.04	281500.76	291.68	222 45	221.47	-999	-999
MW-69	802011.49	281202.55	307.04	223.03	222.57	222 79	-999
MW-70	801988.49	281029.60	305.05	223 58	223.18	-999	-999
MW-71	801804 71	280584 68	294 39	225 74	224.99	225.43	-999
PZ-02	803373.00	282748.00	284 39	239 00	239 96	240.19	-999
RW-01	801973.88	280267.14	296 57	226.42	226 80	226.96	-999
RW-01A	801990 08	280386.26	296 83	225 99	226 26	226.83	-999
RW-01B	802009.37	280504 87	290 48	225 62	225 90	226.18	-999
RW-02	802003.32	280624 56	290.93	225 13	225.19	226.50	-999
RW-03	802012 69	280743 76	299.40	224 85	222 27	223.73	223 33
RW-04	802027 11	280918.07	305.22	224 35	220.97	222 84	222.92
RW-05	802041.97	281113.38	307 25	223 85	221 16	216.74	216.25
RW-06	802067 17	281264 22	304.67	223 17	219.72	220 36	219.74
RW-07	802079 19	281442 21	297.53	222 95	220.61	220 65	220 23
RW-08	802088.53	281574.72	293.09	222.81	217 74	216.05	216 13
RW-09	802232.41	281688.06	290.79	224.34	218 73	219 42	214 27

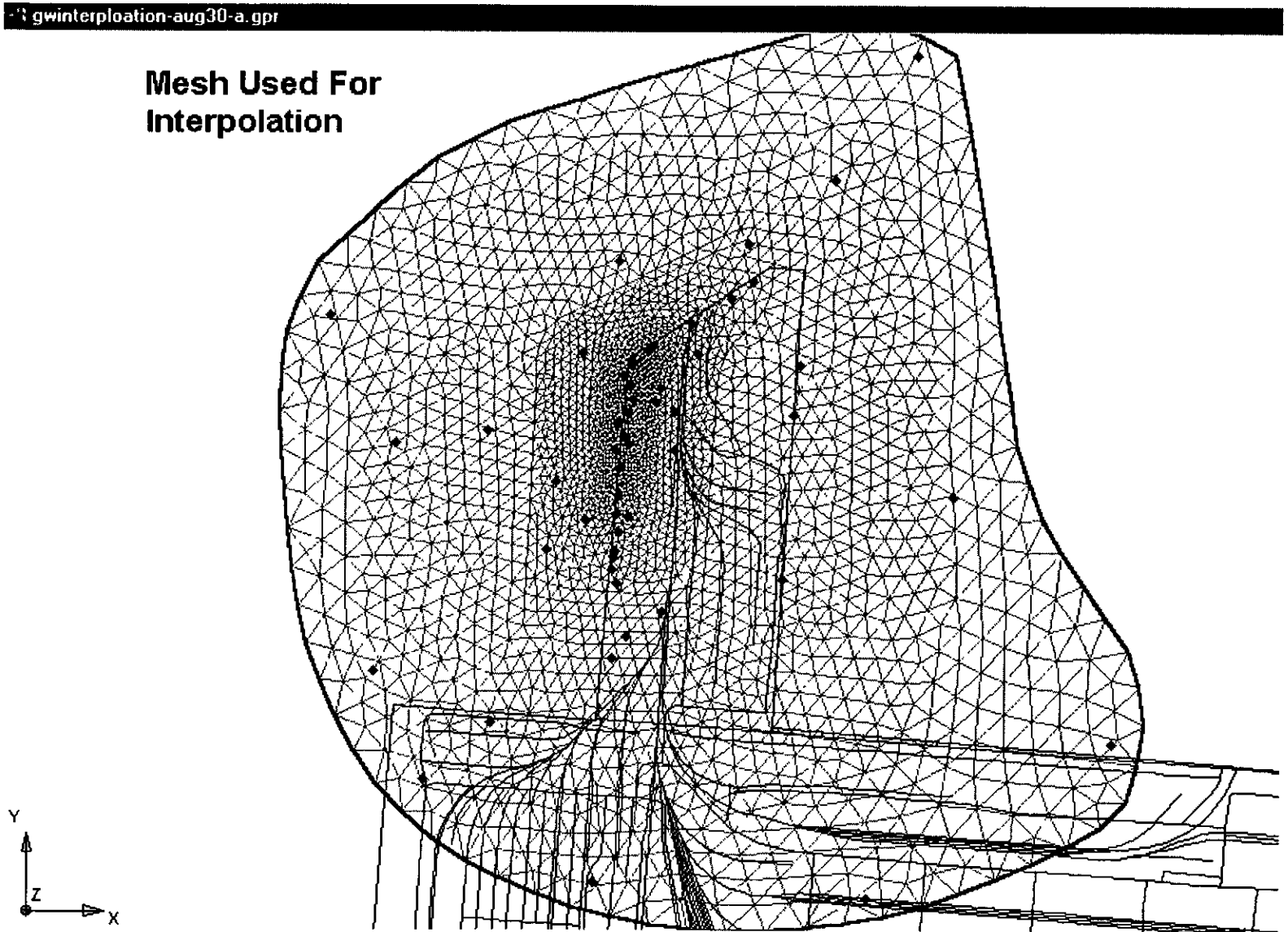


Figure 1. Mesh used for interpolation.

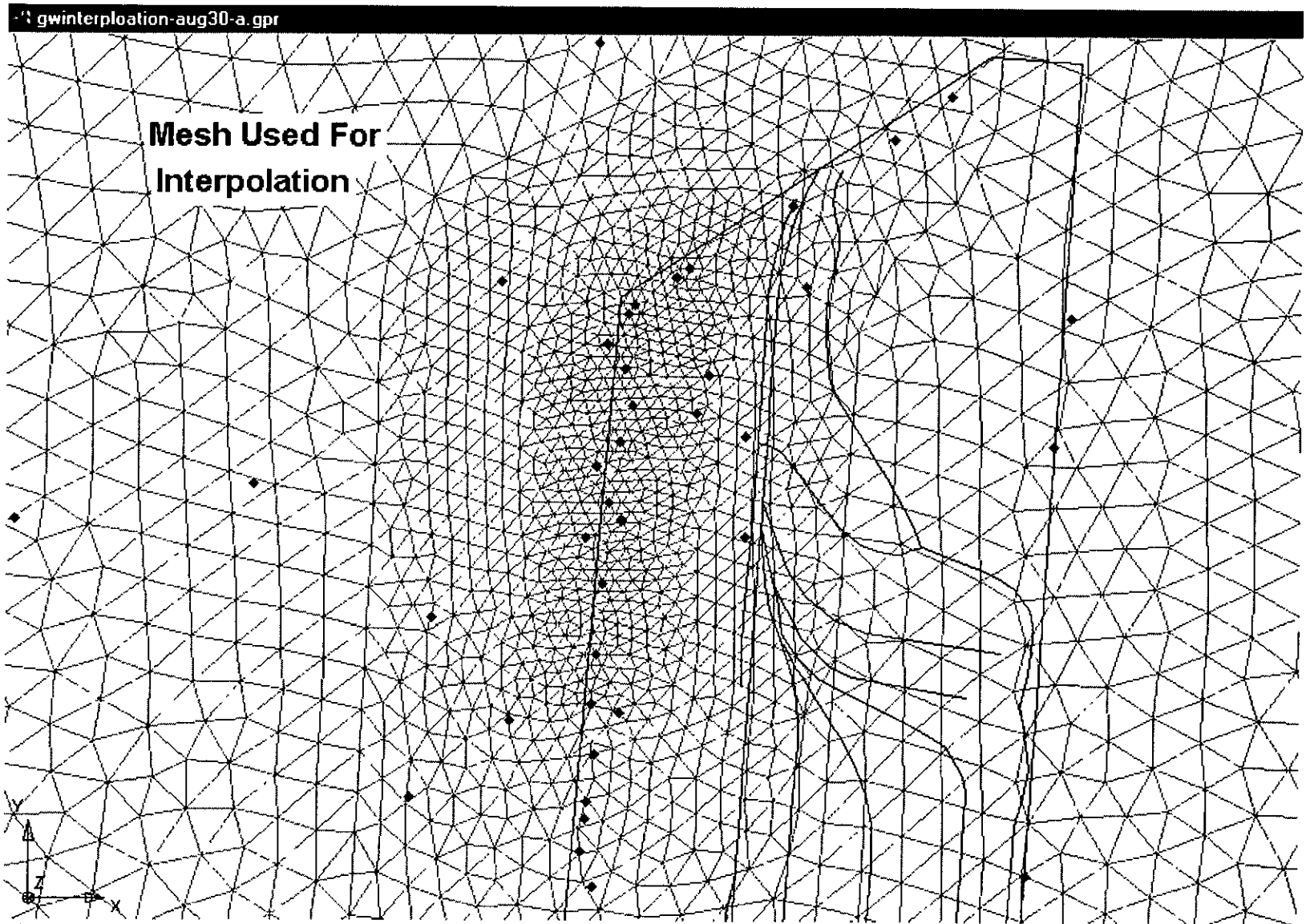


Figure 2. Zoomed area around recovery wells of mesh.

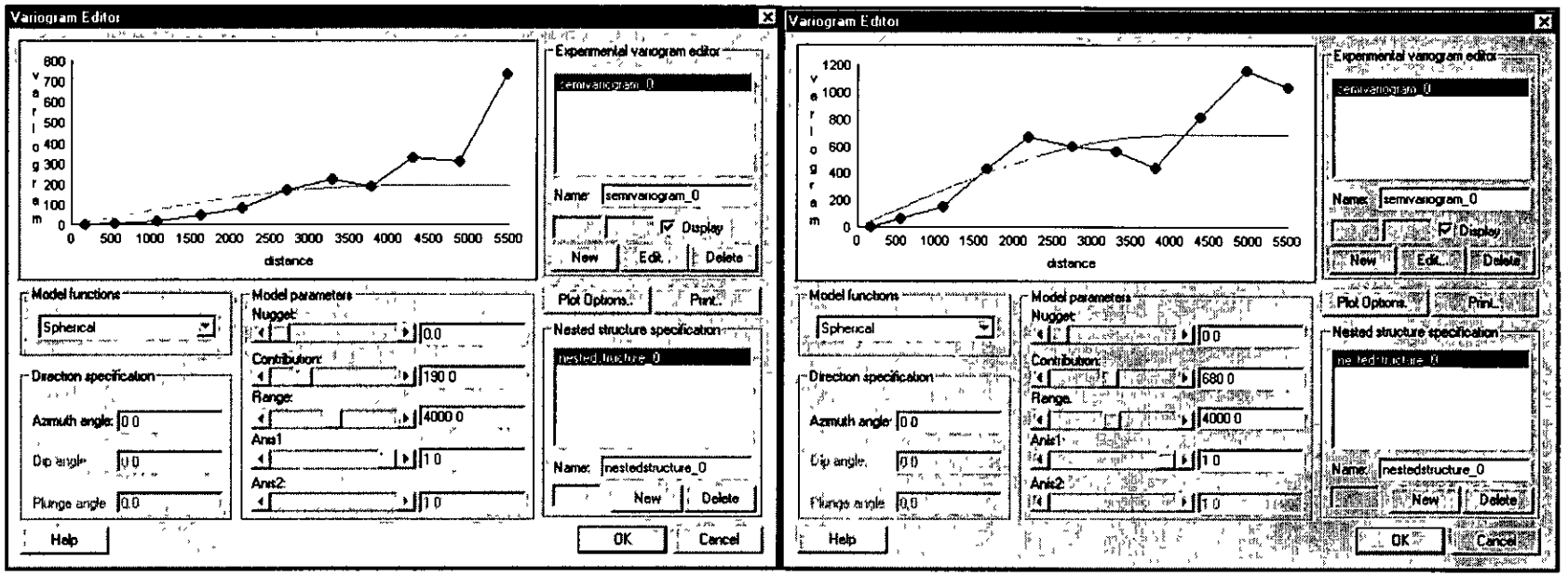


Figure 3. Variograms used for interpolations, left is without "deep" wells, right is with "deep" wells.

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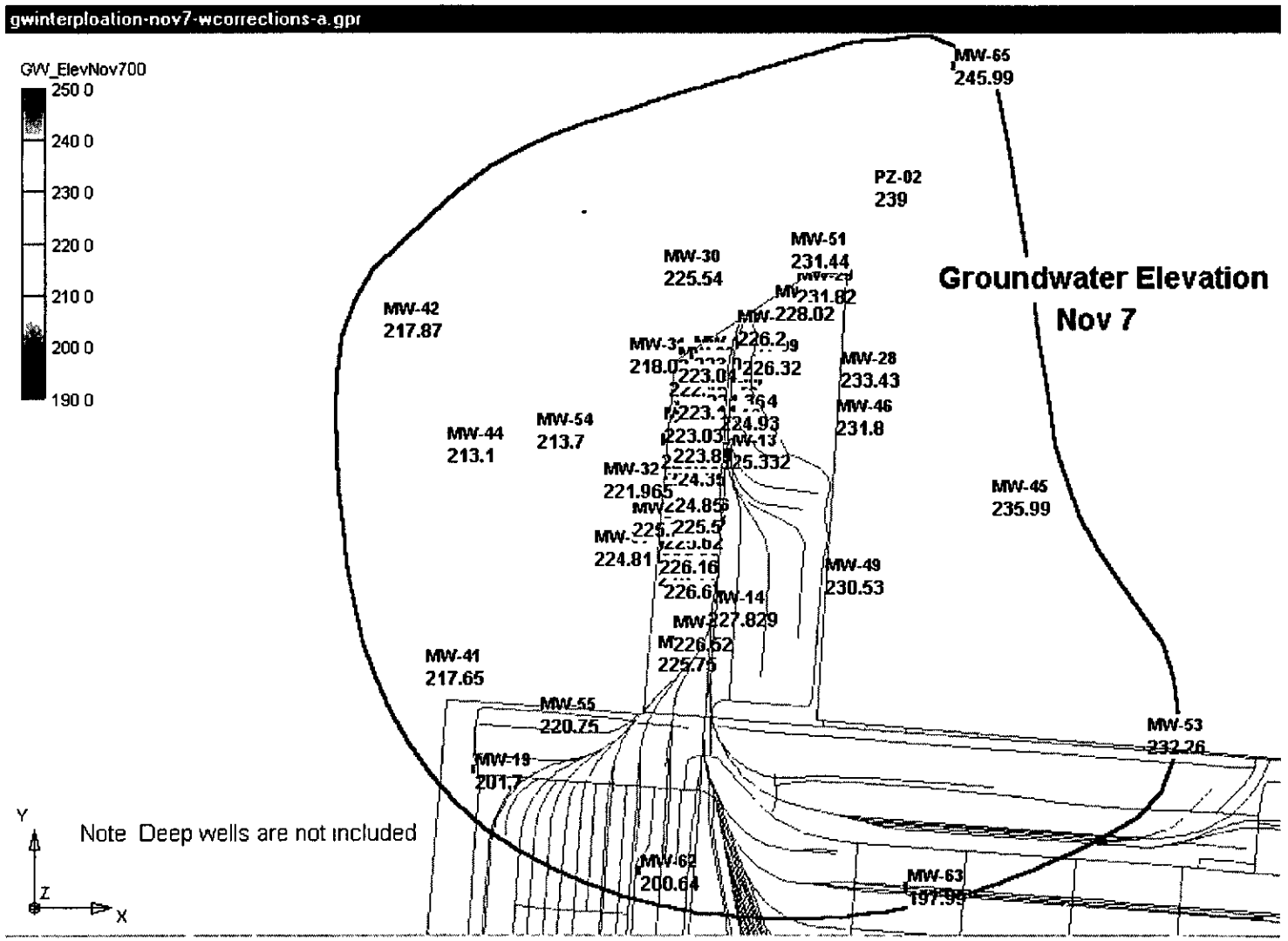


Figure 4. November 7, 2000 groundwater elevation data.

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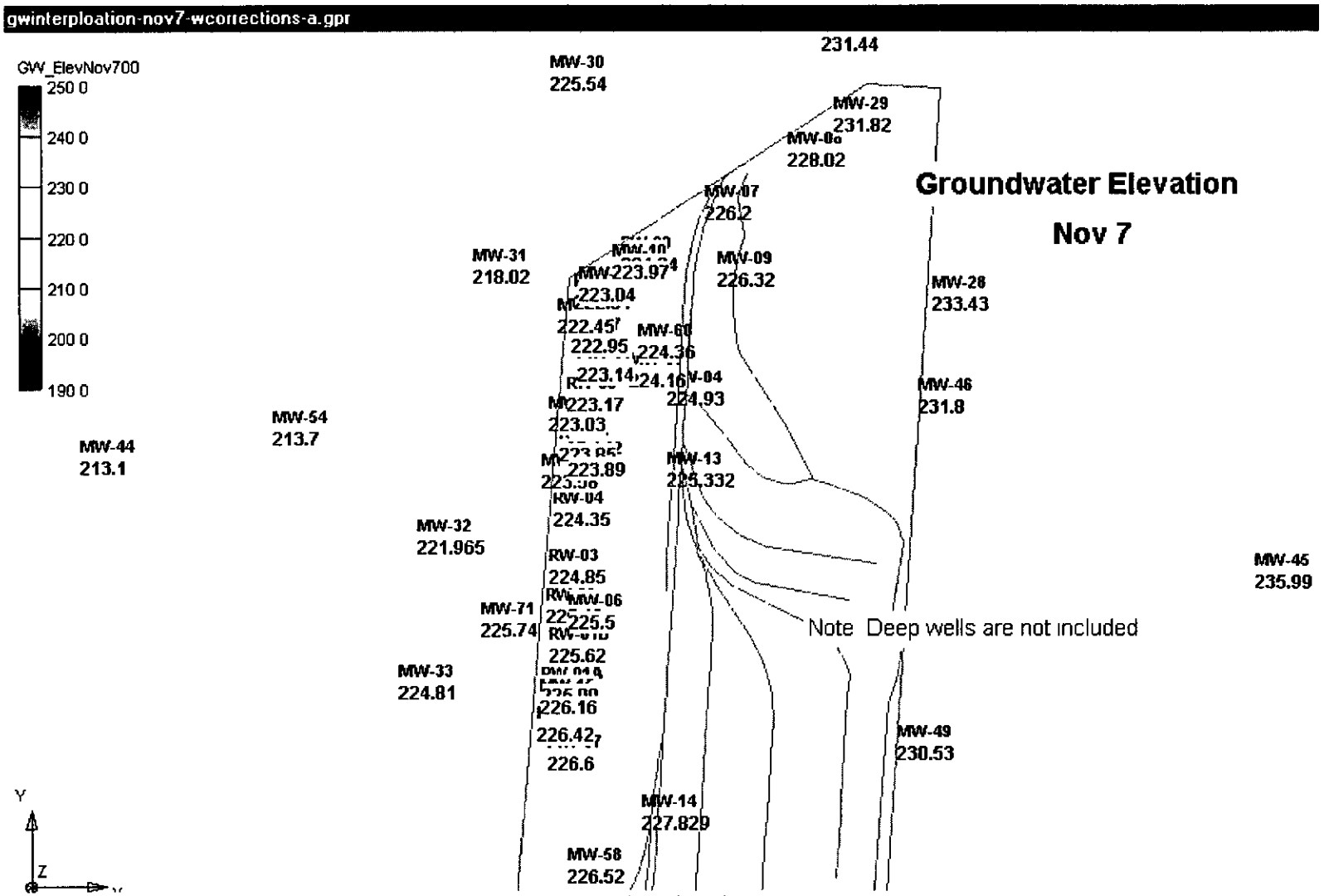


Figure 5. Zoomed view of November 7, 2000 groundwater elevation data.

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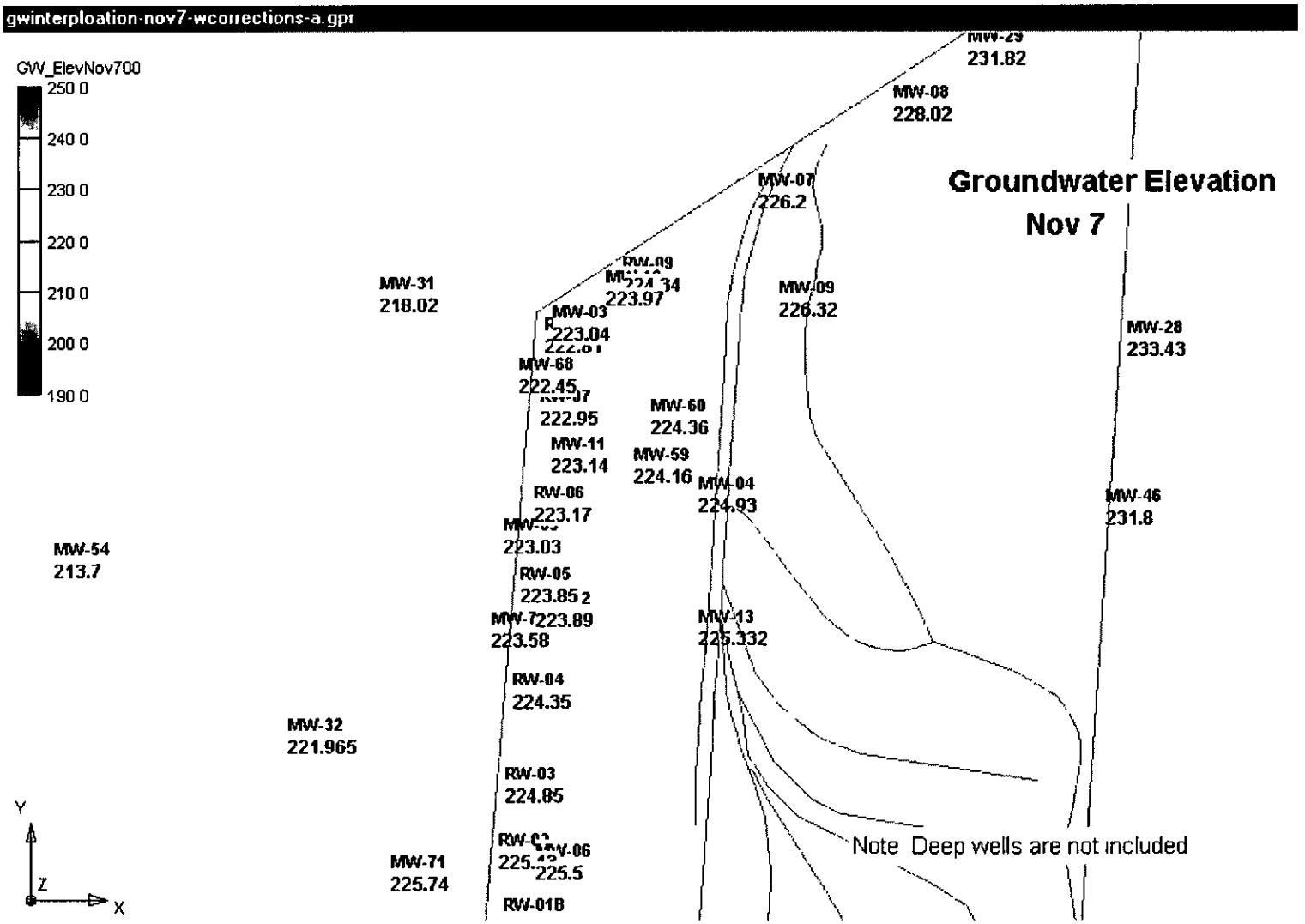


Figure 6. November 7, 2000 groundwater elevation data in the area around recovery wells.

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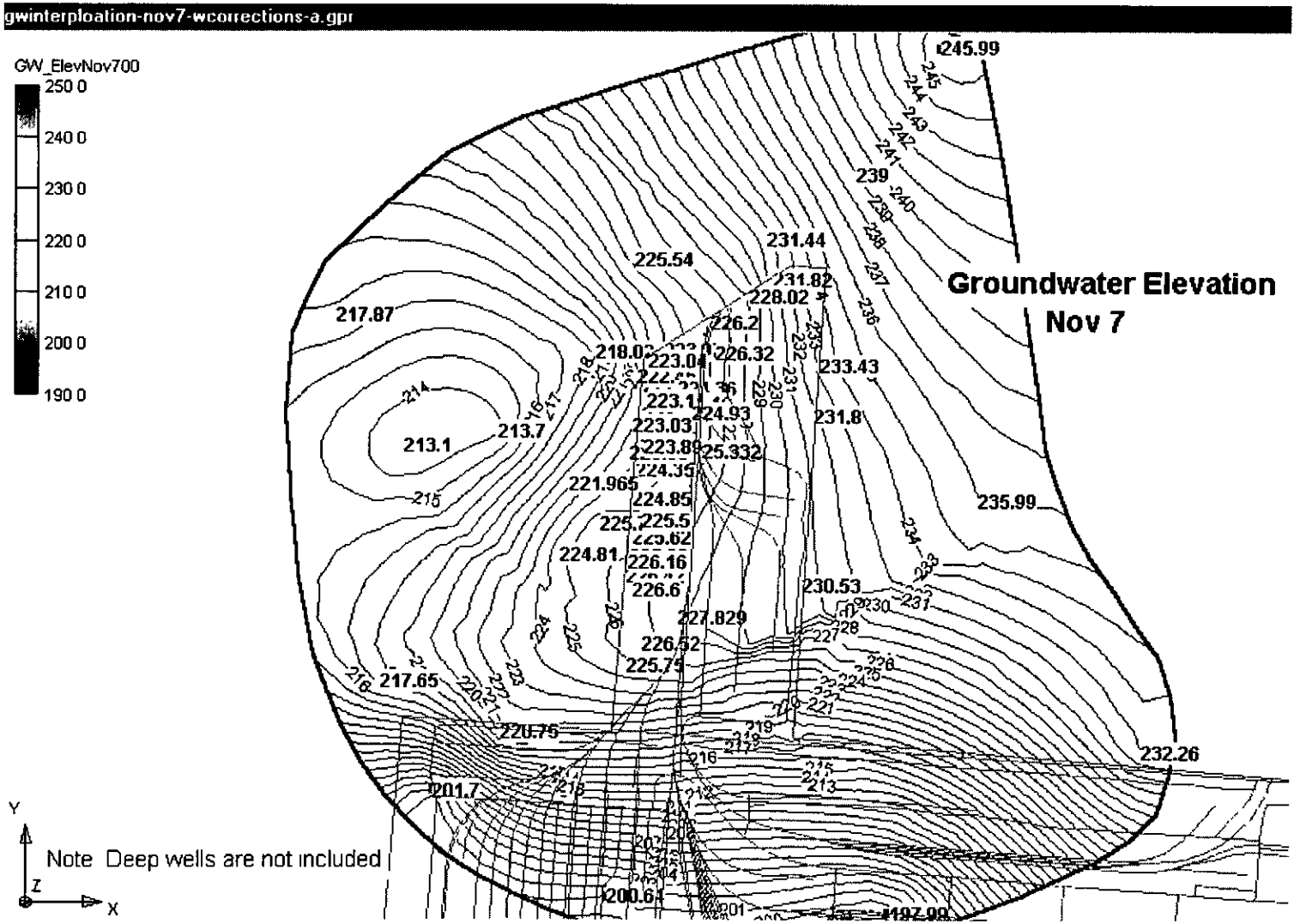


Figure 7. Interpolated one-foot contours of November 7, 2000 groundwater elevation.

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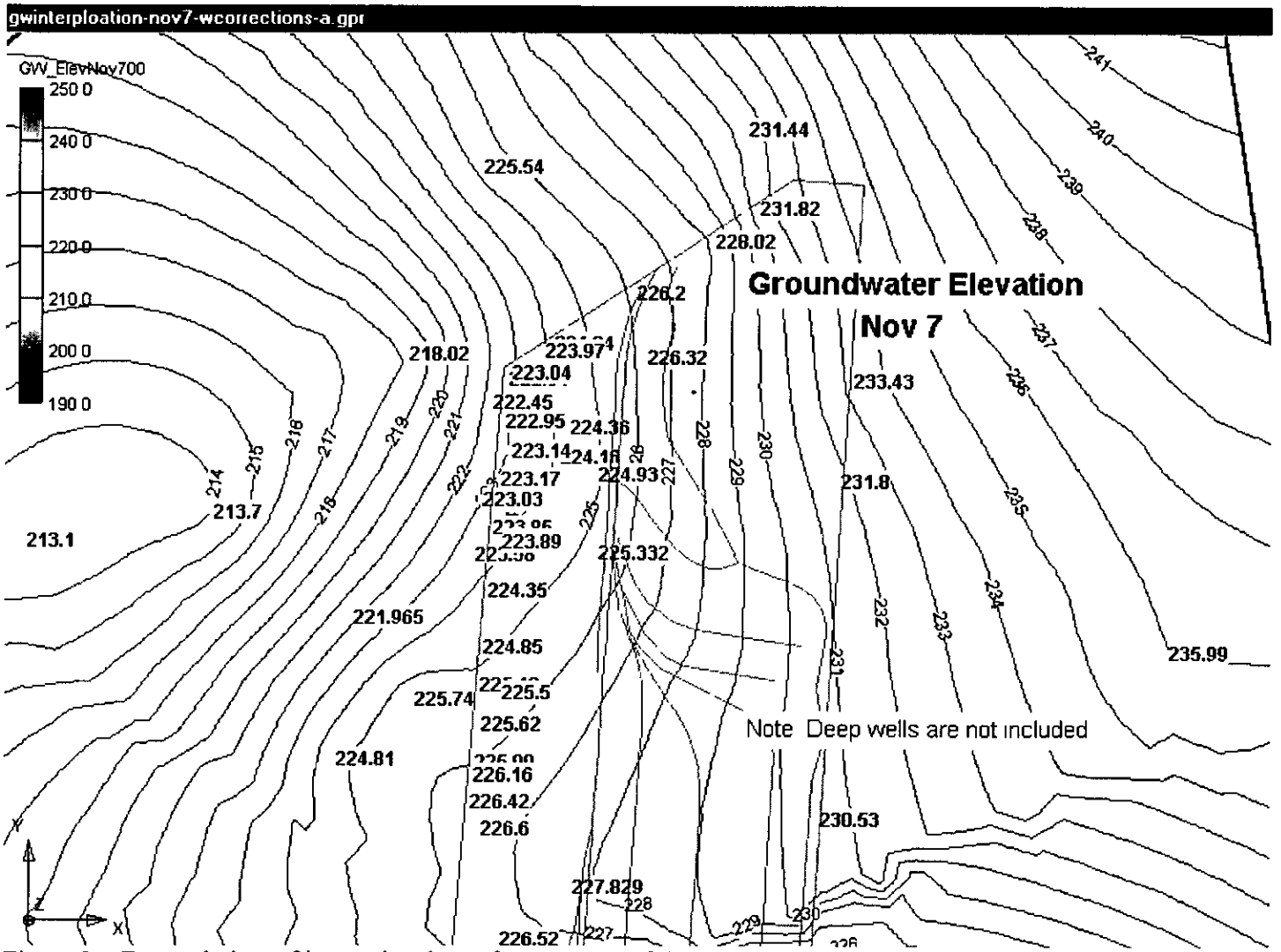


Figure 8 Zoomed view of interpolated one-foot contour of the groundwater elevations for November 7, 2000.

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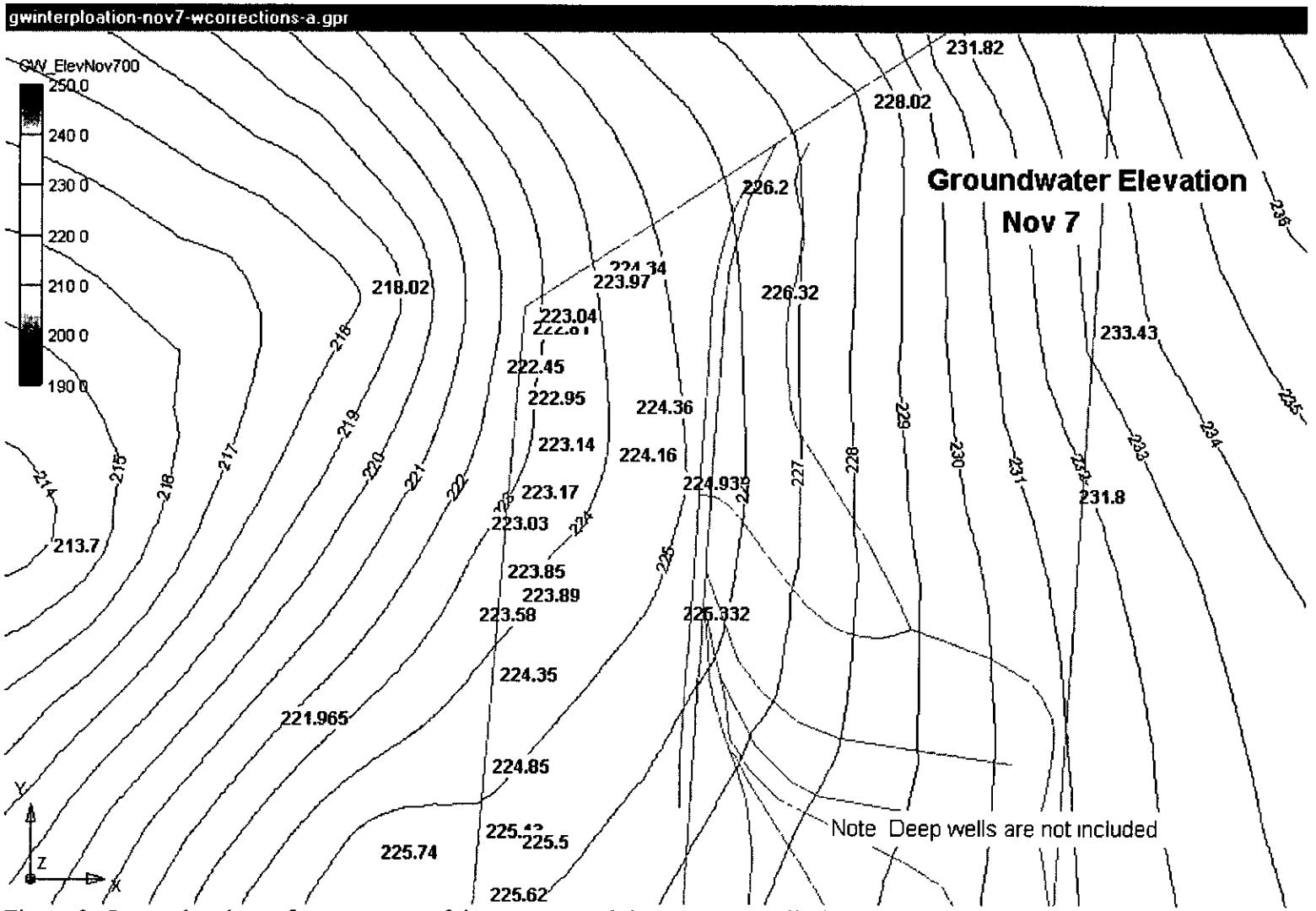


Figure 9. Interpolated one-foot contours of the area around the recovery wells for November 7, 2000.

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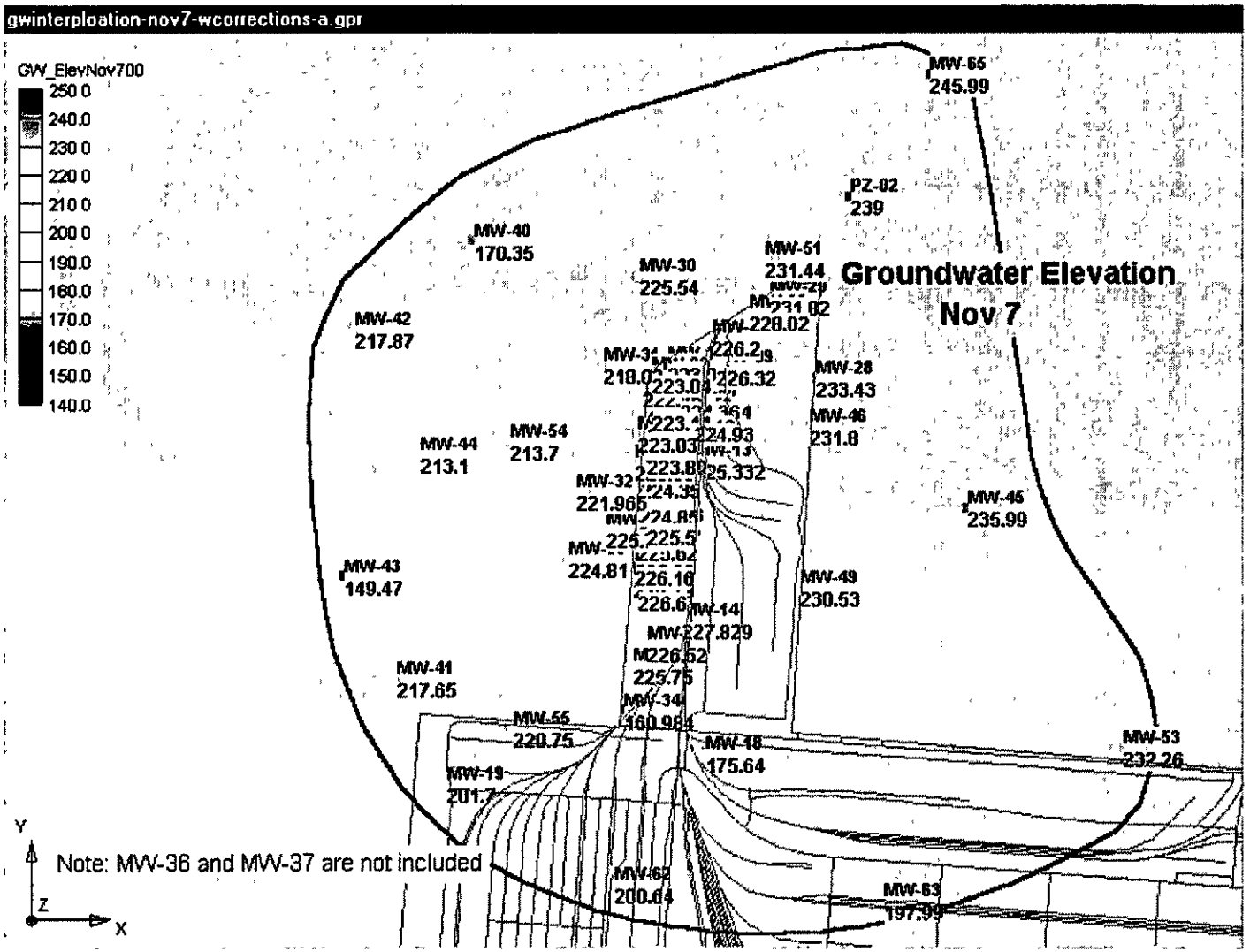


Figure 10. November 7, 2000 groundwater elevations with "deep" wells included.

