



THE MEMPHIS DEPOT TENNESSEE

ADMINISTRATIVE RECORD COVER SHEET

AR File Number 604

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

DUNN FIELD

MEMPHIS DEFENSE DEPOT, TENNESSEE

PREPARED FOR



MOBILE DISTRICT COE

CONTRACT NO. DACA01-99-D-0040

BY

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1.0 INTRODUCTION

This report presents results of Year Two, Third Quarter monitoring (Y2Q3) for the Groundwater Interim Remedial Action (IRA) extraction 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 June through August 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.

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. A representative water level from these transducer wells is included in Appendix A. 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 a lodged sampling pump.

All wells requiring water level measurements were monitored in accordance with 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 and Y2Q2 measurement data were submitted to the USACE, DLA, TDEC and USEPA separately with their respective groundwater quality reports. A complete set of the Y2Q3 measurement data is given in Appendix A.

In addition to the monitoring wells discussed above, recovery well water levels 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.

2.2 Groundwater Sample Collection and Analyses

Groundwater samples were collected in August-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	<u>Quarterly Analyses:</u> pH/Field Probe Conductivity/Field Probe Volatile Organics/SW8260	22-Aug-00 through 24-Aug-00
	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		
Groundwater Recovery Wells	RW-1A	<u>Quarterly Analyses:</u> pH/Field Probe Conductivity Field Probe Volatile Organics/SW8260	22-Aug-00 through 24-Aug-00
	RW-1B		
	RW-01		
	RW-02		
	RW-03		
	RW-04		
	RW-05		
	RW-06		
	RW-07		
	RW-08		
	RW-09		

Cumulative analytical results for quarterly sampled monitoring wells presented in Table 2 include seven 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. 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 a sampling pump being 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 August 2000. The samples were analyzed in accordance with Section F.1 of the Industrial Wastewater Discharge Agreement for Volatile Organic Compounds (VOCs) by method SW846 8260B.

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.

2.4.1 Quarterly Groundwater Sampling Event

QA/QC samples collected in the field during this quarterly sampling event included 1 equipment blank, 3 double blind duplicates, 1 field blank, 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 July-00. 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 Y2Q3 remedial action groundwater monitoring at DDMT in August 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 Y2Q3 was collected for the Dunn Field area on August 30, 2000. The ground water interpolation for the third 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 Y2Q3 groundwater measurement event was to the southwest. In general, the baseline calculated hydraulic gradient was approximately 0.01 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 5. 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 Y2Q3 sampling and analysis event are presented with historical data in Figure 3. A copy of the laboratory analytical reports for Y2Q3 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 Y2Q3 monitoring period (June 1 through August 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 Y2Q2 period in June and July for Cis 1,2 – dichloroethene. The detected concentrations of 62.7 and 54.4 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 August 2000.

3.2.2 Recovery Well Analytical Results Summary

Y2Q3 groundwater samples were collected from recovery wells during the week of August 22, 2000. The groundwater samples were analyzed for TCL Volatile Organics (Method 8260B). Results are provided in Table 3. Y2Q3 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.

RW-01 This was the third time this recovery well has been sampled since being installed in November 1999. Two compounds were detected at concentrations exceeding MCLs. Carbon tetrachloride (CT) decreased slightly from 45.40 to 41.50 ug/L. Trichloroethene (TCE) also decreased slightly from 45.50 to 40.20 ug/L.

RW-01A This was the third time this recovery well has been sampled since being installed in November 1999. Two compounds were detected at concentrations exceeding MCLs. CT decreased slightly from 10.60 to 9.47 ug/L. TCE increased slightly from 73 to 73.9 ug/L.

RW-01B This was the third time this recovery well has been sampled since being installed in November 1999. Two compounds were detected at concentrations exceeding MCLs. CT increased from 12.3 to 26.1 ug/L. TCE increased from 13.6 to 35.7 ug/L.

RW-02 This was the third time this recovery well has been sampled since being installed in November 1999. Two compounds were detected at concentrations exceeding MCLs. CT increased slightly from 16.4 to 16.8 ug/L. TCE increased slightly from 16.9 to 20.6 ug/L.

RW-03 Three compounds (CT, Cis 1,2-dichloroethene [Cis-DCE], and TCE) were detected at concentrations exceeding MCLs during Y2Q3. CT and TCE have exceeded MCLs during each of the seven quarterly sampling events. During the Y2Q3, CT

decreased slightly from Y2Q2 from 16.3 to 13.8 ug/L. Cis-DCE decreased from 138 to 70.8 ug/L. TCE decreased from 78.8 to 57.4 ug/L.

RW-04 Three compounds (CT, Tetrachloroethene [PCE], and TCE) were detected at concentrations exceeding MCLs during Y2Q3. TCE has exceeded MCLs during each of the seven quarterly sampling events. During Y2Q3 CT increased slightly from 4.26 to 5.83 ug/L. PCE increased from 1.97 to 5.14 ug/L and TCE increased from 316 to 334 ug/L.

RW-05 A sample was collected during Y2Q3 for the first time since Y2Q1. TCE has consistently exceeded MCLs in all previous quarterly sampling events in which a sample was obtained. Only TCE exceeded the MCL for Y2Q3 and decreased since Y2Q1 from 1170 to 132 ug/L.

RW-06 Two compounds (PCE and TCE) were detected at concentrations exceeding MCLs during Y2Q3. PCE has exceeded MCLs in 6 of 7 monitoring events, while TCE has consistently exceeded MCLs in each of the seven monitoring events. PCE increased slightly from 5.52 to 5.9 ug/L while TCE decreased slightly from 37.9 to 34 ug/L.

RW-07 Three compounds (Cis-DCE, PCE and TCE) were detected at concentrations exceeding MCLs during Y2Q3. Cis-DCE has exceeded MCLs in 3 of 7 quarterly sampling events, while PCE and TCE have exceeded MCLs in all seven events. Cis-DCE increased from 59.6 to 70.6 ug/L. PCE increased from 7.76 to 10.7 ug/L while TCE increased slightly from 97.2 to 98.9 ug/L.

RW-08 Three compounds (Cis-DCE, PCE and TCE) exceeded MCL concentrations during the Y2Q3 sampling event. Cis-DCE has exceeded the MCL concentration in 6 of 7 quarterly sampling events, while PCE and TCE have consistently exceeded MCLs in each of the seven events. Cis-DCE increased slightly from 120 to 128 ug/L. PCE increased slightly from 5.19 to 5.66 ug/L and TCE decreased from 268 to 190 ug/L.

RW-09 Three compounds (1,1-DCE, PCE and TCE) were detected at concentrations exceeding the MCLs during the Y2Q3 sampling event. All three compounds have exceeded MCLs during each of the seven sampling events. 1,1-DCE increased slightly from 35.9 to 45.4 ug/L. TCE increased slightly from 32.1 to 32.9 ug/L and TCE decreased slightly from 37.7 to 35.5 ug/L.

3.2.3 Monitoring Well Analytical Results Summary

Y2Q3 groundwater samples were collected from select monitoring wells at the site. The samples were analyzed for TCL Volatile Organics (Method (8260B)). Y2Q3 monitoring well laboratory analytical reports are contained in Appendix B.

Table 2 presents TCL Volatile Organics analytical results from all monitoring wells sampled during the Y2Q3 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.

MW-15 Three compounds (CT, 1,1,2 Trichloroethane [TCA] and TCE) were detected at concentrations exceeding MCLs during Y2Q3. CT and TCE have exceeded MCLs during each of the seven quarterly sampling events. TCA has exceeded MCLs three of the seven sampling events. TCA has exceeded MCLs in the past, however it has not exceeded MCLs during each of the last two sampling events, and in fact was not detected in Y2Q3. CT increased slightly from 16.3 to 24.7 ug/L. TCA increased slightly from 4.69 to 5.7 ug/L and TCE increased from 154 to 234 ug/L.