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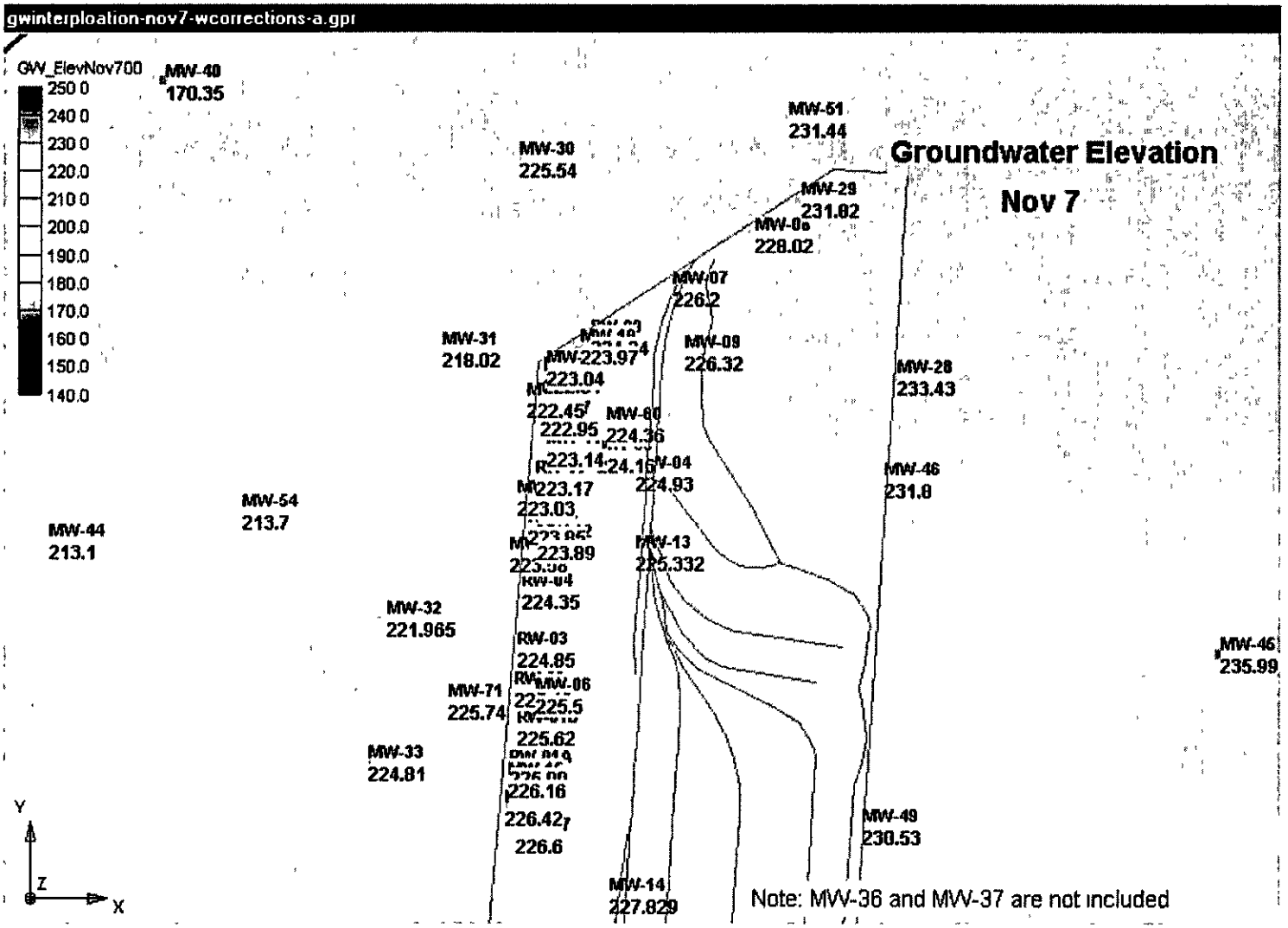


Figure 11. Zoomed view of November 7, 2000 groundwater elevations.

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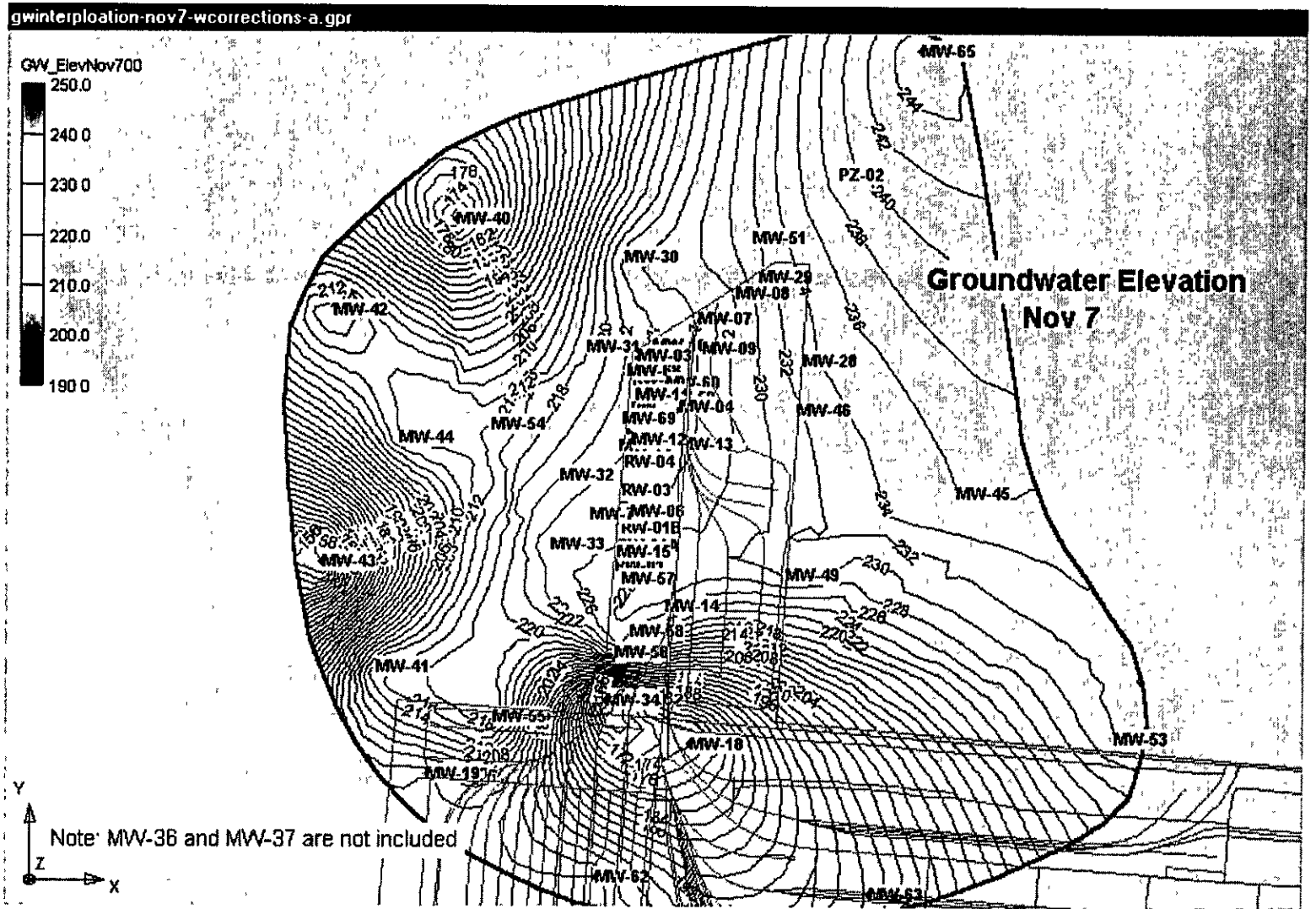


Figure 12. Interpolated two foot contours of groundwater elevation with "deep" wells.

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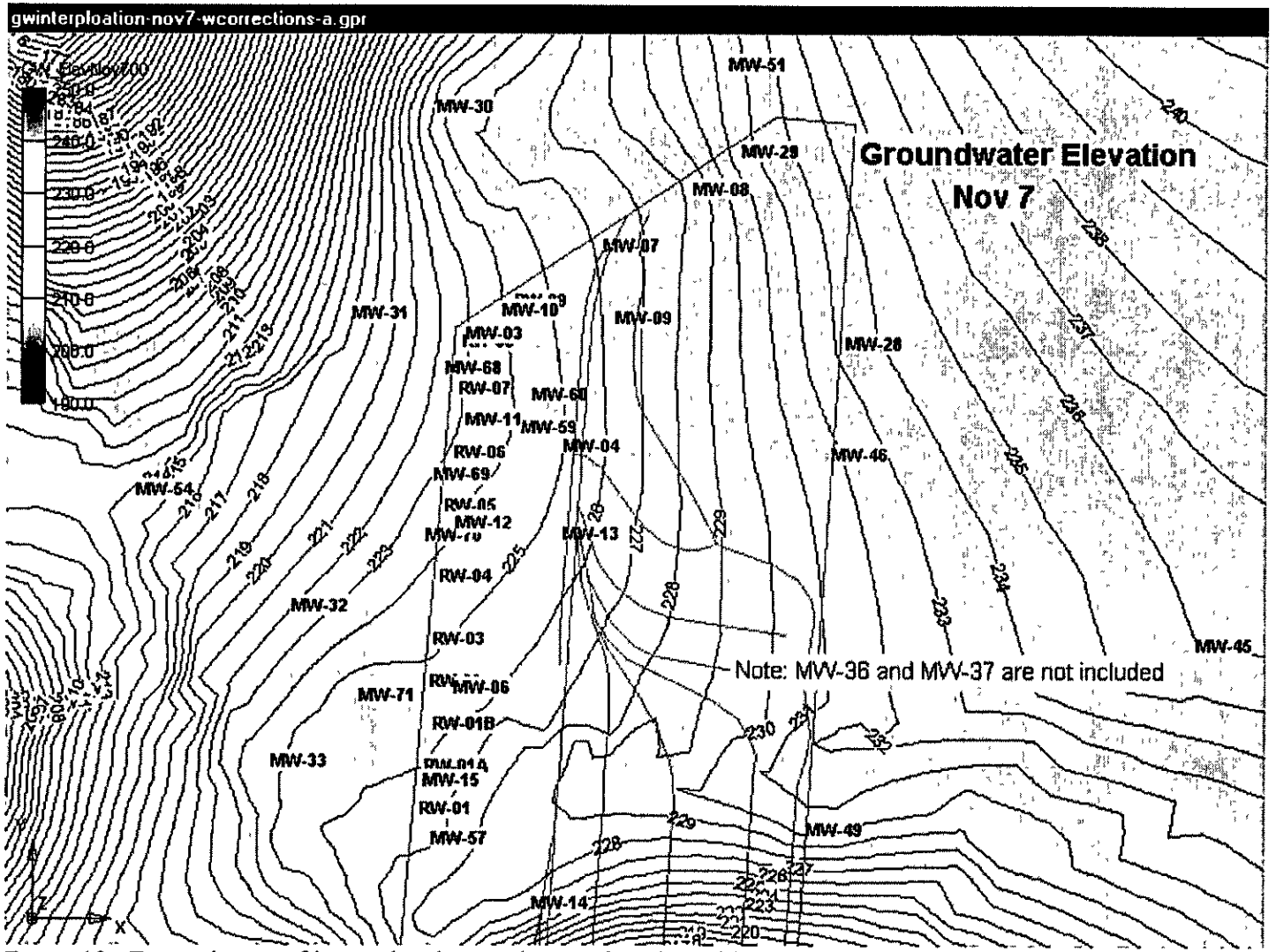


Figure 13. Zoomed view of interpolated groundwater elevation with "deep" wells showing one-foot contours.

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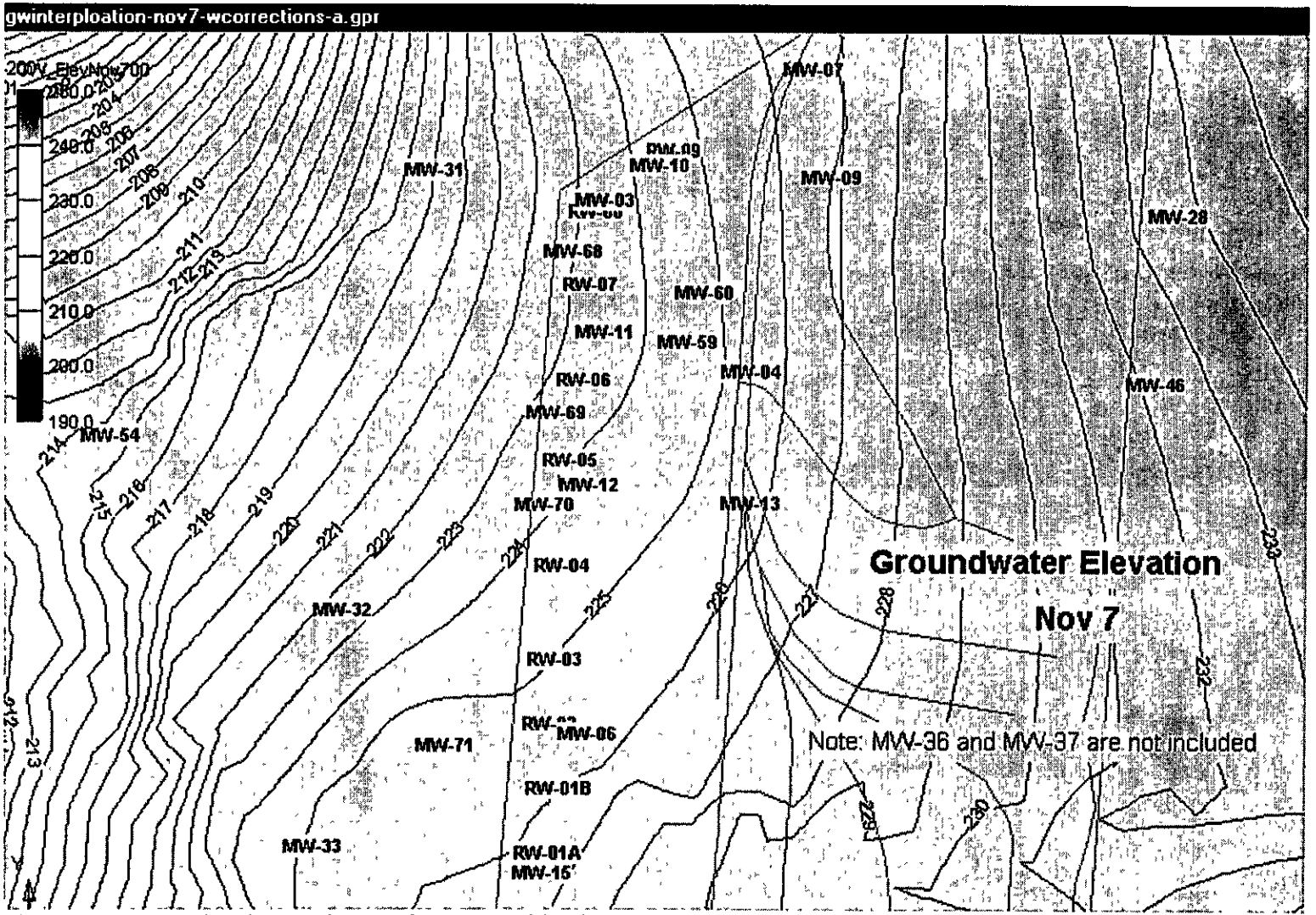


Figure 14. Interpolated groundwater elevations with "deep" wells for area around recovery wells.

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APPENDIX F

TELEMETRY DATA IN ELECTRONIC FORMAT FROM RECOVERY WELLS RW-03THROUGH RW-09 FOR Y2Q4

Appendix E - Data Logger Download Data October - December 2000

Year	Julian Date	Time	Head (in feet) of Water Level Above Transducer							Flow Rate (in GPM)						
			RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09	RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09
2000	275	100	2 8	2.1	6 3	5 1	5 5	8 2	6 8	7	6.7	0	8	0.1	9	18 9
2000	275	200	3 2	2 1	6.3	5	5.5	8.2	6.7	0 6	5 6	0	8	0 1	7 9	19 4
2000	275	300	3 2	2.1	6 3	5 1	5.5	8 2	6 8	0.6	6.2	0	8.1	0 2	7.7	19 1
2000	275	400	2.6	2 1	5 9	5 1	5 5	8 2	6 9	0 6	6 4	0	7.8	0	8 3	18 6
2000	275	500	3 1	2.1	5 9	5 1	5 5	8 2	6 8	0.6	7 1	0	7 9	0 3	8 5	18 7
2000	275	600	2 5	2 1	6	5	5 5	8 2	6 9	2 2	6	0	8	0 3	9 6	18 6
2000	275	700	3 2	2 1	5.9	5.1	5.5	8 2	6.8	0 6	5 3	0	7 9	2 5	9.1	18 6
2000	275	800	3	2 1	5.9	5 1	5 5	8.1	6 9	7	5.2	0	7 7	-0 1	8 2	17.7
2000	275	900	3.2	2 1	6 5	5.1	5 5	8 1	6 8	0 5	5.1	0	7.8	-0 1	7 9	18 7
2000	275	1000	3 2	2 1	5.8	5.1	5.5	8 1	6 8	0.5	6.2	0	7 8	-0.1	9.1	18 6
2000	275	1100	2 5	2 1	6.1	5.1	5 5	8 2	6.9	6.8	6	0	7.8	-0.1	8 6	18.2
2000	275	1200	3	2 1	6	5.1	5 5	8 2	6 8	0 5	5.7	0	7.8	0	8 4	19
2000	275	1300	3.2	2 1	5 8	5	5 5	8.2	6.7	0 5	5 7	0	8	3 2	8.8	19 4
2000	275	1400	3 1	2.1	6 3	5.1	5.5	8.3	6.9	0 5	6	0	7 9	2.7	7.9	19
2000	275	1500	2 7	2 1	6.4	5	5.5	8.3	6.8	0 5	6	0	7 9	2 9	8 2	19 2
2000	275	1600	3	2 1	6.2	5.1	5 5	8.3	6.8	0.5	6.1	0	7 7	2 7	8	19 2
2000	275	1700	3 2	2 1	6 2	5.1	5 5	8.3	6.6	0 5	5 9	0	7.8	2 8	8 3	20.3
2000	275	1800	2 5	2 1	6 2	5	5 5	8.3	6.7	7	5 4	0	7.7	3 3	8 8	19 7
2000	275	1900	2 8	2 1	6 2	5.1	5 5	8 3	6.8	6 9	5 4	0	7 7	3.3	9	19 1
2000	275	2000	2 5	2 1	6 2	5.1	5 5	8.2	6.8	6.9	6 7	0	7 7	3.5	6	19.1
2000	275	2100	2 5	2 1	6 4	5.1	5 5	8.2	6 8	7	6 7	0	7 7	0.2	8 1	18 8
2000	275	2200	3 2	2.1	6.4	5.1	5.5	8 2	6 8	0 6	5 9	0	7 7	0.4	7 7	18 8
2000	275	2300	3 1	2 1	6 2	5	5 5	8.2	6.8	0.6	5.6	0	7 6	0 1	9 1	18 9
2000	275	2400	3.2	2 1	5.9	5	5 5	8 2	6 8	0 6	5.6	0	7.7	0 6	8 6	18 9
2000	276	100	3 1	2 1	6.2	5	5.5	8 2	6 8	0 6	6.5	0	7.7	0	7.8	18 5
2000	276	200	2 5	2 1	6 1	5.1	5 5	8 2	6 8	6 9	5 5	0	7 5	0 5	7 6	18 7
2000	276	300	3 2	2.1	6 4	5	5.5	8 1	6 8	0 6	6 3	0	7 5	0	8 1	18 8
2000	276	400	3 2	2 1	6 4	5.1	5.5	8.1	6.8	0 6	5 5	0	7 5	-0 1	7.8	18.6
2000	276	500	2 5	2 1	6 5	5	5 5	8 1	6 8	7.1	5 6	0	7 7	-0 1	8.6	18 6
2000	276	600	3 2	2 1	6.4	5.1	5.5	8 1	6 9	0.6	5 7	0	7 5	-0.1	8	18.2
2000	276	700	3 2	2 1	6 4	5.1	5.5	8 1	6 8	0.6	6 4	0	7 5	-0 1	8.4	18.4
2000	276	800	3 1	2.1	6.5	5.1	5.5	8.1	6 8	0.5	6 1	0	7 3	-0 1	7 3	18.4
2000	276	900	3 1	2 1	5.9	5.1	5 5	8 1	6 8	0.5	5	0	7 5	-0 1	8 3	18.3
2000	276	1000	2.6	2.1	6.4	5.1	5 5	8 1	6 8	6 9	5 6	0	7.4	-0 1	7 1	18.2
2000	276	1100	3 2	2 1	6.4	5.1	5.5	8 1	6 8	0 5	5 8	0	7 5	-0.1	6 7	18 4
2000	276	1200	3 2	2 1	6.4	5.1	5.5	8.1	6.8	0.5	5.4	0	7.5	0 5	8 2	18 6
2000	276	1300	3	2 1	6 2	5	5 5	8.2	6.8	7	5.8	0	7.4	2 3	6 9	18.7
2000	276	1400	2 4	2 1	6 3	5.1	5 5	8 2	6 8	7 1	6.5	0	7.5	2 6	6 6	18 7
2000	276	1500	2 5	2 1	5 7	5.1	5 5	8 2	6.8	7 1	7	0	7.5	2 9	9 4	19
2000	276	1600	2 5	2.1	6	5	5 5	8 2	6 8	7 1	6.1	0	7.5	3.6	8.9	19
2000	276	1700	2 5	2 1	6 3	5.1	5.5	8 1	6.8	7.1	5.4	0	7 4	4 1	7 9	19
2000	276	1800	3 2	2.1	6 3	5.1	5 4	8 1	6.8	0 5	5 4	0	7 4	4 4	8 9	19
2000	276	1900	3.1	2.1	6.4	5.1	5 5	8.1	6.8	0 6	5 9	0	7.3	4 1	7 8	18 7
2000	276	2000	2 8	2.1	5 9	5.1	5.5	8.1	6.8	0.5	4 9	0	7 3	0 2	8.3	18.7
2000	276	2100	3	2 1	6 3	5.1	5 5	8	6 8	7 1	5.3	0	7 3	0 6	8.1	18.3
2000	276	2200	3 1	2.1	6.3	5.1	5 5	8	6.8	0 5	5	0	7.1	-0.1	8.9	18.6
2000	276	2300	2 8	2.1	6 4	5	5 5	8	6.8	0 6	5 8	0	7 4	-0 1	8 6	18.6
2000	276	2400	3 1	2 1	6 3	5.1	5 5	8	6.9	0 5	5 3	0	7 3	-0.1	8 5	18
2000	277	100	3 2	2.1	6.3	5.1	5 5	8	6.8	0.6	5 8	0	7 3	-0 1	8 6	18 6
2000	277	200	3 1	2.1	6 4	5.1	5 5	8	6 8	0 6	5 5	0	7.3	-0.1	8	18 4
2000	277	300	2.5	2.1	6.3	5.1	5.5	8	6 8	7.1	5.7	0	7 1	-0 1	9	18.4
2000	277	400	3.2	2.1	6 2	5.1	5 5	8	6.8	0.6	5.2	0	7 3	-0 1	9 2	18 4

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Year	Julian Date	Time	Head (in feet) of Water Level Above Transducer							Flow Rate (in GPM)						
			RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09	RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09
2000	277	500	2 5	2 1	6 2	5	5.5	8	6.8	7 1	5 6	0	7 3	-0.1	7 5	18 4
2000	277	600	3	2 1	6 2	5 1	5 5	8	6 8	7 1	1.1	0	7 3	-0 1	8 2	18.3
2000	277	700	3 2	2 6	6 2	5 1	5 5	7 9	6 8	0 6	8	0	7 2	-0.1	8.3	18 4
2000	277	800	3 2	2 2	6 2	5 1	5 5	8	6.8	0.5	16 8	0	7 3	-0 1	9 3	18.4
2000	277	900	3.1	2.1	6 2	5 1	5 5	7 9	6 6	0 5	5 8	0	7 2	-0.1	8.7	19 5
2000	277	1000	2 9	2 1	6.2	5 1	5 5	8	6 8	0 5	5 6	0	7 2	-0 1	8.1	18 1
2000	277	1100	3.2	2 1	6 2	5 1	5 5	8	6.8	0.5	5.4	0	7 4	-0 1	8 5	18 1
2000	277	1200	2 7	2.1	6 2	5	5 5	8	6.8	0 5	6.4	0	7.4	0	9 1	18 4
2000	277	1300	3 1	2 1	6 2	5 1	5 5	8 1	6.8	0.5	6	0	7.3	0 5	7.7	18 6
2000	277	1400	2.8	2 1	6 3	5 1	5.5	8.1	6.8	7.1	5 5	0	7 4	2 8	9	19
2000	277	1500	3 1	2 1	6 3	4 9	5.5	8 2	6.8	0.5	5.4	0	7.8	3 7	6 9	19
2000	277	1600	2 9	2.1	6 3	5 1	5.5	8.1	6.8	0.5	6 1	0	7 3	3.6	7 7	19
2000	277	1700	2 4	2 1	6.2	5 1	5 5	8.1	6 8	7.1	6 5	0	7 3	3 9	8.6	18 9
2000	277	1800	2 9	2 1	6 2	5.1	5.5	8.1	6.8	0.5	5 3	0	7 2	4	9	18.9
2000	277	1900	2.5	2 1	6 1	5 1	5.5	8.1	6 8	7.1	5.7	0	7 2	0.3	8.1	18 8
2000	277	2000	3 2	2.1	6 3	5 1	5.5	8.1	6 8	0 5	5	0	7.3	0.8	9 1	18 9
2000	277	2100	3 2	2 1	6 2	5 1	5.5	8	6 8	0 5	5 4	0	7.3	0.1	8.5	18 5
2000	277	2200	3 2	2 1	6 2	5 1	5.5	8	6 9	0 6	5 9	0	7.1	0 1	8 7	18 2
2000	277	2300	2.5	2 1	6 2	5 1	5.5	8.1	6.8	7.1	5.8	0	7.3	0	7 8	18.6
2000	277	2400	3 2	2.1	6 2	4 9	5.5	8	6 8	0 6	5	0	7.5	0	9 1	18 6
2000	278	100	3 1	2 1	6.2	5 1	5.5	8	6 8	0 6	6	0	7 3	0	8.1	18.6
2000	278	200	3 1	2 1	6 2	5.1	5.5	8	6.8	0.6	6 2	0	7 2	-0.1	9	18.4
2000	278	300	2 8	2.1	6 2	5.1	5.5	8	6 8	7 1	6	0	7.1	-0 1	8 4	18.4
2000	278	400	3 1	2 2	6.2	5 1	5 5	8	6 8	0 6	4.5	0	7 3	0.3	8.6	18 6
2000	278	500	3.1	2 1	6 2	5 1	5.5	8	6.8	0.6	5.4	0	7 3	0.4	6.8	18 4
2000	278	600	2 7	2 1	6 2	5.1	5 5	8	6 8	7	4.9	0	7 3	-0.1	9.1	18 4
2000	278	700	3 2	2 1	6 2	5.1	5 5	8	6 8	0 6	5.7	0	7 2	-0 1	8 8	18.4
2000	278	800	3 2	2 1	6 1	5.1	5 5	8	6 8	0 5	7 1	0	7.2	-0 1	8 8	18 4
2000	278	900	3 2	2 1	6	5.1	5 5	8	6 8	0.5	4 8	0	7.2	-0.1	7.9	18 4
2000	278	1000	2.9	2 1	6 2	5	5.5	8	6 8	0.5	5 5	0	7.4	-0.1	7 7	18.1
2000	278	1100	3 1	2.1	6 2	5	5 5	8	6.7	0.5	5 6	0	7.4	-0.1	9 6	18 8
2000	278	1200	2 6	2.1	6.3	5.1	5 5	8	6.8	7	5 6	0	7.1	0.1	7 1	18 3
2000	278	1300	3 1	2.1	6.2	5.1	5 5	8 1	6.9	0.5	6	0	7 4	1.8	8.8	18 4
2000	278	1400	2 5	2 1	6 3	4.7	5 5	8 1	6.8	0.5	5 4	0	8 2	1 4	6 6	18.9
2000	278	1500	2.6	2.1	6 3	5.1	5.5	8.1	6.8	7	6.6	0	7 3	3 5	8 9	18.9
2000	278	1600	3.1	2.1	6 3	5.5	5 5	8.1	6.8	0 5	6 1	0	6.3	3 5	8 1	18 9
2000	278	1700	3	2.1	6 3	5.1	5 5	8 1	6.8	0 5	5 7	0	7.2	2.8	8 7	19
2000	278	1800	3.1	2.1	6 3	5	5 5	8 1	6.8	0 5	5 6	0	7.4	2.7	8.2	19
2000	278	1900	2.6	2.1	6 2	5	5 5	8 1	6.8	0 6	6.1	0	7 5	0.4	9 6	18.9
2000	278	2000	2.6	2 1	6 1	5.2	5.5	8 1	6.8	7	5.9	0	7 1	1.2	8.3	18.7
2000	278	2100	3.1	2.1	6 1	4.7	5 5	8 1	6.8	0 6	5.7	0	7 8	0.4	7 8	18 7
2000	278	2200	2.5	2 1	5.9	5.1	5 5	8 1	6.8	7	4.8	0	7.2	0 2	7.8	18 5
2000	278	2300	2.5	2 1	6 2	5.1	5 5	8	6.8	7	5.2	0	7.3	-0.1	8 1	18.7
2000	278	2400	3.2	2 1	6 2	5.1	5.5	8	6 8	0 6	4.5	0	7.3	-0.1	7 3	18 3
2000	279	100	3 2	2 1	6 2	5.1	5 5	8	6 8	0 6	6 2	0	7.3	0.2	8.2	18 4
2000	279	200	2.7	2 1	6 2	5.1	5.5	8	6 8	7	6	0	7.2	0 4	6 7	18.7
2000	279	300	3	2 1	6.1	4.9	5 5	8 1	6 8	0 6	5 9	0	7.6	0.7	9 7	18.7
2000	279	400	2.7	2 1	5.9	5	5.5	8.1	6 8	7	6.3	0	7 4	0 5	8 6	18.7
2000	279	500	2 8	2 1	6.3	5.1	5 5	8 1	6 8	7 1	5	0	7 3	0.4	8.6	18 7
2000	279	600	3.2	2 1	6.5	5.1	5 5	8	6 8	0 6	5 3	0	7 3	0 7	8 7	18.6
2000	279	700	2 8	2.1	6 4	5	5 5	8	6 8	0 6	6 5	0	7 2	-0 1	8 9	18 2
2000	279	800	3 2	2 1	5 9	5.1	5 5	8	6 8	0 6	5	0	7 2	-0 1	8.6	18 4

Appendix E - Data Logger Download Data October - December 2000

Year	Julian Date	Time	Head (in feet) of Water Level Above Transducer							Flow Rate (in GPM)						
			RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09	RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09
2000	279	900	3.2	2.1	6 4	5.1	5 5	8	6 9	0 5	6.4	0	7.1	-0 1	8 2	18 1
2000	279	1000	2 5	2 1	6 3	5	5 5	8	6 9	7	6 4	0	7 4	-0.1	8.7	17 9
2000	279	1100	3 1	2 1	5 8	5	5 5	8	6 8	0 5	5.3	0	7.3	0 1	7 5	18 3
2000	279	1200	3	2.1	6.3	5 1	5 5	8	6 8	0 5	6 4	0	7 2	0	6.9	18.4
2000	279	1300	3	2 1	6 3	5.1	5 5	8 1	6 8	0 5	6.4	0	7.3	0.4	7 8	18 7
2000	279	1400	2.5	2 3	6.3	5 1	5 5	8.1	6 9	7	3 1	0	7 3	0 2	6.2	18.6
2000	279	1500	2 9	2 4	6 3	5	5 5	8 1	6 8	7	4 1	0	7.6	3 4	8 5	18 9
2000	279	1600	2.7	2.1	6 3	5 1	5 5	8.1	6 8	7	6 9	0	7 1	3 4	8.1	18.9
2000	279	1700	2 6	2 2	6.3	5 1	5 5	8 1	6 8	7.1	4 7	0	7.2	2.9	7 4	19
2000	279	1800	3 1	2 1	5 7	5 1	5 4	8 1	6 8	0 5	6 2	0	7.2	2 6	7	19
2000	279	1900	3.1	2.1	6 4	5 1	5 5	8 1	6 8	0 5	5 6	0	7 2	0.5	8 6	18.7
2000	279	2000	3 2	2 1	6 3	5.1	5 5	8 1	6 8	0 6	5 6	0	7 2	0 2	8.8	18.6
2000	279	2100	3.1	2.4	6.3	5	5.5	8	6 8	0.6	2 2	0	7 1	0.6	7.6	18 6
2000	279	2200	2 5	2 7	6 1	5 1	5 5	8	6 8	7	7 9	0	7 1	0 6	8.3	18.3
2000	279	2300	2 7	2.3	6.3	5 1	5.5	8	6.8	7	11.8	0	7 2	-0 1	9 2	18 3
2000	279	2400	3.2	2 1	6 4	5.1	5 5	7 9	6 8	0 6	15 7	0	7 1	-0.1	9	18.3
2000	280	100	3 2	2 4	6 1	5 1	5.5	7 9	6 8	0.7	11	0	7.2	-0 1	7.8	17 9
2000	280	200	3 2	2 4	6.3	4 9	5 5	7.9	6 8	0 5	2 6	0	7 4	-0.1	8.8	17.9
2000	280	300	3	2 1	6	5 1	5 5	7 9	6 8	0.6	0 5	0	7 1	-0.1	8	17 9
2000	280	400	3.2	2.3	6.4	4 6	5 5	7 9	6 8	0 6	1 5	0	7.9	-0.1	8.9	18.4
2000	280	500	3 2	2.3	5 9	5 1	5 6	7.9	6.9	0.6	5 3	0	7.2	-0 1	8 1	17 9
2000	280	600	3.2	2 3	6.4	5 1	5.5	7 9	6 8	0 6	5 7	0	7.1	-0.1	7.4	17.9
2000	280	700	3 2	2.1	6	5 1	5 5	7.8	6.8	0.6	4 3	0	7 2	-0 1	8 3	17 9
2000	280	800	3 2	2.1	6 4	5 1	5.5	7.9	6 8	0 6	4 5	0	7.2	-0.1	7.6	17 9
2000	280	900	3.2	2.1	6.1	5.1	5 5	7.8	6.8	0 6	-0 1	0	7 2	-0 1	8.5	17 9
2000	280	1000	3 2	2 3	6 1	5 1	5.5	7.7	6 8	0 6	3	0	7.2	-0 1	8.2	17 4
2000	280	1100	3 2	3 1	6	5	5 5	7 8	6.8	0 6	-0 1	0	7 3	-0.1	9 1	17 9
2000	280	1200	3.2	2.4	6.3	5 1	5.5	7 7	6 8	0.6	2 1	0	7.4	-0.1	8	17 9
2000	280	1300	2 9	3 1	6	5 1	5 5	7 8	6 8	0 6	-0 1	0	7 4	-0 1	7 9	17.9
2000	280	1400	3	2 4	6 1	5.1	5 5	7 8	6 8	0 6	2 2	0	7.4	-0 1	7.3	17 9
2000	280	1500	3 2	2.2	6	5 1	5.5	7 9	6 7	0.6	3 9	0	7.5	-0 1	8 2	18 5
2000	280	1600	3.2	2 8	6	5	5 5	7.9	6 9	0 6	14.1	0	7.4	-0 1	9.3	18
2000	280	1700	3 2	2.2	6.4	5	5.5	7 9	6 7	0 6	9.8	0	7 7	-0 1	7 9	18 7
2000	280	1800	3 2	2 1	6 4	5	5 5	7 9	6.8	0 6	18	0	7.6	-0.1	8.9	18.2
2000	280	1900	3.2	2 2	6.2	5 1	5.5	7 9	6 8	0 6	10.2	0	7 5	-0.1	7 7	18 2
2000	280	2000	2.6	2.1	6 1	5.1	5.5	7 9	6.8	0.6	1 6	0	7.4	-0 1	9.1	17.9
2000	280	2100	3.1	2 5	5 9	5 1	5.5	7 9	6 8	0 6	10 8	0	7.6	-0 1	8 2	18
2000	280	2200	3	2.1	6.2	5	5 5	7.9	6.8	0.6	27.7	0	7.7	-0 1	6 9	18.2
2000	280	2300	2 6	2 3	6 1	5.1	5.5	7.9	6 8	7	11.3	0	7 7	-0 1	8	18.2
2000	280	2400	3 2	2 3	6 4	5.1	5 5	7.8	7	0.6	1 5	0	7.7	-0.1	8 3	17.1
2000	281	100	3 1	2 2	6 3	5.1	5.5	7 9	6 9	0 6	15	0	7 6	-0 1	8 8	17 6
2000	281	200	3.2	2 5	6 4	5	5.5	7.8	6.8	0.6	8	0	7.6	-0 1	7 1	18.1
2000	281	300	3 1	2.9	6 2	5.1	5 5	7.9	6 8	6 9	0 1	0	7 9	-0 1	7 8	18 1
2000	281	400	3.2	2 1	6 4	5	5 5	7 9	6.8	0.6	17.2	0	7.9	-0.1	9 3	12.6
2000	281	500	3.2	2 3	6 4	5	5 5	7.9	6 8	0.6	0	0	7 8	-0.1	8 5	14 6
2000	281	600	3 2	2 5	6 2	5.1	5.5	7.8	6 8	0 6	5	0	7.8	-0 1	9.2	16.2
2000	281	700	3.2	2 1	6 1	5 1	5 5	7.8	6.8	0 6	14 2	0	7 8	-0 1	8 4	15 4
2000	281	800	3 2	2.2	6 1	5.1	5.5	7 8	6 8	0 6	11.3	0	7.8	-0 1	7.2	16 9
2000	281	900	3 3	2 4	6 4	4 9	5 5	7.8	6.8	0 6	-0.1	0	8.1	-0.1	9	14 5
2000	281	1000	3.2	2 2	6 3	5	5.5	7.8	6 8	0 6	14	0	7.9	-0 1	8 1	15 8
2000	281	1100	3 2	2 1	6 1	5 1	5 5	7 8	6.9	0.6	11 8	0	7 8	-0 1	8 2	15 7
2000	281	1200	3.2	2 3	6 1	5.1	5.5	7.9	6 8	0 6	1 9	0	8	-0 1	9.3	15.5

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Year	Julian Date	Time	Head (in feet) of Water Level Above Transducer							Flow Rate (in GPM)							
			RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09	RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09
2000	281	1300	3 2	2 2	6 3	5.1	5 5	7.9	6.9	0 6	4 7	0	8	-0 1	6 7	14 9
2000	281	1400	3 2	2 8	6.3	5 1	5 5	8	6.7	0 6	10 4	0	8	-0 1	9	14 5
2000	281	1500	3	2.1	6	5	5 5	8	6.9	0 6	0	0	8 1	-0 1	7 9	14
2000	281	1600	2.6	2.3	6.4	5	5 5	8	6 8	7	3 1	0	8	0.3	7 8	14 9
2000	281	1700	3	2.2	6	5	5.5	8	6 8	7	0 4	0	8 2	-0 1	6 5	15
2000	281	1800	3.2	2 3	6 4	5 1	5.5	8	6 9	0.6	15 2	0	8 1	-0 1	8 3	14 9
2000	281	1900	2 9	2 3	6.2	5 1	5.5	8	6 8	0.6	1 6	0	8 1	-0 1	9	14 4
2000	281	2000	3 1	2 1	6 3	5 1	5 5	8	6 8	6.9	13	0	8	-0 1	8 5	14 6
2000	281	2100	2 9	2 2	6 3	4 9	5 5	8	6 8	0 6	1 1	0	8 2	-0 1	8.1	14.6
2000	281	2200	3 2	2 4	6 1	5.1	5 5	7 9	6 8	0.6	1.2	0	8 1	-0 1	8 4	14 3
2000	281	2300	3 2	2.4	6 1	4.9	5 5	7 9	6 9	0 6	5 1	0	8 3	-0 1	6.4	13 5
2000	281	2400	3 3	2 6	6	5.1	5.5	7.9	6 9	0 6	11 3	0	8 1	-0 1	7 5	14
2000	282	100	3 3	2.3	6 2	5	5 5	8	6 6	0.6	2.6	0	8 2	-0 1	8 9	15 3
2000	282	200	3 2	2.3	5.7	5	5 5	8	6 8	0 6	12 8	0	8.2	-0.1	8	14 3
2000	282	300	3.2	2.4	6.5	5	5 5	8	6 8	0 6	1.9	0	8 3	-0 1	8.5	14.4
2000	282	400	2 6	2 4	6 1	5	5 5	8	6.8	7	-0 1	0	8 3	-0 1	7 9	14 4
2000	282	500	2 6	2 5	6 1	5 1	5.5	8	6.8	7	9.3	0	8 3	-0 1	8 9	14 4
2000	282	600	3.3	2 4	6 1	5	5.5	8	6.8	0 6	11.5	0	8 2	-0.1	8.5	14 6
2000	282	700	3	3.2	6.1	5 1	5 5	7.9	6.9	6 9	-0 1	0	8 3	-0 1	9	13 7
2000	282	800	3 1	2 2	6 2	5.1	5.5	8	6.7	0 6	0 5	0	8 3	-0 1	7.6	14 6
2000	282	900	3 2	2.1	6 2	5.1	5 5	7 9	6.8	0.6	19.5	0	8.2	-0 1	7.1	13 7
2000	282	1000	3 2	2.7	6 1	5	5 5	7 9	6.9	0 6	-0 1	0	8 3	-0 1	6.7	13 4
2000	282	1100	3.2	2.1	6	5	5 5	7.9	6.8	0.6	5 4	0	8 2	-0 1	7 9	14 7
2000	282	1200	3.2	2 4	6	5 1	5 5	8	6 8	0.6	9.8	0	8.3	-0 1	8	14.6
2000	282	1300	3 2	2	6.2	5	5 6	8	6 8	0.6	2	0	8.4	-0 1	7.3	14
2000	282	1400	3.2	2 3	6 2	5 1	5 5	8 1	6 8	0.6	2 5	0	8.4	0 3	8 5	14.2
2000	282	1500	2 6	2 1	6 2	5.1	5.5	8.1	6 8	7	1 7	0	8.5	3 2	5 2	14.4
2000	282	1600	2 9	2.2	6 2	5	5.5	8.1	6.8	0.6	12.5	0	8.4	2 7	8 1	14 2
2000	282	1700	2 9	2.1	6 2	5.2	5.5	8.1	6 8	6 9	11.6	0	8.2	0.7	7 4	13 6
2000	282	1800	3	2.1	6 2	5	5.5	8.1	6.8	0 6	-0 1	0	8 4	0 2	8 7	14.3
2000	282	1900	3.2	2	6 2	5	5 5	8.1	6.9	0.6	0.5	0	8 5	0 2	7 7	14 5
2000	282	2000	3.1	2 5	6.3	5 1	5 5	8	6.8	0 6	7.5	0	8 3	-0.1	8 5	13 9
2000	282	2100	3 3	2.4	6.1	5	5 5	8	6.8	0 6	11.1	0	8 4	-0.1	8 8	14 6
2000	282	2200	2 6	2	6 5	5.1	5 5	8	6 8	7	0	0	8 4	-0 1	7.5	14 7
2000	282	2300	3 1	2 1	6 1	5 1	5 5	8	6 8	0 6	20 1	0	8 4	-0 1	7 2	14
2000	282	2400	3 2	2 3	6 4	5	5 4	8	6.9	0.6	5.4	0	8 4	0.9	9	14 6
2000	283	100	3 2	2.1	6 2	5 1	5.5	8	6 8	0.6	1 3	0	8 4	-0 1	8 7	14 5
2000	283	200	3.2	2.5	6 2	5 1	5.5	8	6 8	0.6	-0.1	0	8.5	-0.1	8 1	14
2000	283	300	3.3	2.3	6 2	5	5.5	8	6 9	0.6	1 4	0	8.5	-0.1	8 5	14 5
2000	283	400	3.2	2.2	6 2	5	5.5	8	6 8	0 6	0 4	0	8 5	-0 1	8.3	14.4
2000	283	500	3 1	2 3	6.2	5	5 5	8	6 8	0 6	1	0	8.5	-0 1	7.9	14 6
2000	283	600	3.2	2 1	6.2	5	5 5	8	6 8	0 6	0.5	0	8.3	-0 1	8	14.4
2000	283	700	2.5	2 3	6.2	5	5 5	8	6.8	7	2.5	0	8.5	-0.1	7.9	13.8
2000	283	800	3	2.1	6 2	5	5.5	8	6.8	0 6	1.2	0	8.5	-0.1	6 6	14.1
2000	283	900	3 1	2.1	6 5	5	5 5	8	6.9	6.8	14.1	0	8.4	-0.1	7 8	14.1
2000	283	1000	2.8	2.2	6 3	5	5 5	8	6 8	0 6	3.2	0	8.4	-0.1	7.9	13 9
2000	283	1100	3.1	2.4	6 3	5	5.5	8	6 9	0 6	2 3	0	8 4	-0.1	7	13 7
2000	283	1200	2.8	2.4	6 2	5	5.5	8	6 8	7	6 3	0	8 5	0 4	8 2	13 7
2000	283	1300	2 7	2 2	6.2	5 1	5.5	8 1	6 8	7	4 1	0	8 5	0 5	8 5	14 1
2000	283	1400	3 2	2 2	6.2	5	5 5	8 1	6.8	0.5	13 2	0	8 7	2.9	8 1	14 8
2000	283	1500	3	2 3	6 2	5	5 5	8 1	6 8	0 5	-0.1	0	8.4	0.4	8 7	14 9
2000	283	1600	2 6	2.4	6 1	5 1	5 5	8 2	6 8	7	1 9	0	8 4	2.1	7 4	14 6

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Year	Julian Date	Time	Head (in feet) of Water Level Above Transducer							Flow Rate (in GPM)						
			RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09	RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09
2000	283	1700	2 6	2.1	6 1	5 1	5 5	8 2	6 8	7	-0 1	0	8 6	3 1	8.2	14 5
2000	283	1800	2 5	2 1	6.2	5	5 4	8.1	6 9	7	18 4	0	8 6	2 9	7 7	14.1
2000	283	1900	3 2	2 1	6.1	5	5 5	8 2	6 8	0.6	16.8	0	8.5	1 3	8.6	15
2000	283	2000	3 2	2.2	6.2	5	5 5	8.1	6.8	0.6	14.7	0	8 4	0 5	9 2	14.6
2000	283	2100	3 2	2 3	6.1	5	5 5	8 1	6.8	0.6	11.7	0	8 5	0 7	8 3	13 9
2000	283	2200	3 2	2 1	6.4	5.1	5 5	8 1	6.8	0.6	1.9	0	8 5	0 4	7 5	14.1
2000	283	2300	2.6	2 2	6	5	5 5	8 1	6.8	7	0	0	8 5	0 6	8 8	14 5
2000	283	2400	3	2 1	6.1	4 9	5 5	8 1	6 8	7	-0.1	0	8 6	0 3	7.6	14 7
2000	284	100	3 2	2.4	6.1	5	5 5	8 1	6 8	0.6	1.8	0	8.3	2 5	3.6	14.6
2000	284	200	3 1	2.6	6.4	5	5 5	8 1	6.8	0 6	8 2	0	8.5	1.3	8	14 4
2000	284	300	2 7	2.4	6 1	5 1	5 5	8.1	6 8	7	9 6	0	8.4	0.3	8 3	14 3
2000	284	400	3 3	2.4	6 3	5.1	5 5	8 1	6 8	0 6	13 8	0	8.4	0.4	7 7	15.4
2000	284	500	2.6	2.1	6.2	5	5 5	8 1	6 8	7	6 5	0	8.4	0 3	7	14.4
2000	284	600	3	2.2	6 2	5 1	5 5	8	6.8	6 9	3 2	0	8.1	-0 1	9	14
2000	284	700	2.6	2 1	6 2	5	5 5	8.1	6 7	6 9	18 5	0	8 1	-0.1	8 1	14.1
2000	284	800	3 2	2 1	6 2	5	5.5	8 1	6 8	0 6	15 4	0	8 5	-0 1	6 2	15.2
2000	284	900	3 2	2	6 2	5	5 5	8	6 8	0.5	14.1	0	8.4	-0.1	6.3	13.2
2000	284	1000	3 2	2.1	6 2	5 1	5 5	8	6 8	0.5	0 3	0	8 3	-0 1	6 5	13.5
2000	284	1100	3 1	2 3	6 2	5 1	5.5	8.1	6.9	0 5	3 8	0	8 2	0 2	8 2	14 5
2000	284	1200	2 6	2 4	6 2	5 1	5.5	8 1	6 8	0 6	2 7	0	8 3	0 2	8.6	13 7
2000	284	1300	3 2	2.1	6.2	4.9	5 5	8 1	6 9	0.5	18.2	0	8 5	0 4	8.3	13.5
2000	284	1400	2 9	2.2	6.2	5.1	5 5	8 2	6.8	0 5	2 5	0	8 4	1 4	7	14 1
2000	284	1500	2 6	2.5	6.3	5.1	5 5	8 2	6 8	0 5	-0 1	0	8 3	2 7	7.1	13 9
2000	284	1600	3	2.1	6.2	5	5.5	8 2	6 8	0.5	24.6	0	8 4	2 6	9.3	14.2
2000	284	1700	3.1	2.4	6.2	5	5.5	8.2	6.8	0.6	9 4	0	8 4	2	8.6	14 6
2000	284	1800	3	2 2	6.1	5.1	5.5	8 1	6 8	0.6	13 7	0	8.3	0 5	9.4	14
2000	284	1900	3.2	2 1	6 4	5.1	5.5	8 1	6 8	0.6	1.2	0	8 2	0.7	8 1	14
2000	284	2000	2 8	2 3	6 2	5	5.5	8 1	6 8	0.6	5	0	8 2	0.4	9 1	13 8
2000	284	2100	2 9	2 9	6.5	5 1	5.5	8 1	6 8	6.9	0.8	0	8 2	0.5	9	13.4
2000	284	2200	3 2	2 3	6 2	5 1	5.5	8.1	6.8	0.6	18.9	0	8 3	-0 1	8 6	14.3
2000	284	2300	3 2	2 1	6	5 1	5.5	8.1	6 8	0.6	20	0	8.3	-0 1	8 4	14
2000	284	2400	3 1	2 1	6.4	5.1	5.5	8 1	6 8	0.6	15.2	0	8.3	0.4	9 5	13.8
2000	285	100	2 6	2.4	6.1	5	5 5	8	6 7	7	11.6	0	8.2	0 2	9.2	13.8
2000	285	200	2.7	2.6	6.3	5	5 5	8	6 8	7	18.7	0	8.3	-0 1	4 4	13.5
2000	285	300	2 8	2.1	6.4	5	5.5	8	6.8	7	15.6	0	8.3	-0 1	6 9	13 7
2000	285	400	2 6	2.1	6.1	5	5.5	8	6 8	7	12	0	8.3	-0.1	7 2	14 6
2000	285	500	2.8	2	6.5	5	5 5	8	6 8	7	0.6	0	8.2	0	10 4	14 4
2000	285	600	3.2	2 1	6.3	5 1	5 4	8	6 8	0.6	2 4	0	7.9	0	10.1	13.8
2000	285	700	3.2	2 3	6 4	5.1	5 5	8	6 8	0.6	1 2	0	8.1	-0.1	10.3	14.5
2000	285	800	2 5	2 1	6 1	4.9	5 5	8	6.9	7	0 8	0	8.2	-0.1	9.4	13 8
2000	285	900	3 2	2	6.2	5.1	5.5	7.9	6 8	0 5	-0.1	0	8	-0.1	9.4	13 4
2000	285	1000	3.2	2.1	6 4	5	5 5	8	6 8	0.5	19 2	0	8.1	-0.1	9.3	13.6
2000	285	1100	2.9	2 2	6 3	5	5 5	8	6.8	0 5	11 9	0	8.1	0	4	13 9
2000	285	1200	3 2	2 3	6 4	5	5 5	8	6 8	0 5	3 6	0	8.2	0	9.1	13 8
2000	285	1300	2 5	2 2	6 3	5 1	5 5	8.1	6 6	7	17 5	0	8.1	0	8.9	14 3
2000	285	1400	3	2.1	5.8	5	5.5	8.1	6.8	0 5	0	0	8 3	0 2	9.1	13 5
2000	285	1500	3 2	2.3	6 4	5 1	5 5	8.2	6 9	0.5	13 8	0	8.1	0 8	8 8	14 2
2000	285	1600	2 4	2.1	6.5	5 1	5.4	8.2	6 8	7	2 3	0	8.2	4 1	9.4	13 6
2000	285	1700	3.1	2.1	6.1	5	5.5	8.2	6 9	0.5	12	0	8.2	0.3	9.5	14.7
2000	285	1800	3.2	2.1	6.2	5	5.5	8.2	6.8	0 5	0 7	0	8.2	0 4	9 3	14 2
2000	285	1900	2.8	2 1	6	5.1	5.5	8.2	6 8	7	1 1	0	8.2	0.2	7 4	14 3
2000	285	2000	2.5	2 1	6 4	5	5.5	8.1	6 8	6.9	21 5	0	8	0 4	9 9	14 3

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Year	Julian Date	Time	Head (in feet) of Water Level Above Transducer							Flow Rate (in GPM)						
			RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09	RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09
2000	285	2100	3 2	2 4	6 5	5.1	5.4	8 1	6 8	0 6	2.9	0	8 1	0 5	8 5	14 4
2000	285	2200	3 2	2 1	6 2	5	5.5	8 1	6 9	0 6	13.1	0	8.1	0	4 1	14.3
2000	285	2300	3 2	2 3	6 5	5	5 5	8 1	6 8	0 6	2.3	0	8 1	-0 1	6	13 6
2000	285	2400	3	2 2	6 4	5	5.5	8 1	6 8	6 9	1.6	0	8	0.1	9 9	15
2000	286	100	2.5	2 1	6 3	5	5.5	8 1	6 8	6 9	14.2	0	7 9	0.1	10 1	14 1
2000	286	200	3 2	2 1	6	5	5.5	8 1	6 8	0 6	16 2	0	8 1	-0 1	3 9	14.7
2000	286	300	3 1	2 1	6	5	5 5	8 1	6.6	0.6	2	0	8.1	-0.1	10 2	16
2000	286	400	2 8	2 2	6 4	5	5 5	8.1	6 9	0.6	0	0	8 1	0 2	7	14.6
2000	286	500	3 2	2 1	6 3	5	5.5	8 1	6 8	0.6	-0.1	0	8	0	9 8	14
2000	286	600	3.2	2.4	6.2	5.1	5 5	8 1	6 8	0.6	1.7	0	7.9	-0.1	9.3	13 9
2000	286	700	2 5	2 4	6	5	5.5	8 1	6.8	6.9	0 4	0	8.1	-0 1	9.9	13 4
2000	286	800	3 3	2 1	6 2	5 1	5.5	8	6.8	0 6	-0 2	0	7.9	-0 1	9.7	13 9
2000	286	900		2.1	6 4	5 1	5.5	8	6.8	-1.9	-0.1	0	8	-0 1	9 6	13 6
2000	286	1000		2.3	6.1	5	5.5	8	6.8	-1.9	1.9	0	7.8	-0 1	9.4	13 8
2000	286	1100		2	6 3	5.1	5 5	8 1	6.8	-1.9	2.4	0	7 9	0	9 3	13.3
2000	286	1200		2.5	5 9	5	5 5	8.1	6.7	-1.9	0.8	0	8	0	5 4	13.7
2000	286	1300		2.7	5 9	5 1	5.5	8 1	6.9	-1.9	-0 1	0	8	0	8 3	13.9
2000	286	1400		2 3	5.9	5.1	5 4	8 2	6.8	-1.9	13.1	0	8	2.8	9 5	13 5
2000	286	1500		2.3	6	5	5.5	8 2	6.8	-1.9	1.1	0	8	3.4	9 3	14.1
2000	286	1600		2 8	6 2	5	5.5	8.2	6 7	-1 9	-0 1	0	8	2 9	8 6	14.6
2000	286	1700		2 1	6.2	5.1	5.5	8 2	6.8	-1 9	16.8	0	7 9	1 2	7 8	14 1
2000	286	1800		2	6.2	5	5.5	8 2	6.8	-1.9	22.5	0	7.9	0.5	7.5	14 6
2000	286	1900		2 3	6.1	5.1	5.5	8.2	6.8	-1 9	1.5	0	7 8	0 7	9.7	13.8
2000	286	2000		2 4	6.3	5	5.5	8 1	6 8	-1 9	2.9	0	7 9	0 2	9.7	14 2
2000	286	2100		2.4	6	5.1	5.5	8 1	6.8	-1.9	4.1	0	7 8	0	10	13 4
2000	286	2200		2 6	6	5.1	5.5	8 1	6 8	-1 9	2 2	0	7 9	0	9 7	14 4
2000	286	2300		2 2	6.1	5	5.5	8 1	6 8	-1 9	1	0	7.9	0	8 4	14
2000	286	2400		2 2	6 1	5	5.5	8.1	6.8	-1.9	1 5	0	7.8	0	10 1	13.7
2000	287	100		2	6 1	5	5.5	8 1	6 8	-1 9	1 2	0	7 9	0.2	9 6	13.8
2000	287	200		2.1	6.1	5	5.5	8 1	6 8	-1 9	14.7	0	7.9	0	9 3	14.7
2000	287	300		2.8	6 2	5 1	5 5	8 1	6.8	-1.9	-0.1	0	7 9	0.1	9 8	14.4
2000	287	400		2.2	6 2	5 1	5.5	8 1	6 8	-1.9	0 8	0	7 8	0.2	10	13 9
2000	287	500		2.1	6 4	5	5.5	8 1	6 8	-1.9	11 7	0	7 7	0.3	9 6	14 7
2000	287	600		2.5	6	5	5 5	8 1	6 8	-1.9	6 9	0	7.8	-0 1	10	13 7
2000	287	700		2.3	6.4	5	5 5	8 1	6 8	-1.9	11.2	0	7 8	-0.1	9.8	13 8
2000	287	800		2 7	6 4	5 1	5 5	8.1	6.8	-1.9	-0.1	0	7 7	-0.1	8.6	14
2000	287	900		2 9	6 1	5 1	5.5	8.1	6 9	-1.9	-0 1	0	7 7	-0.1	9.4	13 3
2000	287	1000		2 1	6 4	5	5.5	8.1	6 7	-1.9	13.5	0	7 6	-0.1	9.6	13 7
2000	287	1100		2 3	6.2	5	5 5	8 1	6 8	-1.9	0.6	0	7 8	-0.1	9.5	12 8
2000	287	1200		2.4	5.8	5 1	5 5	8 1	6 9	-1.9	-0.1	0	7 6	-0.1	10.4	13 3
2000	287	1300		2.8	6.1	5	5 5	8.1	6.8	-1.9	-0 1	0	7 8	0 4	7.6	13.7
2000	287	1400		2 3	6.5	5	5 5	8 2	6 8	-1.9	-0 1	0	7 7	0 3	4 1	14
2000	287	1500		2 3	6.2	5	5 5	8 2	6 8	-1.9	3.7	0	7.7	1.4	9.4	13.8
2000	287	1600		2 2	6 2	5.1	5 5	8.2	6.8	-1.9	13.7	0	7 7	2 3	9.7	14.1
2000	287	1700		2 2	5.8	5.1	5 5	8 3	6 8	-1.9	17.3	0	7 7	2 4	9 9	13.9
2000	287	1800		2.3	6 1	5.1	5 5	8 3	6 8	-1 9	2 5	0	7 7	2 6	9.7	14.9
2000	287	1900		2.3	6	5	5 5	8 2	6 8	-1 9	4.7	0	7 6	2 2	3 8	13.5
2000	287	2000		2.4	5 8	5	5 5	8.2	6 8	-1 9	13 2	0	7 6	0.8	8 7	14 1
2000	287	2100		2 2	6 2	5 1	5.5	8.1	6.8	-1 9	2 5	0	7 6	0.1	7 9	14 3
2000	287	2200		2 1	6 2	5 1	5 5	8.1	6 8	-1 9	19 2	0	7 6	-0.1	7 4	13 4
2000	287	2300		2 1	6 1	5 1	5.5	8.1	6.8	-1 9	1	0	7 6	-0 1	9 8	13 7
2000	287	2400		2 4	6 4	5.1	5.5	8 1	6 8	-1 9	-0.1	0	7.5	-0 1	8 8	13 5

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Year	Julian Date	Time	Head (in feet) of Water Level Above Transducer							Flow Rate (in GPM)						
			RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09	RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09
2000	288	100		2 2	5 9	5.1	5 5	8 1	6.8	-1.9	19.4	0	7 6	0 2	7 5	13.7
2000	288	200		2 2	6 2	5 1	5 5	8 1	6 8	-1.9	4.3	0	7 6	0 2	10 3	14
2000	288	300		2 4	6 3	5	5.5	8 2	6.8	-1.9	2.4	0	7 8	0.6	9 6	13 3
2000	288	400		2 4	6 2	5	5 5	8 2	6.8	-1 9	3.8	0	7 5	0 4	9 7	13 6
2000	288	500		2 3	6 2	5	5 5	8.1	6 8	-1 9	0	0	7.5	0	5.2	13 3
2000	288	600		2	6 3	5 1	5.5	8 1	6.8	-1 9	0 2	0	7 4	-0 1	9.9	13
2000	288	700		2.5	6	5.1	5 5	8 1	6.8	-1 9	-0.1	0	7 5	-0 1	10.3	13 2
2000	288	800		2.1	6 1	5	5 5	8	6 8	-1 9	-0.1	0	7.5	-0.1	8.2	13.6
2000	288	900		2.4	6 1	5	5 5	8	6 8	-1.9	4.1	0	7.4	-0 1	8	12.9
2000	288	1000		2.3	6.2	5	5 5	8	6.8	-1 9	1 9	0	7.4	-0 1	9 4	13 3
2000	288	1100		2 1	5 9	5.1	5 5	8 1	6 8	-1 9	14 4	0	7.5	-0 1	8.7	13.6
2000	288	1200		2 2	6 5	5.1	5 5	8 1	6 8	-1 9	13 7	0	7.4	0	9 4	12.8
2000	288	1300		2	6 3	5.1	5 5	8 2	6 8	-1.9	0.8	0	7.6	0.2	9 8	13 1
2000	288	1400		2	6.3	5	5 5	8 2	6 8	-1 9	-0 1	0	7 4	1	9 3	13 7
2000	288	1500		2 3	6.1	5	5 4	8 2	6 8	-1 9	13 4	0	7 5	2.7	9.6	12 9
2000	288	1600		2 3	6 2	5.1	5 5	8 2	6 8	-1 9	6 6	0	7.4	2.1	9.1	13.6
2000	288	1700		2 6	6 3	5 1	5.5	8 2	6 8	-1.9	-0.1	0	7 5	0 4	9 6	14
2000	288	1800		2	6.3	5 1	5 5	8 2	6.8	-1 9	20 7	0	7 5	0 6	9 5	14 4
2000	288	1900		2	6.2	5	5 5	8 2	6.8	-1 9	-0 1	0	7 4	0 2	9 3	13 5
2000	288	2000		2 1	6	5	5 5	8.2	6 8	-1 9	1 8	0	7.5	0.4	8.7	13.5
2000	288	2100		2 2	6.3	5 1	5.5	8 2	6 8	-1.9	3.2	0	7 2	0 3	10	13 6
2000	288	2200		2.3	6.1	5	5 5	8 1	6.8	-1 9	2 1	0	7 4	0 2	9 2	13 1
2000	288	2300		2.4	6 4	5	5 5	8.1	6.8	-1 9	10.4	0	7.4	0.2	9.9	13.7
2000	288	2400		2	6 3	5 1	5.5	8 1	6.8	-1.9	19.4	0	7 1	0 3	8.3	13 5
2000	289	100		2	6 3	5 1	5.5	8 1	6.8	-1 9	24	0	7 3	0 1	6.1	13 6
2000	289	200		2 1	6 1	5 1	5.5	8 1	6.8	-1 9	-0 1	0	7.3	-0.1	9	13
2000	289	300		2.2	6 4	5	5.5	8 1	6.8	-1 9	5.6	0	7 4	-0 1	6.7	13
2000	289	400		2	6 4	5	5.5	8 1	6.8	-1 9	-0 1	0	7.2	-0.1	9.8	12.6
2000	289	500		2 9	6 4	5	5 5	8 1	6.8	-1.9	-0.1	0	7 3	-0 1	10.1	12.5
2000	289	600		2 4	6.4	5	5 5	8 1	6.8	-1 9	2.5	0	7 3	-0 1	10 3	13.3
2000	289	700		2 2	6 4	5	5 5	8.1	6.8	-1 9	12	0	7.3	-0.1	9.9	12.2
2000	289	800		2.1	6 4	5.1	5.5	8.1	6.8	-1 9	20.6	0	7 2	-0 1	8.4	12.9
2000	289	900		2	6 1	5 1	5.5	8.1	6.8	-1.9	-0.1	0	7 1	-0 1	9 6	13 5
2000	289	1000		2.2	6.4	5	5 5	8 1	6.8	-1 9	13.6	0	7 2	-0 1	6 3	12 8
2000	289	1100		2.2	5.8	5 1	5 5	8.1	6.8	-1 9	-0 1	0	7 2	-0 1	9 1	13 1
2000	289	1200		2.3	6.3	5 1	5 5	8.1	6.9	-1 9	4.5	0	7.2	-0.1	9.1	12 6
2000	289	1300		2 1	6 3	5	5.5	8.2	6.8	-1 9	19.4	0	7.4	0	9.6	12.7
2000	289	1400		2	6 3	5 1	5 5	8.2	6 9	-1.9	0.4	0	7 1	0 7	9 5	12 8
2000	289	1500		2 3	6 3	5.1	5 5	8.2	6.8	-1.9	1.8	0	7 2	0 9	8 8	13 7
2000	289	1600		2.7	6 3	5 1	5 5	8.2	6.8	-1 9	-0 1	0	7 2	1	9 4	12 8
2000	289	1700		2	6	5	5.5	8.2	6 9	-1 9	0.9	0	7.3	0.5	9.2	13
2000	289	1800		2 3	6	5.1	5.5	8 2	6 8	-1 9	0.3	0	7 2	0 6	9 5	13 3
2000	289	1900		2.5	6.3	5	5.5	8 2	6.8	-1 9	3.9	0	7 2	0.8	9 7	12 8
2000	289	2000		2.4	6 4	5.1	5.5	8 2	6 8	-1 9	1.8	0	7.1	0.2	9.2	13 1
2000	289	2100		2.3	6 1	5.1	5 5	8 1	6 8	-1.9	3.1	0	7 1	-0 1	9 4	13.5
2000	289	2200		2.3	5 9	5 1	5 5	8.1	6.8	-1 9	-0 1	0	7 1	0	8 8	13 3
2000	289	2300		2 2	6	5.1	5 5	8 1	6 8	-1 9	2.2	0	7	-0 1	9 3	12.5
2000	289	2400		2 3	6.3	5 1	5 5	8 1	6.8	-1 9	3 5	0	7.1	-0 1	9 9	12 9
2000	290	100		2 2	6 5	5 1	5 5	8 1	6 8	-1 9	6	0	7 1	-0 1	9.3	12.9
2000	290	200		2 4	6	5 1	5 5	8 1	6.8	-1.9	12 4	0	7 1	0.2	9 1	13 8
2000	290	300		2 1	6	5 1	5 5	8 1	6 8	-1 9	17.8	0	7 1	0	9.2	13.3
2000	290	400		2 1	6.2	5	5 5	8 1	6 8	-1 9	17 4	0	7	0	9 8	12 5

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Year	Julian Date	Time	Head (in feet) of Water Level Above Transducer							Flow Rate (in GPM)						
			RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09	RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09
2000	290	500		2 5	6 3	5 1	5 5	8 1	6 8	-1 9	14.1	0	7.1	0	9 4	12 4
2000	290	600		2 2	6 4	5	5 5	8 1	6.7	-1 9	3 6	0	7 1	0.1	9 9	13.3
2000	290	700		2 3	6 2	5 1	5 5	8 1	6 8	-1 9	1 6	0	7.1	0.1	5 8	12.3
2000	290	800		2 2	6	5	5.5	8.1	6.7	-1 9	2 3	0	7.1	0	10	13.4
2000	290	900		2.8	6.3	5	5 4	8 1	6 8	-1 9	-0 1	0	7	0	9 5	12 7
2000	290	1000		2.3	6 3	5	5 5	8 1	6 8	-1.9	2.5	0	7 1	-0.1	9 9	12 5
2000	290	1100		2.1	6 3	5.1	5 5	8.1	6 8	-1 9	3	0	7 1	-0.1	9.9	13 2
2000	290	1200		2	5 9	5 1	5 5	8.1	6 8	-1 9	24.2	0	7 1	0 1	9.5	12 5
2000	290	1300		2.2	6 3	5 1	5 5	8.2	6 8	-1.9	0	0	6 9	0 2	9	13 2
2000	290	1400		2.3	6 4	5.1	5.5	8.2	6.9	-1 9	4.9	0	7	0.5	9.5	12 4
2000	290	1500		2.1	5.9	5 1	5 5	8 2	6 8	-1 9	22.5	0	7.1	4 2	8.7	13
2000	290	1600		2 2	6 4	5	5 5	8.2	6 9	-1 9	7.9	0	7	3 6	9 6	12 8
2000	290	1700		2 3	5 9	5	5 5	8.2	6 8	-1.9	2.5	0	7.1	0 5	9	13 3
2000	290	1800		2 1	5 9	5.1	5 5	8.2	6 8	-1 9	23.7	0	6.8	0.6	3 6	13.1
2000	290	1900		2	6 3	5.1	5 5	8.2	6 8	-1 9	0 6	0	6.9	0 8	9.6	12.8
2000	290	2000		2 1	6 4	5 1	5 5	8 2	6 8	-1 9	3 3	0	6.9	0 4	9 9	12.9
2000	290	2100		2 1	6 3	5	5 5	8.1	6 9	-1.9	0	0	6.9	-0 1	9	12 4
2000	290	2200		2 1	6	5	5 5	8.1	6.8	-1.9	14 9	0	6.9	-0.1	9	12 3
2000	290	2300		2	6.2	5	5.5	8 1	6 8	-1.9	2 6	0	6.8	-0.1	8.9	12.6
2000	290	2400		2 1	5.9	5	5 5	8.1	6 8	-1 9	12 6	0	6 9	0.4	9 4	12.6
2000	291	100		2 1	6	5	5 5	8 2	6 8	-1.9	3.7	0	6 9	0.3	8 5	12 5
2000	291	200		2.2	6.3	5 1	5.5	8.1	6 8	-1.9	15 7	0	6.7	0.1	9.3	12 9
2000	291	300		2 2	6 3	5	5.5	8 1	6 8	-1 9	2 1	0	7	0	8.7	13
2000	291	400		2.1	6.4	5	5.5	8 1	6.8	-1.9	15.2	0	6 8	0 1	6 5	12 4
2000	291	500		2.2	6.3	5.1	5.5	8 1	6 8	-1.9	19 5	0	6.7	-0 1	9.5	12.7
2000	291	600		2	6 5	5	5.5	8 1	6 8	-1.9	0 9	0	6 9	-0.1	9	13
2000	291	700		2.2	6 1	5	5.5	8 1	6 8	-1.9	12 7	0	6.9	-0.1	10.2	12 8
2000	291	800		2.2	6 4	5 1	5.5	8	6 9	-1.9	15 4	0	6 7	-0.1	9.5	11.8
2000	291	900		2.3	6 3	5 1	5.5	8	6.8	-1.9	5.2	0	6 8	-0.1	8.7	12.3
2000	291	1000		2 2	5.9	5.1	5.5	8	6.8	-1.9	1 6	0	6.8	-0.1	9.7	12.1
2000	291	1100		2	6.2	5	5.5	8	6 8	-1.9	1 3	0	7	-0.1	9	12.2
2000	291	1200		2 6	6 3	5	5.5	8	6 8	-1.9	8 9	0	7	-0 1	9	12.6
2000	291	1300		2 8	6 3	5.1	5.5	8 1	6 7	-1.9	0	0	6 9	-0 1	9 4	12.7
2000	291	1400		2 6	6 4	5.1	5 5	8.1	6.9	-1.9	-0.1	0	7	0	10	12 1
2000	291	1500		2.2	6 4	5	5 5	8 1	6 8	-1.9	13	0	7	-0 1	9.1	12 6
2000	291	1600		2 2	6 3	5 1	5 5	8 1	6 8	-1.9	2 5	0	7	-0 1	9 2	12.7
2000	291	1700		2 8	6 1	5	5 5	8 1	6 8	-1.9	-0 1	0	7	-0 1	9 4	12.4
2000	291	1800		2 2	5 9	5	5 5	8 1	6.8	-1.9	1 4	0	6 8	-0 1	9 4	11 8
2000	291	1900		2.2	6	5	5 5	8	6.8	-1.9	21.5	0	7	-0.1	9.1	13
2000	291	2000		2.3	6.4	5.1	5.5	8	6 8	-1.9	1.9	0	7	-0.1	9.5	12 5
2000	291	2100		2.1	6.2	5 1	5 5	8 1	6 8	-1.9	15 3	0	7	-0 1	9	12.5
2000	291	2200		2.2	6.5	5 1	5 5	8 1	6 8	-1.9	12 9	0	7	-0 1	9 5	12.7
2000	291	2300		2 2	6.4	5 1	5 5	8	6 8	-1.9	1 5	0	7	-0.1	9.1	13 4
2000	291	2400		2 1	6.4	5	5 5	8 1	6 8	-1.9	0 7	0	7 2	-0 1	9	12.9
2000	292	100		2 1	6 4	5 1	5 5	8 1	6 8	-1.9	16.4	0	7	0	9 6	13 4
2000	292	200		2	6 4	5.1	5 5	8 1	6 8	-1.9	0.8	0	7	-0 1	9.6	12 8
2000	292	300		2 3	6 4	5 1	5 5	8 1	6 8	-1.9	6	0	7	-0 1	9.4	12 4
2000	292	400		2	6	5	5 5	8.1	6 8	-1.9	2.5	0	7 3	-0 1	9.2	12 5
2000	292	500		2 3	6	5 1	5 5	8.1	6.8	-1.9	3.6	0	7 1	0	8.8	13 3
2000	292	600		2 2	5 9	5.1	5 4	8.1	6.8	-1.9	2.4	0	7.1	-0.1	9.6	13 1
2000	292	700		2 2	6	5 1	5 5	8.1	6.8	-1.9	3.6	0	7.1	-0 1	9.3	13.3
2000	292	800		2 4	6	5	5 5	8	6.8	-1.9	4.6	0	7	-0.1	9.2	12.3