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

MW-31 Two compounds (1,2 Dichloroethane and TCE) were detected at concentrations exceeding MCLs during Y2Q3. 1,2 Dichloroethane had not previously been detected at concentrations exceeding MCLs and was found at a concentration of 9.58 ug/L. 1,1 DCE, which had been detected at concentrations exceeding MCLs in each of the two previous sampling events, was not detected during Y2Q3. TCE has exceeded MCLs in each of seven quarterly sampling events and increased from 49.5 to 68.1 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 seven quarterly sampling events. PCE had not previously been detected at concentrations exceeding the MCL. CT increased from 37 to 47.2 ug/L and TCE increased from 58.2 to 89.2 ug/L.

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

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

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

MW-44 One compound (CT) was detected at a concentration exceeding the MCLs during Y2Q3 (5.3 ug/L). All VOC compounds had been non-detect for the first five quarterly sampling events, but several compounds have been detected the last two sampling events.

MW-51 Two compounds (DCE and TCE) were detected at concentrations exceeding the MCLs during Y2Q3. DCE concentrations have exceeded MCLs in each event except for Y2Q1 and increased from 8.23 to 12.9 ug/L. TCE has exceeded MCLs only once previously in Y1Q1 and increased slightly from 4.63 to 6.33 ug/L between Y2Q2 and Y2Q3.

MW-54 Two VOC compounds (CT and TCE) were detected at concentrations exceeding MCLs during the Y2Q3 sampling event. CT increased from 4.46 to 7.97 ug/L and TCE increased from 11.6 to 28.1 ug/L. TCE has exceeded MCLs in each of the seven sampling events.

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

MW-57 This was the third time this well has been sampled. Three compounds (CT, PCE, and TCE) were detected at concentrations exceeding MCLs. CT increased from 39.9 to 50.6 ug/L. PCE decreased slightly from 5.38 to 5.1 ug/L. TCE increased slightly from 46.5 to 49.2 ug/L. Each of these compounds has exceeded MCLs in each of the three sampling events.

MW-58 This was the third time this well has been sampled. No VOCs have been detected at concentrations exceeding MCLs during all three quarterly sampling events.

MW-59 One compound (PCE) was detected at a concentration exceeding the MCL. PCE has exceeded MCLs in each of the three quarterly events in which this well has been sampled. The PCE concentration decreased slightly from 24.1 to 22 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 Two compounds (PCE and TCE) were detected at concentrations exceeding the MCL. PCE concentration increased from 2.07 to 8.35 ug/L while TCE increased slightly from 44.5 to 48.9 ug/L.

MW-69 One compound (TCE) was detected at a concentration exceeding the MCL. TCE has been detected at concentrations exceeding the MCL in each of the three quarterly events in which this well has been sampled. TCE concentration decreased significantly this quarter from 642 to 50.4 ug/L.

MW-70 Four compounds (Cis-DCE, PCE, 1,1,2 Trichloroethane [1,1,2-TCA], and TCE) were detected at concentrations exceeding MCLs. The standard sampling method was used this quarter, a change from the stratified sampling conducted in the previous quarter. Concentrations of the detected compounds were elevated somewhat from the previous quarter, although still significantly lower than the Y2Q1 event. Cis-DCE increased from 54.8 to 218 ug/L. PCE increased from 5.35 to 35.8 ug/L. 1,1,2-TCA increased from 3.93 to 15.2 ug/L. TCE increased from 720 to 1120 ug/L.

MW-71 Three VOC compounds (CT, PCE, and TCE) were detected at concentrations exceeding MCLs during Y2Q3. CT and TCE have exceeded the MCLs in each of the three sampling events in which this well was sampled. PCE has exceeded the MCL in two of the three sampling events. CT decreased slightly from 34 to 32.9 ug/L. PCE increased from 4.54 to 7.02 ug/L and TCE decreased slightly from 239 to 224 ug/L.

3.3 QA/QC Results

Quality control samples and results are presented in Table 4 for the Y2Q3 sampling event. A data evaluation was conducted for the quarterly sampling event and for the June, July and August monthly effluent sampling events. A copy of the complete data evaluation is provided in Appendix D.

3.3.1 Y2Q3 Samples

The three samples taken in duplicate were MW-30, RW-02 and MW-70. 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. "NC" indicates the RPD could not be calculated due to a positive result in a sample but not its duplicate.

Analyte	MW-30	RW-02	MW-70
Carbon Tetrachloride		1	9
Chloroform		1	4
Trans-1,2-Dichloroethene		1	7
1,1,2,2-Tetrachloroethane			3
Tetrachloroethene		2	6
1,1,2-Trichloroethane		19	3
Trichloroethene		2	4
Cis-1,2-Dichloroethene		3	8
Vinyl Chloride			NC

The acceptance criteria used for field duplicates was <20% (reference SW-846 Test Methods for Evaluating Solid Waste). None of the samples yielded a RPD above the acceptance limit.

3.3.2 Monthly Effluent Samples

Three effluent samples were collected during the third 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-026. This equipment blank yielded detectable concentrations of calcium and sodium (0.067 and 3.2 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-44 has experienced a gradual increase in detection of compounds; from all non-detect in the first five sampling periods to several detections in the Y2Q2 event, to one exceedance of the MCL in the Y2Q3 event.
- MW-32 continues to experience a gradual increase in concentration of compounds.
- MW-70 continues to exhibit the highest concentration of compounds of any sampled wells, however concentrations are significantly lower in the Y2Q3 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 Y2Q3.
- 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. Efforts are currently underway to free the pump, or to drive it to the bottom of the well.
- Periods of downtime have been experienced for the following wells:

RW-03 – Flow meter required recalibration. Was off-line 01 June to 19 June.

RW-04 – Was cycling badly. Shut down on 27-July. Controller was reprogrammed and well restarted 07-August.

RW-05 – Actuator had to be replaced. Was out of commission 01-June to 08-July.

RW-07 – Was cycling off due to low-flow alarm. Set point was changed and well was restarted 07-August.

TABLES

Table 1
Summary of Analytical Results for Total Effluent (Through August 2000)