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Year	Julian Date	Time	Head (in feet) of Water Level Above Transducer							Flow Rate (in GPM)						
			RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09	RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09
2000	292	900		2 1	6 2	5	5.5	8 1	6 8	-1 9	28 1	0	7 1	-0 1	8.8	12 3
2000	292	1000		2 2	6 4	5	5.5	8 1	6 8	-1 9	4 7	0	7 2	-0 1	8.7	12
2000	292	1100		2 4	6.3	5	5.5	8 1	6 8	-1 9	14 6	0	7.2	-0.1	8 7	12 1
2000	292	1200		2 2	5 9	5.1	5.5	8.1	6 8	-1 9	0 7	0	7 2	-0 1	8 7	11 9
2000	292	1300		2	6 4	5 1	5.5	8 1	6 8	-1 9	0 9	0	7	0	9	13
2000	292	1400		2.3	5.9	5	5.5	8 2	6 9	-1 9	-0 1	0	7 3	0.2	9 5	12.9
2000	292	1500	2.6	2.8	6 3	5	5.5	8.2	6 8	6.9	-0 1	0	7.2	0 6	8 7	13
2000	292	1600	2 5	2.2	6 3	5	5.5	8 2	6 7	6.9	20 7	0	7.3	0.2	9 5	13 3
2000	292	1700	3 3	2 9	6.3	5	5.5	8 2	6 8	0.5	-0 1	0	7.2	0 3	9	12.8
2000	292	1800	2.5	2	5 8	5	5.5	8.2	6 8	6.6	18	0	7.3	0 7	5 3	13 1
2000	292	1900	3 1	2 3	6 2	5	5.5	8 2	6 8	0.6	14 8	0	7.2	-0 1	9.9	12 6
2000	292	2000	3 2	2 1	6 1	5.1	5.5	8 1	6 8	0.6	17.2	0	7.1	0.1	9.7	12 4
2000	292	2100	3 2	2.1	6.3	5 1	5.5	8 1	6 8	0.6	16 8	0	7.2	0	9.2	13 2
2000	292	2200	2.7	2 3	6 3	5	5.5	8 1	6.8	6.9	1.2	0	7 2	0	9.1	12 9
2000	292	2300	3 2	2 1	6 3	5.1	5.5	8.1	6 8	0.6	0	0	7 3	-0 1	9.6	13
2000	292	2400	3 2	2 2	6	5	5.5	8 1	6 8	0 6	-0.1	0	7 3	-0 1	9.2	12 9
2000	293	100	3 3	2	6.1	5.1	5.5	8 1	6 8	0.6	3.8	0	7.3	0.1	9.5	12 9
2000	293	200	3 2	2	6	5 1	5.5	8 1	6 8	0.6	1.4	0	7 3	0	9 2	13.1
2000	293	300	3 3	2 5	6 2	5 1	5.5	8.1	6 8	0 6	6.9	0	7 2	0 1	10	12.4
2000	293	400	2 5	2 1	6 2	5 1	5.5	8 1	6 8	6.9	4.2	0	7 3	0	9 2	13.5
2000	293	500	2 6	2 4	6	5.1	5 5	8 1	6 8	6 9	14.4	0	7 3	-0 1	9.7	13
2000	293	600	3.2	2.1	6 2	5	5 5	8 1	6 8	0 6	-0 1	0	7 3	-0 1	9 9	13.6
2000	293	700	3 2	2.6	6 2	5	5 5	8 1	6 8	0 6	-0 1	0	7 4	-0 1	9 4	12
2000	293	800	3 3	2.3	6.2	5	5 5	8 1	6 8	0.6	5 5	0	7.2	-0 1	9 5	12.9
2000	293	900	2 6	2.3	6	5	5 5	8	6 8	0.6	2.4	0	7 3	-0 1	9 9	12 4
2000	293	1000	3 3	2.3	6.3	5.1	5.5	8.1	6 8	0 6	2.9	0	7 3	-0.1	8 8	12
2000	293	1100	3.3	2 1	6.1	5	5 5	8 1	6 8	0.6	11.9	0	7 5	-0 1	8 8	11 9
2000	293	1200	3 3	2 3	6.1	5	5 5	8 1	6 8	0 6	-0.1	0	7 4	0.2	9 8	12 5
2000	293	1300	3 1	2 2	6.5	5.1	5 5	8.2	6 8	0 6	-0.1	0	7.4	0.4	8.9	12 8
2000	293	1400	2 6	2	6.5	5	5 5	8.2	6.8	6 9	2 1	0	7 5	2.1	8 6	13 8
2000	293	1500	3 3	2 2	6	5	5 5	8.2	6 8	0 5	2.3	0	7 5	2.3	7 9	12 9
2000	293	1600	2 5	2 2	6	5 1	5.5	8.2	6 8	6.9	4 2	0	7 4	1.8	8 6	12 7
2000	293	1700	3	2 2	5.8	5	5 5	8.2	6 8	6 9	12.8	0	7.3	0.5	9.6	13
2000	293	1800	2.6	2.1	6.4	5 1	5 5	8 2	6 8	6.9	13 6	0	7 4	0.3	7.8	12.5
2000	293	1900	2 8	2	6 4	5	5 5	8 2	6 8	0 8	2 6	0	7 3	0 5	9 2	13 3
2000	293	2000	2 6	2 3	6 4	5	5 5	8 2	6 8	6 9	1 9	0	7 4	0	8.7	12 7
2000	293	2100	3	2.2	6 4	5	5 5	8 1	6 8	6 9	2 8	0	7 4	0	8.9	13 3
2000	293	2200	3 3	2 2	6 3	5.1	5.5	8 1	6 8	0.6	10.3	0	7.1	-0 1	9.7	12 1
2000	293	2300	3 3	2	6.2	5	5.5	8 1	6.8	0.9	8 2	0	7 4	-0 1	9.8	13.3
2000	293	2400	2 6	2 8	6	5.1	5.5	8.1	6 8	7	-0.1	0	7 4	-0.1	8.9	13.2
2000	294	100	3 3	2 2	6 4	5	5.5	8 1	6.8	0.6	1 8	0	7 4	-0 1	8.8	13.3
2000	294	200	3 1	2.1	6.4	5	5.5	8 1	6 8	0.9	5	0	7.4	-0 1	8.7	13.1
2000	294	300	3.3	2.1	6.3	5 1	5.5	8 1	6.8	0.7	19	0	7 3	0	9	13
2000	294	400	2 6	2 3	6.4	5	5.5	8 1	6.8	7	2 9	0	7 4	0 1	9.2	12.8
2000	294	500	2.5	2.1	6 3	5	5.5	8 1	6.8	6 8	11.6	0	7.5	0 1	9	13.1
2000	294	600	3 2	2 3	6 3	5	5 5	8.1	6.8	0.6	-0.1	0	7 5	-0.1	8.8	13
2000	294	700	2 8	2.1	6 2	5	5 5	8 1	6.8	0.7	-0.1	0	7.3	-0 1	8.9	13.8
2000	294	800	2 8	2 2	6 5	5	5 5	8	6.8	6.9	2 2	0	7 4	-0 1	10.1	13
2000	294	900	2 9	2.5	6 1	5	5 5	8 1	6 8	7	-0.1	0	7 4	-0.1	9.1	13
2000	294	1000	3 3	2.1	6.1	5	5 5	8.1	6 8	0.7	22	0	7 4	-0 1	8 8	12.6
2000	294	1100	3 2	2.2	6 4	5	5 5	8 1	6 8	0.7	3 3	0	7 5	-0.1	8.5	12 8
2000	294	1200	3.3	2.1	6.3	5.1	5 5	8 1	6 8	0.6	3 5	0	7 2	-0.1	8 2	13

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Year	Julian Date	Time	Head (in feet) of Water Level Above Transducer							Flow Rate (in GPM)						
			RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09	RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09
2000	294	1300	3 2	2.6	6 1	5 1	5 5	8.1	6.9	0 5	6 8	0	7 3	0.1	8 5	12 8
2000	294	1400	3.2	2 3	5 8	5.1	5 5	8 2	6 8	0 5	13 8	0	7.4	0 5	9 1	13 4
2000	294	1500	2 5	2	6.3	5	5 5	8 2	6 8	6 9	2 6	0	7 4	0 2	7.8	13 3
2000	294	1600	2 9	2 3	5 9	5	5 5	8 2	6 8	6 9	1.9	0	7 4	0.4	3 9	12 8
2000	294	1700	3 2	2 3	6	5 1	5 5	8 2	6 8	0.5	1 9	0	7 1	0 4	8 9	12 8
2000	294	1800	2.5	2 2	6 4	5.1	5.5	8 2	6.8	6 9	13	0	7 3	0	3 3	13 1
2000	294	1900	3.2	2 1	6.2	5.1	5.5	8.2	6 8	0 6	13 8	0	7.3	0.1	8	13 9
2000	294	2000	2.9	2 2	6.2	5.1	5.5	8 1	6 8	6 9	4 4	0	7 3	0	9 2	13
2000	294	2100	2.6	2.5	5.8	5	5.5	8 1	6.8	7	-0 1	0	7 3	0.1	7 7	12.7
2000	294	2200	3	2 3	6.3	5	5.5	8.1	6 8	0 6	1 8	0	7.2	-0.1	6.8	13
2000	294	2300	2 8	2	6 4	5	5 5	8.1	6 8	0.7	1 7	0	7 3	-0 1	9	13
2000	294	2400	3 3	2 2	6 4	5	5 5	8 1	6 8	0 7	0 1	0	7 3	-0 1	6.7	12.4
2000	295	100	3 2	2.1	6 1	5	5.5	8 1	6.8	0 6	18.7	0	7 4	-0 1	8.1	12 8
2000	295	200	3.2	2 2	6	5	5 5	8 1	6 5	0 6	2 4	0	7 3	0	9.4	15.1
2000	295	300	3 2	2	6	5 1	5 5	8.1	6 8	0.6	-0 1	0	7.1	0.1	8.6	12 6
2000	295	400	3 3	2 3	6.3	5 1	5 5	8.1	6.4	0 7	-0 1	0	7 4	0	10	15.7
2000	295	500	3.3	2.3	6 4	5 1	5 5	8.1	6.8	0 6	10 4	0	7 4	0	9.2	13 5
2000	295	600	3 2	2 2	6 3	5	5 5	8.1	6.5	0 7	-0 1	0	7 3	-0.1	8.8	13 8
2000	295	700	3.3	2	6 6	5.1	5 5	8.1	6.8	0 6	0 2	0	7.2	-0 1	9.2	12 7
2000	295	800	2 5	2 2	5.9	5	5.5	8	6 8	7	22	0	7 3	-0 1	9	12 7
2000	295	900	3 2	2	6.4	5	5.5	8	6.5	0 6	1 7	0	7 3	-0 1	7.9	14 1
2000	295	1000	3.2	2 3	5 9	5.1	5 5	8	6 8	0.5	2 1	0	7.3	-0.1	9.5	11.8
2000	295	1100	2 5	2 4	6	5 1	5 5	8	6 9	7	12 8	0	7 3	-0 1	9	12.1
2000	295	1200	3 3	2 3	6 2	5 1	5.5	8 1	6.8	0.5	2 4	0	7 2	-0 1	7.9	12 2
2000	295	1300	2.9	2 2	6 4	5	5 5	8.1	6 8	7	13 4	0	7.4	0.1	7.9	12 9
2000	295	1400	3.2	2 2	6 4	5	5 3	8 1	6.9	0.5	14 1	0	7 3	3	8.9	13
2000	295	1500	2.5	2 3	6 3	5	5 5	8.1	6 8	6.9	1.7	0	7 3	0.2	9.5	13 2
2000	295	1600	2 6	2	6.3	5.1	5 5	8.2	6 8	0 7	-0.1	0	7 4	0.2	9.1	12.5
2000	295	1700	3 2	2.2	6 3	5	5.5	8.1	6.7	0 5	3 8	0	7 2	0.2	8.7	13 4
2000	295	1800	2.7	2	6.2	5.1	5 4	8.1	6 8	6 8	-0.1	0	7.2	0.1	8.5	13
2000	295	1900	3 2	2.1	6.3	5 1	5.4	8.1	6.8	0.6	-0.1	0	7.3	0.2	8.6	13.1
2000	295	2000	3.2	2	5 9	5 1	5.5	8 1	6.8	0 6	2.2	0	7 3	-0 1	5.7	12 1
2000	295	2100	3.2	3	6 3	5	5.5	8 1	6.8	0 6	-0.1	0	7 3	-0 1	8.4	12 1
2000	295	2200	3.2	2 2	6 3	5	5 5	8	6 8	0 6	-0.1	0	7 1	-0.1	8.7	12 9
2000	295	2300	3 2	2 2	6 3	5	5 5	8	6 8	0 6	2.5	0	7.3	-0 1	8 6	12 6
2000	295	2400	3 2	2 1	6.4	5	5 5	8	6 8	0 6	12.4	0	7 3	-0 1	8 7	12.6
2000	296	100	3 2	2.3	6 3	5.1	5 5	8	6 8	0 6	1.2	0	7.3	-0 1	8.3	11 7
2000	296	200	3	2	6.4	5.1	5 5	8	6.8	6 9	-0.1	0	7.2	-0 1	9 4	12.7
2000	296	300	2.5	2 2	6.1	5	5 5	8	6 8	6.9	10.3	0	7.3	-0.1	9 3	12 9
2000	296	400	2 5	2 7	6 1	5	5.5	8	6 8	7	-0 1	0	7.3	-0 1	8 5	12 7
2000	296	500	3 2	2 3	6 3	5	5.5	8	6 8	0.6	10 4	0	7.3	-0 1	9.4	11.8
2000	296	600	3 2	2	5 8	5	5.4	8	6 8	0.7	1.1	0	7.3	-0 1	9 1	11 6
2000	296	700	2 8	2 4	6	5	5 5	8	6 8	6 9	6.4	0	7.2	-0 1	3 1	12.3
2000	296	800	3 2	2	6.3	5 1	5 5	7 9	6.8	0.6	-0 1	0	7.3	-0 1	9.5	12.3
2000	296	900	2.9	2.2	6 4	5 1	5.5	7 9	6.9	6 9	15	0	7 3	-0 1	9 9	11.9
2000	296	1000	3 2	2.4	6.1	5.1	5 5	7.9	6 8	0 5	-0.1	0	7.3	-0.1	9 1	11.8
2000	296	1100	3 2	2.1	6.6	5 1	5.5	7 9	6 8	0 5	10.8	0	7 4	-0 1	5 7	12
2000	296	1200	3 2	2 4	6.3	5	5 5	7.9	6 8	0.6	1 5	0	7.4	-0.1	9 3	12.2
2000	296	1300	2 9	2.3	5 8	5 1	5 5	8	6.8	0 5	3 5	0	7 4	-0.1	9.2	11.8
2000	296	1400	3 2	2 5	6 5	5.1	5.5	8.1	6 8	0 5	15 3	0	7.5	0	9 3	12.1
2000	296	1500	3 2	2.1	5 8	5 1	5.5	8 1	6 8	0 5	26 7	0	7 4	-0.1	8 2	11.6
2000	296	1600	2.5	2	6 2	5 1	5 5	8 1	6 8	6 9	0 9	0	7 5	-0 1	8 5	12 2

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Year	Julian Date	Time	Head (in feet) of Water Level Above Transducer							Flow Rate (in GPM)						
			RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09	RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09
2000	296	1700	3.2	2 2	6 5	5	5.5	8 1	6.6	0.5	14 1	0	7 4	-0 1	8 9	12 8
2000	296	1800	3.2	2 5	5 9	5	5 5	8 1	6.8	0.5	-0 1	0	7 6	-0 1	9	11.8
2000	296	1900	2.8	2 6	6 3	5	5.5	8	6.8	0.5	5 6	0	7 6	-0 1	8 7	12.1
2000	296	2000	3.2	2 1	5 9	5 1	5.5	8	6.9	0.5	0 1	0	7 4	-0 1	8.8	11 6
2000	296	2100	3.1	2 1	6 2	5 1	5.5	8	6.8	0 5	17.2	0	7 3	-0.1	4.9	11.5
2000	296	2200	2.6	2.3	6 1	5.1	5.5	8	6.8	7	11 2	0	7.5	-0 1	9.3	11 1
2000	296	2300	3.2	2 4	6 5	5	5.5	8	6 8	0 5	1.6	0	7.6	-0 1	7.9	11 7
2000	296	2400	3.2	2	5 9	5	5.5	8	6 8	0 6	2 6	0	7 6	-0.1	9.6	11 4
2000	297	100	3.2	2.3	5 8	5 1	5.5	8	6 8	0 6	4.3	0	7 6	-0.1	8 8	12 5
2000	297	200	3.2	2.2	5 8	5 1	5 5	8	6 8	0.5	13 6	0	7.5	-0.1	8 2	11 4
2000	297	300	3 2	2.4	6.4	5 1	5.5	8	6.7	0 6	-0 1	0	7.6	-0.1	5.5	12 2
2000	297	400	2 9	2 3	6 3	5.1	5 5	8	6 8	0 6	1.9	0	7 5	-0 1	8.1	12.2
2000	297	500	3.2	2.7	5.9	5 1	5.5	8	6 8	0 6	0	0	7 5	-0 1	9 1	11 6
2000	297	600	3 2	2	5 9	5 1	5.5	8	6 8	0 6	14 2	0	7 6	-0 1	8 4	11 4
2000	297	700	3 1	2 4	5 9	5	5.5	8	6 8	0.6	-0.1	0	7.6	-0 1	8 6	11.8
2000	297	800	3 2	2 1	5 9	5 1	5.5	8	6 7	0 6	3 8	0	7 6	-0 1	9.6	12.1
2000	297	900	2 6	2	6 4	5 1	5.5	7 9	6 8	7	10	0	7 6	-0 1	8.5	11
2000	297	1000	3	2 1	6 3	5 1	5.5	8	6 9	6 9	-0 1	0	7 6	-0 1	8.2	11.4
2000	297	1100	3 1	2 1	6 1	5 1	5.4	7 9	6 8	0.6	13.8	0	7.5	-0 1	7.8	11 1
2000	297	1200	3 2	2 3	6 3	5 1	5.5	8	6.8	0 6	0 5	0	7 6	-0.1	8.7	11.1
2000	297	1300	3.2	2.2	6.4	5 1	5.5	8 3	6 8	0 5	17 9	0	7 7	-0 1	7.8	12
2000	297	1400	2.6	2 1	6 3	5	5.4	8 4	6 8	7	0	0	7.8	0.5	7.7	12 4
2000	297	1500	3.3	3	5 8	5 1	5.5	8.4	6 7	0 5	-0 1	0	7.7	0.3	7.8	13 2
2000	297	1600	3.3	2.1	6 3	5 1	5.5	8 5	6 8	0 6	2 4	0	7.6	0.1	7.1	11 8
2000	297	1700	3.2	2 1	6 2	5	5.5	8 5	6 8	0.5	22.3	0	7.7	0 2	7.1	12 3
2000	297	1800	2 5	3.3	6.3	5	5.5	8 4	6 8	6 9	-0 1	0	7 7	-0.1	7	12 1
2000	297	1900	2.5	2 4	6 2	5	5.5	8 4	6 8	6 9	5 4	0	7 8	-0.1	7.4	11 8
2000	297	2000	3 2	2.4	6 3	5.1	5.5	8.4	6.8	0 5	0 4	0	7 7	-0.1	6.8	12
2000	297	2100	2 5	2.4	5.8	5	5.5	8 4	6 9	7	7 8	0	7 6	-0.1	7.7	11 5
2000	297	2200	2 7	2 6	5 9	5	5.5	8 4	6 8	0 6	3.8	0	7 8	-0 1	7 4	12 2
2000	297	2300	3 2	2.2	6 2	5.1	5.5	8 4	6.8	0.6	0.1	0	7.8	-0.1	7.5	11 5
2000	297	2400	2 6	2 2	5.8	5.1	5.5	8.4	6 8	6 9	14 3	0	7.7	-0 1	6.7	11.5
2000	298	100	3	2.4	6	5.1	5.5	8 4	6 8	6 9	10 9	0	7 7	-0 1	7 6	12 6
2000	298	200	3.3	2 3	5.9	5	5.5	8 4	6 8	0 6	7	0	7 8	-0 1	6 9	12 5
2000	298	300	2 9	2 6	6.1	5	5 5	8 4	6 8	7	0.1	0	7 9	0 1	7 5	12 1
2000	298	400	3 1	2 7	6.2	5	5 5	8.4	6.8	6 8	-0 1	0	7.8	0 1	7 1	12 3
2000	298	500	3.3	3 5	6.2	5	5.5	8.4	6 8	0 6	-0 1	0	7 9	-0 1	8.1	11.4
2000	298	600	3.2	2.6	5.9	5	5 5	8 4	6 9	0 6	0	0	7 6	-0 1	7 1	11 6
2000	298	700	3.2	2 3	6 4	5	5 5	8 4	6 8	0 6	0 8	0	7 8	-0 1	7 5	12 7
2000	298	800	3 2	2 3	6 2	5 1	5 5	8 4	6 6	0.6	18.5	0	7 8	-0 1	8 6	12 1
2000	298	900	3 2	2 1	5 9	5 1	5.5	8.3	6.9	0 5	16 4	0	7.7	-0.1	7.8	10.7
2000	298	1000	3.2	3.4	6.3	4.9	5.5	8 4	6 9	0 5	7 5	0	7 9	-0 1	6.9	10.8
2000	298	1100	2.5	2.4	6 3	5 1	5 5	8 4	6 8	6 9	12 9	0	7 6	-0 1	7 1	11 3
2000	298	1200	3 2	2.4	5 9	5	5 5	8.4	6 8	0 5	11 9	0	7.9	-0 1	7	-0 1
2000	298	1300	2 4	2 3	5.9	5 1	5 5	8 5	6 8	7	1.7	0	7 9	0 3	7 5	-0 1
2000	298	1400	2 6	3 3	6 3	5 1	5 5	8 5	6.8	7	-0.1	0	7 9	1 4	7 4	-0 1
2000	298	1500	3 2	2.2	6.3	5.1	5.4	8 5	6 8	0 5	-0 1	0	7 8	3 4	7 9	-0.1
2000	298	1600	3.2	2 2	5 8	5	5 5	8 5	6 8	0 5	14.3	0	7.8	1	7	-0 1
2000	298	1700	2.4	2.1	5 9	5 1	5.5	8 5	6 8	7	0 9	0	7 9	0 4	7	-0.1
2000	298	1800	3.2	2 2	6.4	5	5 5	8 5	6 8	0 5	9	0	7.9	0 5	6 3	-0 1
2000	298	1900	2 9	2.3	6.4	5 1	5.5	8 5	6.8	0 6	-0 1	0	7.8	0 5	7.8	-0.1
2000	298	2000	3 2	2 3	6.3	5 1	5 5	8 5	6 8	0 6	-0.1	0	7.8	0	6 9	-0 1

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Year	Julian Date	Time	Head (in feet) of Water Level Above Transducer							Flow Rate (in GPM)						
			RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09	RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09
2000	298	2100	2.8	2 8	6	5	5.5	8 5	6 8	6.9	6 5	0	7.8	0.1	8.5	-0.1
2000	298	2200	3.1	3 1	6 4	5	5.5	8 5	7	0.5	-0.1	0	7 8	0 1	8	-0 1
2000	298	2300	3 2	2.1	6 4	5.1	5.5	8 5	6.8	0.6	1 7	0	7 8	0.2	7.5	-0 1
2000	298	2400	3 1	2 4	6 2	5 1	5.5	8 5	6 8	0.6	0 6	0	7.8	0.2	7.7	-0.1
2000	299	100	3 3	2 2	6 1	5 1	5.5	8.5	6 8	0.6	19	0	7 6	0.3	7.9	-0 1
2000	299	200	3.1	2 2	6.4	5	5.5	8.5	6 8	0 7	0 8	0	7.8	0 4	7.5	-0 1
2000	299	300	3 3	2	6 3	5 1	5.5	8 5	6 7	0.7	0	0	7.8	0 4	7 8	-0.1
2000	299	400	3 2	2 2	6 4	5.1	5.5	8.5	6 7	0 6	2 1	0	7 8	0 7	7 3	-0.1
2000	299	500	3.2	2 8	6.2	5 1	5.5	8.5	6 8	0.6	-0 1	0	7.8	0.4	8.4	-0.1
2000	299	600	3 3	2.2	6 4	5 1	5.5	8.4	7	0.6	20 8	0	7.6	0 2	7.9	-0.1
2000	299	700	3 3	2.3	6	5 1	5.5	8 4	6 8	0.6	7.7	0	7 8	-0.1	6 4	-0.1
2000	299	800	2 6	2.2	6	5	5.5	8.4	6.8	7	12 1	0	7 8	-0 1	7 7	-0.1
2000	299	900	2 5	3.2	5 9	5	5.5	8.4	6.7	7	-0 1	0	7 7	-0 1	7 3	-0 1
2000	299	1000	2 7	3 2	6 2	5	3.6	8 4	7	7	0	0	7.7	8.1	7.5	-0.1
2000	299	1100	2.8	2 1	6	5.1	2.8	8.4	6 6	0.5	21.8	0	7 7	9 5	6 9	-0 1
2000	299	1200	2.9	2.4	5.9	5 1	2.9	8 5	6 9	0.5	11 4	0	7 7	9 2	6 4	-0 1
2000	299	1300	3.1	2 6	6 4	5 1	2.9	8 5	6.9	0 5	1 5	0	7 7	9 3	7	-0 1
2000	299	1400	3 2	2 1	6 3	5	2.9	8 5	6 8	0 5	24 3	0	7.9	9.3	7.4	-0.1
2000	299	1500	3 1	2	6 3	5.1	2 7	8 5	6 9	0.5	-0.1	0	7 7	9 4	7.1	-0 1
2000	299	1600	3 2	2	6 4	5	2 7	8 5	6 8	0.5	0	0	7 7	9 4	6.6	-0 1
2000	299	1700	3.2	2.7	6 2	5.1	2 8	8.5	6.8	0 5	2 8	0	7 6	9 1	6.7	-0 1
2000	299	1800	3 2	2.3	6 2	5.1	2 8	8 5	6.8	0.8	3 5	0	7.7	8 9	7	-0 1
2000	299	1900	3 1	2.6	5.7	5 1	2 8	8 5	6 9	0.5	6 5	0	7 6	8 9	6.3	-0 1
2000	299	2000	3.2	2.5	5 8	5	2 8	8.4	6 8	0.6	1 1	0	7 4	8.7	7.3	-0 1
2000	299	2100	2.4	2 2	5 9	5	2 8	8 4	6 8	7	9.5	0	7 7	8.7	7.6	-0 1
2000	299	2200	3.1	2 1	5 9	5 1	2 8	8 4	6.8	0.6	31 9	0	7 6	8.5	6.8	-0 1
2000	299	2300	2 7	3	6 4	5 1	2.8	8 4	6.8	7	-0 1	0	7.6	8.6	7.2	-0.1
2000	299	2400	2 6	2.1	6.3	5 1	2 9	8 4	6.8	6.9	13	0	7.4	8.4	7	-0 1
2000	300	100	2.6	2 2	5.9	5 1	2 7	8 4	6.8	7	0 4	0	7.5	8.5	6 8	-0 1
2000	300	200	2 8	2 1	6.3	5	2 9	8 4	6.8	6.9	9.9	0	7.6	8.3	7.3	-0.1
2000	300	300	3 2	2 4	6	5	2 8	8 4	6.8	0.6	-0 1	0	7.6	8.4	7.7	-0 1
2000	300	400	3 1	2.5	5 9	5 1	2 8	8 4	6.8	0.6	0 4	0	7.4	8.4	6 6	-0.1
2000	300	500	2.5	2.1	6 4	5	2 8	8.4	6.8	7	1 5	0	7.5	8 4	7.7	-0 1
2000	300	600	3 2	2	6 4	5 1	2.7	8.4	6.7	0.6	3 9	0	7.5	8.4	7.1	-0.1
2000	300	700	3.2	2 4	6	5.1	2.8	8 3	6 8	0 6	5.8	0	7.5	8.2	7 9	-0.1
2000	300	800	3.2	2.5	5.9	5	2.9	8 3	6 8	0.6	6 3	0	7 5	8	7 2	-0.1
2000	300	900	2 9	2.8	6 3	5	2.8	8.3	6.7	7	0 1	0	7.5	8 2	7 4	-0 1
2000	300	1000	3.2	2 3	6	5	2.8	8.3	6 9	0 6	-0 1	0	7 3	8.1	6.9	-0 1
2000	300	1100	3 1	2 2	6 4	5.1	2.8	8.3	6 8	0 5	24 8	0	7.4	8.1	7	-0.1
2000	300	1200	2 8	2 1	6 4	5.1	2 8	8.3	6 8	7	25.1	0	7.4	8.1	7 7	-0.1
2000	300	1300	2 4	2.7	6.4	5 1	2.8	8.4	6 9	7.1	-0 1	0	7 4	8 4	6 8	-0.1
2000	300	1400	2.8	2.5	6 3	5	2 8	8.4	6 8	7	-0 1	0	7 4	8.4	7.3	-0.1
2000	300	1500	3.1	2.3	5.7	5	2.7	8	6 8	0 5	12 2	0	7.3	8.5	8.6	-0.1
2000	300	1600	3	2.2	5 8	5	2 8	7 8	6 7	0 5	12 8	0	7 4	8.3	8 6	-0.1
2000	300	1700	3.2	2	6 3	5 1	2 9	7 8	6 8	0 5	17.4	0	7 3	8 2	8 8	-0.1
2000	300	1800	3 1	2 2	6.3	5 1	2 8	7 7	6 8	0.5	0 4	0	7 3	8 2	8 8	-0.1
2000	300	1900	3.2	2 5	6 2	5	2 8	7 7	6 7	0 5	-0 1	0	7 4	8	9.2	-0.1
2000	300	2000	3 2	2.4	6.2	5.1	2 8	7 7	6 8	0 5	12 7	0	7 2	8.1	9	-0.1
2000	300	2100	2.9	2 3	6 2	5	2 7	7 6	6 8	0 6	15	0	7 3	8 1	9 2	-0.1
2000	300	2200	3	2 5	6 2	5	2.8	7 6	6 8	0 7	-0 1	0	7.3	7.9	9 4	-0.1
2000	300	2300	3 2	2.4	6.3	5	2 8	7 6	6 8	0.6	-0.1	0	7 3	7 9	9 2	-0 1
2000	300	2400	2.6	2.2	6 3	5.1	2.8	7.6	6 8	7	0	0	7 2	8	7 9	-0.1