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 Industrial Wastewater Discharge Max. Levels
Laboratory ID No	9810817-01	9810819-01	9811283-01	9811479-01	9811479-04	9811705-01	9812045-01	
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 2 of System Operation (O&M)	Week 3 of System Operation (O&M)	Week 4 of System Operation (O&M)	
Date Effluent Sample Collected	19-Oct-98	26-Oct-98	9-Nov-98	16-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/285,560 GPD	169 GPM/244,512 GPD	158 GPM/228,672 GPD	145 GPM/209,800 GPD	10,989,840 GAL	561,600 GPD
LABORATORY ANALYSES	1,382,400 GAL	3,408,480 GAL	5,976,549 GAL	7,748,680 GAL	9,343,370 GAL	10,989,840 GAL		Monthly Ave / One Day Max.
DL	5.8	5.9	5.8	5.6	5.9	5.6	5.8	5.5 to 10.0
Units	SU							mg/L
TAL Metals (EPA 200 Series)								
Aluminum (Method 200.7)	ND	ND	ND	ND	ND	ND	ND	1/2
Arsenic (Method 208.2)	ND	ND	ND	ND	ND	ND	ND	0.04/0.1
Barium (Method 200.7)	0.104	0.107	0.109	0.118	0.117	0.112	0.124	NS
Cadmium (Method 200.7)	ND	ND	ND	ND	ND	ND	ND	0.01/0.02
Calcium (Method 200.7)	23	21.6	24.7	25.3	25	24.6	28.5	NS
Chromium (Method 200.7)	ND	ND	ND	ND	ND	ND	ND	0.2/0.4
Copper (Method 200.7)	ND	ND	ND	ND	ND	ND	ND	0.2/0.4
Iron (Method 200.7)	0.07	0.046	0.022	0.019	0.019	0.036	0.01	0.2/0.4
Lead (Method 200.7)	ND	ND	ND	ND	ND	ND	ND	10/20
Magnesium (Method 200.7)	11.7	11.3	12.6	13	12.8	12.5	13	0.15/0.3
Manganese (Method 200.7)	ND	ND	ND	0.015	0.015	0.014	0.048	NS
Mercury (Method 245.1)	ND	ND	ND	ND	ND	ND	ND	0.001/0.002
Nickel (Method 200.7)	ND	ND	ND	ND	ND	ND	ND	0.1/0.3
Potassium (Method 200.7)	0.916	0.781	0.883	0.975	1.15	0.9	0.703	NS
Sodium (Method 200.7)	27.8	28.3	27.7	27.9	28.7	26.8	28.1	NS
Zinc (Method 200.7)	0.047	0.129	0.095	0.098	0.095	0.083	0.062	0.3/1.0
TCL Volatile Organics (Method 8260B)								
Carbon Tetrachloride	2.9	4.3	3.06	3.27	3.38	4.07	3.22	ug/L
Chloroform	13.6	12.9	14.9	18.1	20.9	20.6	16.4	20/40
1,1-Dichloroethane	1	ND	ND	ND	ND	ND	ND	NS
1,1-Dichloroethene	11.6	5.42	9.99	13.9	15.6	20.3	14.6	50/100
Cis 1,2-Dichloroethene	29.2	43.8	30	33.3	36.8	37.3	32.8	50/100
Trans 1,2-Dichloroethene	5.96	9.27	6.68	7.47	7.92	8.42	7.47	50/100
Methylene Chloride	1	ND	ND	ND	ND	ND	ND	10/20
1,1,2,2-Tetrachloroethane	87.1	159	234	234	257	272	178	500/1000
Tetrachloroethene	25.7	22.6	28.9	30	29.7	34.4	25.6	80/120
Toluene	1	ND	ND	ND	ND	ND	ND	20/40
1,1,1-Trichloroethane	1	ND	ND	ND	ND	1	ND	10/20
1,1,2-Trichloroethane	181	2.82	1.59	1.48	1.5	1.3	1.1	50/100
Trichloroethene	108	226	195	225	220	217	160	400/800
TCL Semi-Volatile Organics (Method 8270C)								
Bis(2-ethylhexyl)phthalate	ND	23.6B	ND	ND	ND	26B	ND	ug/L
Di-n-butyl Phthalate	91.2	2.5J	ND	ND	ND	ND	ND	10/20
Naphthalene	ND	ND	ND	ND	ND	ND	ND	30/60
Phenol	ND	ND	ND	ND	ND	ND	ND	10/20

NOTE: Compounds included in the 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-06 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

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

ND = not detected

mg/L = milligrams per liter

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 (Through August 2000)

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 Industrial Wastewater Discharge Max. Levels
Laboratory ID No	9812784-01	9812784-02	9801888-01	9802864-01	9802702-01	9802702-02	9802756-01	9802775-01	
Total System Effluent Sample Description	Week 7 of System Operation (O&M)	Week 13 of System Operation (O&M)	Week 13 of System Operation (O&M)	Week 13 of System Operation (O&M)	Week 17 of System Operation (O&M)				
Date Effluent Sample Collected	18-Dec-98	22-Feb-99	22-Feb-99	22-Feb-99	23-Feb-99	23-Feb-99	24-Feb-99	25-Feb-99	
Instantaneous Flow Rate	98.4' GPM/141.886 GPD	118.7 GPM/168.048 GPD	108.1 GPM/155.564 GPD	80.7 GPM/116.208 GPD	79.2 GPM/114.048 GPD	104.2 GPM/150.046 GPD	24.924/750 GAL	25.017/630 GAL	561,600 GPD
Totalized Flow	14,448,100 GAL	20,527,972 GAL	24,688,250 GAL	24,817,070 GAL					
LABORATORY ANALYSES	DL	Units							Monthly Ave / One Day Max.
pH (Method 150.1)	5.8	5.8	8.5	8.1					5.5 to 10.0
TAL Metals (EPA 200 Series)									
Aluminum (Method 200.7)	ND	ND	ND	ND					mg/L
Arsenic (Method 208.2)	ND	ND	ND	ND					1/2
Barium (Method 200.7)	0.114	0.118	0.119	0.109					0.04/0.1
Cadmium (Method 200.7)	ND	ND	ND	ND					NS
Calcium (Method 200.7)	25.2	28.3	27.1	23.1					0.01/0.02
Chromium (Method 200.7)	ND	ND	ND	ND					NS
Copper (Method 200.7)	0.020	0.014	0.044	0.151					0.2/0.4
Iron (Method 200.7)	ND	ND	ND	ND					0.2/0.4
Lead (Method 200.7)	ND	ND	ND	ND					10/20
Magnesium (Method 200.7)	11.9	12.4	12.5	11.3					0.15/0.3
Manganese (Method 200.7)	0.087	0.101	0.175	0.049					NS
Mercury (Method 245.1)	ND	ND	ND	ND					NS
Nickel (Method 200.7)	ND	ND	ND	ND					0.001/0.002
Potassium (Method 200.7)	0.808	0.818	0.927	0.951					0.1/0.3
Sodium (Method 200.7)	25.3	26.8	26.5	24.1					NS
Zinc (Method 200.7)	0.115	0.081	0.048	0.065					NS
TCL Volatile Organics (Method 8260B)									
Carbon Tetrachloride	4.50	4.72	2.32	2.53					ug/L
Chloroform	10.1	10.3	9.95	6.64					20/40
1,1-Dichloroethane	ND	ND	ND	ND					NS
1,1-Dichloroethene	4.8	5.36	13.3	19.5					50/100
Cis 1,2-Dichloroethene	43.4	46.7	34	38.2					50/100
Trans 1,2-Dichloroethene	9.78	10.4	7.85	11					50/100
Methylene Chloride	ND	ND	ND	ND					10/20
1,1,2,2-Tetrachloroethane	175	189	60.1	46.8					500/1000
Tetrachloroethane	11.8	13.4	17.9	16.5					60/120
Toluene	ND	ND	ND	ND					20/40
1,1,1-Trichloroethane	ND	ND	ND	ND					10/20
1,1,2-Trichloroethane	ND	1.06	ND	ND					50/100
Trichloroethene	183	198	118	144					400/800
TCL Semi-Volatile Organics (Method 8270C)									
Bis(2-ethylhexyl)phthalate	11.9	11.6	ND	ND					ug/L
Di-n-butyl Phthalate	ND	ND	ND	ND					10/20
Naphthalene	ND	ND	ND	ND					30/60
Phenol	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 method 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

mg/L = milligrams per liter

DL = detection limit

GPD = gallons per day

AcEffluent meter zeroed out 03-Nov-99

B = analysis 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 (Through August 2000)