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Year	Julian Date	Time	Head (in feet) of Water Level Above Transducer							Flow Rate (in GPM)						
			RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09	RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09
2000	301	100	3 2	3 3	6	5	2 8	7 6	6 8	0 6	0 8	0	7 3	8	9.6	-0 1
2000	301	200	3 2	2 6	6 3	5	2 8	7.5	6.8	0.6	-0 1	0	7.3	8	9.5	-0 1
2000	301	300	2 6	2 1	6 3	5	2 8	7 6	6 8	7	2	0	7 3	8	9 7	-0.1
2000	301	400	3.1	2 3	6	5 1	2 9	7 6	6 9	0 6	0 6	0	7 3	7.8	9 9	-0.1
2000	301	500	3 3	2 3	6 2	5 1	2 8	7.5	6.8	0 6	11.8	0	7 2	8	9.6	-0.1
2000	301	600	3 2	2 5	5.9	5	2 8	7.5	6 7	0 6	24 7	0	7 3	7.9	9 5	-0.1
2000	301	700	3 2	3 4	6.4	5 1	2 8	7.5	6.5	0.6	-0.1	0	7.3	7.9	10 5	-0 1
2000	301	800	3 2	2 3	6.4	5	2.8	7.5	6.8	0 6	25.4	0	7 3	7 7	4.9	-0.1
2000	301	900	3.3	2	6.4	5 1	2 8	7.5	6.8	0 6	3	0	7 2	7 6	9 5	-0 1
2000	301	1000	3 1	2.3	6 2	5 1	2 8	7 5	6.8	0 5	-0 2	0	7	7 6	9 1	-0 1
2000	301	1100	2 9	2.3	6.3	5	2 8	7.5	6.6	0 5	13.3	0	7 4	7 7	9.4	-0 1
2000	301	1200	2 5	3.3	6.4	5 1	2 8	7.5	6.6	0 5	0.6	0	7.2	7 7	9.4	-0.1
2000	301	1300	2.9	3.7	6.3	5.1	2 9	7.5	6.8	6 9	-0 1	0	7.2	7 8	8.8	-0 1
2000	301	1400	2 9	2.4	5.9	5.1	2 8	7.6	6.7	0 5	12.9	0	7 2	8	8.2	-0 1
2000	301	1500	3.2	3	6 3	5	2 8	7.6	6.6	0.5	2.6	0	7.2	8	9.3	-0 1
2000	301	1600	3.2	2.1	6 3	5.1	2.9	7 6	6.7	0 5	8 4	0	7 2	7.9	9.1	-0.1
2000	301	1700	2.8	3.4	6.2	5	2 8	7 6	6.8	7 1	-0 1	0	7 3	7.9	9 1	-0.1
2000	301	1800	2.7	2 4	6 3	5.1	2 7	7 5	7	7 1	18 2	0	7 1	8	9 3	-0.1
2000	301	1900	3 2	2 3	6 3	5	2 8	7.5	6.5	0 5	9 4	0	7 4	7.8	8 1	-0.1
2000	301	2000	2 6	2 1	6 3	5.1	2.9	7.5	6.8	0 6	-0.1	0	7 2	7.6	9.6	-0.1
2000	301	2100	3 2	2.3	6.1	5	2 8	7.5	6.8	0 6	20	0	7 2	7.8	9 3	-0.1
2000	301	2200	3 2	3 4	6 2	5	2 7	7.4	6.9	0 6	-0.1	0	7.1	7 8	8 4	-0.1
2000	301	2300	3 3	2	6 2	5 1	2.9	7.4	6.8	0 6	7 3	0	7 2	7.6	9.1	-0.1
2000	301	2400	3 3	3.3	6 1	5 1	2 7	7.4	6.8	0 6	0 1	0	7 2	7 8	9 5	-0.1
2000	302	100	3 3	2 3	6 2	5 1	2 9	7.4	6.8	0.6	6.3	0	7.2	7 6	7 7	-0 1
2000	302	200	3 2	2.4	6.4	5.1	2 7	7.4	6.8	0 6	14 6	0	7 1	7 8	8.6	-0.1
2000	302	300	3 3	2.2	6	5	2 7	7.4	6.9	0 6	-0 1	0	7 4	7 8	9	-0 1
2000	302	400	2.9	2.4	6	5	2.8	7.4	6.8	0.6	1 6	0	7 2	7.8	9.7	-0 1
2000	302	500	3.3	2.2	6.2	5	2 8	7.4	6 9	0 6	26 8	0	7 2	7 7	9	-0 1
2000	302	600	2.6	2 4	6 5	5	2 8	7.4	6.8	7	0 4	0	7 2	7 6	8 8	-0 1
2000	302	700	3.2	2 1	5.8	5 1	2 8	7.4	6.8	0.6	26 3	0	7.1	7.6	7 9	-0 1
2000	302	800	2.9	2 4	6.3	5	2.9	7.4	6.5	7	0 8	0	7 2	7 4	7.7	-0 1
2000	302	900	3 2	2.3	6.3	5 1	2 8	7.3	6.7	0 5	4 6	0	7 2	7 6	9.6	-0 1
2000	302	1000	2.8	2 3	6 2	5 1	2 8	7.3	6.8	0 5	3	0	7.2	7 6	8.1	-0 1
2000	302	1100	3 1	2 8	6 2	5 1	2.8	7.3	6.8	0 5	-0.1	0	7.2	7.6	8	-0 1
2000	302	1200	2 7	3 9	6 2	5.1	2.7	7.4	6.9	7.1	-0.1	0	7	7.8	7.6	-0 1
2000	302	1300	3 2	2	6.2	5	2.8	7.4	6.8	0 5	24 2	0	7.3	7.8	7.9	-0.1
2000	302	1400	2 5	2.3	6 3	5	2.9	7.5	6.8	7	20 5	0	7.3	7.7	8	-0.1
2000	302	1500	3.1	2.5	6 2	5	2 9	7.5	6.8	0 5	16 8	0	7.3	7.8	8	-0 1
2000	302	1600	3	2.3	5 8	5.1	2.8	7.5	6.8	0 5	5.3	0	7.2	7.9	8.7	-0 1
2000	302	1700	3.2	2.2	6 2	5.1	2.8	7.5	6.6	0 5	15 4	0	7.1	7.9	7.5	-0 1
2000	302	1800	3	2.1	6 2	5 1	2.8	7.5	6.8	0 5	0	0	7.2	7.8	7.4	-0 1
2000	302	1900	2.6	2 1	6 2	5 1	2 8	7.4	6.8	7 1	-0.1	0	7.2	7.8	8.6	-0 1
2000	302	2000	3 1	2 2	6.3	5	2.7	7 4	6.8	0.7	-0 1	0	7.2	7.8	9.1	-0 1
2000	302	2100	2 6	2.5	6 3	5	2.8	7 4	6.8	7 1	16 9	0	7 1	7.7	8 5	-0 1
2000	302	2200	3.2	2 3	6 3	5	2.8	7 4	6.7	0 6	10.6	0	7 2	7.6	9.2	-0 1
2000	302	2300	3 2	2 2	6.2	5	2.8	7.4	6.9	0 6	-0.1	0	7 2	7.8	7 1	-0.1
2000	302	2400	2 8	3 3	6.2	5 1	2 8	7.4	6.9	7 1	-0.1	0	7 2	7.7	8	-0 1
2000	303	100	2 9	2 1	5 9	5.1	2.8	7.4	6.8	0 6	-0 1	0	7 2	7.7	8	-0 1
2000	303	200	2.9	2.5	6 4	5 1	2 8	7 4	6.8	0 5	-0.1	0	7 1	7 6	8 2	-0 1
2000	303	300	3 2	3.2	6 4	5	2.8	7 3	6.8	0 6	-0 1	0	7.2	7.6	8.8	-0.1
2000	303	400	3 2	2.1	6 3	5 1	2 8	7 4	6.8	0 6	11.6	0	7 2	7 7	8 7	-0.1

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Year	Julian Date	Time	Head (in feet) of Water Level Above Transducer							Flow Rate (in GPM)						
			RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09	RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09
2000	303	500	2 9	2.8	6 1	5	2 8	7 4	6 8	0.6	-0 1	0	7.2	7 7	8 5	-0 1
2000	303	600	3 2	2.1	5.8	5 1	2 8	7 3	6 7	0.6	-0 1	0	7.2	7 7	9	-0 1
2000	303	700	3.2	2.3	6.1	5 1	2 8	7 3	6 8	0 6	19.7	0	7	7 7	8 2	-0.1
2000	303	800	3 3	2.1	6.3	5.1	2.8	7.3	6.8	0.6	-0.1	0	7.1	7.4	8	-0 1
2000	303	900	3 3	2.2	6	5 1	2 8	7 3	6 9	0 5	26 6	0	7 1	7 6	8.4	-0 1
2000	303	1000	3 1	2.2	5.7	5 1	2 8	7 3	6 7	0 5	-0.1	0	7 2	7 6	8.3	-0 1
2000	303	1100	3 2	2.6	5.9	5	2.8	7.3	6 8	0 5	1 1	0	7	7 6	8 5	-0.1
2000	303	1200	3 1	2.5	6 4	5 1	2 8	7.3	6 9	0 5	0 4	0	7 2	7 6	6.6	-0.1
2000	303	1300	2.9	3.5	6.4	5	2 8	7.4	6.7	7 1	-0.1	0	7 4	7 7	8 4	-0.1
2000	303	1400	3 2	2	6.3	5.1	2.8	7 4	6 8	0 5	1.1	0	7.2	7.7	8 5	-0 1
2000	303	1500	2 9	2.1	6 3	5 1	2 8	7.4	6 8	0 5	0 5	0	7.2	7.8	7.4	-0 1
2000	303	1600	2.4	2.1	6 3	5 1	2 9	7 4	6.8	7 2	24 3	0	7	7.6	8.7	-0.1
2000	303	1700	2 5	2.5	6.2	5	2 8	7 4	6.9	7.1	11 7	0	7 2	7.8	8.2	-0.1
2000	303	1800	2 5	2.4	6.2	5.1	2.9	7 4	7.1	0.6	14 9	0	7.1	7.5	7.4	-0 1
2000	303	1900	3 2	2.4	6.2	5 1	2 8	7 4	6.9	0.5	12.5	0	7 1	7.6	7.3	-0 1
2000	303	2000	3	2.2	6.2	5 1	2 9	7 3	6.8	0.5	1.4	0	7 1	7 5	7.4	-0 1
2000	303	2100	3.3	3	6 2	5 1	2 8	7 3	6.7	0.5	0	0	6 9	7 5	7 9	-0.1
2000	303	2200	3 3	2.2	6 2	5.1	2 8	7.3	6.8	0.6	2.8	0	7 1	7 6	7 9	-0.1
2000	303	2300	3	3.1	6.2	5 1	2 9	7 3	6 5	0.6	-0.1	0	7 1	7.3	5 7	-0.1
2000	303	2400	2 7	3.5	6 2	5	2 9	7 3	6 8	0.6	-0 1	0	7 1	7.4	7.4	-0.1
2000	304	100	3.2	2.4	6.2	5 1	2 7	7 3	6 8	0 6	11	0	7	7 7	8 2	-0.1
2000	304	200	3 2	3.3	6.2	5	2.8	7 3	6 8	0.6	-0.1	0	7	7 5	7 8	-0.1
2000	304	300	3 2	2	6.2	5 1	2 8	7 3	6 7	0 6	1 4	0	7.2	7 6	8.4	-0 1
2000	304	400	3.2	3.2	6.2	5	2.8	7.3	6 8	0 6	-0.1	0	7.1	7.6	6.3	-0 1
2000	304	500	2 8	2.1	6.2	5	2 8	7.2	6 8	7 3	0	0	7.1	7.5	7.9	-0 1
2000	304	600	2.5	2 3	6.1	5	2 7	7 3	6 7	7 2	14 4	0	7	7.5	5	-0 1
2000	304	700	3 2	2 5	6.2	5	2.8	7.2	6.8	0.6	3 6	0	7.1	7.4	8.1	-0 1
2000	304	800	3 1	2 8	6.2	5	2 7	7 2	6 8	0 6	-0.1	0	7 1	7.5	7.8	-0 1
2000	304	900	3.2	2.7	6.2	5 1	2 8	7 2	6 8	0 6	-0.1	0	7 1	7 4	7 4	-0.1
2000	304	1000														
2000	304	1100														
2000	304	1200														
2000	304	1300														
2000	304	1400														
2000	304	1500														
2000	304	1600														
2000	304	1700														
2000	304	1800														
2000	304	1900														
2000	304	2000														
2000	304	2100														
2000	304	2200														
2000	304	2300														
2000	304	2400														
2000	305	100														
2000	305	200														
2000	305	300														
2000	305	400														
2000	305	500														
2000	305	600														
2000	305	700														
2000	305	800														

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Year	Julian Date	Time	Head (in feet) of Water Level Above Transducer							Flow Rate (in GPM)						
			RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09	RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09
2000	305	900														
2000	305	1000														
2000	305	1100														
2000	305	1200														
2000	305	1300														
2000	305	1400														
2000	305	1500														
2000	305	1600														
2000	305	1700														
2000	305	1800														
2000	305	1900														
2000	305	2000														
2000	305	2100														
2000	305	2200														
2000	305	2300														
2000	305	2400														
2000	306	100														
2000	306	200														
2000	306	300														
2000	306	400														
2000	306	500														
2000	306	600														
2000	306	700														
2000	306	800														
2000	306	900														
2000	306	1000														
2000	306	1100														
2000	306	1200														
2000	306	1300														
2000	306	1400														
2000	306	1500														
2000	306	1600														
2000	306	1700														
2000	306	1800														
2000	306	1900														
2000	306	2000														
2000	306	2100														
2000	306	2200														
2000	306	2300														
2000	306	2400														
2000	307	100														
2000	307	200														
2000	307	300														
2000	307	400														
2000	307	500														
2000	307	600														
2000	307	700														
2000	307	800														
2000	307	900														
2000	307	1000														
2000	307	1100														
2000	307	1200														

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Year	Julian Date	Time	Head (in feet) of Water Level Above Transducer							Flow Rate (in GPM)						
			RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09	RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09
2000	307	1300														
2000	307	1400														
2000	307	1500														
2000	307	1600														
2000	307	1700														
2000	307	1800														
2000	307	1900														
2000	307	2000														
2000	307	2100														
2000	307	2200														
2000	307	2300														
2000	307	2400														
2000	308	100														
2000	308	200														
2000	308	300														
2000	308	400														
2000	308	500														
2000	308	600														
2000	308	700														
2000	308	800														
2000	308	900														
2000	308	1000														
2000	308	1100														
2000	308	1200														
2000	308	1300														
2000	308	1400														
2000	308	1500														
2000	308	1600														
2000	308	1700														
2000	308	1800														
2000	308	1900														
2000	308	2000														
2000	308	2100														
2000	308	2200														
2000	308	2300														
2000	308	2400														
2000	309	100														
2000	309	200														
2000	309	300														
2000	309	400														
2000	309	500														
2000	309	600														
2000	309	700														
2000	309	800														
2000	309	900														
2000	309	1000														
2000	309	1100														
2000	309	1200														
2000	309	1300														
2000	309	1400														
2000	309	1500														
2000	309	1600														

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Year	Julian Date	Time	Head (in feet) of Water Level Above Transducer							Flow Rate (in GPM)						
			RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09	RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09
2000	309	1700														
2000	309	1800														
2000	309	1900														
2000	309	2000														
2000	309	2100														
2000	309	2200														
2000	309	2300														
2000	309	2400														
2000	310	100														
2000	310	200														
2000	310	300														
2000	310	400														
2000	310	500														
2000	310	600														
2000	310	700														
2000	310	800														
2000	310	900														
2000	310	1000														
2000	310	1100														
2000	310	1200														
2000	310	1300														
2000	310	1400														
2000	310	1500														
2000	310	1600														
2000	310	1700														
2000	310	1800														
2000	310	1900														
2000	310	2000														
2000	310	2100														
2000	310	2200														
2000	310	2300														
2000	310	2400														
2000	311	100														
2000	311	200														
2000	311	300														
2000	311	400														
2000	311	500														
2000	311	600														
2000	311	700														
2000	311	800														
2000	311	900														
2000	311	1000														
2000	311	1100														
2000	311	1200														
2000	311	1300														
2000	311	1400														
2000	311	1500														
2000	311	1600														
2000	311	1700														
2000	311	1800														
2000	311	1900														
2000	311	2000														

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Year	Julian Date	Time	Head (in feet) of Water Level Above Transducer							Flow Rate (in GPM)						
			RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09	RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09
2000	311	2100														
2000	311	2200														
2000	311	2300														
2000	311	2400														
2000	312	100														
2000	312	200														
2000	312	300														
2000	312	400														
2000	312	500														
2000	312	600														
2000	312	700														
2000	312	800														
2000	312	900														
2000	312	1000														
2000	312	1100														
2000	312	1200														
2000	312	1300														
2000	312	1400														
2000	312	1500														
2000	312	1600														
2000	312	1700														
2000	312	1800														
2000	312	1900														
2000	312	2000														
2000	312	2100														
2000	312	2200														
2000	312	2300														
2000	312	2400														
2000	313	100														
2000	313	200														
2000	313	300														
2000	313	400														
2000	313	500														
2000	313	600														
2000	313	700														
2000	313	800														
2000	313	900														
2000	313	1000														
2000	313	1100														
2000	313	1200														
2000	313	1300														
2000	313	1400														
2000	313	1500														
2000	313	1600														
2000	313	1700														
2000	313	1800														
2000	313	1900														
2000	313	2000														
2000	313	2100														
2000	313	2200														
2000	313	2300														
2000	313	2400														

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Year	Julian Date	Time	Head (in feet) of Water Level Above Transducer							Flow Rate (in GPM)						
			RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09	RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09
2000	314	100														
2000	314	200														
2000	314	300														
2000	314	400														
2000	314	500														
2000	314	600														
2000	314	700														
2000	314	800														
2000	314	900														
2000	314	1000														
2000	314	1100														
2000	314	1200														
2000	314	1300														
2000	314	1400														
2000	314	1500														
2000	314	1600														
2000	314	1700														
2000	314	1800														
2000	314	1900														
2000	314	2000														
2000	314	2100														
2000	314	2200														
2000	314	2300														
2000	314	2400														
2000	315	100														
2000	315	200														
2000	315	300														
2000	315	400														
2000	315	500														
2000	315	600														
2000	315	700														
2000	315	800														
2000	315	900														
2000	315	1000														
2000	315	1100														
2000	315	1200														
2000	315	1300														
2000	315	1400														
2000	315	1500														
2000	315	1600														
2000	315	1700														
2000	315	1800														
2000	315	1900														
2000	315	2000														
2000	315	2100														
2000	315	2200														
2000	315	2300														
2000	315	2400														
2000	316	100														
2000	316	200														
2000	316	300														
2000	316	400														

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Year	Julian Date	Time	Head (in feet) of Water Level Above Transducer							Flow Rate (in GPM)						
			RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09	RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09
2000	316	500														
2000	316	600														
2000	316	700														
2000	316	800														
2000	316	900														
2000	316	1000														
2000	316	1100														
2000	316	1200														
2000	316	1300														
2000	316	1400														
2000	316	1500														
2000	316	1600														
2000	316	1700														
2000	316	1800														
2000	316	1900														
2000	316	2000														
2000	316	2100														
2000	316	2200														
2000	316	2300														
2000	316	2400														
2000	317	100														
2000	317	200														
2000	317	300														
2000	317	400														
2000	317	500														
2000	317	600														
2000	317	700														
2000	317	800														
2000	317	900														
2000	317	1000														
2000	317	1100														
2000	317	1200														
2000	317	1300														
2000	317	1400														
2000	317	1500														
2000	317	1600														
2000	317	1700														
2000	317	1800														
2000	317	1900														
2000	317	2000														
2000	317	2100														
2000	317	2200														
2000	317	2300														
2000	317	2400														
2000	318	100														
2000	318	200														
2000	318	300														
2000	318	400														
2000	318	500														
2000	318	600														
2000	318	700														
2000	318	800														

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Year	Julian Date	Time	Head (in feet) of Water Level Above Transducer							Flow Rate (in GPM)						
			RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09	RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09
2000	318	900														
2000	318	1000														
2000	318	1100														
2000	318	1200														
2000	318	1300														
2000	318	1400														
2000	318	1500														
2000	318	1600														
2000	318	1700														
2000	318	1800														
2000	318	1900														
2000	318	2000														
2000	318	2100														
2000	318	2200														
2000	318	2300														
2000	318	2400														
2000	319	100														
2000	319	200														
2000	319	300														
2000	319	400														
2000	319	500														
2000	319	600														
2000	319	700														
2000	319	800														
2000	319	900														
2000	319	1000														
2000	319	1100														
2000	319	1200														
2000	319	1300														
2000	319	1400														
2000	319	1500														
2000	319	1600														
2000	319	1700														
2000	319	1800														
2000	319	1900														
2000	319	2000														
2000	319	2100														
2000	319	2200														
2000	319	2300														
2000	319	2400														
2000	320	100														
2000	320	200														
2000	320	300														
2000	320	400														
2000	320	500														
2000	320	600														
2000	320	700														
2000	320	800														
2000	320	900														
2000	320	1000														
2000	320	1100														
2000	320	1200														

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Year	Julian Date	Time	Head (in feet) of Water Level Above Transducer							Flow Rate (in GPM)						
			RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09	RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09
2000	320	1300														
2000	320	1400														
2000	320	1500														
2000	320	1600														
2000	320	1700														
2000	320	1800														
2000	320	1900														
2000	320	2000														
2000	320	2100														
2000	320	2200														
2000	320	2300														
2000	320	2400														
2000	321	100														
2000	321	200														
2000	321	300														
2000	321	400														
2000	321	500														
2000	321	600														
2000	321	700														
2000	321	800														
2000	321	900														
2000	321	1000														
2000	321	1100														
2000	321	1200														
2000	321	1300														
2000	321	1400														
2000	321	1500														
2000	321	1600														
2000	321	1700														
2000	321	1800														
2000	321	1900														
2000	321	2000														
2000	321	2100														
2000	321	2200														
2000	321	2300														
2000	321	2400														
2000	322	100														
2000	322	200														
2000	322	300														
2000	322	400														
2000	322	500														
2000	322	600														
2000	322	700														
2000	322	800														
2000	322	900														
2000	322	1000														
2000	322	1100														
2000	322	1200														
2000	322	1300														
2000	322	1400														
2000	322	1500														
2000	322	1600														

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Year	Julian Date	Time	Head (in feet) of Water Level Above Transducer							Flow Rate (in GPM)						
			RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09	RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09
2000	322	1700														
2000	322	1800														
2000	322	1900														
2000	322	2000														
2000	322	2100														
2000	322	2200														
2000	322	2300														
2000	322	2400														
2000	323	100														
2000	323	200														
2000	323	300														
2000	323	400														
2000	323	500														
2000	323	600														
2000	323	700														
2000	323	800														
2000	323	900														
2000	323	1000														
2000	323	1100														
2000	323	1200														
2000	323	1300														
2000	323	1400														
2000	323	1500														
2000	323	1600														
2000	323	1700														
2000	323	1800														
2000	323	1900														
2000	323	2000														
2000	323	2100														
2000	323	2200														
2000	323	2300														
2000	323	2400														
2000	324	100														
2000	324	200														
2000	324	300														
2000	324	400														
2000	324	500														
2000	324	600														
2000	324	700														
2000	324	800														
2000	324	900														
2000	324	1000														
2000	324	1100														
2000	324	1200														
2000	324	1300														
2000	324	1400														
2000	324	1500														
2000	324	1600														
2000	324	1700														
2000	324	1800														
2000	324	1900														
2000	324	2000														

Appendix E - Data Logger Download Data October - December 2000

Year	Julian Date	Time	Head (in feet) of Water Level Above Transducer							Flow Rate (in GPM)						
			RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09	RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09
2000	324	2100														
2000	324	2200														
2000	324	2300														
2000	324	2400														
2000	325	100														
2000	325	200														
2000	325	300														
2000	325	400														
2000	325	500														
2000	325	600														
2000	325	700														
2000	325	800														
2000	325	900														
2000	325	1000	3 3	1 6	1 8	4 5	2 9	8 4	5 2							
2000	325	1100	3 7	1 5	1 6	4.3	2 7	8 2	5 1							
2000	325	1200	3 7	1.4	1 9	4.3	2 6	8.1	5							
2000	325	1300	3 7	1 3	1.7	4.3	2.6	8.1	5							
2000	325	1400	3.3	1 4	1 7	4.2	2 7	8	4.9							
2000	325	1500	3 8	1 4	1 6	4.2	2 7	8	4.9							
2000	325	1600	3 7	1.4	1 8	4.2	2.7	8	4.8							
2000	325	1700	3 8	1 8	1 7	4.2	2.7	8	4.9							
2000	325	1800	3 7	1 9	1 9	4.2	2.7	8	4.9							
2000	325	1900	3 2	1.9	1 8	4.2	2.7	8	4.9							
2000	325	2000	3 4	1 9	1 7	4.2	2.7	7.9	4.9							
2000	325	2100	3.3	1.9	2 2	4.2	2.7	7.9	4.9							
2000	325	2200	3 3	1 9	2 1	4.2	2.7	7 9	4 9							
2000	325	2300	3.3	1 9	1 5	4.2	2.7	7 9	4 9							
2000	325	2400	3 3	1.9	1 8	4.2	2.7	7.9	4 9							
2000	326	100	3 3	1 9	1 8	4.2	2.7	7.9	4 9							
2000	326	200	3.3	1 9	1 8	4.2	2.7	7 9	5							
2000	326	300	3 3	1.9	1 8	4.2	2.7	7 9	5							
2000	326	400	3 3	1.9	1.8	4.2	2.7	7 9	5							
2000	326	500	2 9	1 9	1 8	4.1	2.7	7.9	5							
2000	326	600	3 2	1 9	1 8	4.1	2.7	7.7	5							
2000	326	700	2.8	1 8	1 8	4.1	2.7	7 7	5							
2000	326	800	3 3	1.8	1.8	4.1	2.7	7 7	5							
2000	326	900	3 6	1 8	1 8	4.1	2.7	7 7	5							
2000	326	1000	2 9	1 8	1 9	4.1	2.7	7 6	4 9							
2000	326	1100	3	1 7	1 8	4.1	2.7	7.6	4.9							
2000	326	1200	3.7	1.7	1 8	4.1	2.7	7 6	4 9							
2000	326	1300	3 7	1 7	2.1	4.1	2.7	7 6	4 9							
2000	326	1400	3 7	1 6	1 7	4.1	2.7	7.5	4 9							
2000	326	1500	3.7	1.6	1 8	4.1	2.7	7.5	4.9							
2000	326	1600	3 4	1 6	1 8	4.1	2.7	7 5	4 9							
2000	326	1700	3 4	1 6	1 5	4.1	2.6	7 5	4 9							
2000	326	1800	3 3	1.6	1 6	4.1	2.7	7 5	4 9							
2000	326	1900	3 3	1 6	1 7	4.1	2.7	7 5	5							
2000	326	2000	3 3	1 6	1 8	4.1	2.7	7 5	5							
2000	326	2100	3 3	1 6	1 8	4	2.7	7 5	5							
2000	326	2200	3.3	1 6	1 8	4	2.7	7 5	5							
2000	326	2300	3.3	1 6	1.8	4	2.7	7 5	5							
2000	326	2400	3.3	1 5	1 8	4	2.7	7.5	5							

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Year	Julian Date	Time	Head (in feet) of Water Level Above Transducer							Flow Rate (in GPM)						
			RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09	RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09
2000	327	100	3.3	1 5	1 9	4	2 7	7 5	5							
2000	327	200	3 3	1 5	2 2	4	2 7	7.5	5							
2000	327	300	3.3	1.5	1 3	4	2 7	7.4	5							
2000	327	400	3 3	1.5	1 8	4	2 7	7 4	5							
2000	327	500	3 3	1.5	1.8	3 9	2 7	7 4	5							
2000	327	600	3 3	1 5	1.7	3 9	2 7	7 4	5							
2000	327	700	3.3	1 5	2	3.9	2.8	7 4	5							
2000	327	800	3.3	1 5	1.9	3.9	2 7	7.4	5							
2000	327	900	3 2	1.5	1 7	3.9	2.7	7.3	5							
2000	327	1000	3 2	1.5	1 6	3.9	2 7	7.2	4 9							
2000	327	1100	3 2	1.4	1.9	3 9	2 7	7 1	4 8							
2000	327	1200	3 3	1 4	1.6	3 9	2 8	7 1	4.8							
2000	327	1300	3 7	2.7	7.3		4.1	9 2	6 7							
2000	327	1400	3.8	2 9	7 8		4 3	9.4	6 8							
2000	327	1500	3.8	3	7 8		4 4	9.5	6.9							
2000	327	1600	3 8	3.1	7.8		4 4	9.6	7							
2000	327	1700	3 8	3.1	7 9		4.4	9 6	7 1							
2000	327	1800	3 8	3 2	7 9		4 5	9 7	7 2							
2000	327	1900	3 8	3 2	7.9		4 5	9.8	7 2							
2000	327	2000	3.8	3 2	8		4 5	9 8	7.2							
2000	327	2100	3.8	3 2	8		4.6	9 8	7 3							
2000	327	2200	3 8	3 2	8		4.6	9 8	7 3							
2000	327	2300	3 8	3.3	8		4.6	9 9	7.3							
2000	327	2400	3.8	3.3	8		4 6	9.9	7.4							
2000	328	100	3 8	3.3	8.1		4 6	9.9	7 4							
2000	328	200	3 8	3.3	8 1		4 6	9 9	7.4							
2000	328	300	3.8	3 3	8.1		4 6	9.9	7 4							
2000	328	400	3.9	3 3	8.1		4.6	10	7 4							
2000	328	500	3.9	3.3	8 1		4.6	10	7 4							
2000	328	600	3 8	3 3	8 1		4.6	10	7 4							
2000	328	700	3 8	3.3	8.1		4 6	10	7.5							
2000	328	800	3 8	3.4	8.1		4 6	10	7.5							
2000	328	900	3 8	3 3	8 1		4 6	10	7.5							
2000	328	1000	3.8	3 3	8 1		4 6	10	7 5							
2000	328	1100	3.8	3 4	8 1		4 6	10	7 5							
2000	328	1200	3 9	3 4	8.1		4.6	10	7.5							
2000	328	1300	3 9	3.4	8 1		4.6	10	7.5							
2000	328	1400	3 9	3 4	8 1		4.6	10	7 5							
2000	328	1500	3.9	3.4	8		4.6	10	7.5							
2000	328	1600	3 9	3.4	8		4.6	10	7.5							
2000	328	1700	3 9	3.4	8		4.6	10	7.5							
2000	328	1800	3.9	3 4	8		4 6	10	7 5							
2000	328	1900	3.9	3 4	8		4 6	10	7 5							
2000	328	2000	3.9	3.4	8		4.6	10	7 5							
2000	328	2100	3.9	3 4	8		4 6	10	7 5							
2000	328	2200	3 9	3 5	8		4 6	10	7 5							
2000	328	2300	3 9	3 5	8.1		4.7	10	7 5							
2000	328	2400	3 9	3.5	8.1		4.7	10	7.5							
2000	329	100	3 9	3 5	8 1		4 7	10	7.5							
2000	329	200	3.9	3 5	8 1		4 7	10	7 5							
2000	329	300	3 9	3 5	8.1		4.7	10	7.6							
2000	329	400	3.9	3 5	8 1		4 7	10	7 5							

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Year	Julian Date	Time	Head (in feet) of Water Level Above Transducer							Flow Rate (in GPM)						
			RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09	RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09
2000	329	500	3.9	3.5	8		4 6	10	7 5							
2000	329	600	4	3.5	8		4.6	10	7 5							
2000	329	700	4	3.5	8		4 6	10	7.5							
2000	329	800	4	3 5	8		4 6	10	7 5							
2000	329	900	4	3.5	8		4 6	10	7 5							
2000	329	1000	4	3 5	8		4.6	10	7.5							
2000	329	1100	4	3 5	8		4 6	10	7 5							
2000	329	1200	4	3.5	8		4 6	10	7 5							
2000	329	1300	4	3.5	8		4.6	10	7 6							
2000	329	1400	4 1	3 6	7 9		4 5	10	7.6							
2000	329	1500	4.1	3 7	8		4 9	10 1	7 6							
2000	329	1600	4 2	3 7	8		4 9	10 1	7.5							
2000	329	1700	4 1	3 7	7.9		4.9	10 1	7.5							
2000	329	1800	4 1	3 7	7.9		4 9	10 1	7.5							
2000	329	1900	4.1	3 6	7.9		4 9	10 1	7.5							
2000	329	2000	4 1	3.6	7.9		4 8	10 1	7.4							
2000	329	2100	4 1	3 6	7.9		4.8	10.1	7.4							
2000	329	2200	4	3 6	7 9		4 8	10	7.4							
2000	329	2300	4	3 6	7 9		4 8	10	7.4							
2000	329	2400	4	3.6	7 9		4 8	10	7.4							
2000	330	100	4	3 6	7 9		4.8	10	7.4							
2000	330	200	4	3.6	7 9		4 8	10	7.4							
2000	330	300	4	3.6	7 9		4 8	10	7.4							
2000	330	400	4	3 6	7 9		4 8	10 1	7.4							
2000	330	500	4	3.6	7 9		4 8	10 1	7.4							
2000	330	600	4	3.6	7.9		4 8	10.1	7.4							
2000	330	700	4	3 6	7 9		4 8	10 1	7 4							
2000	330	800	3 9	3.6	7 9		4 8	10 1	7.4							
2000	330	900	3 9	3 7	7.9		4.8	10 1	7.4							
2000	330	1000	3 9	3 7	7 9		4 9	10 1	7.4							
2000	330	1100	3.9	3.7	7 9		4 9	10 1	7.4							
2000	330	1200	3.9	3 7	8		4 9	10.1	7.4							
2000	330	1300	3.9	3 7	8		4 9	10 1	7 4							
2000	330	1400	3.9	3 7	8		4 9	10 1	7 4							
2000	330	1500	3.9	3.7	8		4 9	10 1	7.4							
2000	330	1600	3.9	3.7	8		4 9	10 2	7.4							
2000	330	1700	3.9	3.8	8		4.9	10.2	7.4							
2000	330	1800	3.9	3.8	8		4.9	10.2	7.4							
2000	330	1900	3.9	3 8	8		5	10 2	7.5							
2000	330	2000	3 9	3.8	8		5	10 2	7.5							
2000	330	2100	3 9	3.9	8 1		5	10 2	7 5							
2000	330	2200	3 9	3.9	8 1		5	10 2	7.5							
2000	330	2300	3 8	3.9	8 1		5	10 3	7.5							
2000	330	2400	3.9	3.9	8 1		5	10.3	7 5							
2000	331	100	3 9	3 9	8.1		5	10 3	7 5							
2000	331	200	3.9	3 9	8 1		5	10 3	7 6							
2000	331	300	3 9	3.9	8 2		5.1	10 3	7.6							
2000	331	400	3.9	3.9	8 2		5.1	10 4	7 6							
2000	331	500	3 9	3 9	8.2		5.1	10.4	7.6							
2000	331	600	3.9	3 9	8 2		5 1	10 4	7 6							
2000	331	700	3 9	3 9	8 2		5.1	10 4	7 7							
2000	331	800	3.9	3 9	8 2		5 1	10 4	7 7							

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Year	Julian Date	Time	Head (in feet) of Water Level Above Transducer							Flow Rate (in GPM)						
			RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09	RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09
2000	331	900	3.9	3 9	8 2		5 1	10.4	7 7							
2000	331	1000	3 9	3 8	8 1		5	10 3	7 6							
2000	331	1100	3 9	3.8	8 1		4.9	10 3	7.6							
2000	331	1200	3 9	3 8	8		4.9	10 3	7 5							
2000	331	1300	3 9	3.8	8		4.9	10 3	7 5							
2000	331	1400	3 9	3 8	8		4 8	10 3	7 5							
2000	331	1500	3 9	3 8	8		4 8	10.3	7 5							
2000	331	1600	3 9	3 8	8		4 9	10 3	7.5							
2000	331	1700	3 9	3 8	8 1		4 9	10 4	7.6							
2000	331	1800	3.9	3 8	8 1		5	10.4	7 6							
2000	331	1900	3.9	3.9	8.2		5	10 4	7 7							
2000	331	2000	3 9	3 9	8.2		5	10 5	7.7							
2000	331	2100	3.9	3 9	8 2		5 1	10.5	7 7							
2000	331	2200	3 9	3 9	8 2		5 1	10.5	7 7							
2000	331	2300	3 9	3 9	8.3		5 1	10 5	7.7							
2000	331	2400	3 9	3.9	8.3		5 1	10 5	7.7							
2000	332	100	3.9	3.9	8 3		5.1	10 5	7 8							
2000	332	200	3 9	3.9	8.3		5.2	10 6	7 8							
2000	332	300	3 9	3 9	8.4		5 2	10.6	7 8							
2000	332	400	3 9	3 9	8 4		5.2	10 6	7.8							
2000	332	500	3.9	4	8 4		5 2	10.6	7 8							
2000	332	600	3 9	3 9	8 4		5 2	10.6	7 8							
2000	332	700	3 9	4	8 4		5.2	10 6	7.9							
2000	332	800	3.9	3.9	8 4		5 2	10 6	7.9							
2000	332	900	3 9	3.9	8.4		5 2	10 6	7 8							
2000	332	1000	3.9	3 9	2 3		3.1	8 4	5.7							
2000	332	1100	3 9	3 6	1 6		2 9	8.2	5 5							
2000	332	1200	3 9	2 5	1.7		2 8	8	5.5							
2000	332	1300	3.7	2 4	2 2		2 7	8.1	5.4							
2000	332	1400	3.6	1 8	1 9		2 7	7.9	5.3							
2000	332	1500	3 6	1.4	1.9		2 6	7 8	5.3							
2000	332	1600	3 7	3.5	2.1		2.6	7 8	5.2							
2000	332	1700	3.6	-21.3	2		2.6	7 8	5 3							
2000	332	1800	3 7	3 7	2.1		2.7	7.8	5 3							
2000	332	1900	3 6	3 7	1 8		2 7	7 8	5 3							
2000	332	2000	3.6	3 8	1.5		2.7	7.8	5.3							
2000	332	2100	3.4	3.8	1 9		2.7	7.8	5.3							
2000	332	2200	3.4	3.8	1 8		2 7	7.8	5.3							
2000	332	2300	3 4	3.8	2 2		2 7	7.8	5.3							
2000	332	2400	3 4	3.8	2 3		2 7	7 8	5 3							
2000	333	100	3 4	3 8	1.9		2.7	7 8	5.3							
2000	333	200	3.4	3 8	1 5		2.6	7 7	5 3							
2000	333	300	3.3	3 9	1 8		2 6	7 7	5 3							
2000	333	400	3.4	3.9	1 8		2.7	7.7	5.3							
2000	333	500	3 4	3 9	2 2		2 7	7.7	5.3							
2000	333	600	3 3	3.9	2.2		2 7	7.7	5.3							
2000	333	700	3 3	3.9	1 6		2 7	7 7	5.3							
2000	333	800	3 3	3.9	1 9		2 7	7 7	5 3							
2000	333	900	3 3	3 9	1.8		2 7	7 6	5 3							
2000	333	1000	3.3	3 9	2.2		2.6	7 6	5 2							
2000	333	1100	3 6	3 8	2		2 7	7 5	5.2							
2000	333	1200	3 7	3 8	1 8		2 7	7.5	5 1							