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 Industrial Wastewater Discharge Max. Levels
Laboratory ID No	9904750-01	9904750-02	9904750-01	9904750-02	9904750-01	9904750-02	9904750-02	
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 30 of System Operation (O&M)	Week 35 of System Operation (O&M)	Week 38 of System Operation (O&M)	Week 38 of System Operation (O&M)	
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/135,782 GPD	105.3 GPM/151,632 GPD	87.9 GPM/128,576 GPD	81.3 GPM/117,072 GPD	80.9 GPM/116,496 GPD			561,600 GPD
Totalized Flow	28,904,822 GAL	32,187,260 GAL	36,220,118 GAL	40,550,682 GAL	42,847,212 GAL			
LABORATORY ANALYSES	DL	DL	DL	DL	DL	DL	DL	Monthly Ave / One Day Max
pH (Method 150.1)	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)	ND	ND	ND	ND	ND	ND	ND	1/2
Arsenic (Method 208.2)	ND	ND	ND	ND	ND	ND	ND	0.04 / 0.1
Barium (Method 200.7)	0.108	0.108	0.114	0.11	0.107	0.101	0.099	NS
Cadmium (Method 200.7)	ND	ND	ND	ND	ND	ND	ND	0.01 / 0.02
Calcium (Method 200.7)	22.7	23	22.8	23.1	21.4	21	21.2	NS
Chromium (Method 200.7)	ND	ND	ND	ND	ND	ND	ND	0.2 / 0.4
Copper (Method 200.7)	ND	ND	ND	ND	ND	ND	ND	0.2 / 0.4
Iron (Method 200.7)	0.034	0.025	0.034	0.012	0.016	0.016	0.011	0.2 / 0.4
Lead (Method 200.7)	ND	ND	ND	ND	ND	ND	ND	0.2 / 0.4
Magnesium (Method 200.7)	11.3	11.6	11.7	11.4	10.5	10.6	10.6	10 / 20
Manganese (Method 200.7)	0.04	0.028	0.03	0.031	0.027	0.014	0.059	0.15 / 0.3
Mercury (Method 245.1)	ND	ND	ND	ND	ND	ND	ND	NS
Nickel (Method 200.7)	0.02	0.028	0.03	0.031	0.027	0.014	0.059	NS
Potassium (Method 200.7)	0.881	0.728	0.859	0.844	0.787	0.835	0.806	0.001 / 0.002
Sodium (Method 200.7)	23.8	22.9	24.1	24.2	23.8	22.8	22.4	0.1 / 0.3
Zinc (Method 200.7)	0.069	0.04	0.045	0.047	0.028	0.028	0.03	NS
TCL Volatile Organics (Method 8260B)								ug/L
Carbon Tetrachloride	2.17	1.47	1.61	2.25	2.29	1.46	1.29	20 / 40
Chloroform	5.59	8.63	7.15	4.54	9.3	8.46	7.83	20 / 40
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	NS
1,1-Dichloroethene	13.9	11.8	11.8	16.2	17.8	14.2	13.4	50 / 100
Cis 1,2-Dichloroethene	37	37	37.2	42.8	48.3	34.1	32.5	50 / 100
Trans 1,2-Dichloroethene	10.8	9.77	9.7	12.0	13.7	10.1	9.68	50 / 100
Methylene Chloride	ND	ND	ND	ND	ND	ND	ND	10 / 20
1,1,2,2-Tetrachloroethane	1/50/100	ND	ND	ND	ND	ND	ND	500 / 1000
Tetrachloroethene	29.3	38.9	39.2	56.1	76.4	65.1	59.8	60 / 120
Toluene	18.7	12.9	13.8	16.1	17	14.6	13.3	20 / 40
1,1,1-Trichloroethane	ND	ND	ND	ND	1.58	1	ND	10 / 20
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	50 / 100
Trichloroethene	116	118	117	150	163	117	110	400 / 800
TCL Semi-Volatile Organics (Method 8270C)								ug/L
Bis(2-ethylhexyl)phthalate	24.4B	ND	14.1B	13.6B	ND	ND	ND	10 / 20
Di-n-butyl Phthalate	ND	ND	ND	ND	ND	ND	ND	30 / 60
Naphthalene	ND	ND	ND	ND	ND	ND	ND	10 / 20
Phenol	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

NS = Recovery well RW-06 was not in operation at the time of sample collection

J = 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

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

912 = bold number indicates that value exceeds Discharge Max. Levels

Table 1 Summary of Analytical Results for Total Effluent (Through August 2000)

Sample Identification Number			ST-EFF-15	ST-INF-15 (Duplicate)	ST-EFF-18	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	9908614-01	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 47 of System Operation (O&M)	Week 51 of System Operation (O&M)	Week 55 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-98	22-Sep-98	22-Sep-98	21-Oct-98	18-Nov-98	15-Dec-98			
Instantaneous Flow Rate			74.7 GPM / 107,576 GPD	72.2 GPM/104,112 GPD	72.3 GPM/104,112 GPD	72.3 GPM/104,112 GPD	76.2 GPM/108,728 GPD	71.5 GPM/102,860 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	5.7	5.7	8.0	8.1	5.9	5.7	Monthly Ave / One Day Max.
pH (Method 150.1)			--	SU							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 208.2)	0.003	mg/L	ND	ND	ND	0.099	0.1	0.101	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	0.034	0.019	0.015	0.2 / 0.4
Iron (Method 200.7)	0.008	mg/L	0.1	0.063	0.068	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	10.8	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	0.066	ND	ND	ND	NS
Nickel (Method 200.7)	0.02	mg/L	ND	ND	ND	ND	ND	ND	ND	ND	0.001 / 0.002
Potassium (Method 200.7)	0.25	mg/L	0.788	0.79	0.852	0.928	1.18	0.82	0.84	0.784	0.1 / 0.3
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-Dichloroethene	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	1/50/100	ug/L	137	131	148	183	120	118	137	144	500 / 1000
Tetrachloroethane	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
Trichloroethane	1/50/100	ug/L	207	218	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.

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

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mg/L = milligrams per liter

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GPD = gallons per day

AS/Effluent meter zeroed out 03-Nov-98

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

ug/L = micrograms per liter

GPM = gallons per minute

\$1.2 = bold number indicates that value exceeds Discharge Max. Levels

Summary of Analytical Results for Total Effluent (Through August 2000)

Sample Identification Number		ST-EFF-020		ST-EFF-021		ST-EFF-121 (Duplicate)		ST-INF-022 (Duplicate)		ST-EFF-023		ST-EFF-024		City of Memphis	
		0001189-01	0002422-01	0002422-02	0003418-01	0003418-02	0004398-01	0004398-01	0004398-01	0004398-01	0004398-01	0004398-01	0004398-01	0004398-01	0004398-01
Laboratory ID No		Week 63 of System Operation (O&M)		Week 64 of System Operation (O&M)		Week 65 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)	
Total System Effluent Sample Description		10-Jan-00		15-Feb-00		15-Mar-00		15-Apr-00		15-May-00		15-May-00		15-May-00	
Data Effluent Sample Collected		70.6 GPM/101.664 GPD		62.928,034 GAL		57.1 GPM/82.224		67.775,983 GAL		52.1 GPM/75.024 GPD		52.1 GPM/75.024 GPD		52.1 GPM/75.024 GPD	
Instantaneous Flow Rate		59,949,612 GAL		61		5.4		5.8		6.1		5.9		6.0	
Totalized Flow		7.0		6.1		5.4		5.8		6.1		5.9		6.0	
LABORATORY ANALYSES		DL		Units										Monthly Ave / One Day Max	
pH (Method 150.1)		-		SU										5.5 to 10.0	
TAL Metals (EPA 200 Series)		mg/L												mg/L	
Aluminum (Method 200.7)	0.08	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1/2
Arsenic (Method 206.2)	0.003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.04/0.1
Barium (Method 200.7)	0.003	0.089	0.108	0.108	0.108	0.108	0.108	0.108	0.108	0.111	0.111	0.111	0.111	0.111	NS
Cadmium (Method 200.7)	0.005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.01/0.02
Calcium (Method 200.7)	0.015	19.9	21.0	21.6	21.6	21.6	21.6	21.6	21.6	21.1B	21.1B	21.1B	21.1B	21.1B	NS
Chromium (Method 200.7)	0.009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2/0.4
Copper (Method 200.7)	0.008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2/0.4
Iron (Method 200.7)	0.009	0.021	0.114	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.15/0.3
Lead (Method 200.7)	0.06	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS
Magnesium (Method 200.7)	0.04	10.6	10.8	11.3	11.3	11.3	11.3	11.3	11.3	10.9	10.9	10.9	10.9	10.9	NS
Manganese (Method 200.7)	0.003	ND	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.019	0.019	0.019	0.019	0.019	0.001/0.002
Mercury (Method 245.1)	0.0002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.1/0.3
Nickel (Method 200.7)	0.02	0.752	0.818	0.874	0.874	0.874	0.874	0.874	0.874	0.826	0.826	0.826	0.826	0.826	NS
Potassium (Method 200.7)	0.25	22.8	22.7	23.5	23.5	23.5	23.5	23.5	23.5	22.9	22.9	22.9	22.9	22.9	NS
Sodium (Method 200.7)	0.05	0.038	0.305	0.053	0.053	0.053	0.053	0.053	0.053	0.052	0.052	0.052	0.052	0.052	0.3/1.0
Zinc (Method 200.7)	0.01														
TCL Volatile Organics (Method 8260B)		ug/L												ug/L	
Carbon Tetrachloride	1	1.14	1.71	1.67	1.67	1.67	1.67	1.67	1.5	1.63	1.63	1.63	1.63	1.63	20/40
Chloroform	1	8.34	6.51	6.58	6.58	6.58	6.58	6.58	8.36	7.60	7.60	7.60	7.60	7.60	20/40
1,1-Dichloroethane	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS
1,1-Dichloroethene	1	ND	13.8	14.1	14.1	14.1	14.1	14.1	13.5	ND	ND	ND	ND	ND	50/100
Cis 1,2-Dichloroethane	1	48	43.8	43.7	43.7	43.7	43.7	43.7	43.1	51.5	51.5	51.5	51.5	51.5	50/100
Trans 1,2-Dichloroethene	1	13.4	12.3	12.0	12.0	12.0	12.0	12.0	13.4	14.9	14.9	14.9	14.9	14.9	50/100
Methylene Chloride	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10/20
1,1,2,2-Tetrachloroethane	1/50/100	218	177	189	189	189	189	189	51.7	54.7	54.7	54.7	54.7	54.7	500/1000
1,1,2-Trichloroethane	1	17.7	14.9J*	15.3J*	15.3J*	15.3J*	15.3J*	15.3J*	18	18	18	18	18	18	60/120
Toluene	1	ND	ND	ND	ND	ND	ND	ND	15.3J	ND	ND	ND	ND	ND	20/40
1,1,1-Trichloroethane	1	ND	0.48J	0.48J	0.48J	0.48J	0.48J	0.48J	ND	ND	ND	ND	ND	ND	10/20
1,1,2-Trichloroethane	1	ND	0.80J	0.75J	0.75J	0.75J	0.75J	0.75J	0.97J	0.96J	0.96J	0.96J	0.96J	0.96J	50/100
Trichloroethene	1/50/100	189	177	179	179	179	179	179	121	189	189	189	189	189	400/800
TCL Semi-Volatile Organics (Method 8270C)		ug/L												ug/L	
Bis(2-ethylhexyl)phthalate	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10/20
Di-n-butyl Phthalate	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	30/60
Naphthalene	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10/20
Phenol	5	ND	ND	ND	ND	ND	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

mg/L = milligrams per liter

GPM = gallons per minute

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

81.2 = bold number indicates that value exceeds Discharge Max. Levels

Summary of Analytical Results for Total Effluent (Through August 2000)

Table 1

Sample Identification Number	ST-EFF-025	ST-EFF-026	EQB-026	ST-EFF-027	City of Memphis Industrial Wastewater
Laboratory ID No.	0006714-01	0007278-01	0007278-02	0008325-01	
Total System Effluent Sample Description	Week 85 of System Operation (O&M)	Week 85 of System Operation (O&M)	Week 85 of System Operation (O&M)	Week 92 of System Operation (O&M)	
Date Effluent Sample Collected	23-Jun-00	13-Jul-00	13-Jul-00	11-Aug-00	-
Instantaneous Flow Rate	35.09 GPM/79 330 GPD	52.78 GPM/76 003 GPD	52.78 GPM/76 003 GPD	57.22 GPM/82 396 GPD	561 600 GPD
Totalized Flow	73,321 836 GAL	75,673,706 GALLONS	75,673,706 GALLONS	78,223,187	-
LABORATORY ANALYSES					
pH (Method 150.1)	DL	7.7	8.4	8.1	mg/L
TAL Metals (EPA 200 Series)	-	5.7			5.5 to 10.0
Aluminum (Method 200.7)	0.06	ND	ND	ND	1/2
Arsenic (Method 206.2)	0.003	ND	ND	ND	0.04/0.1
Barium (Method 200.7)	0.003	0.108	0.104	0.111	NS
Cadmium (Method 200.7)	0.005	ND	ND	ND	0.01/0.02
Calcium (Method 200.7)	0.015	21.8	21.3	21.7	NS
Chromium (Method 200.7)	0.009	ND	ND	ND	0.2/0.4
Copper (Method 200.7)	0.008	ND	ND	ND	0.2/0.4
Iron (Method 200.7)	0.009	0.094	0.029	0.137	10/20
Lead (Method 200.7)	0.04	ND	ND	ND	0.15/0.3
Magnesium (Method 200.7)	0.003	11.4	11	10.8	NS
Mercury (Method 245.1)	0.0002	0.014	0.009	0.011	NS
Nickel (Method 200.7)	0.02	ND	ND	ND	0.001/0.002
Potassium (Method 200.7)	0.25	0.829	0.838	0.87	0.1/0.3
Sodium (Method 200.7)	0.05	22.0	23.7	23.8	NS
Zinc (Method 200.7)	0.01	0.04	0.061	0.045	0.3/1.0
TCL Volatile Organics (Method 8260B)					
Carbon Tetrachloride	1 ug/L	1.3	1.2	1.82	ug/L
Chloroform	1 ug/L	9.41	8.92	7.96	20/40
1,1-Dichloroethane	1 ug/L	ND	ND	ND	20/40
1,1,1-Trichloroethane	1 ug/L	16.6	15	13.2	NS
Cis 1,2-Dichlorobenzene	1 ug/L	62.7	54.4	44.5	50/100
Trans 1,2-Dichlorobenzene	1 ug/L	18.5	15.9	11.6	50/100
Methylene Chloride	5 ug/L	ND	ND	ND	10/20
1,1,2,2-Tetrachloroethane	1/50/100	59.2	52	42.7	500/1000
Tetrachloroethane	1 ug/L	14.5	13.8	13.8	60/120
Toluene	1 ug/L	ND	ND	ND	20/40
1,1,1-Trichloroethane	1 ug/L	ND	ND	ND	10/20
1,1,2-Trichloroethane	1 ug/L	0.93	0.969J	ND	50/100
Trichloroethene	1/50/100	139	123	148	400/800
TCL Semi-Volatile Organics (Method 8270C)					
Bis(2-ethylhexyl)phthalate	10 ug/L	ND	ND	ND	ug/L
Dk-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

Quarterly Analytical Results for TCL Volatile Organics
on Sampled Monitoring Wells

Sample Identification Number			MW-14-Y2Q1		MW-14-Y2Q2		MW-14-Y2Q3-RE*		Maximum Contaminant Level (MCL)-Primary Drinking Water Standard	USEPA Region III RBCs-Tap Water (October 7, 1999)
Laboratory & Lab Sample ID No	Date Sample Collected		0002480-08	0005523-27	0005523-27	0008674-04				
	pH		57	61	200	201	70			
	Conductivity (umhos)		218	200	219	NP				
	Temperature		17.6	21.9	21.9	NP				
	Turbidity (ntu)		184	>999		NP				
Laboratory Analyses			DL	Units						
TCL Volatile Organics (Method 8260B)	Benzene	1/10/100		ug/L	ND	ND	ND	ND	5	0.32
	Bromodichloromethane	1/10/100		ug/L	ND	<1.00	ND	ND	NS	0.17
	Carbon Tetrachloride	1/10/100		ug/L	ND	<1.00	ND	ND	5	0.16
	Chlorobenzene	1/10/100		ug/L	ND	<1.00	ND	ND	100	110
	Chloroform	1/10/100		ug/L	ND	<1.00	ND	ND	NS	0.15
	Chloromethane	1/10/100		ug/L	ND	<1.00	ND	ND	NS	3.6
	1,1-Dichloroethane	1/10/100		ug/L	ND	<1.00	ND	ND	NS	800
	1,2-Dichloroethane	1/10/100		ug/L	ND	<1.00	ND	ND	5	0.12
	1,1-Dichloroethene	1/10/100		ug/L	ND	<1.00	ND	ND	7	0.044
	Trans 1,2-Dichloroethane	1/10/100		ug/L	ND	<1.00	ND	ND	100	120
	Cis 1,2-Dichloroethene	1/10/100		ug/L	ND	<1.00	ND	ND	70	61
	1,1,2,2-Tetrachloroethane	1/10/100		ug/L	ND	<1.00	ND	ND	NS	0.053
	Tetrachloroethene	1/10/100		ug/L	ND	<1.00	ND	ND	5	1.1
	Toluene	1/10/100		ug/L	ND	<1.00	ND	ND	1000	750
	1,1,1-Trichloroethane	1/10/100		ug/L	ND	<1.00	ND	ND	200	540
	1,1,2-Trichloroethane	1/10/100		ug/L	ND	<1.00	ND	ND	5	0.19
Trichloroethene	1/10/100		ug/L	ND	<1.00	ND	ND	5	1.6	
Vinyl Chloride	1/10/100		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