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Year	Julian Date	Time	Head (in feet) of Water Level Above Transducer							Flow Rate (in GPM)						
			RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09	RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09
2000	333	1300	3 6	3 8	1 7		2 7	7 5	5 1							
2000	333	1400	3 7	3 7	2		2 7	7 4	5 1							
2000	333	1500	3 6	3.7	1 8		2.7	7 4	5 1							
2000	333	1600	3 6	3.7	1.8		2 7	7.4	5.1							
2000	333	1700	3 6	3 8	1 4		2.7	7.4	5.1							
2000	333	1800	3 6	3 8	1 7		2 7	7.4	5 1							
2000	333	1900	3.6	3 8	1.8		2 7	7.4	5 1							
2000	333	2000	3.6	3.8	1 9		2.7	7 4	5.1							
2000	333	2100	3 7	3.8	2 1		2 7	7 4	5.1							
2000	333	2200	3 6	3 8	1 9		2 7	7.4	5 1							
2000	333	2300	3 6	3.8	1 9		2.7	7 4	5 1							
2000	333	2400	3.5	3 8	2 2		2 7	7 4	5 1							
2000	334	100	3.6	3 8	2		2.7	7 4	5 1							
2000	334	200	3.6	3.8	2 1		2.7	7.4	5.2							
2000	334	300	3 6	3.8	1 8		2.7	7.4	5.2							
2000	334	400	3.7	3 8	1 8		2.7	7.4	5.2							
2000	334	500	3.6	3 8	1 8		2 7	7.4	5 2							
2000	334	600	3 6	3 9	1 5		2 7	7.4	5 2							
2000	334	700	3 6	3 9	1.3		2 7	7 5	5 2							
2000	334	800	3.7	3 9	1 8		2.5	7 5	5.3							
2000	334	900	3 3	3.8	1.7		2.7	7.5	5.3							
2000	334	1000	3 6	3 8	1.9		2 7	7.4	5 2							
2000	334	1100	3 7	3.8	1.6		2.7	7.4	5.2							
2000	334	1200	3 7	3 8	1 8		2 7	7.4	5 2							
2000	334	1300	3 6	3.8	1.8		2 7	7 4	5 2							
2000	334	1400	3.6	3 8	1 8		2 7	7 4	5 2							
2000	334	1500	3 6	3.8	1.8		2.7	7 3	5.2							
2000	334	1600	3.7	3.8	1.4		2.7	7.4	5.2							
2000	334	1700	3 4	3 8	2 1		2 7	7.4	5 3							
2000	334	1800	3 4	3 8	1 7		2 7	7 4	5 3							
2000	334	1900	3 4	3.9	2 2		2.7	7 5	5.4							
2000	334	2000	3.4	3.9	2 3		2.7	7 5	5.4							
2000	334	2100	3.3	3 9	1 8		2 7	7.5	5.4							
2000	334	2200	3 4	3.9	1.8		2.7	7.5	5.4							
2000	334	2300	3 3	3 9	2.1		2 7	7.5	5.4							
2000	334	2400	3.3	3.9	1 6		2.7	7.5	5.5							
2000	335	100	3 3	3 9	1 4		2 7	7 5	5 5							
2000	335	200	3 3	3 9	2 1		2 7	7.5	5 5							
2000	335	300	3.3	3 9	1 7		2 7	7.5	5 5							
2000	335	400	3.3	3.9	1 8		2 7	7 6	5.6							
2000	335	500	3 4	3.9	1.8		2.8	7.6	5.6							
2000	335	600	3 3	3 9	1.8		2.7	7.6	5 6							
2000	335	700	3 4	3 9	2 1		2 7	7 6	5 6							
2000	335	800	3 3	3 9	1.4		2.7	7 6	5.6							
2000	335	900	3 3	3 9	2		2 7	7.5	5 6							
2000	335	1000	3.3	3 9	1 9		2.7	7 5	5 5							
2000	335	1100	3 3	3 5	1 7		2 7	7.4	5.5							
2000	335	1200	3.3	3.7	2 2		2 7	7.4	5 4							
2000	335	1300	3 4	1 8	1.8		2 7	7 4	5 4							
2000	335	1400	3.5	2.4	2.1		2 7	7 3	5 4							
2000	335	1500	3 7	2 3	2.2		2 8	7 3	5 4							
2000	335	1600	3.6	2 5	1 4		2 7	7 3	5 4							

Appendix E - Data Logger Download Data October - December 2000

Year	Julian Date	Time	Head (in feet) of Water Level Above Transducer							Flow Rate (in GPM)						
			RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09	RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09
2000	335	1700	3 6	2 5	2 1		2 7	7 4	5 4							
2000	335	1800	3 6	2 5	2		2.7	7 4	5 5							
2000	335	1900	3.8	3 5	8 3		4 3	9 7	7 6							
2000	335	2000	3 9	3 6	8 4		4 4	9 9	7 7							
2000	335	2100	3 9	3 6	8 5		4.5	9.9	7 8							
2000	335	2200	3 9	3 6	8 5		4 5	10	7 8							
2000	335	2300	3 9	3 6	8.5		4 6	10.1	7 9							
2000	335	2400	3 9	3 7	8.5		4 6	10.1	7 9							
2000	336	100	3 9	3.7	8 6		4 6	10.2	7 9							
2000	336	200	3 9	3 6	8.6		4 6	10.2	8							
2000	336	300	3 9	3 7	8.6		4.7	10.2	8							
2000	336	400	3.9	3 7	8.6		4 7	10.2	8							
2000	336	500	3 9	3.6	8.6		4 7	10.3	8							
2000	336	600	3 9	3 6	8.6		4 7	10.3	8							
2000	336	700	3 9	3 6	8.6		4 7	10.3	8							
2000	336	800	3 9	3 6	8.6		4 7	10.3	8							
2000	336	900	3 9	3 6	8.6		4 7	10.3	8							
2000	336	1000	3 9	3 6	8.6		4 7	10 3	8.1							
2000	336	1100	3 9	3 6	8.6		4 7	10.3	8.1							
2000	336	1200	3 9	3 6	8.5		4 7	10.3	8.1							
2000	336	1300	4	3 6	8.5		4.6	10.2	8							
2000	336	1400	4	3 6	8.4		4 6	10 2	8							
2000	336	1500	4	3 6	8.4		4 5	10.2	8							
2000	336	1600	4	3.6	8.4		4.6	10 2	7.9							
2000	336	1700	4 3	2 4	1.7		2.7	8.1	5 9	4 8	20	5 8		16.9	21 4	21.4
2000	336	1800	4 3	2 5	2		2 6	7.9	5 8	3.3	16.8	5 5		16.7	21 2	21.4
2000	336	1900	4 3	2 5	1.7		2 7	7 9	5 8	3 4	16 8	5 7		16.3	25 4	21.4
2000	336	2000	4.3	2 5	1.8		2 7	7.8	5.7	3 4	16 8	5 6		15.7	31.7	21.4
2000	336	2100	4 3	2.4	2.1		2.7	7 8	5 7	3 4	16 8	5 4		15 3	30 2	21.3
2000	336	2200	4 4	2 4	1.8		2 7	7 8	5 7	3 4	17 2	5 8		15 3	29 2	21 3
2000	336	2300	4.4	2 4	1.7		2.7	7.7	5.7	3.4	16 8	5 6		15 1	29	21 1
2000	336	2400	4.4	2 5	1.9		2.7	7.7	5 7	3.4	16.8	4 7		15 1	29.2	21 1
2000	337	100	4 3	2.5	1.7		2.7	7.7	5 7	3 3	16.8	5.7		14 9	29	21.1
2000	337	200	4 4	2 5	1.8		2.7	7.7	5 7	3 4	16.4	5.5		14 9	28 9	21 1
2000	337	300	4 4	2 6	1.9		2.7	7 7	5 6	3.4	14.1	5.4		14.9	29	21 1
2000	337	400	4.4	2 5	1.8		2.7	7.7	5.6	3 4	15.2	5.5		14 7	28.7	21 1
2000	337	500	4.4	2.5	1.8		2.7	7.6	5 6	3.4	15.2	5.5		14 7	28.7	21.1
2000	337	600	4 4	2.4	1.8		2.7	7 6	5 6	3.4	18.8	5.5		14 7	28.7	21.1
2000	337	700	4 3	2 5	2		2 7	7 6	5 6	3.4	16 4	5.4		14 7	28.6	21.1
2000	337	800	4.3	2 5	1.7		2.7	7 6	5 6	3.3	16.4	5.6		14.7	27.2	21
2000	337	900	4.3	2 4	2.2		2 7	7.6	5 6	3.5	19.6	5 5		15 1	27.2	21
2000	337	1000	4.3	2 5	1.4		2.7	7 6	5 7	3.4	17.2	5.9		14 9	27 2	21
2000	337	1100	4 3	2.5	1.8		2 7	7 6	5 7	3.3	17 6	5 7		14 9	27.4	21
2000	337	1200	4.3	2.5	1.8		2 7	7.6	5.7	3.4	17.6	5 6		14 9	27.4	21
2000	337	1300	4 3	2.5	1.8		2 7	7 6	5 7	2.8	17 2	5 6		14 9	27 1	21
2000	337	1400	4 2	2.5	1.8		2.7	7.6	5 7	2.8	17 6	5 5		14.9	27 1	21
2000	337	1500	4 2	2.6	2 1		2 7	7 6	5 7	2.7	14 4	5.2		15 1	27	21
2000	337	1600	4 2	2.5	1.8		2.7	7 6	5 7	2 7	18 4	5 6		15.1	27 2	21
2000	337	1700	4 2	2.5	1 8		2 7	7 6	5 7	2 7	18	5 6		14.9	26 9	21
2000	337	1800	4 2	2.4	2		2 7	7 7	5 7	2 7	18	5 1		14.9	26 7	21
2000	337	1900	4.2	2.4	2 3		2 7	7 7	5 8	2 7	18	4 9		14.9	26.7	21
2000	337	2000	4 2	2.5	2		2 7	7.6	5 8	2 7	16	5 6		14.9	26 7	21

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Year	Julian Date	Time	Head (in feet) of Water Level Above Transducer							Flow Rate (in GPM)						
			RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09	RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09
2000	337	2100	4 2	2 4	1 7		2.7	7.6	5 8	2 7	18 4	5.6		14 9	26 7	21
2000	337	2200	4.2	2 5	1 8		2.7	7 6	5 8	2 7	16 8	5.5		14 9	26 7	21
2000	337	2300	4 2	2.5	2.1		2 7	7 6	5 8	2 7	16 8	5		13 5	26.7	21
2000	337	2400	4.2	2 5	1 8		2 7	7.6	5.8	2.7	16.8	5.5		13 1	26.7	21
2000	338	100	4.2	2 5	1 8		2 7	7.6	5.8	2 6	16 8	5 5		13.1	26 7	21
2000	338	200	4.2	2 5	1.8		2 7	7.6	5.9	2 5	16 8	5 5		13.3	26.7	20.8
2000	338	300	4.2	2 5	1 8		2 7	7.6	5 9	2 5	16.8	5 5		13 5	26 7	21
2000	338	400	4.2	2.5	1.8		2 7	7.6	5 9	2 5	16 8	5 5		13.5	26 7	20 8
2000	338	500	4 2	2 5	1.8		2 7	7.6	5 9	2 6	16.8	5 1		13 5	26 7	20 8
2000	338	600	4 2	2 5	1.7		2 7	7.6	5.9	2 6	16.8	5.7		13 7	26 7	20 8
2000	338	700	4.2	2 5	1 5		2 7	7 6	5 9	2 5	16 8	5 7		13 9	26.7	20 8
2000	338	800	4 2	2 5	1.6		2 8	7 6	5 9	2.5	16.8	5 4		13.5	26.9	20 8
2000	338	900	4 2	2 4	2		2.7	7.6	5 9	2.5	19 2	4 9		13 9	26.9	20.8
2000	338	1000	4 2	2 5	2 1		2.7	7.6	5 9	2 4	17.2	5.1		13.7	26 9	20.8
2000	338	1100	4.2	2.5	1 8		2 7	7 6	5 9	2 4	17 2	5 5		13.7	26 9	20.8
2000	338	1200	4.2	2.4	1 8		2.7	7 5	5 8	2 4	17 6	5 5		13.7	26 9	20 9
2000	338	1300	4.2	2.3	1.7		2.7	7 5	5 8	2 4	18	6 2		13.1	26.8	20 9
2000	338	1400	4 3	2.3	2		2.7	7.5	5.8	2.4	18	5		13 1	26 9	20 8
2000	338	1500	4.3	2.5	1 8		2.7	7 5	5 8	2 4	14	5.4		12 9	26 8	20 8
2000	338	1600	4 3	2.5	1 8		2.7	7 5	5 8	2 4	14	5 4		12.7	26 9	20 8
2000	338	1700	4 3	2 5	1 8		2.7	7 5	5 8	2 4	14.8	5.4		12 7	26 8	20.8
2000	338	1800	4.3	2.5	1 7		2.8	7 5	5 8	2 4	14.8	5.5		12 9	26.8	20 8
2000	338	1900	4 3	2.5	1.8		2.7	7 5	5 8	2 4	14.8	5.4		13.3	26 9	20 8
2000	338	2000	4.2	2.5	1 8		2.7	7.5	5.9	2.4	14.8	5 4		13 3	26.9	20.8
2000	338	2100	4.2	2.5	1 8		2.7	7 5	5.9	2 4	16	5 4		13 3	26.6	20.8
2000	338	2200	4.2	2.6	1 9		2 7	7 5	5.9	2 4	12	5		13 3	26.9	20.8
2000	338	2300	4.3	2 5	2 3		2 7	7 5	5.9	2 4	15.6	4.7		13.3	26 9	20.8
2000	338	2400	4.2	2.5	1 6		2 7	7 5	5.9	2 4	15 6	5 5		13.3	26 9	20 8
2000	339	100	4.3	2 5	2 2		2.7	7.5	5.9	2.4	15.6	5 1		13.3	26 9	20.8
2000	339	200	4.3	2.5	1 8		2 7	7.5	5.9	2 5	15 6	5.4		13 3	26 9	20 8
2000	339	300	4.3	2.5	1 7		2 7	7 5	5.9	2 5	15 6	5 5		13.3	26 9	20 8
2000	339	400	4.3	2.5	1.8		2 7	7.5	5.9	2.4	15 6	5 5		13 3	26.9	20 8
2000	339	500	4.2	2 5	2		2.7	7.5	5.9	2.4	15 6	5 4		13 5	26 9	20.8
2000	339	600	4.2	2 5	1 7		2 7	7.5	5.9	2.5	15.6	5		13 5	26 9	20 8
2000	339	700	4.2	2.5	1 6		2 7	7 5	5.9	2.5	15 6	5 7		13 5	26 9	20.8
2000	339	800	4 2	2.5	1.5		2 7	7 5	5 9	2.5	15 6	5.9		13.5	26 9	20.8
2000	339	900	4.1	2 6	2.1		2 7	7.5	5 9	0 6	14 4	5.4		13 5	26.9	20 7
2000	339	1000	4	2 4	1 8		2.7	7.4	5.8	0.6	17 6	5.4		12 9	26.9	20.8
2000	339	1100	3 6	2 5	2 1		2 7	7.4	5 8	3.5	14.8	4.6		12 7	26.9	20.9
2000	339	1200	3.3	2 5	1 8		2 7	7.3	5 7	5.4	14.8	5.2		12 5	26.9	20.9
2000	339	1300	3 3	2 5	1 8		2 7	7.3	5 7	5.4	14.9	5 2		12.1	26.9	20.9
2000	339	1400	3 3	2 5	1 9		2.7	7.3	5.7	4.8	14.9	5 8		12 1	26 9	20.8
2000	339	1500	3.4	2 4	1 6		2 8	7.2	5 7	4 2	15.3	5.2		11 5	26 9	20.9
2000	339	1600	3 3	2 4	1 3		2 7	7.2	5 6	4 9	16.4	5		12 5	26.9	20.9
2000	339	1700	3 3	2 4	2 1		2.7	7.3	5.7	4.5	16.8	4 7		12.1	26 9	20 9
2000	339	1800	3 3	2 6	2 2		2 7	7.3	5 7	4 5	12.9	4.5		12 1	26 9	20 7
2000	339	1900	3 3	2 5	1 8		2.7	7.3	5.7	4 2	13.6	5 1		12.3	26 9	20.7
2000	339	2000	3.3	2.5	2 1		2 7	7.3	5 7	4.2	14.4	4.9		12 3	26 9	20 7
2000	339	2100	3 3	2 5	1.6		2.7	7.3	5.7	3 8	14 4	5 2		12 3	26 8	20 7
2000	339	2200	3 3	2 5	1 8		2 7	7.3	5 7	4	14.4	5.2		12 3	26 8	20 7
2000	339	2300	3 3	2 5	2 1		2 7	7.3	5 7	4	14.4	4 9		12 5	26 8	20 7
2000	339	2400	3 3	2 5	1 8		2 7	7.3	5 7	4	14 4	5 3		12 5	26 7	20.8

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Year	Julian Date	Time	Head (in feet) of Water Level Above Transducer							Flow Rate (in GPM)						
			RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09	RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09
2000	340	100	3 4	2.5	1 8		2 7	7 3	5.7	3	14 4	5.3		12 5	26 7	20.8
2000	340	200	3.4	2.5	2		2 7	7.3	5.7	3	14.4	4 7		12 5	26 7	20.8
2000	340	300	3.4	2.5	1.8		2 7	7 3	5.7	3	14 8	5 3		12.5	26.7	20 8
2000	340	400	3.4	2 5	2.1		2 7	7 3	5 7	3	14.8	5 1		12 5	26 7	20 8
2000	340	500	3 5	2 5	2.2		2 7	7 3	5 7	3	14 8	4 7		12 5	26.7	20 8
2000	340	600	3.4	2.5	1.8		2 7	7 2	5.7	3	14 8	5.3		12 5	26 7	20 8
2000	340	700	3 4	2 5	1 8		2 7	7 3	5 7	3	14 8	5 3		12 5	26 7	20 7
2000	340	800	3 4	2 5	1.8		2 7	7.3	5 7	3	14.8	5 3		12.5	26.7	20.7
2000	340	900	3 4	2.5	1 7		2.7	7 2	5 7	3	14.8	5 2		12 5	26 7	20 7
2000	340	1000	3 4	2 5	2 1		2 7	7 3	5 6	3	14.8	5 1		11 9	24 2	20 7
2000	340	1100	3 3	2.4	7 8		2.7	7 2	5 6	3 7	15.3	-0.1		11 1	26	20 7
2000	340	1200	3.3	2.6	7 9		2.7	7 1	5 5	3.7	11 2	-0.1		11.1	26	20 7
2000	340	1300	3.3	2.6	7 9		2.7	7.1	5 5	3.7	12.5	-0.1		11 1	26	20 7
2000	340	1400	3.3	2.5	8		2.8	7.1	5.5	4	12 5	-0.1		12 1	26 2	20 7
2000	340	1500	3 3	2 5	8		2 7	7.1	5 5	3.8	12 9	-0.1		12 5	26 2	20 7
2000	340	1600	3 3	2 5	8		2 8	7.1	5 5	3 8	12 9	-0 1		12.7	26.2	20.9
2000	340	1700	3 3	2.3	8.1		2.7	7.1	5 5	3.8	18	-0.1		13.1	26 2	20 7
2000	340	1800	3.3	2 5	8 1		2 6	7.1	5.5	3.9	13 6	-0.1		14 1	26 2	20 7
2000	340	1900	3 3	2 5	8 1		2 7	7 1	5 5	3.9	13.7	-0.1		13 3	26 2	20 7
2000	340	2000	3 3	2.5	8 1		2 7	7 1	5 6	3 5	13 6	-0.1		13 5	26	20 7
2000	340	2100	3.3	2.5	8 2		2.7	7 1	5 6	3 5	13 6	-0.1		13 3	26	20 7
2000	340	2200	3.3	2 5	8 2		2 7	7 1	5 6	3 5	13 6	-0 1		13 5	26	20 7
2000	340	2300	3 3	2 5	8 2		2 7	7 1	5.5	3 5	13 6	-0.1		13 5	26	20.7
2000	340	2400	3 3	2 5	8 2		2.7	7 1	5.5	3 5	13 6	-0.1		13 5	26	20 7
2000	341	100	3 3	2 5	8.2		2.7	7.1	5.5	3 5	13.6	-0.1		13 5	26	20 7
2000	341	200	3 3	2.5	8.2		2.7	7 1	5.5	3 5	13 6	-0.1		13.1	26	20 7
2000	341	300	3 3	2 5	8.2		2.8	7 1	5.5	3 5	13 6	-0.1		13 1	26	20 7
2000	341	400	3.3	2.5	8 2		2 7	7.1	5 5	3 5	13 6	-0.1		13 3	26	20.7
2000	341	500	3.3	2.5	8 2		2.7	7.1	5 5	3 5	13 6	-0.1		13 5	26	20 7
2000	341	600	3 3	2 5	8.2		2 7	7.1	5 5	3 5	13.6	-0.1		13 5	26	20 7
2000	341	700	3 3	2 5	8.2		2 7	7.1	5 5	3 5	13.6	-0 1		13 5	26	20 7
2000	341	800	3 3	2.5	8 2		2 7	7.1	5 5	3.5	13 6	-0.1		13.5	26	20 7
2000	341	900	3.3	2 5	8 2		2 7	7.1	5.5	3.4	13 6	-0 1		13 3	26	20 7
2000	341	1000	3 3	2 5	8.2		2 7	7 1	5.5	3.4	13 6	-0.1		13 1	26	20 7
2000	341	1100	3.3	2 5	8.2		2.8	7.1	5 5	3.4	13.6	-0 1		12 9	26	20 7
2000	341	1200	3.3	2.5	8 2		2.7	7.1	5 5	3.4	13 6	-0 1		13 3	26	20.7
2000	341	1300	3.3	2 5	8 2		2.7	7 1	5 4	3.4	13 2	-0 1		13.3	26	20 5
2000	341	1400	3.4	2 5	8 1		2.7	7	5 4	3.4	13.2	-0 1		12 5	26	20 6
2000	341	1500	3 4	2 5	8 1		2 7	7	5 4	3.4	13.3	-0.1		12 5	26	20 7
2000	341	1600	3 4	2 4	8.1		2 7	7	5.4	3 4	13.6	-0 1		12 3	26	20 6
2000	341	1700	3 3	2.6	8 1		2 7	7	5.4	4.2	10.5	-0 1		12.3	26	20 7
2000	341	1800	3.2	2 6	8.1		2.8	7	5 3	4 2	11.2	-0 1		11 9	26	20 5
2000	341	1900	3 3	2.5	8.1		2 7	6.9	5 3	3 3	12	-0 1		12 3	26	20 5
2000	341	2000	3 1	2.5	8 1		2 7	6.9	5 3	4	12	-0 1		12 3	26	20.5
2000	341	2100	3 4	2 4	8 1		2.7	6 9	5 3	2 9	13 6	-0.1		12 1	26	20 5
2000	341	2200	3 4	2 6	8.1		2.7	6.9	5 3	2 9	10.1	-0.1		12 1	26	20 5
2000	341	2300	3 4	2 5	8 1		2.7	6 9	5 3	2 9	14	-0 1		12 1	26	20 5
2000	341	2400	3 4	2 5	8.1		2.7	6.9	5 3	2 9	14	-0.1		12 1	26	20 5
2000	342	100	3 4	2 6	8 1		2.7	7	5 3	2 9	10 5	-0 1		12 1	26	20 5
2000	342	200	3 4	2 6	8.1		2.7	6 9	5 3	2 9	11.7	-0.1		12 5	26	20 5
2000	342	300	3 4	2.5	8 1		2.7	6 9	5 3	2.9	12	-0 1		12 5	26	20 5
2000	342	400	3 4	2 3	8 1		2 7	6 9	5 3	2 9	16 8	-0 1		12 3	26	20 5

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Year	Julian Date	Time	Head (in feet) of Water Level Above Transducer							Flow Rate (in GPM)						
			RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09	RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09
2000	342	500	3 4	2.6	8 1		2 8	6.9	5.3	2 9	12	-0 1		11 9	26	20 5
2000	342	600	3 4	2 5	8.1		2 7	6 9	5 3	2 9	12.9	-0.1		12 1	26	20.5
2000	342	700	3.4	2 5	8 2		2.7	6 9	5 3	2.9	12 9	-0 1		12 1	26	20.5
2000	342	800	3.4	2 5	8 2		2 7	6.9	5 3	2 9	12 9	-0 1		12 1	26	20 5
2000	342	900	3.4	2 5	8.2		2.7	6 9	5.3	2 9	12 4	-0 1		12.3	26	20.5
2000	342	1000	3 4	2.5	8 2		2 7	6 9	5.2	2.9	12.4	-0.1		12 1	26	20 6
2000	342	1100	3 1	2.5	8.2		2 7	6 8	5 2	4 7	12 5	-0 1		11 1	26	20.6
2000	342	1200	3.4	2.5	8 2		2 7	6.8	5.1	2.9	12 5	-0.1		11.3	26	20.6
2000	342	1300	3 4	2 5	8 2		2 7	6.8	5 1	2.8	12 1	-0 1		11 1	26	20 4
2000	342	1400	3 3	2 5	8 2		2.7	6.8	5 1	4 2	12 5	-0 1		11.9	25 9	20 6
2000	342	1500	3.3	2.5	8.2		2 7	6 7	5	3 9	12.5	-0.1		11.3	26	20 6
2000	342	1600	3 2	2.2	8 3		2.8	6 7	5	5	18 4	-0 1		11.3	26	20.6
2000	342	1700	3.3	2 5	8 3		2 6	6 7	5.1	2.7	12.9	-0 1		12 7	26	20.6
2000	342	1800	3.2	2 5	8 3		2 7	6.7	5 1	4	12 9	-0 1		11 5	26	20.4
2000	342	1900	3 2	2.5	8.3		2 7	6.7	5 1	6.2	13.3	-0 1		11.5	26	20.6
2000	342	2000	3.4	2 5	8 3		2.7	6.7	5.1	2 9	12 9	-0.1		11.7	26	20.6
2000	342	2100	3 4	2.5	8 3		2.7	6 7	5	3	13.3	-0.1		11 7	26	20 6
2000	342	2200	3 3	2.5	8 3		2 7	6.7	5	3	13 3	-0 1		11 7	26	20 6
2000	342	2300	3.3	2.5	8.3		2 7	6 7	5	3	13.3	-0 1		11 9	26	20.6
2000	342	2400	3.3	2.5	8 3		2 7	6 7	5	3	13 2	-0 1		11.7	26	20.6
2000	343	100	3.3	2 5	8 3		2 7	6.7	5	3	13 3	-0 1		11.7	26	20.6
2000	343	200	3 7	2 5	8 3		2 7	6.7	5	0.6	13.3	-0 1		11.7	26	20 6
2000	343	300	3.7	2.5	8 3		2.7	6.7	5	0 6	13 3	-0.1		11.7	26	20.5
2000	343	400	3 7	2.5	8 3		2.7	6 7	5	0.6	13.3	-0.1		11 7	26	20 6
2000	343	500	3.7	2.5	8.3		2 7	6 7	5	0 6	13.3	-0 1		12 1	26	20 6
2000	343	600	3.7	2 5	8 3		2.7	6 7	5	0 6	13 2	-0 1		12.1	26	20.5
2000	343	700	3.7	2 5	8 3		2 7	6.7	5	0.6	13.6	-0 1		12.1	26	20.4
2000	343	800	3.7	2.5	8 3		2.7	6.7	5	0.6	13 6	-0.1		12.1	26	20.4
2000	343	900	3 6	2 3	8 3		2.7	6.7	5	0.6	18 4	-0.1		12 1	26	20 5
2000	343	1000	3 7	2.7	8.2		2.7	6.7	4 9	0 6	9.7	-0.1		12 1	26	20 4
2000	343	1100	3.2	2.6	8.2		2 7	6 7	4.9	3 7	11.3	-0 1		11 5	26	20.4
2000	343	1200	3.3	2 6	8.2		2.7	6 6	4.9	2 8	11.7	-0.1		11.3	26	20 4
2000	343	1300	3.2	2 3	8 2		2 7	6 7	4.8	3.7	18 4	-0 1		11.3	26	20.4
2000	343	1400	3.4	2 5	8 2		2 7	6.7	4.8	2 8	13.6	-0 1		11.3	26	20.4
2000	343	1500	3 3	2.5	8.2		2 8	6.6	4 8	3.4	13.7	-0.1		10 9	26	20 4
2000	343	1600	3.4	2 5	8 2		2.7	6.7	4.8	2.5	13 7	-0.1		11 9	26	20.4
2000	343	1700	3 4	2.5	8 2		2.7	6 7	4 9	2 3	14.1	-0.1		11.7	26	20 4
2000	343	1800	3 3	2.5	8.2		2.7	6 7	4 9	3.2	14	-0 1		11 7	26	20 4
2000	343	1900	3 3	2 6	8 2		2 7	6.7	4.9	3	12.9	-0 1		12.5	26	20 4
2000	343	2000	3.3	2.4	8.2		2 7	6.8	5	2 8	18	-0 1		12.3	26	20 4
2000	343	2100	3.3	2 4	8 2		2 7	6 8	5	2 8	17 6	-0.1		12.3	26	20.4
2000	343	2200	3 3	2 4	8 2		2.7	6.8	5	2.8	17 6	-0 1		12 3	26	20 5
2000	343	2300	3 3	2 4	8.2		2.7	6.8	5	2.8	16.8	-0.1		12 5	26	20 4
2000	343	2400	3.3	2.4	8 2		2.7	6 8	5	2 8	17.6	-0.1		12 5	26	20.5
2000	344	100	3 3	2.4	8.2		2.7	6 8	5	2.8	17.6	-0 1		12 9	26	20 4
2000	344	200	3.3	2 4	8.2		2 7	6 9	5	2 8	17.6	-0 1		12 9	26	20 4
2000	344	300	3 3	2 6	8 2		2.7	6 9	5	2.8	14	-0 1		12.9	26	20 4
2000	344	400	3 3	2.6	8.2		2 7	6.9	5	2 8	14	-0 1		12.9	26	20 4
2000	344	500	3 3	2 5	8 2		2.7	6.9	5	2 8	14 8	-0.1		12.9	26	20.4
2000	344	600	3 3	2 4	8 2		2.7	6.9	5	2.8	18	-0.1		12 9	26	20.4
2000	344	700	3 6	2.5	8 2		2.7	6 9	5	0 6	15 6	-0.1		12.7	26	20 4
2000	344	800	3 7	2.5	8.2		2 7	6 9	5	0 6	15.6	-0 1		13 1	26	20 4

Appendix E - Data Logger Download Data October - December 2000

Year	Julian Date	Time	Head (in feet) of Water Level Above Transducer							Flow Rate (in GPM)						
			RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09	RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09
2000	344	900	3.6	2.5	8 2		2 7	6 9	5	0 6	15 6	-0 1		13 1	26	20 4
2000	344	1000	3 6	2.5	8 2		2 7	6 8	4.9	0 6	15.6	-0.1		12.7	26	20 4
2000	344	1100	3 7	2.4	8 3		2 7	6 8	4.9	0 6	15 6	-0.1		12 1	26	20.4
2000	344	1200	3 3	2.6	8.3		2 7	6.8	4.9	3.9	11 7	-0 1		11 7	26	20.4
2000	344	1300	3.3	2 5	8 3		2.8	6 7	4 8	3.9	13 3	-0 1		11 3	26	20 4
2000	344	1400	3.4	2 5	8.3		2 7	6.7	4 7	3	13 3	-0.1		11 1	26	20 4
2000	344	1500	3 3	2.5	8 3		2 7	6 7	4 7	4	13.7	-0.1		11.1	26	20 4
2000	344	1600	3 3	2.5	8 3		2 7	6 7	4 7	3 5	13.3	-0.1		11.1	26	20 4
2000	344	1700	3 3	2.5	8 3		2 7	6.7	4 8	3	13 3	-0.1		11.1	26	20 4
2000	344	1800	3.3	2.4	8.3		2.7	6.7	4.8	3 9	14	-0 1		11 1	26.2	20.4
2000	344	1900	3.3	2 4	8.3		2.7	6.7	4.8	3.5	14 1	-0 1		11 5	26	20.4
2000	344	2000	3 6	2 4	8 3		2.7	6 7	4 8	0 6	14 8	-0 1		11.3	26	20 4
2000	344	2100	3 3	2 3	8 3		2 7	6.7	4 8	2.9	16 4	-0 1		11.1	26	20 4
2000	344	2200	3 4	2.3	8 4		2 7	6 7	4 8	2 9	17 2	-0.1		11.1	26	20 4
2000	344	2300	3.3	2.5	8 3		2.7	6 7	4 8	2 9	12.5	-0.1		11.3	26	20 4
2000	344	2400	3.3	2.5	8 3		2 7	6.7	4.8	2 9	12 1	-0 1		11.3	26	20 4
2000	345	100	3 3	2 5	8 3		2.7	6.7	4.8	2 9	12 9	-0.1		11 7	26	20.4
2000	345	200	3 3	2 5	8.3		2.7	6.7	4.8	2.9	12 9	-0 1		11 7	26	20.4
2000	345	300	3 7	2.3	8 3		2 7	6 7	4 8	0.6	18	-0 1		11 5	26	20.4
2000	345	400	3.3	2 5	8 3		2 8	6 6	4.8	2 9	13 6	-0 1		11 1	26	20 4
2000	345	500	3.3	2.6	8 3		2 7	6.6	4 8	2.9	9 7	-0 1		11.5	26	20.4
2000	345	600	3 3	2.4	8 3		2.7	6 6	4 8	2 9	14.4	-0 1		11.5	26	20 4
2000	345	700	3.3	2 4	8 3		2 7	6 6	4 8	2 9	15.6	-0.1		11 1	26	20 4
2000	345	800	3 3	2 6	8.2		2.7	6.6	4 8	2 9	11.7	-0.1		11 1	26	20.4
2000	345	900	3.3	2.5	8.2		2.7	6.6	4.8	2 8	12.5	-0 1		11 1	26	20.4
2000	345	1000	3.3	2 3	8.2		2 7	6 6	4.8	2.8	18	-0.1		11.3	26	20.4
2000	345	1100	3.3	2 6	8 2		2 7	6 6	4 7	2.7	12 5	-0 1		11 3	26	20.4
2000	345	1200	3.3	2.5	8 3		2.7	6 6	4.7	2.7	12 5	-0 1		11.1	26	20 4
2000	345	1300	3 3	2.5	8 3		2 7	6.6	4 7	2.7	11 7	-0 1		10.9	26	20 4
2000	345	1400	3 3	2.5	8 3		2 7	6 5	4 7	2 7	11.7	-0 1		10 1	26	20 4
2000	345	1500	3.3	2 5	8 3		2.7	6.5	4.7	2 9	11.7	-0.1		10 1	26	20 4
2000	345	1600	3.3	2 5	8.3		2.7	6.5	4 7	2 5	12 5	-0.1		10.7	26	20 4
2000	345	1700	3.2	2 5	8.3		2.7	6.5	4.6	4.3	12 1	-0.1		10.7	26	20.4
2000	345	1800	3 6	2.5	8.3		2 7	6 5	4.7	0.6	11 7	-0 1		10 7	26	20.4
2000	345	1900	3 3	2.5	8 3		2.7	6 5	4.7	3.5	12.1	-0 1		10 7	26	20.4
2000	345	2000	3.3	2 5	8 3		2.7	6 5	4.7	3.5	12 1	-0 1		10.7	26.2	20 4
2000	345	2100	3 3	2 5	8 3		2 7	6 5	4 7	3	11 7	-0.1		10.7	26	20.4
2000	345	2200	3.2	2 5	8 3		2 7	6.5	4 7	2.9	12.1	-0.1		10 7	26	20.4
2000	345	2300	3.2	2 5	8.3		2 7	6.5	4 7	3 4	12.1	-0 1		10 7	26	20 4
2000	345	2400	3.3	2.4	8 3		2.7	6.5	4 7	3 5	12.5	-0.1		10 3	26 2	20 4
2000	346	100	3.3	2 5	8.3		2.7	6 5	4 6	3	12 1	-0.1		10.3	26	20 4
2000	346	200	3 2	2 5	8.3		2 7	6 5	4.6	3.9	12 1	-0.1		10.3	26	20 4
2000	346	300	3 3	2.5	8 3		2 7	6 5	4.6	3 8	12.1	-0 1		10 9	26	20.4
2000	346	400	3.3	2 5	8 3		2.7	6 5	4.7	3.7	12 1	-0 1		10.9	26	20.4
2000	346	500	3 3	2.5	8.3		2 7	6.5	4 6	2.7	11.3	-0.1		10.3	26	20.4
2000	346	600	3.3	2 3	8 3		2 7	6.5	4 6	2 8	17.2	-0 1		10 3	26	20 4
2000	346	700	3 4	2.5	8.3		2.7	6.5	4 6	2.8	11 7	-0.1		10.3	26	20.4
2000	346	800	3.4	2 5	8 3		2.7	6.4	4 6	2 8	11.3	-0 1		10 3	26	20 4
2000	346	900	3 4	2 4	8.3		2.7	6 7	4.6	2 8	12 5	-0 1		10 3	21 6	20.4
2000	346	1000	3.4	2 5	8.3		2 7	6.4	4.5	2 8	12 1	-0.1		10 3	21 2	20 4
2000	346	1100	3.2	2 5	8 3		2 7	6 4	4 5	3 5	12 1	-0 1		10 9	21 3	20 3
2000	346	1200	3 3	2 6	8 4		2 7	6 3	4 4	3.3	12.1	-0.1		11.5	21 4	21 8

Appendix E - Data Logger Download Data October - December 2000

Year	Julian Date	Time	Head (in feet) of Water Level Above Transducer							Flow Rate (in GPM)						
			RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09	RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09
2000	346	1300	3.2	2 6	8 4		2.7	6 3	4 3	4 2	11 7	-0 1		11 7	21.4	21 8
2000	346	1400	3 4	2.3	8 4		2 7	6.2	4 2	3 3	18 4	-0 1		11 5	21.4	21.6
2000	346	1500	3 2	2.5	8 4		2 7	6 3	4 2	4	12 5	-0 1		11 5	21 4	21 6
2000	346	1600	3.4	2.5	8 4		2 7	6.3	4 2	3	12.5	-0.1		11 1	21 4	21 6
2000	346	1700	3 3	2.5	8 3		2 7	6.4	4.3	2.7	14.1	-0.1		11.5	21 4	21.6
2000	346	1800	3 3	2.6	1 9		2 7	6.5	4 3	2.3	14	5 2		11 9	21.4	21.4
2000	346	1900	3 3	2.5	1 9		2 7	6.6	4 4	1.6	14	5.2		12.3	21 4	21.4
2000	346	2000	3 3	2.5	1.7		4.1	6 6	4.5	1 8	14 8	5 8		-0.2	21 4	21 4
2000	346	2100	3.3	2.5	1 5		4.2	6 7	4.5	1.9	14.8	5 7		-0 2	21.4	21 4
2000	346	2200	3 3	2.5	1 5		4.2	6 8	4.6	1 8	14 4	5.7		-0.2	21.4	21.4
2000	346	2300	3 3	2.4	1.9		4.3	6 8	4.6	1 9	15 2	5.3		-0.2	21.4	21 4
2000	346	2400	3 3	2 5	1.9		4.1	6 9	4 7	1.9	14	5.2		-0 2	21.4	21 4
2000	347	100	3 5	2 5	1.7		4 2	6 9	4 7	0 6	14	5.1		-0 2	21.4	21 4
2000	347	200	3 4	2 4	1.6		4 2	7	4 8	0 6	15 6	5.5		-0 2	21 4	21.4
2000	347	300	3 4	2.6	1.7		4 2	7	4.8	0 6	13 2	5 4		-0 2	21 4	21.4
2000	347	400	3 4	2 6	2.1		4 3	7 1	4.9	0 6	12	5 4		-0.2	21 4	21.4
2000	347	500	3 4	2 4	2.1		4 3	7 1	4 9	0.6	15.6	5		-0 1	21.4	21.4
2000	347	600	3.4	2 6	2.1		4.3	7 1	4 9	0 6	13.2	5		-0 1	21 4	21 4
2000	347	700	3 4	2.5	1.7		4 4	7.2	5	0 6	14	5.4		-0 2	21 4	21.2
2000	347	800	3.4	2 4	1.8		4 3	7.2	5	0.6	17.2	5 5		-0.2	21 4	21 2
2000	347	900	3 4	2 6	1.6		4.3	7.2	5	0.6	13.6	5 5		-0 1	21.4	21 3
2000	347	1000	3 4	2 6	1.6		4 3	7.2	4.9	0.6	12.4	5 5		-0 1	21.4	21.3
2000	347	1100	3 4	2 5	2		4 3	7.2	5	0.6	12	5 1		-0.1	21.4	21 3
2000	347	1200	3.5	3 5	6.2		4.3	9.3	5	0.6	-0.2	-0 1		-0.1	-0.1	21 7
2000	347	1300	3.6	3.6	8		4 3	9.7	7.1	0 6	-0.2	-0.1		-0.2	-0 1	-0.1
2000	347	1400	3.6	3 6	8		4.3	9 8	7.3	0.6	-0.2	-0 1		-0.2	-0.1	-0 1
2000	347	1500	3 7	3 6	8		4 3	9.9	8.3	0 6	-0.2	-0.1		-0 2	-0.1	9 8
2000	347	1600	3 7	3 6	8.1		4 3	9 9	6.8	0 6	-0.2	-0 1		-0 2	-0.1	-0 1
2000	347	1700	3.7	3 6	8 1		4.3	10	6 8	0 6	-0.2	-0 1		-0 2	-0.1	-0 1
2000	347	1800	3 7	3.6	8 1		4 3	10	6 8	0 6	-0 2	-0.1		-0 2	-0 1	-0 1
2000	347	1900	3.7	3 6	8.1		4 3	10 1	6.8	0 6	-0 2	-0 1		-0.2	-0 1	-0 1
2000	347	2000	3.7	3 6	8 1		4 4	10 1	6 8	0.6	-0 2	-0 1		-0.2	-0 1	-0 1
2000	347	2100	3.8	3 6	8 2		4.3	10 2	6 8	0.6	-0 2	-0 1		-0.2	-0.1	-0 1
2000	347	2200	3.8	3 6	8 2		4.3	10 2	6 8	0 6	-0 2	-0.1		-0 2	-0.1	-0 1
2000	347	2300	3 8	3 6	8 2		4 3	10.2	6 8	0 6	-0 2	-0.1		-0 2	-0 1	-0.1
2000	347	2400	3.8	3 6	8 2		4 4	10 2	6.8	0 6	-0 2	-0.1		-0.2	-0 1	-0 1
2000	348	100	3.8	3 6	8 2		4.4	10 2	6 8	0.6	-0 2	-0.1		-0.1	-0 1	-0.1
2000	348	200	3 8	3 5	8 2		4.4	10 2	6 9	0 6	-0.2	-0.1		-0.2	-0 1	-0.1
2000	348	300	3.8	3 5	8 2		4.4	10 2	6 9	0.6	-0 2	-0.1		-0.2	-0.1	-0.1
2000	348	400	3 9	3.5	8 3		4.4	10.2	6 9	0 6	-0 2	-0.1		-0.2	-0 1	-0.1
2000	348	500	3 9	3 5	8.3		4.4	10 2	6.9	0.6	-0 2	-0.1		-0.2	-0 1	-0 1
2000	348	600	3 9	3 5	8.3		4.4	10 2	6 9	0.6	-0.2	-0.1		-0.2	-0.1	-0 1
2000	348	700	3.9	3.5	8.2		4.4	10 2	6 9	0.6	-0 2	-0.1		-0.2	-0.1	-0.1
2000	348	800	3 9	3 5	8.2		4.4	10.2	6.9	0.6	-0 2	-0.1		-0.2	-0.1	-0 1
2000	348	900	3.9	3 4	8 3		4.4	10 2	6 8	0.6	-0 2	-0 1		-0.2	-0.1	-0 1
2000	348	1000	3 9	3.5	8.3		4.5	10.2	6.9	0 6	-0 2	-0 1		-0 1	-0.1	-0 1
2000	348	1100	3 9	3 5	8.3		4.5	10.2	6.9	0 6	-0 2	-0 1		-0.2	-0.1	-0 1
2000	348	1200	4	3 5	8.4		4.6	10.2	7	0 6	-0 2	-0.1		-0 2	-0 1	-0.1
2000	348	1300	4	3 6	8.4		4.7	10.2	7	0.6	-0.2	-0 1		-0.2	-0 1	-0 1
2000	348	1400	4.1	3.6	8 4		4.7	10.1	7.1	0 6	-0.2	-0 1		-0 1	-0 1	-0 1
2000	348	1500	4 1	3 6	8 4		4.7	10.1	7.1	0.6	-0.2	-0 1		-0 2	-0 1	-0 1
2000	348	1600	4	3 6	8.3		4.7	10.1	7 1	0 6	-0.2	-0 1		-0 1	-0 1	-0 1

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Year	Julian Date	Time	Head (in feet) of Water Level Above Transducer							Flow Rate (in GPM)						
			RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09	RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09
2000	348	1700	4	3 6	8 3		4.7	10.1	7 1	0 6	-0.2	-0 1		-0.1	-0.1	-0 1
2000	348	1800	4	3.6	8 3		4 6	10 1	7	0 6	-0.2	-0.1		-0 1	-0.1	-0 1
2000	348	1900	3 9	3.6	8 3		4 6	10.1	7	0.6	-0 2	-0 1		-0 1	-0 2	-0.1
2000	348	2000	3 9	3 6	8.3		4 7	10.1	7	0 6	-0.2	-0 1		-0.1	-0 1	-0 1
2000	348	2100	3.9	3 6	8.3		4 6	10 1	7	0.6	-0 2	-0.1		-0.1	-0 1	-0.1
2000	348	2200	3.9	3 7	8 2		4.6	10 1	7	0.6	-0 2	-0.1		-0 1	-0 1	-0 1
2000	348	2300	3 8	3.7	8 2		4.6	10.1	7.1	0 6	-0.2	-0 1		-0.1	-0.1	-0 1
2000	348	2400	3 8	3 8	8.2		4 7	10 1	7 1	0 6	-0.2	-0 1		-0 1	-0 1	-0 1
2000	349	100	3.8	3 8	8.2		4 7	10.2	7 1	0.6	-0 2	-0 1		-0 1	-0 1	-0.1
2000	349	200	3.8	3 8	8.2		4 7	10.2	7.1	0 6	-0.2	-0 1		-0 1	-0 1	-0.1
2000	349	300	3 8	3 8	8.2		4 7	10 2	7.1	0.6	-0 2	-0.1		-0.1	-0 1	-0.1
2000	349	400	3 8	3.8	8 2		4.7	10 2	7 2	0.6	-0 2	-0.1		-0.1	-0 1	-0 1
2000	349	500	3 8	3.8	8 2		4.7	10 3	7 2	0.6	-0 2	-0 1		-0 2	-0.1	-0 1
2000	349	600	3 8	3 8	8 2		4.7	10.3	7 2	0 6	-0.2	-0 1		-0.1	-0 1	-0 1
2000	349	700	3.8	3 8	8.2		4 6	10 3	7.2	0 6	-0 2	-0.1		-0 1	-0.1	-0 1
2000	349	800	3 8	3 8	8.2		4 6	10.3	7 3	0 6	-0 2	-0 1		-0 1	-0 1	-0.1
2000	349	900	3.8	3.8	8 2		4.6	10.4	7.3	0.6	-0 2	-0 1		-0.1	-0 1	-0.1
2000	349	1000	3 8	3.8	8 2		4 6	10.4	7.3	0 6	-0.2	-0 1		-0.1	-0 1	-0.1
2000	349	1100	3 7	3.8	8 2		4 6	10 4	7.3	0.6	-0 2	-0.1		-0 1	-0.1	-0 1
2000	349	1200	3 8	3 8	8 2		4.6	10 4	7.3	0.6	-0 2	-0.1		-0 1	-0.1	-0 1
2000	349	1300	3.8	3.8	8 2		4.6	10 5	7 4	0.6	-0.2	-0 1		-0.1	-0 1	-0.1
2000	349	1400	3.8	3 8	8.2		4 6	10 5	7 4	0 6	-0.2	-0 1		-0.1	-0 1	-0 1
2000	349	1500	3 8	3 8	8.2		4 6	10 5	7 4	0 6	-0 2	-0 1		-0 1	-0.1	-0.1
2000	349	1600	-22	3.8	8.2		4 6	10.5	7 4	-2	-0.2	-0 1		-0.1	-0 1	-0.1
2000	349	1700	-22	3.8	8 2		4 6	10.5	7.4	-2	-0 2	-0.1		-0.1	-0.1	-0.1
2000	349	1800	-22	3.9	8 2		4.7	10 5	7.4	-2.1	-0 2	-0 1		-0 1	-0.1	-0.1
2000	349	1900	-22	3 9	8 2		4 7	10.5	7.4	-2 1	-0.2	-0.1		-0 1	-0.1	-0 1
2000	349	2000	-22	3 9	8.2		4.7	10 6	7.5	-2.1	-0 2	-0 1		-0 1	-0.1	-0 1
2000	349	2100	-22	3 9	8 2		4.7	10 6	7 5	-2.1	-0 2	-0 1		-0.1	-0 1	-0.1
2000	349	2200	-22	3 9	8 3		4 7	10 6	7 5	-2.1	-0.2	-0.1		-0.1	-0 1	-0.1
2000	349	2300	-22	3.9	8.3		4 7	10 6	7.5	-2	-0.2	-0.1		-0.1	-0.1	-0.1
2000	349	2400	-22	3.8	8 3		4.7	10 6	7 5	-2 1	-0 2	-0 1		-0.1	-0 1	-0.1
2000	350	100	-22	3.8	8 3		4 7	10.6	7.5	-2 1	-0 2	-0 1		-0.1	-0.1	-0.1
2000	350	200	-22	3 8	8 3		4 7	10.6	7.5	-2 1	-0.2	-0.1		-0.1	-0.1	-0 1
2000	350	300	-22	3 8	8 3		4 7	10.6	7.5	-2 1	-0 2	-0.1		-0 1	-0.1	-0 1
2000	350	400	-22	3 8	8.3		4.7	10 6	7.5	-2 1	-0 2	-0 1		-0 2	-0.1	-0.1
2000	350	500	-22	3.8	8 3		4.7	10 6	7 5	-2	-0 2	-0 1		-0 1	-0 1	-0.1
2000	350	600	-22	3.8	8.3		4 6	10 6	7 5	-2.1	-0.2	-0 1		-0.1	-0 1	-0.1
2000	350	700	-22	3.8	8.3		4 7	10.6	7 5	-2.1	-0.2	-0 1		-0.1	-0 1	-0 1
2000	350	800	-22	3.8	8 3		4 7	10 6	7 5	-2	-0 2	-0.1		-0.1	-0 1	-0 1
2000	350	900	-22	3 7	8 3		4.7	10.6	7.5	-2	-0 2	-0 1		-0 1	-0.1	-0 1
2000	350	1000	-22	3.7	8 3		4 7	10.6	7.5	-2	-0 2	-0 1		-0.1	-0.1	-0.1
2000	350	1100	-22 1	3 7	8 4		4 9	10.6	7.4	-2 1	-0 2	-0.1		-0.1	-0.1	-0 1
2000	350	1200	-22 1	3 7	8 3		4.9	10 6	7.4	-2 1	-0 2	-0.1		-0 1	-0.1	-0.1
2000	350	1300	-22.2	2.4	1 8		4.8	8 4	5 5	-2 1	20	5 9		-0.1	21 2	21
2000	350	1400	-22.1	2.6	1.8		4 8	8 2	5 3	-2.1	16 4	5.7		-0.1	21.2	21
2000	350	1500	-22.1	3 5	8 3		4 8	10 1	8	-2.1	-0 2	-0 1		-0.1	-0 1	11.3
2000	350	1600	-22 1	3 6	8 4		4 9	10 3	7 4	-2 1	-0 2	-0 1		-0.1	-0 1	-0 1
2000	350	1700	-22.1	3 7	8 4		4 9	10 3	7 3	-2.1	-0 2	-0 1		-0 1	-0 1	-0.1
2000	350	1800	-22 1	3 7	8 5		4 8	10.4	7.3	-2 1	-0.2	-0 1		-0.1	-0.1	-0 1
2000	350	1900	-22	3 7	8 4		4.8	10.4	7.3	-2 1	-0 2	-0 1		-0 1	-0 1	-0 1
2000	350	2000	-22	3.7	8 4		4.8	10.4	7.2	-2 1	-0.2	-0 1		-0.1	-0 1	-0.1

Appendix E - Data Logger Download Data October - December 2000

Year	Julian Date	Time	Head (in feet) of Water Level Above Transducer							Flow Rate (in GPM)						
			RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09	RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09
2000	350	2100	-22	3 7	8 5		4.8	10 4	7 3	-2 1	-0 2	-0 1		-0 1	-0 1	-0 1
2000	350	2200	-22	3 7	8.5		4 8	10 3	7.3	-2	-0.2	-0 1		-0 1	-0 1	-0 1
2000	350	2300	-22	3.7	8 5		4 9	10 3	7 6	-2	-0.2	-0 1		-0 1	-0 1	-0 1
2000	350	2400	-21.9	3.7	8 5		5	10 2	7 7	-2	-0 2	-0.1		-0 1	-0 1	-0.1
2000	351	100	-21.9	3 7	8.5		5	10.2	7 7	-2	-0 2	-0.1		-0.1	-0 1	-0 1
2000	351	200	-21.9	3 7	8.5		4.9	10 1	7.7	-2	-0 2	-0 1		-0.1	-0.1	-0.1
2000	351	300	-21 8	3 8	8.5		5	10 1	7.6	-2	-0.2	-0 1		-0 1	-0.1	-0 1
2000	351	400	-21 8	3 7	8.5		5	10 2	7 6	-2	-0.2	-0 1		-0 1	-0.1	-0.1
2000	351	500	-21.8	3 7	8 5		5	10 1	7 6	-2	-0 2	-0 1		-0.1	-0 1	-0.1
2000	351	600	-21.8	3.7	8 5		4 9	10 1	7 6	-2	-0 2	-0.1		-0.1	-0 1	-0.1
2000	351	700	-21 8	3 7	8 5		4.9	10.1	7 6	-2	-0 2	-0 1		-0 1	-0.1	-0 1
2000	351	800	-21 8	3.7	8.5		4.9	10 1	7.6	-2	-0.2	-0 1		-0 1	-0.1	-0 1
2000	351	900	-21.8	3 7	8.4		4.9	10	7.6	-2	-0.2	-0 1		-0 1	-0 1	-0 1
2000	351	1000	-21 8	3 6	8 4		4 8	10	7 6	-2	-0 2	-0.1		-0 1	-0 1	-0.1
2000	351	1100	-21.8	3.6	8 4		4 8	10	7 6	-2	-0 2	-0.1		-0.1	-0 1	-0 1
2000	351	1200	-21.8	3.6	8.4		4 8	10	7 6	-2	-0.2	-0.1		-0 1	-0.1	-0 1
2000	351	1300	-21.8	3 7	8 5		4.9	10	7.6	-2	-0 2	-0 1		-0 1	-0.1	-0 1
2000	351	1400	-21 8	3 7	8.5		4.9	10	7.6	-2	-0.2	-0.1		-0 1	-0.1	-0.1
2000	351	1500	-21 8	3 7	8.4		4.9	10	7.6	-2	-0.2	-0 1		-0 1	-0 1	-0.1
2000	351	1600	-21.8	3.7	8.4		4.9	10	7.5	-2	-0.2	-0 1		-0 2	-0.1	-0.1
2000	351	1700	-21.8	3.8	8 3		4.9	10	7 5	-2	-0 2	-0 1		-0.2	-0 1	-0.1
2000	351	1800	-21 9	3.8	8 3		4 9	10.1	7 4	-2	-0 2	-0.1		-0 1	-0 1	-0 1
2000	351	1900	-21 9	3 9	8.3		4 9	10 1	7 4	-2	-0.2	-0.1		-0 1	-0.1	-0 1
2000	351	2000	-21 9	3 9	8 3		4.9	10 1	7 4	-2	-0 2	-0 1		-0.1	-0.1	-0 1
2000	351	2100	-22	3 9	8.2		4 9	10.2	7.3	-2	-0.2	-0 1		-0 1	-0 1	-0.1
2000	351	2200	-22	3.9	8.2		4.8	10 2	7.3	-2 1	-0.2	-0 1		-0 1	-0 1	-0.1
2000	351	2300	-22.1	3.9	8 3		4.8	10 3	7.3	-2.1	-0.2	-0 1		-0.1	-0 1	-0.1
2000	351	2400	-22 1	3.9	8 2		4 8	10 3	7 3	-2.1	-0.2	-0.1		-0.2	-0.1	-0 1
2000	352	100	-22 2	3.8	8 2		4.8	10 4	7 3	-2.1	-0 2	-0.1		-0.2	-0.1	-0 1
2000	352	200	-22 2	3 8	8 2		4 8	10.4	7 3	-2.1	-0 2	-0 1		-0 2	-0.2	-0 1
2000	352	300	-22 3	3 8	8.2		4 8	10.5	7.3	-2 1	-0 2	-0 1		-0 2	-0.1	-0.1
2000	352	400	-22.4	3 8	8.2		4.8	10 5	7.3	-2 1	-0.2	-0 1		-0 2	-0 2	-0.1
2000	352	500	-22.4	3.8	8.2		4.8	10 6	7.3	-2 1	-0.2	-0 1		-0.2	-0 2	-0 1
2000	352	600	-22.4	3.9	8 2		4.8	10 6	7 3	-2.1	-0 2	-0 1		-0.2	-0 2	-0.1
2000	352	700	-22 4	3 9	8 2		4.8	10.7	7 3	-2.1	-0 2	-0.1		-0 2	-0.1	-0 1
2000	352	800	-22 5	3 9	8.2		4 8	10 7	7 3	-2 1	-0.2	-0.1		-0 2	-0.2	-0 1
2000	352	900	-22.5	3.8	8 2		4.8	10.7	7.3	-2 1	-0.2	-0.1		-0 2	-0.1	-0.1
2000	352	1000	-22.5	3.8	8 2		4 8	10.7	7.3	-2 1	-0.2	-0 1		-0 1	-0 1	-0.1
2000	352	1100	-22.5	3 8	8.2		4 7	10 7	7.3	-2 1	-0.2	-0.1		-0.1	-0 1	-0.1
2000	352	1200	-22.4	3.8	8.3		4 7	10.7	7.4	-2.1	-0.2	-0 1		-0.1	-0 1	-0 1
2000	352	1300	-22 4	3 7	8.3		4 7	10 8	7.5	-2.1	-0 2	-0 1		-0.1	-0.1	-0 1
2000	352	1400	-22.4	3.7	8 3		4.8	10 8	7.5	-2.1	-0 2	-0 1		-0.1	-0 1	-0 1
2000	352	1500	-22 3	3 6	8 3		4.8	10 7	7 5	-2.1	-0 2	-0.1		-0.1	-0.1	-0.1
2000	352	1600	-22 2	3.6	8.3		4.8	10 8	7 5	-2 1	-0.2	-0.1		-0 2	-0.1	-0.1
2000	352	1700	-22.2	3 7	8.3		4 8	10.8	7 5	-2 1	-0 2	-0.1		-0 2	-0 1	-0.1
2000	352	1800	-22.2	3.7	8.3		4 8	10.8	7.5	-2.1	-0 2	-0 1		-0 2	-0 1	-0 1
2000	352	1900	-22.2	3 7	8 3		4 8	10 8	7.5	-2 1	-0.2	-0 1		-0.2	-0 1	-0 1
2000	352	2000	-22 2	3 7	8 4		4 8	10.8	7 5	-2.1	-0 2	-0 1		-0.2	-0 1	-0 1
2000	352	2100	-22.2	3.6	8 4		4.8	10 8	7.6	-2.1	-0 2	-0 1		-0.2	-0.1	-0 1
2000	352	2200	-22 2	3 6	8 4		4.8	10.8	7 6	-2.1	-0 2	-0 1		-0.2	-0.1	-0.1
2000	352	2300	-22 2	3.6	8 4		4 8	10 8	7 6	-2 1	-0 2	-0.1		-0 2	-0.1	-0.1
2000	352	2400	-22.2	3.6	8 4		4 9	10.8	7.6	-2 1	-0 2	-0.1		-0.2	-0 1	-0 1

Appendix E - Data Logger Download Data October - December 2000

Year	Julian Date	Time	Head (in feet) of Water Level Above Transducer							Flow Rate (in GPM)						
			RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09	RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09
2000	353	100	-22.2	3 6	8 4		4 9	10 8	7.6	-2 1	-0.2	-0 1		-0 2	-0 1	-0 1
2000	353	200	-22 2	3 6	8.4		4 9	10 8	7 6	-2 1	-0 2	-0 1		-0.2	-0 1	-0 1
2000	353	300	-22.2	3 6	8 4		4 9	10 8	7.6	-2 1	-0 2	-0.1		-0.2	-0 1	-0 1
2000	353	400	-22.3	3 6	8 4		4.9	10 8	7.6	-2 1	-0 2	-0.1		-0 2	-0 1	-0.1
2000	353	500	-22 3	3 6	8 4		4 9	10 8	7 6	-2.1	-0.2	-0.1		-0 2	-0.1	-0.1
2000	353	600	-22.3	3 6	8 4		4 9	10.8	7.6	-2 1	-0 2	-0 1		-0 2	-0 1	-0.1
2000	353	700	-22 3	3 6	8 4		4.9	10 8	7.6	-2.1	-0 2	-0 1		-0 2	-0 1	-0 1
2000	353	800	-22.3	3 6	8.4		5	10 8	7 6	-2.1	-0.2	-0.1		-0 2	-0 1	-0 1
2000	353	900	-22 4	3 6	8 4		5	10.8	7 7	-2.1	-0 2	-0 1		-0 2	-0 1	-0.1
2000	353	1000	-22 3	3 7	8 5		5	10 8	7 7	-2.1	-0 2	-0 1		-0 1	-0 1	-0 1
2000	353	1100	-22.3	3.7	8 5		5	10 7	7 7	-2.1	-0.2	-0.1		-0 2	-0 1	-0 1
2000	353	1200	-22 3	3 7	8 4		5	10 7	7.7	-2.1	-0 2	-0 1		-0.2	-0.1	-0 1
2000	353	1300	-22 3	3 7	8 4		5	10.7	7 7	-2.1	-0 2	-0 1		-0.2	-0 1	-0.1
2000	353	1400	-22 2	3.7	8 5		5	10 7	7 7	-2.1	-0 2	-0 1		-0.2	-0.1	-0.1
2000	353	1500	-22.1	3.7	8.5		5	10 7	7 7	-2.1	-0.2	-0 1		-0.2	-0.1	-0.1
2000	353	1600	-22 1	3.7	8 4		5	10 6	7 7	-2.1	-0.2	-0.1		-0 2	-0.1	-0.1
2000	353	1700	-22	3.7	8 4		5	10.6	7 6	-2.1	-0 2	-0 1		-0 1	-0 1	-0 1
2000	353	1800	-22	3.7	8 4		5	10 6	7 6	-2	-0 2	-0.1		-0 1	-0.1	-0 1
2000	353	1900	-22	3.8	8 4		5	10 6	7 6	-2.1	-0 2	-0 1		-0 1	-0 1	-0 1
2000	353	2000	-22.1	3.9	8 3		5	10 7	7 5	-2.1	-0.2	-0.1		-0.1	-0 1	-0 1
2000	353	2100	-22.1	3.9	8 3		5	10.7	7 5	-2.1	-0 2	-0.1		-0 2	-0 1	-0.1
2000	353	2200	-22.1	3.9	8 3		5	10 7	7 5	-2.1	-0 2	-0.1		-0 2	-0 1	-0 1
2000	353	2300	-22 1	3 9	8 4		5	10 7	7 5	-2.1	-0.2	-0.1		-0.2	-0 1	-0 1
2000	353	2400	-22 1	3 9	8.4		5	10 8	7 6	-2.1	-0.2	-0.1		-0 2	-0 1	-0.1
2000	354	100	-22.1	3.9	8.4		5	10 8	7 6	-2.1	-0.2	-0.1		-0 2	-0 1	-0 1
2000	354	200	-22 1	3 9	8.4		5	10.8	7.6	-2.1	-0.2	-0.1		-0 2	-0.1	-0.1
2000	354	300	-22 2	3 9	8.4		5	10 8	7 6	-2.1	-0.2	-0.1		-0 2	-0 1	-0 1
2000	354	400	-22.2	4	8.4		5	10 8	7 6	-2.1	-0.2	-0.1		-0.2	-0.1	-0.1
2000	354	500	-22 2	3 9	8.4		5	10.8	7 6	-2.1	-0.2	-0 1		-0 2	-0.1	-0.1
2000	354	600	-22.3	4	8.4		5	10.8	7 6	-2.1	-0 2	-0 1		-0.2	-0.1	-0.1
2000	354	700	-22 3	4	8.3		5	10.9	7 6	-2.1	-0.2	-0.1		-0.2	-0.1	-0 1
2000	354	800	-22.3	3.9	8 3		5	10.9	7.6	-2.1	-0.2	-0 1		-0.2	-0.1	-0.1
2000	354	900	-22.3	4	8 3		5	10.9	7 5	-2.1	-0.2	-0 1		-0.2	-0.1	-0.1
2000	354	1000	-22.4	4	8 3		5	10.9	7 5	-2.1	-0.2	-0 1		-0.2	-0 1	-0 1
2000	354	1100	-22.5	4	8 3		4 9	10.9	7.5	-2.1	-0.2	-0.1		-0.1	-0 1	-0 1
2000	354	1200	-22 5	4.1	8 3		4 9	10 9	7.5	-2.1	-0.2	-0 1		-0.1	-0 1	-0 1
2000	354	1300	-22 6	4 1	8 4		4 9	10 9	7.6	-2.1	-0.2	-0 1		-0 1	-0.1	-0 1
2000	354	1400	-22 5	4	8 4		4 9	10 9	7.6	-2.1	-0.2	-0 1		-0.1	-0.1	-0 1
2000	354	1500	-22 2	4	8 4		5	10 9	7.6	-2.1	-0.2	-0 1		-0 2	-0 1	-0.1
2000	354	1600	-22	4	8 4		5	10 9	7.6	-2.1	-0.2	-0.1		-0.2	-0 1	-0 1
2000	354	1700	-22	4 1	8 4		5	11	7.6	-2	-0.2	-0.1		-0.2	-0.1	-0 1
2000	354	1800	-21.8	4 1	8 3		5	11	7.6	-2	-0.2	-0 1		-0 2	-0.1	-0 1
2000	354	1900	-21.8	4 1	8.4		5	11	7.6	-2	-0.2	-0 1		-0 1	-0 1	-0 1
2000	354	2000	-21.9	4.1	8.4		5	11	7.6	-2	-0.2	-0 1		-0.2	-0 1	-0.1
2000	354	2100	-22	4.1	8.4		5	11	7.6	-2.1	-0.2	-0 1		-0 2	-0 1	-0.1
2000	354	2200	-22.1	4.1	8 4		5	11 1	7.6	-2.1	-0.2	-0.1		-0 1	-0 2	-0.1
2000	354	2300	-22 2	4.1	8 4		5	11.1	7.6	-2.1	-0 2	-0 1		-0 2	-0.1	-0.1
2000	354	2400	-22 2	4.1	8 4		5	11 1	7.6	-2.1	-0 2	-0 1		-0 2	-0.1	-0.1
2000	355	100	-22 2	4.1	8 4		5	11 1	7.7	-2.1	-0 2	-0 1		-0 2	-0.1	-0.1
2000	355	200	-22 3	4 1	8 4		5	11 1	7.7	-2.1	-0 2	-0 1		-0 2	-0.1	-0.1
2000	355	300	-22 3	4.1	8 4		5	11.1	7.6	-2.1	-0.2	-0 1		-0.2	-0.1	-0 1
2000	355	400	-22 3	4 1	8 4		5	11 1	7.7	-2 1	-0 2	-0 1		-0 2	-0.1	-0.1

Appendix E - Data Logger Download Data October - December 2000

Year	Julian Date	Time	Head (in feet) of Water Level Above Transducer							Flow Rate (in GPM)						
			RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09	RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09
2000	355	500	-22 3	4	8 4		5	11 1	7.7	-2 1	-0 2	-0 1		-0 2	-0 1	-0 1
2000	355	600	-22 3	4	8 4		5	11.1	7.7	-2.1	-0 2	-0 1		-0 2	-0 1	-0.1
2000	355	700	-22 3	4	8 4		5	11.1	7.7	-2 1	-0.2	-0 1		-0.2	-0.1	-0.1
2000	355	800	-22 4	4	8 4		5	11.1	7.7	-2 1	-0.2	-0.1		-0.2	-0 1	-0.1
2000	355	900	-22	4	8 4		5	11	7.7	-2.1	-0.2	-0 1		-0 2	-0 1	-0 1
2000	355	1000	-21 9	4	8 4		5	11	7 7	-2	-0 2	-0.1		-0 1	-0.1	-0 1
2000	355	1100	-21 8	3.9	8.4		5	11	7 7	-2	-0 2	-0 1		-0 2	-0 1	-0 1
2000	355	1200	-21.8	3.9	8 5		5	10 9	7 7	-2	-0 2	-0 1		-0 2	-0 1	-0 1
2000	355	1300	-21.6	3.8	8 5		5.1	10 9	7 8	-2	-0 2	-0.1		-0 1	-0 1	-0 1
2000	355	1400	-22	3.8	8.5		5 1	10.9	7 8	-2 1	-0.2	-0 1		-0 2	-0.1	-0.1
2000	355	1500	-21 8	2.5	1 6		5 1	8 9	5 9	-2	23 2	5 9		-0 1	21 1	21
2000	355	1600	-21.7	2.5	1 3		5 1	8 6	5.7	-2	20	6 2		-0.1	21 1	21 3
2000	355	1700	-21 8	3.5	7.8		5.1	10 3	5.6	-2	-0.2	-0.1		-0 1	-0 1	21 4
2000	355	1800	-21 9	3 6	8.4		5 1	10.6	7 6	-2	-0 2	-0 1		-0.2	-0 1	-0 1
2000	355	1900	-21 9	3 7	8.4		5 1	10.7	7 6	-2	-0 2	-0 1		-0 2	-0 1	-0.1
2000	355	2000	-21 9	3 7	8 4		5 1	10.7	7.7	-2	-0 2	-0 1		-0.1	-0 1	-0 1
2000	355	2100	-21 9	3 7	8.4		5.1	10.8	7 7	-2	-0 2	-0 1		-0.1	-0 1	-0 1
2000	355	2200	-22	3.7	8.5		5 1	10.8	7 7	-2	-0 2	-0.1		-0 1	-0.1	-0 1
2000	355	2300	-22	3 7	8.4		5 1	10.7	7.7	-2	-0 2	-0 1		-0 1	-0 1	-0.1
2000	355	2400	-22	3 7	8 5		5 1	10.8	7 7	-2.1	-0 2	-0 1		-0 1	-0.1	-0 1
2000	356	100	-22	3.7	8.5		5.1	10.8	7 7	-2 1	-0.2	-0.1		-0 1	-0.1	-0 1
2000	356	200	-22	3 8	8.4		5 1	10 8	7.6	-2.1	-0.2	-0 1		-0 1	-0.1	-0 1
2000	356	300	-22	3 8	8 4		5 1	10 8	7 6	-2.1	-0.2	-0 1		-0.1	-0.1	-0 1
2000	356	400	-22	3.8	8 4		5.1	10.8	7 6	-2.1	-0.2	-0.1		-0.1	-0.1	-0 1
2000	356	500	-22	3 8	8 4		5.1	10 8	7 7	-2.1	-0 2	-0.1		-0.1	-0 1	-0.1
2000	356	600	-22	3.9	8 4		5.1	10 8	7 6	-2 1	-0.2	-0 1		-0.1	-0 1	-0 1
2000	356	700	-22 1	3 9	8.4		5.1	10 8	7.6	-2 1	-0 2	-0 1		-0 2	-0 1	-0 1
2000	356	800	-22.1	3 9	8 4		5.1	10 9	7 6	-2.1	-0 2	-0 1		-0.1	-0 1	-0.1
2000	356	900	-22 1	3.9	8 4		5	10.9	7.6	-2 1	-0 2	-0 1		-0 2	-0.1	-0.1
2000	356	1000	-22 1	3 9	8.3		5	10 8	7.6	-2 1	-0 2	-0 1		-0 1	-0 1	-0.1
2000	356	1100	-22.1	3 9	8 3		5	10 8	7.6	-2.1	-0 2	-0 1		-0 1	-0.1	-0.1
2000	356	1200	-22.3	3 9	8 3		5	10 8	7.6	-2.1	-0.2	-0 1		-0.1	-0.1	-0 1
2000	356	1300	-22 3	3.9	8 4		5	10 9	7.6	-2 1	-0 2	-0.1		-0 1	-0.1	-0 1
2000	356	1400	-22 3	3.9	8 4		5	10 9	7 6	-2 1	-0.2	-0.1		-0 1	-0 1	-0 1
2000	356	1500	-22 3	3 9	8.4		5	10 9	7.6	-2 1	-0.2	-0 1		-0 1	-0.1	-0 1
2000	356	1600	-22.2	3 9	8 4		5	10.9	7 6	-2.1	-0.2	-0 1		-0.1	-0 1	-0 1
2000	356	1700	-22 1	4	8 4		5 1	10.9	7 6	-2.1	-0.2	-0 1		-0.2	-0 1	-0 1
2000	356	1800	-22 2	4	8 4		5.1	11	7 6	-2.1	-0.2	-0 1		-0.2	-0.1	-0 1
2000	356	1900	-22 2	4	8 4		5	11	7.6	-2.1	-0 2	-0 1		-0.2	-0.1	-0.1
2000	356	2000	-22 2	3 9	8.4		5	11	7.6	-2.1	-0 2	-0 1		-0.2	-0 1	-0.1
2000	356	2100	-22.3	3 9	8 4		5	11.1	7 6	-2.1	-0 2	-0.1		-0.2	-0 1	-0.1
2000	356	2200	-22 3	4	8 4		5.1	11.1	7 6	-2 1	-0.2	-0.1		-0 2	-0 1	-0.1
2000	356	2300	-22 3	4	8 4		5	11.1	7.6	-2 1	-0 2	-0.1		-0 2	-0 1	-0.1
2000	356	2400	-22 3	4	8.4		5 1	11.1	7 6	-2.1	-0 2	-0 1		-0.2	-0.1	-0 1
2000	357	100	-22 3	4	8 4		5.1	11.1	7 6	-2 1	-0 2	-0 1		-0 2	-0 2	-0 1
2000	357	200	-22 4	4	8.4		5 1	11.2	7 6	-2 1	-0 2	-0 1		-0 1	-0.1	-0 1
2000	357	300	-22 4	4	8 4		5.1	11 1	7 6	-2 1	-0.2	-0 1		-0 2	-0.2	-0.1
2000	357	400	-22 4	4	8 4		5 1	11 1	7 6	-2 1	-0 2	-0 1		-0 1	-0.1	-0 1
2000	357	500	-22 5	4	8 4		5.1	11 2	7.6	-2 1	-0.2	-0 1		-0 1	-0.1	-0.1
2000	357	600	-22 5	4	8 4		5 1	11 2	7.6	-2 1	-0.2	-0 1		-0 2	-0 2	-0.1
2000	357	700	-22.5	4	8 4		5 1	11 2	7.6	-2.1	-0.2	-0 1		-0.2	-0 1	-0.1
2000	357	800	-22 5	4	8 4		5 1	11 2	7.6	-2.1	-0.2	-0.1		-0 2	-0 2	-0.1