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

TABLE 2
Quarterly Analytical Results for TCL Volatile Organics
on Sampled Monitoring Wells

Sample Identification Number Laboratory & Lab Sample ID No Date Sample Collected	MW-15-Y1Q1 9902125-12 3-Feb-99	MW-15-Y1Q2 9905638-01 24-May-99	MW-15-Y1Q3 9908741-10 27-Aug-99	MW-15-Y1Q4 9911147-12 3-Nov-99	MW-15-Y2Q1 0002423-015 15-Feb-00	MW-15-Y2Q2 0005523-05 17-May-00	MW-15-Y2Q3 0008592-03 22-Aug-00	Maximum Contaminant Level (MCL)-Primary Drinking Water Standard	USEPA Region III RBCs-Tap Water (October 7, 1999)
pH	4.6	4.6	7.6	5.8	5.8	5.9	7.55		
Conductivity (umhos)	208	196	157	204	240	245	210		
Temperature	NA	17.9	20	17.1	17.8	18.8	NP		
Turbidity (ntu)	NA	10	221	8.71	16.3	>999	NP		
Laboratory Analyses	DL	Units							
TCL Volatile Organics (Method 8260B)									
Benzene	1/10/100	ug/L	ND	ND	ND	ND	ND	5	0.32
Bromodichloromethane	1/10/100	ug/L	ND	ND	1.42	<1.00	ND	NS	0.17
Carbon Tetrachloride	1/10/100	ug/L	27.9	35.2	29	18.3	24.7	5	0.16
Chlorobenzene	1/10/100	ug/L	ND	ND	ND	<1.00	ND	100	110
Chloroform	1/10/100	ug/L	308	1020	1060	704	848	NS	0.15
Chloromethane	1/10/100	ug/L	ND	ND	ND	<1.00	ND	NS	3.6
1,1-Dichloroethane	1/10/100	ug/L	ND	ND	ND	<1.00	ND	NS	800
1,2-Dichloroethane	1/10/100	ug/L	ND	ND	ND	<1.00	ND	5	0.12
1,1,1-Trichloroethane	1/10/100	ug/L	ND	ND	ND	<1.00	ND	7	0.044
Trans 1,2-Dichloroethene	1/10/100	ug/L	2.13	4.08	4.54	2.29	4.17	100	120
Cis 1,2-Dichloroethene	1/10/100	ug/L	5.96	12.4	14.3	6.96	12	70	61
1,1,2,2-Tetrachloroethane	1/10/100	ug/L	4.75	187	522	343	389	NS	0.053
Toluene	1/10/100	ug/L	ND	10	6.91	3.96	7.18	5	1.1
1,1,1-Trichloroethane	1/10/100	ug/L	ND	ND	ND	<1.00	ND	1000	750
1,1,2-Trichloroethane	1/10/100	ug/L	ND	ND	ND	<1.00	ND	200	540
Trichloroethene	1/10/100	ug/L	115	331	299	4.69	5.7	5	0.19
Vinyl Chloride	1/10/100	ug/L	ND	ND	299	154	234	5	1.6
						<1.00	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 S

RBCs = Risk Based Contaminants

NS = no standard NP = not performed

NA = not available

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

J = Estimated value - presence of the compound was confirmed

J* = estimated value - quality control recoveries outside accepta

Table 2
Quarterly Analytical Results for TCL Volatile Organics
on Sampled Monitoring Wells

Sample Identification Number Laboratory & Lab Sample ID No Date Sample Collected	MW-30-Y1Q1 9902125-04 02-Feb-99	MW-30-Y1Q2 9905638-10 24-May-99	MW-30-Y1Q3 9908741-02 26-Aug-99	MW-30-Y1-Q4 9911147-02 02-Nov-99	MW-30-Y2Q1 0002423-02 15-Feb-00	MW-30-Y2Q2 0005523-12 16-May-00	MW-30-Y2Q3 0008592-09 22-Aug-00	Maximum Contaminant Level (MCL)-Primary Drinking Water Standard	USEPA Region III RBCs-Tap Water (October 7, 1999)
Conductivity (umhos)	6.1	5.4	7.4	5.7	6.3	6.3	6.5		
Temperature	NA	17.4	22.8	300	325	286	243		
Turbidity (ntu)	15.1	19.6	21.3	16.4	14.8	20.1	NP		
	NA	>999	>999	8.52	>999	473	NP		
Laboratory Analyses									
	DL	DL	DL	DL	DL	DL	DL		
TCL Volatile Organics (Method 8260B)									
Benzene	1/10/100	ug/L	ND	ND	ND	ND	ND	5	0.32
Bromodichloromethane	1/10/100	ug/L	ND	ND	ND	<1.00	ND	NS	0.17
Carbon Tetrachloride	1/10/100	ug/L	ND	ND	ND	<1.00	ND	5	0.16
Chlorobenzene	1/10/100	ug/L	ND	ND	ND	<1.00	ND	100	110
Chloroform	1/10/100	ug/L	ND	ND	ND	<1.00	ND	NS	0.15
Chloromethane	1/10/100	ug/L	ND	ND	ND	<1.00	ND	NS	3.6
1,1-Dichloroethane	1/10/100	ug/L	ND	ND	ND	<1.00	ND	NS	800
1,2-Dichloroethane	1/10/100	ug/L	ND	ND	ND	<1.00	ND	5	0.12
1,1,1-Trichloroethane	1/10/100	ug/L	ND	ND	ND	<1.00	ND	7	0.044
Trans 1,2-Dichloroethene	1/10/100	ug/L	ND	ND	ND	<1.00	ND	100	120
Cis 1,2-Dichloroethene	1/10/100	ug/L	ND	ND	ND	<1.00	ND	70	61
1,1,2,2-Tetrachloroethane	1/10/100	ug/L	ND	ND	ND	<1.00	ND	NS	0.053
Tetrachloroethene	1/10/100	ug/L	ND	ND	ND	<1.00	ND	5	1.1
Toluene	1/10/100	ug/L	ND	ND	ND	<1.00	ND	1000	750
1,1,1-Trichloroethane	1/10/100	ug/L	ND	ND	ND	<1.00	ND	200	540
1,1,2-Trichloroethane	1/10/100	ug/L	ND	ND	ND	<1.00	ND	5	0.19
Trichloroethene	1/10/100	ug/L	ND	ND	ND	<1.00	ND	5	1.6
Vinyl Chloride	1/10/100	ug/L	ND	ND	ND	<1.00	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 S

RBCs = Risk Based Contaminants

NS = no standard NP = not performed

NA = not available

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

J = Estimated value - presence of the compound was confirmed

J* = estimated value - quality control recoveries outside accepta

Quarterly Analytical Results for TCL Volatile Organics
on Sampled Monitoring Wells

Sample Identification Number Laboratory & Lab Sample ID No Date Sample Collected	pH	Conductivity (umhos)	Temperature	Turbidity (ntu)	MW-31-Y1Q1										MW-31-Y2Q3				Maximum Contaminant Level (MCL)-Primary Drinking Water Standard	USEPA Region III RBCs-Tap Water (October 7, 1999)
					MW-31-Y1Q1	MW-31-Y1Q2	MW-31-Y1Q3	MW-31-Y1Q4	MW-31-Y2Q1	MW-31-Y2Q2	MW-31-Y2Q3	MW-31-Y2Q4	MW-31-Y2Q5	MW-31-Y2Q6	MW-31-Y2Q7	MW-31-Y2Q8	MW-31-Y2Q9	MW-31-Y2Q10		
9902125-11	9905638-16	9908741-08	9911147-09	002423-02	0005523-07	0008634-06	0011745-05	0014856-04	0017967-03	0021078-02	0024189-01	0027300-00	0030411-00	0033522-00	0036633-00	0039744-00	0042855-00	0045966-00	0049077-00	0052188-00
03-Feb-99	25-May-99	27-Aug-99	03-Nov-99	15-Feb-00	17-May-00	23-Aug-00	29-Nov-00	01-Feb-01	03-May-01	05-Aug-01	07-Nov-01	09-Feb-02	11-May-02	13-Aug-02	15-Nov-02	17-Feb-03	19-May-03	21-Aug-03	23-Nov-03	25-Feb-04
47	64	72	59	6	NP	59	236	236	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP
376	262	275	256	17.5	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP
NA	181	192	179	182	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP
NA	7	244	974	182	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP
Laboratory Analyses																				
TCL Volatile Organics (Method 8260B)					DL										Units					
Benzene					1/10/100										ug/L					
Bromodichloromethane					1/10/100										ug/L					
Carbon Tetrachloride					1/10/100										ug/L					
Chlorobenzene					1/10/100										ug/L					
Chloroform					1/10/100										ug/L					
Chloromethane					1/10/100										ug/L					
1,1-Dichloroethane					1/10/100										ug/L					
1,2-Dichloroethane					1/10/100										ug/L					
1,1,1-Trichloroethane					1/10/100										ug/L					
Trans 1,2-Dichloroethene					1/10/100										ug/L					
Cis 1,2-Dichloroethene					1/10/100										ug/L					
1,1,2,2-Tetrachloroethane					1/10/100										ug/L					
Toluene					1/10/100										ug/L					
1,1,1-Trichloroethane					1/10/100										ug/L					
1,1,2-Trichloroethane					1/10/100										ug/L					
Trichloroethane					1/10/100										ug/L					
Vinyl Chloride					1/10/100										ug/L					

Only compounds detected are listed

ug/L = micrograms per liter

DL = Detection Limit

TCL = Target Compound List

BOL = Below Detection Limit

MCL = Maximum Contaminant Level - Primary Drinking Water S

RBCs = Risk Based Contaminants

NS = no standard NP = not performed

NA = not available

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

J = Estimated value - presence of the compound was confirmed

J* = estimated value - quality control recoveries outside acceptance

Quarterly Analytical Results for TCL Volatile Organics
on Sampled Monitoring Wells

Sample Identification Number Laboratory & Lab Sample ID No Date Sample Collected	pH	Conductivity (umhos)	Temperature	Turbidity (ntu)	MW-32-Y1Q1	MW-32-Y1Q2	MW-32-Y1Q3	MW-32-Y1Q4	MW-32-Y2Q1	MW-32-Y2Q2	MW-32-Y2Q3	Maximum Contaminant Level (MCL)-Primary Drinking Water Standard	USEPA Region III RBCs-Tap Water (October 7, 1995)
					9902125-09 03-Feb-99	9905638-14 25-May-99	9908741-06 26-Aug-99	9911147-10 03-Nov-99	0002423-07 15-Feb-00	0005523-18 16-May-00	0008674-06 24-Aug-00		
	5.8	6.2	7.4	6	NA	283	224	NA	6.5	6	7.25		
	432	283	224	NA	18.2	20.5	17.1	20	>999	>999	NP		
	NA	0	>999	9.75	NA	0	>999	9.75	>999	>999	NP		
Laboratory Analyses					DL								
TCL Volatile Organics (Method 8260B)					Units								
Benzene	1/10/100	ug/L			ND	ND	ND	ND	ND	ND	ND	5	0.32
Bromodichloromethane	1/10/100	ug/L			ND	ND	ND	ND	ND	<1.00	ND	NS	0.17
Carbon Tetrachloride	1/10/100	ug/L			25.2	14.2	17.3	25.2	25.5	37	47.2	5	0.16
Chlorobenzene	1/10/100	ug/L			ND	ND	ND	ND	ND	<1.00	ND	100	1.10
Chloroform	1/10/100	ug/L			7.89	32.2	76.9	73	77.2	117	171	NS	0.15
Chloromethane	1/10/100	ug/L			ND	ND	ND	ND	ND	<1.00	ND	NS	3.6
1,1-Dichloroethane	1/10/100	ug/L			ND	ND	ND	ND	ND	<1.00	ND	NS	800
1,2-Dichloroethane	1/10/100	ug/L			ND	ND	ND	ND	ND	<1.00	ND	5	0.12
Trans 1,2-Dichloroethane	1/10/100	ug/L			3.82	1.76	0.99 J	1.01	1.12	2	2.68	7	0.044
Cis 1,2-Dichloroethane	1/10/100	ug/L			30.5	16.7	4.64	4.59	5.07	6.61	5.66	70	61
1,1,2,2-Tetrachloroethane	1/10/100	ug/L			5.67	4.42	0.92 J	ND	ND	<1.00	2.12	NS	0.053
Tetrachloroethane	1/10/100	ug/L			1.16	1.28	2.22	2.63	2.34	3.94	5.9	5	1.1
Toluene	1/10/100	ug/L			ND	ND	ND	ND	ND	<1.00	ND	1000	750
1,1,1-Trichloroethane	1/10/100	ug/L			ND	ND	ND	ND	ND	<1.00	ND	200	540
1,1,2-Trichloroethane	1/10/100	ug/L			1.54	ND	ND	ND	ND	<1.00	ND	5	0.19
Trichloroethene	1/10/100	ug/L			31.8	28.1	34.6	36.8	41.8	58.2	89.2	5	1.6
Vinyl Chloride	1/10/100	ug/L			ND	ND	ND	ND	ND	<1.00	ND	2	0.019

Only compounds detected are listed

ug/L = micrograms per liter

DL = Detection Limit

TCL = Target Compound List

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RBCs = Risk Based Contaminants

NS = no standard NP = not performed

NA = not available

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J = Estimated value - presence of the compound was confirmed

J* = estimated value - quality control recoveries outside acceptance

Quarterly Analytical Results for TCL Volatile Organics
on Sampled Monitoring Wells