Appendix E - Data Logger Download Data October - December 2000

Year	Julian Date	Time	Head (in feet) of Water Level Above Transducer							Flow Rate (in GPM)						
			RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09	RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09
2000	357	900	-22 5	4	8 4		5.1	11 2	7 6	-2 1	-0 2	-0 1		-0.1	-0 1	-0.1
2000	357	1000	-22.5	4	8 3		5 1	11.2	7 6	-2 1	-0 2	-0 1		-0.1	-0 1	-0 1
2000	357	1100	-22.5	4	8 4		5 1	11.2	7 6	-2.1	-0 2	-0 1		-0 1	-0.1	-0 1
2000	357	1200	-22 5	4	8 4		5	11.1	7 6	-2 1	-0 2	-0 1		-0 1	-0.1	-0 1
2000	357	1300	-22.4	3 9	8.4		5	11.2	7 7	-2 1	-0 2	-0.1		-0.1	-0 1	-0 1
2000	357	1400	-22 4	3 9	8.5		5.1	11 2	7.7	-2.1	-0.2	-0.1		-0 1	-0.1	-0 1
2000	357	1500	-22.3	3.8	8 5		5	11.1	7.7	-2.1	-0 2	-0 1		-0.1	-0 1	-0.1
2000	357	1600	-22 2	3.8	8 4		5	11 1	7.7	-2 1	-0 2	-0 1		-0.2	-0 1	-0 1
2000	357	1700	-22 2	3.9	8 5		5 1	11 2	7 8	-2 1	-0 2	-0.1		-0 2	-0.1	-0 1
2000	357	1800	-22.2	3 9	8.5		5.1	11 2	7 8	-2 1	-0 2	-0 1		-0 1	-0.1	-0 1
2000	357	1900	-22.2	3 8	8 5		5 1	11.2	7 8	-2 1	-0 2	-0.1		-0 2	-0 1	-0 1
2000	357	2000	-22 2	3 8	8 5		5 1	11.2	7 8	-2.1	-0.2	-0.1		-0.2	-0 1	-0 1
2000	357	2100	-22 2	3 8	8.5		5.1	11.2	7 8	-2 1	-0.2	-0.1		-0.2	-0.1	-0 1
2000	357	2200	-22.2	3 8	8.5		5.1	11.2	7 8	-2 1	-0.2	-0 1		-0.2	-0 1	-0 1
2000	357	2300	-22 3	3 8	8.5		5.1	11.2	7 8	-2.1	-0 2	-0 1		-0 2	-0 1	-0.1
2000	357	2400	-22 3	3 8	8.5		5.1	11 2	7.8	-2.1	-0 2	-0 1		-0 2	-0.1	-0 1
2000	358	100	-22 3	3.8	8 5		5.1	11 2	7.8	-2 1	-0.2	-0 1		-0 2	-0.1	-0 1
2000	358	200	-22 3	3.8	8 5		5.1	11 2	7.8	-2 1	-0 2	-0.1		-0 1	-0 1	-0 1
2000	358	300	-22 3	3.8	8.4		5 1	11 2	7.7	-2.1	-0 2	-0.1		-0 2	-0 1	-0.1
2000	358	400	-22 3	3 8	8 4		5 1	11 2	7 7	-2.1	-0 2	-0.1		-0.2	-0 1	-0.1
2000	358	500	-22.3	3.8	8 5		5 1	11 2	7 8	-2 1	-0.2	-0.1		-0 2	-0.1	-0 1
2000	358	600	-22.3	3 8	8.5		5.1	11 2	7 8	-2 1	-0.2	-0 1		-0.2	-0 1	-0.1
2000	358	700	-22.3	3 8	8 5		5 1	11 2	7 8	-2.1	-0 2	-0 1		-0 2	-0 1	-0 1
2000	358	800	-22.3	3 8	8 5		5 1	11 2	7 8	-2.1	-0 2	-0.1		-0 2	-0.1	-0 1
2000	358	900	-22 3	3 7	8.5		5.1	11.2	7 8	-2.1	-0 2	-0 1		-0 2	-0.1	-0.1
2000	358	1000	-22 3	3.7	8.5		5	11.1	7 8	-2.1	-0.2	-0 1		-0 1	-0.1	-0 1
2000	358	1100	-22.3	3 7	8.5		5.1	11.1	7 8	-2 1	-0 2	-0.1		-0 1	-0 1	-0.1
2000	358	1200	-22 3	3 7	8 5		5.1	11.1	7 8	-2.1	-0 2	-0.1		-0.1	-0 1	-0.1
2000	358	1300	-22 2	3.7	8 5		5.1	11.1	7.8	-2 1	-0.2	-0.1		-0 1	-0.1	-0 1
2000	358	1400	-22 2	3.7	8.5		5.1	11 1	7.8	-2 1	-0.2	-0 1		-0 1	-0 1	-0 1
2000	358	1500	-22 2	3.7	8 5		5 1	11 1	7.8	-2.1	-0.2	-0 1		-0.2	-0 1	-0 1
2000	358	1600	-22 2	3.7	8 5		5 1	11 1	7.8	-2.1	-0.2	-0 1		-0.2	-0.1	-0 1
2000	358	1700	-22 1	3.7	8 5		5 1	11 1	7 8	-2 1	-0.2	-0 1		-0 1	-0.1	-0 1
2000	358	1800	-22.1	3 7	8 5		5.1	11 1	7 8	-2.1	-0 2	-0.1		-0 1	-0 1	-0.1
2000	358	1900	-22 1	3 7	8 5		5 1	11.1	7.8	-2.1	-0 2	-0 1		-0 1	-0 1	-0.1
2000	358	2000	-22.1	3 7	8 5		5 1	11 1	7.8	-2.1	-0 2	-0.1		-0.2	-0 1	-0.1
2000	358	2100	-22.1	3.7	8.5		5 1	11	7 8	-2.1	-0 2	-0.1		-0 1	-0 1	-0 1
2000	358	2200	-22.1	3.7	8.5		5 1	11 1	7 8	-2.1	-0.2	-0 1		-0 1	-0.1	-0 1
2000	358	2300	-22.1	3 7	8.5		5.1	11.1	7 8	-2 1	-0.2	-0.1		-0.1	-0 1	-0 1
2000	358	2400	-22 1	3 8	8.5		5.1	11.1	7.8	-2 1	-0.2	-0 1		-0.1	-0 1	-0.1
2000	359	100	-22 1	3 8	8.5		5.1	11.1	7.8	-2.1	-0.2	-0 1		-0.1	-0.1	-0 1
2000	359	200	-22 1	3 8	8.5		5.1	11.1	7.8	-2 1	-0.2	-0 1		-0 1	-0.1	-0 1
2000	359	300	-22 1	3 8	8.5		5.1	11 1	7.8	-2 1	-0 2	-0.1		-0 2	-0.1	-0.1
2000	359	400	-22 1	3.8	8 5		5 1	11.1	7.8	-2 1	-0 2	-0 1		-0.1	-0 1	-0.1
2000	359	500	-22 1	3.8	8 5		5 2	11 1	7 8	-2 1	-0.2	-0 1		-0 1	-0.1	-0 1
2000	359	600	-22 1	3.8	8.5		5 2	11 1	7.8	-2.1	-0 2	-0.1		-0 1	-0 1	-0 1
2000	359	700	-22 2	3.9	8 5		5 2	11 1	7 8	-2.1	-0 2	-0.1		-0 1	-0.1	-0 1
2000	359	800	-22 2	3.9	8.4		5 2	11.1	7.7	-2 1	-0 2	-0.1		-0 2	-0 1	-0 1
2000	359	900	-22 2	3.9	8 4		5 2	11 1	7 7	-2.1	-0.2	-0 1		-0.1	-0 1	-0 1
2000	359	1000	-22 2	3 9	8 4		5 2	11 1	7 7	-2 1	-0.2	-0.1		-0.1	-0.1	-0.1
2000	359	1100	-22 2	3 9	8 4		5 2	11 1	7 7	-2.1	-0.2	-0 1		-0.1	-0.1	-0.1
2000	359	1200	-22.2	3 9	8.4		5.2	11.1	7 7	-2 1	-0.2	-0 1		-0 1	-0.1	-0 1

Appendix E - Data Logger Download Data October - December 2000

Year	Julian Date	Time	Head (in feet) of Water Level Above Transducer							Flow Rate (in GPM)						
			RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09	RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09
2000	359	1300	-22 2	3.9	8 5		5 2	11 1	7 7	-2.1	-0 2	-0 1		-0 1	-0.1	-0 1
2000	359	1400	-22 1	3 9	8 5		5 1	11 1	7.8	-2.1	-0 2	-0 1		-0.1	-0 1	-0 1
2000	359	1500	-22 1	3.9	8 5		5.1	11 1	7 8	-2 1	-0.2	-0 1		-0.1	-0 1	-0 1
2000	359	1600	-22.1	3 9	8.5		5.2	11.1	7.8	-2 1	-0 2	-0 1		-0 1	-0 1	-0 1
2000	359	1700	-22	3 9	8 5		5.2	11.1	7.8	-2 1	-0 2	-0 1		-0.1	-0 1	-0.1
2000	359	1800	-22.1	3 9	8 5		5.2	11 1	7 8	-2 1	-0.2	-0 1		-0 1	-0.1	-0 1
2000	359	1900	-22 1	3 9	8 5		5 3	11.2	7.8	-2 1	-0 2	-0.1		-0 1	-0.1	-0 1
2000	359	2000	-22 1	4	8 5		5 3	11 2	7.7	-2.1	-0 2	-0 1		-0.1	-0 1	-0 1
2000	359	2100	-22 1	4	8 5		5.3	11 2	7 8	-2.1	-0 2	-0.1		-0.2	-0.1	-0 1
2000	359	2200	-22 2	4	8.5		5 3	11.2	7 8	-2.1	-0 2	-0 1		-0.2	-0 1	-0.1
2000	359	2300	-22 2	4	8.5		5 4	11 2	7 8	-2 1	-0 2	-0 1		-0.1	-0 1	-0.1
2000	359	2400	-22 2	4	8.5		5.4	11 3	7 8	-2 1	-0 2	-0 1		-0 2	-0.1	-0.1
2000	360	100	-22.2	4	8.5		5.4	11.3	7.8	-2 1	-0.2	-0.1		-0 2	-0.1	-0.1
2000	360	200	-22.3	4	8.5		5.4	11.3	7.8	-2 1	-0.2	-0.1		-0 2	-0.1	-0.1
2000	360	300	-22.3	4	8 5		5 4	11.3	7.8	-2 1	-0 2	-0 1		-0 2	-0.1	-0 1
2000	360	400	-22 3	4	8 5		5 4	11 3	7.8	-2.1	-0.2	-0.1		-0 2	-0.1	-0 1
2000	360	500	-22.4	4	8 5		5.4	11 3	7 8	-2 1	-0 2	-0.1		-0.2	-0.1	-0 1
2000	360	600	-22.4	4	8.5		5 4	11 3	7 8	-2.1	-0 2	-0 1		-0.2	-0 1	-0.1
2000	360	700	-22 4	4.1	8 5		5 2	11.3	7.8	-2.1	-0 2	-0 1		-0 1	-0 1	-0.1
2000	360	800	-22 4	4.1	8 4		5 2	11 3	7 7	-2.1	-0.2	-0 1		-0.1	-0 1	-0.1
2000	360	900	-22.4	4.1	8.5		5.2	11 3	7 7	-2.1	-0 2	-0.1		-0 1	-0.1	-0.1
2000	360	1000	-22.4	4 1	8.5		5 2	11.3	7.8	-2 1	-0 2	-0.1		-0 1	-0 1	-0 1
2000	360	1100	-22 4	4.1	8.5		5.2	11 3	7 8	-2 1	-0.2	-0.1		-0.1	-0.1	-0 1
2000	360	1200	-22.4	4 1	8.5		5.2	11 3	7 8	-2 1	-0.2	-0.1		-0 1	-0.1	-0.1
2000	360	1300	-22.4	4	8 5		5.2	11.3	7.8	-2.1	-0.2	-0 1		-0.1	-0.1	-0 1
2000	360	1400	-22.4	4	8 5		5 2	11.3	7 9	-2 1	-0 2	-0 1		-0 1	-0.1	-0 1
2000	360	1500	-22 3	3 9	8 5		5 2	11.3	7.9	-2 1	-0 2	-0 1		-0.2	-0 1	-0.1
2000	360	1600	-22 3	3.9	8 6		5 2	11.3	7.9	-2.1	-0.2	-0 1		-0.1	-0 1	-0.1
2000	360	1700	-22.3	3.9	8.5		5.2	11.3	7.9	-2 1	-0 2	-0.1		-0 2	-0 1	-0.1
2000	360	1800	-22 3	3.9	8 5		5 2	11.3	7.9	-2.1	-0 2	-0 1		-0.1	-0 1	-0.1
2000	360	1900	-22 3	3.9	8 5		5 2	11 3	7 8	-2.1	-0 2	-0.1		-0.1	-0 1	-0 1
2000	360	2000	-22.3	3.9	8 5		5.2	11 3	7 8	-2.1	-0 2	-0.1		-0 1	-0.1	-0 1
2000	360	2100	-22.3	3.9	8.5		5.2	11 3	7 8	-2.1	-0 2	-0.1		-0 2	-0.1	-0.1
2000	360	2200	-22 3	3.9	8.5		5.2	11.3	7.8	-2 1	-0.2	-0.1		-0 2	-0.1	-0.1
2000	360	2300	-22 3	3.9	8.5		5.2	11 3	7.8	-2.1	-0.2	-0.1		-0.2	-0 1	-0 1
2000	360	2400	-22.3	3.9	8 6		5.2	11 3	7 9	-2 1	-0.2	-0 1		-0 1	-0 1	-0 1
2000	361	100	-22.3	3 8	8 5		5.2	11 3	7 9	-2 1	-0.2	-0 1		-0.2	-0.1	-0.1
2000	361	200	-22.3	3 8	8.6		5.2	11 3	7 9	-2 1	-0 2	-0.1		-0.1	-0 1	-0.1
2000	361	300	-22 3	3 8	8.5		5.2	11.3	7 9	-2 1	-0 2	-0 1		-0 1	-0 1	-0.1
2000	361	400	-22 3	3 8	8 6		5 2	11.3	7.9	-2.1	-0 2	-0 1		-0.1	-0 1	-0 1
2000	361	500	-22.3	3 8	8 6		5 2	11.2	7.9	-2 1	-0 2	-0 1		-0 2	-0.1	-0 1
2000	361	600	-22.3	3 8	8 6		5.2	11.2	7.9	-2 1	-0 2	-0.1		-0 1	-0 1	-0 1
2000	361	700	-22 3	3.8	8 6		5 2	11.2	7.9	-2.1	-0 2	-0.1		-0 1	-0 1	-0.1
2000	361	800	-22 2	3.8	8 5		5 2	11 2	7.9	-2.1	-0.2	-0.1		-0 1	-0.1	-0 1
2000	361	900	-22 2	3.8	8.6		5 2	11 2	7.9	-2.1	-0.2	-0.1		-0 1	-0.1	-0 1
2000	361	1000	-22 2	3.8	8.5		5 2	11 2	7 9	-2.1	-0.2	-0 1		-0.2	-0 1	-0 1
2000	361	1100	-22.2	3.8	8.5		5.2	11 2	7.9	-2 1	-0.2	-0 1		-0 1	-0 1	-0.1
2000	361	1200	-22.2	3 8	8.6		5.2	11 2	7 9	-2.1	-0.2	-0 1		-0 1	-0 1	-0.1
2000	361	1300	-22.2	3 8	8 6		5.2	11 2	7 9	-2 1	-0.2	-0.1		-0.1	-0 1	-0.1
2000	361	1400	-22.2	3 8	8 6		5.2	11 1	8	-2.1	-0 2	-0 1		-0.1	-0 1	-0.1
2000	361	1500	-22.2	3 7	8 6		5 1	11 1	8	-2 1	-0 2	-0 1		-0 1	-0.1	-0 1
2000	361	1600	-22 1	3 7	8.6		5.1	11.1	7.9	-2 1	-0 2	-0.1		-0 1	-0 1	-0.1

Appendix E - Data Logger Download Data October - December 2000

Year	Julian Date	Time	Head (in feet) of Water Level Above Transducer							Flow Rate (in GPM)						
			RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09	RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09
2000	361	1700	-22 1	3 7	8 6		5.1	11.1	7.9	-2 1	-0 2	-0 1		-0 1	-0 1	-0 1
2000	361	1800	-22 1	3 7	8 6		5.1	11 1	7 9	-2.1	-0.2	-0 1		-0 1	-0 1	-0.1
2000	361	1900	-22.1	3.7	8 6		5 1	11 1	7 9	-2.1	-0 2	-0 1		-0 1	-0.1	-0 1
2000	361	2000	-22.1	3 8	8 6		5 1	11.1	7.9	-2.1	-0 2	-0 1		-0 1	-0.1	-0 1
2000	361	2100	-22 1	3.7	8 6		5 1	11 1	7 9	-2 1	-0.2	-0 1		-0.1	-0 1	-0.1
2000	361	2200	-22 1	3 8	8 6		5.1	11.1	7 9	-2 1	-0 2	-0.1		-0.1	-0 1	-0 1
2000	361	2300	-22 1	3 7	8.6		5 1	11.1	7.9	-2 1	-0 2	-0 1		-0 2	-0 1	-0 1
2000	361	2400	-22 1	3.7	8.6		5 1	11.1	7.9	-2.1	-0.2	-0.1		-0 1	-0 1	-0 1
2000	362	100	-22 1	3 7	8.6		5.1	11 1	8	-2 1	-0.2	-0 1		-0.1	-0.1	-0.1
2000	362	200	-22.1	3 7	8.6		5.1	11	7.9	-2.1	-0.2	-0 1		-0 1	-0.1	-0 1
2000	362	300	-22.1	3.7	8 6		5.1	11	7.9	-2.1	-0.2	-0.1		-0.1	-0 1	-0.1
2000	362	400	-22.1	3.7	8 6		5.1	11	7.9	-2.1	-0 2	-0 1		-0.1	-0 1	-0 1
2000	362	500	-22 2	3 7	8 6		5.1	11	8	-2.1	-0 2	-0.1		-0.1	-0 1	-0 1
2000	362	600	-22.1	3 6	8 6		5	11	8	-2 1	-0 2	-0.1		-0.1	-0.1	-0 1
2000	362	700	-22 1	3 6	8 6		5	11	7.9	-2.1	-0.2	-0.1		-0 1	-0 1	-0.1
2000	362	800	-22 1	3.6	8 6		5	11	7 9	-2 1	-0.2	-0.1		-0 2	-0.1	-0.1
2000	362	900	-22 2	3 6	8.6		5	11	7 9	-2 1	-0.2	-0 1		-0 2	-0.1	-0.1
2000	362	1000	-22.2	3 6	8.6		5	11	7 9	-2 1	-0.2	-0 1		-0.1	-0.1	-0 1
2000	362	1100	-22 2	3 6	8 6		5	11	7.9	-2.1	-0.2	-0 1		-0.1	-0.1	-0 1
2000	362	1200	-22.1	3.6	8.6		5	11	7 9	-2 1	-0 2	-0.1		-0.1	-0 1	-0.1
2000	362	1300	-22.1	3.6	8 6		4.9	10 9	8	-2.1	-0 2	-0 1		-0.1	-0 1	-0 1
2000	362	1400	-22.1	3.6	8 7		4 9	10.9	8	-2.1	-0.2	-0 1		-0.1	-0 1	-0 1
2000	362	1500	-22 1	3.6	8 6		4 9	10 9	8	-2.1	-0.2	-0.1		-0 1	-0 1	-0.1
2000	362	1600	-22 1	3 5	8 6		4.9	10 9	8	-2 1	-0 2	-0.1		-0.1	-0 1	-0.1
2000	362	1700	-22 1	3 5	8 7		4 9	10 9	8	-2.1	-0.2	-0.1		-0 1	-0 1	-0.1
2000	362	1800	-22 1	3 5	8 6		4.9	10 9	8	-2 1	-0 2	-0 1		-0 1	-0.1	-0.1
2000	362	1900	-22.1	3 5	8.6		4 9	10.9	8	-2.1	-0 2	-0 1		-0 1	-0.1	-0 1
2000	362	2000	-22 1	3.5	8 6		4 9	10.9	8	-2 1	-0.2	-0.1		-0 1	-0 1	-0 1
2000	362	2100	-22 1	3 5	8.6		4.9	10.9	8	-2 1	-0.2	-0 1		-0.1	-0 1	-0 1
2000	362	2200	-22.1	3 5	8.6		4.9	10.8	8	-2.1	-0.2	-0 1		-0.1	-0.1	-0 1
2000	362	2300	-22.1	3.5	8.6		4.9	10.8	8	-2 1	-0.2	-0.1		-0.1	-0 1	-0.1
2000	362	2400	-22.1	3.5	8 6		4.9	10 9	8	-2 1	-0 2	-0.1		-0.1	-0 1	-0.1
2000	363	100	-22 1	3.5	8 6		4.9	10 8	7 9	-2.1	-0 2	-0.1		-0.1	-0 1	-0.1
2000	363	200	-22.2	3.5	8.6		4.9	10.8	7.9	-2.1	-0 2	-0.1		-0 2	-0.1	-0.1
2000	363	300	-22 2	3 5	8 6		4 9	10 8	7.9	-2.1	-0.2	-0 1		-0 2	-0.1	-0 1
2000	363	400	-22 2	3.5	8 6		4 8	10 8	8	-2.1	-0.2	-0.1		-0 1	-0.1	-0 1
2000	363	500	-22 2	3 5	8 6		4 8	10 8	8	-2 1	-0 2	-0.1		-0 1	-0.1	-0 1
2000	363	600	-22 2	3 5	8 6		4.8	10 8	7.9	-2 1	-0 2	-0 1		-0.2	-0.1	-0 1
2000	363	700	-22.2	3 5	8.6		4.9	10 8	8	-2 1	-0 2	-0 1		-0.1	-0.1	-0 1
2000	363	800	-22 2	3 5	8.6		4 8	10 8	8	-2.1	-0.2	-0 1		-0 2	-0 1	-0.1
2000	363	900	-22 2	3 5	8 6		4 9	10.8	7 9	-2 1	-0.2	-0 1		-0.2	-0 1	-0.1
2000	363	1000	-22.2	3 5	8.6		4.9	10.8	7 9	-2 1	-0.2	-0 1		-0.1	-0 1	-0.1
2000	363	1100	-22.2	3 5	8.6		4.9	10.8	7.9	-2.1	-0.2	-0 1		-0.1	-0 1	-0.1
2000	363	1200	-22.3	3.5	8.6		4.9	10 8	7 9	-2 1	-0.2	-0.1		-0.1	-0 1	-0.1
2000	363	1300	-22 2	3 5	8 6		4.8	10 8	7 9	-2 1	-0 2	-0.1		-0.1	-0 1	-0.1
2000	363	1400	-22 3	3 5	8 6		4 8	10 8	8	-2.1	-0.2	-0.1		-0 1	-0 1	-0.1
2000	363	1500	-22.2	3.4	8 7		4.7	10 7	8	-2.1	-0 2	-0.1		-0 1	-0 1	-0 1
2000	363	1600	-22 2	3 4	8.6		4 8	10 7	8	-2.1	-0 2	-0 1		-0 1	-0 1	-0 1
2000	363	1700	-22 1	3.5	8 6		4 8	10 8	7 9	-2.1	-0.2	-0.1		-0 1	-0.1	-0 1
2000	363	1800	-22 2	3 5	8.6		4 8	10 8	7.9	-2.1	-0 2	-0 1		-0 2	-0.1	-0 1
2000	363	1900	-22 2	3 5	8 6		4 9	10 8	7.9	-2 1	-0.2	-0 1		-0 1	-0 1	-0 1
2000	363	2000	-22 2	3 6	8 6		4.9	10.8	7 9	-2 1	-0.2	-0 1		-0 1	-0 1	-0.1

Appendix E - Data Logger Download Data October - December 2000

Year	Julian Date	Time	Head (in feet) of Water Level Above Transducer							Flow Rate (in GPM)						
			RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09	RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09
2000	363	2100	-22 2	3 6	8 6		4 9	10.8	7 9	-2.1	-0 2	-0 1		-0 1	-0 1	-0 1
2000	363	2200	-22 2	3.6	8.6		4 9	10 8	7 9	-2 1	-0.2	-0 1		-0 1	-0.1	-0 1
2000	363	2300	-22 2	3.6	8.6		4.9	10 8	7 9	-2 1	-0.2	-0 1		-0.2	-0.1	-0 1
2000	363	2400	-22 2	3 6	8 6		4 9	10.9	7.9	-2 1	-0 2	-0 1		-0 2	-0 1	-0.1
2000	364	100	-22.2	3 6	8 6		4 9	10 9	7.9	-2.1	-0 2	-0.1		-0.2	-0 2	-0 1
2000	364	200	-22.2	3 6	8 6		4 9	10 9	7.9	-2 1	-0.2	-0.1		-0 1	-0 1	-0 1
2000	364	300	-22.2	3 6	8.6		4 9	10.9	7.9	-2 1	-0 2	-0.1		-0.2	-0 1	-0.1
2000	364	400	-22 2	3.5	8 6		4 9	10.8	7 9	-2.1	-0 2	-0 1		-0.2	-0.1	-0 1
2000	364	500	-22.2	3 5	8 6		4.9	10 9	7 9	-2 1	-0.2	-0 1		-0.1	-0.1	-0 1
2000	364	600	-22 2	3.5	8.6		4.9	10.9	7.9	-2 1	-0.2	-0 1		-0 2	-0 1	-0.1
2000	364	700	-22 2	3.6	8.6		4.9	10 9	7 9	-2.1	-0 2	-0 1		-0.2	-0 1	-0.1
2000	364	800	-22 2	3.6	8 6		4.9	10 8	7.9	-2.1	-0 2	-0.1		-0.1	-0 1	-0 1
2000	364	900	-22.2	3 6	8 6		4.9	10 8	7.9	-2 1	-0.2	-0.1		-0.2	-0.1	-0 1
2000	364	1000	-22.2	3 6	8.6		4 9	10.8	7.9	-2 1	-0 2	-0.1		-0.1	-0 1	-0.1
2000	364	1100	-22.2	3 6	8 6		4 9	10 8	7.9	-2 1	-0 2	-0 1		-0.1	-0.1	-0 1
2000	364	1200	-22 3	3.6	8 6		4 8	10.8	7 9	-2.1	-0 2	-0 1		-0.1	-0.1	-0 1
2000	364	1300	-22.3	3 6	8 6		4.8	10.8	7 9	-2.1	-0.2	-0 1		-0 1	-0.1	-0 1
2000	364	1400	-22.3	3 6	8.6		4 9	10.8	7 9	-2.1	-0.2	-0 1		-0 1	-0 1	-0.1
2000	364	1500	-22 3	3 6	8 6		4 9	10.8	7.9	-2.1	-0 2	-0 1		-0 1	-0 1	-0.1
2000	364	1600	-22 3	3.7	8 6		4 9	10 9	7 9	-2.1	-0 2	-0.1		-0.2	-0 2	-0.1
2000	364	1700	-22.3	3.7	8.6		5	10 9	7 9	-2 1	-0.2	-0.1		-0.2	-0.1	-0 1
2000	364	1800	-22 3	3.8	8.6		5	10.9	7.9	-2 1	-0 2	-0.1		-0.2	-0 2	-0 1
2000	364	1900	-22.4	3.8	8 5		5.1	10 9	7 8	-2.1	-0 2	-0.1		-0.1	-0.1	-0 1
2000	364	2000	-22.4	3 9	8.6		5.1	11	7.8	-2 1	-0 2	-0.1		-0.2	-0.1	-0 1
2000	364	2100	-22 4	3 9	8 6		5 1	11	7.8	-2 1	-0 2	-0 1		-0 1	-0.1	-0.1
2000	364	2200	-22 4	3 9	8 6		5.1	11	7.9	-2 1	-0.2	-0.1		-0 1	-0.1	-0.1
2000	364	2300	-22 4	3 9	8 6		5 2	11	7.9	-2.1	-0.2	-0 1		-0 1	-0 1	-0.1
2000	364	2400	-22 4	3.9	8 6		5 2	11	7 9	-2.1	-0.2	-0 1		-0.2	-0 1	-0.1
2000	365	100	-22.4	3 9	8 6		5.2	11.1	7 9	-2.1	-0 2	-0.1		-0 1	-0.1	-0 1
2000	365	200	-22 4	3 9	8 6		5 2	11.1	7.9	-2 1	-0 2	-0.1		-0.2	-0 1	-0.1
2000	365	300	-22 4	3.9	8 6		5.2	11 1	7 9	-2.1	-0 2	-0.1		-0.1	-0.1	-0 1
2000	365	400	-22 4	3 9	8.6		5.2	11.1	7 9	-2 1	-0.2	-0.1		-0.2	-0.1	-0 1
2000	365	500	-22.5	3.9	8.6		5.2	11 1	7 9	-2 1	-0 2	-0.1		-0 1	-0.2	-0 1
2000	365	600	-22.5	3.9	8.6		5.2	11.1	7.9	-2 1	-0 2	-0 1		-0 1	-0 2	-0.1
2000	365	700	-22.5	3.9	8 6		5 2	11.1	7.9	-2 1	-0 2	-0 1		-0 2	-0 1	-0.1
2000	365	800	-22.5	3.9	8 6		5 2	11 1	7 9	-2.1	-0 2	-0 1		-0.1	-0 2	-0.1
2000	365	900	-22.5	3.9	8 6		5.2	11 1	7.9	-2 1	-0.2	-0 1		-0.1	-0.1	-0.1
2000	365	1000	-22.5	3 9	8.6		5.2	11 1	7.9	-2 1	-0.2	-0.1		-0 1	-0 1	-0 1
2000	365	1100	-22 5	3 9	8 6		5 1	11	7 9	-2.1	-0.2	-0.1		-0.1	-0 1	-0 1
2000	365	1200	-22 5	3.9	8 6		5 1	11	7.9	-2.1	-0.2	-0.1		-0.1	-0 1	-0.1
2000	365	1300	-22 5	3 9	8 6		5 1	11	7 9	-2.1	-0 2	-0.1		-0.1	-0 1	-0 1
2000	365	1400	-22 4	3 9	8.6		5.1	11.1	7 9	-2 1	-0 2	-0.1		-0 1	-0.1	-0 1
2000	365	1500	-22 3	3 9	8 6		5 1	11	7.9	-2 1	-0 2	-0.1		-0 1	-0.1	-0.1
2000	365	1600	-22 3	3.9	8 6		5.1	11	7 9	-2 1	-0 2	-0 1		-0.1	-0.1	-0 1
2000	365	1700	-22 3	3 9	8.6		5.1	11 1	7 9	-2 1	-0 2	-0.1		-0 2	-0 1	-0.1
2000	365	1800	-22 3	3 9	8.6		5.2	11.1	7 9	-2 1	-0 2	-0 1		-0 1	-0 1	-0.1
2000	365	1900	-22 3	3 9	8.6		5.2	11 1	7 9	-2 1	-0.2	-0.1		-0 2	-0 1	-0 1
2000	365	2000	-22 3	4	8 6		5 2	11 1	7 9	-2 1	-0 2	-0 1		-0 2	-0 1	-0.1
2000	365	2100	-22 3	4	8.6		5.2	11 1	7 9	-2 1	-0.2	-0 1		-0.1	-0.2	-0 1
2000	365	2200	-22 3	4	8 6		5 3	11.2	7.9	-2 1	-0.2	-0.1		-0.2	-0 1	-0.1
2000	365	2300	-22 3	4	8 6		5 3	11 2	7 9	-2 1	-0.2	-0.1		-0 2	-0 1	-0 1
2000	365	2400	-22 3	4	8 6		5 3	11.2	7.9	-2.1	-0.2	-0.1		-0 2	-0.1	-0 1

Appendix E - Data Logger Download Data October - December 2000

Year	Julian Date	Time	Head (in feet) of Water Level Above Transducer							Flow Rate (in GPM)						
			RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09	RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09
2000	366	100	-22 3	4	8 6		5 3	11.2	7 9	-2 1	-0 2	-0 1		-0 1	-0 1	-0 1
2000	366	200	-22 3	4	8 6		5 3	11.2	7 9	-2 1	-0 2	-0.1		-0.2	-0.1	-0.1
2000	366	300	-22.4	4 1	8 6		5.3	11 2	7.9	-2.1	-0 2	-0 1		-0 2	-0.1	-0 1
2000	366	400	-22 4	4 1	8.6		5.4	11 2	7 9	-2.1	-0.2	-0 1		-0 2	-0.1	-0 1
2000	366	500	-22 4	4.1	8 6		5 4	11 2	7.9	-2 1	-0 2	-0 1		-0.2	-0 1	-0 1
2000	366	600	-22.4	4.1	8.6		5 4	11.3	7 9	-2 1	-0 2	-0 1		-0.2	-0 1	-0.1
2000	366	700	-22.4	4 1	8 6		5 4	11 3	7.9	-2 1	-0 2	-0 1		-0 1	-0.1	-0.1
2000	366	800	-22 4	4 1	8.6		5.4	11 3	7.9	-2.1	-0 2	-0.1		-0.1	-0.1	-0 1
2000	366	900	-22.4	4.1	8.6		5 4	11 3	7 9	-2.1	-0.2	-0 1		-0 1	-0 1	-0.1
2000	366	1000	-22 4	4 1	8 6		5 3	11.2	7 9	-2.1	-0 2	-0 1		-0.1	-0.1	-0 1
2000	366	1100	-22.4	4 1	8 6		5.3	11.2	7 9	-2 1	-0 2	-0 1		-0.1	-0.1	-0.1
2000	366	1200	-22.4	4 1	8 6		5 3	11 2	7.9	-2 1	-0.2	-0.1		-0.1	-0.1	-0 1
2000	366	1300	-22.4	4	8.6		5.3	11.2	7.9	-2.1	-0 2	-0.1		-0 1	-0.1	-0 1
2000	366	1400	-22 3	4	8 6		5 3	11 2	8	-2.1	-0.2	-0 1		-0 1	-0.1	-0.1
2000	366	1500	-22 3	4	8 6		5.3	11.2	8	-2 1	-0 2	-0.1		-0.1	-0.1	-0 1
2000	366	1600	-22.2	4	8 6		5 3	11.2	8	-2 1	-0 2	-0 1		-0.1	-0.1	-0.1
2000	366	1700	-22.2	4	8.6		5 3	11 2	8	-2 1	-0.2	-0.1		-0 1	-0.1	-0.1
2000	366	1800	-22 2	4	8.6		5.3	11.2	8	-2.1	-0 2	-0 1		-0 2	-0.1	-0.1
2000	366	1900	-22 2	4	8 6		5.3	11 2	8	-2.1	-0.2	-0.1		-0 2	-0.1	-0 1
2000	366	2000	-22 2	4	8 6		5.3	11 3	8	-2 1	-0 2	-0 1		-0.2	-0 1	-0 1
2000	366	2100	-22.3	4	8.6		5 3	11.3	8	-2 1	-0 2	-0 1		-0 2	-0 1	-0.1
2000	366	2200	-22.3	4	8 6		5 4	11.3	7 9	-2 1	-0 2	-0.1		-0 2	-0.1	-0.1
2000	366	2300	-22 3	4 1	8.6		5 4	11 3	7.9	-2 1	-0 2	-0.1		-0 1	-0.1	-0 1
2000	366	2400	-22 3	4.1	8.6		5 4	11 3	7.9	-2 1	-0 2	-0.1		-0 2	-0 1	-0 1

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