TABLE 2

Sample Identification Number Laboratory & Lab Sample ID No Date Sample Collected	MW-33-Y1Q1 9902125-07 02-Feb-99	MW-33-Y1Q2 9905638-13 25-May-99	MW-33-Y1Q3 9908741-05 26-Aug-99	MW-33-Y1Q4 9911147-04 02-Nov-99	MW-33-Y2Q1 0002423-05 15-Feb-00	MW-33-Y2Q2 0005523-17 16-May-00	MW-33-Y2Q3 0008592-06 22-Aug-00	Maximum Contaminant Level (MCL)-Primary Drinking Water Standard	USEPA Region III RBCs-Tap Water (October 7, 1999)
pH	5.7	6.2	7.4	5.3	5.8	5.7	7.6		
Conductivity (umhos)	181	181	146	190	191	181	126		
Temperature	NA	18.6	20	16.2	17.6	19.9	NP		
Turbidity (ntu)	NA	5	>999	8.77	224	>999	NP		
Laboratory Analyses	DL	Units							
TCL Volatile Organics (Method 8260B)									
Benzene	1/10/100	ug/L	ND	ND	ND	ND	ND	5	0.32
Bromodichloromethane	1/10/100	ug/L	ND	ND	ND	<1.00	ND	NS	0.17
Carbon Tetrachloride	1/10/100	ug/L	ND	ND	ND	<1.00	ND	5	0.16
Chlorobenzene	1/10/100	ug/L	ND	ND	ND	<1.00	ND	100	110
Chloroform	1/10/100	ug/L	ND	ND	ND	<1.00	ND	NS	0.15
1,1-Dichloroethane	1/10/100	ug/L	ND	ND	ND	<1.00	ND	NS	3.6
1,2-Dichloroethane	1/10/100	ug/L	ND	ND	ND	<1.00	ND	NS	800
1,1,1-Trichloroethane	1/10/100	ug/L	ND	ND	ND	<1.00	ND	5	0.12
Trans 1,2-Dichloroethane	1/10/100	ug/L	ND	ND	ND	<1.00	ND	7	0.044
Cis 1,2-Dichloroethane	1/10/100	ug/L	ND	ND	ND	<1.00	ND	100	120
1,1,2,2-Tetrachloroethane	1/10/100	ug/L	ND	ND	ND	<1.00	ND	70	61
Toluene	1/10/100	ug/L	ND	ND	ND	<1.00	ND	NS	0.053
1,1,1-Trichloroethane	1/10/100	ug/L	ND	ND	ND	<1.00	ND	5	1.1
1,1,2-Trichloroethane	1/10/100	ug/L	ND	ND	ND	<1.00	ND	1000	750
Trichloroethene	1/10/100	ug/L	ND	ND	ND	<1.00	ND	200	540
Vinyl Chloride	1/10/100	ug/L	ND	ND	ND	<1.00	ND	5	0.19
			ND	ND	ND	<1.00	ND	5	1.6
			ND	ND	ND	<1.00	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 S

RBCs = Risk Based Contaminants

NS = no standard NP = not performed

NA = not available

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TABLE 2
Quarterly Analytical Results for TCL Volatile Organics
on Sampled Monitoring Wells

Sample Identification Number Laboratory & Lab Sample ID No Date Sample Collected	MW-34-Y1Q1 9902168-01 04-Feb-99	MW-34-Y1Q2 9905638-17 25-May-99	MW-34-Y1Q3 9908741-09 27-Aug-99	MW-34-Y1Q4 9911147-07 03-Nov-99	MW-34-Y2Q1 0002480-09 16-Feb-00	MW-34-Y2Q2 0005523-32 18-May-00	MW-34-Y2Q3 0008674-07 24-Aug-00	Maximum Contaminant Level (MCL)-Primary Drinking Water Standard	USEPA Region III RBCs-Tap Water (October 7, 1999)
pH	5.2	5.7	7.4	5.9	NA	5.9	7.13		
Conductivity (umhos)	184	185	148	169	NA	181.2	196		
Temperature	NA	18.8	20.1	17.6	NA	22.2	NP		
Turbidity (ntu)	NA	4	451	7.48	NA	219	NP		
Laboratory Analyses	DL	Units							
TCL Volatile Organics (Method 8260B)									
Benzene	1/10/100	ug/L	ND	ND	ND	ND	ND	5	0.32
Bromochloromethane	1/10/100	ug/L	ND	ND	ND	<1.00	ND	NS	0.17
Carbon Tetrachloride	1/10/100	ug/L	1.01	0.51 J	1.04	1.03	0.86 J	5	0.16
Chlorobenzene	1/10/100	ug/L	ND	ND	ND	<1.00	ND	100	110
Chloroform	1/10/100	ug/L	4.34	0.66 J	1.98	3.49	ND	NS	0.15
Chloromethane	1/10/100	ug/L	ND	ND	ND	<1.00	ND	NS	3.6
1,1-Dichloroethane	1/10/100	ug/L	ND	ND	ND	<1.00	ND	NS	800
1,2-Dichloroethane	1/10/100	ug/L	ND	ND	ND	<1.00	ND	5	0.12
1,1,1-Trichloroethane	1/10/100	ug/L	ND	ND	ND	<1.00	ND	7	0.044
Trans 1,2-Dichloroethane	1/10/100	ug/L	ND	ND	ND	<1.00	ND	100	120
Cis 1,2-Dichloroethane	1/10/100	ug/L	1.03	ND	ND	<1.00	ND	70	61
1,1,2,2-Tetrachloroethane	1/10/100	ug/L	ND	ND	ND	<1.00	ND	NS	0.053
Tetrachloroethene	1/10/100	ug/L	ND	ND	ND	<1.00	ND	5	1.1
Toluene	1/10/100	ug/L	ND	0.53 J	ND	<1.00	ND	1000	750
1,1,1-Trichloroethane	1/10/100	ug/L	ND	ND	ND	<1.00	ND	200	540
1,1,2-Trichloroethane	1/10/100	ug/L	ND	ND	ND	<1.00	ND	5	0.19
Trichloroethene	1/10/100	ug/L	4.39	0.64 J	ND	2.15	2.55	5	1.6
Vinyl Chloride	1/10/100	ug/L	ND	ND	ND	<1.00	ND	2	0.019

Only compounds detected are listed

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Quarterly Analytical Results for TCL Volatile Organics
on Sampled Monitoring Wells

TABLE 2

Sample Identification Number Laboratory & Lab Sample ID No Date Sample Collected	MW-40-Y1Q1 9902125-03 02-Feb-99	MW-40-Y1Q2 9905638-09 24-May-99	MW-40-Y1Q3 9908741-01 26-Aug-99	MW-40-Y1Q4 9911147-01 02-Nov-99	MW-40-Y2Q1 0002423-01 15-Feb-00	MW-40-Y2Q2 0005623-11 17-May-00	MW-40-Y2Q3 0008634-05 23-Aug-00	Maximum Contaminant Level (MCL)-Primary Drinking Water Standard	USEPA Region III RBCs-Tap Water (October 7, 1999)
pH	8.4	6	7.4	6.3	6.5	6.3	7.9		
Conductivity (umhos)	<1000	413	641	775	857	855	739		
Temperature	15.9	21.2	24.2	22.2	16.3	19	NP		
Turbidity (ntu)	NA	51	78	9.17	8.57	30.7	NP		
Laboratory Analyses	DL	Units							
TCL Volatile Organics (Method 8260B)									
Benzene	1/10/100	ug/L	ND	ND	ND	ND	ND	5	0.32
Bromodichloromethane	1/10/100	ug/L	ND	ND	ND	<1.00	ND	NS	0.17
Carbon Tetrachloride	1/10/100	ug/L	ND	ND	ND	<1.00	ND	5	0.16
Chlorobenzene	1/10/100	ug/L	ND	0.94 J	ND	0.99 J	ND	100	110
Chloroform	1/10/100	ug/L	ND	ND	ND	<1.00	ND	NS	0.15
Chloromethane	1/10/100	ug/L	ND	ND	ND	<1.00	ND	NS	3.6
1,1-Dichloroethane	1/10/100	ug/L	1.48	ND	ND	<1.00	ND	NS	800
1,2-Dichloroethane	1/10/100	ug/L	ND	ND	ND	<1.00	ND	5	0.12
1,1,1-Trichloroethane	1/10/100	ug/L	1.06	ND	ND	<1.00	ND	7	0.044
Trans 1,2-Dichloroethane	1/10/100	ug/L	ND	ND	ND	<1.00	ND	100	120
Cis 1,2-Dichloroethane	1/10/100	ug/L	ND	ND	ND	<1.00	ND	70	61
1,1,2,2-Tetrachloroethane	1/10/100	ug/L	ND	ND	ND	<1.00	ND	NS	0.053
Tetrachloroethane	1/10/100	ug/L	ND J*	ND	ND	<1.00	ND	5	1.1
Toluene	1/10/100	ug/L	ND	ND	ND	<1.00	ND	1000	750
1,1,1-Trichloroethane	1/10/100	ug/L	ND	ND	ND	<1.00	ND	200	540
1,1,2-Trichloroethane	1/10/100	ug/L	ND	ND	ND	<1.00	ND	5	0.19
Trichloroethane	1/10/100	ug/L	ND	ND	ND	<1.00	ND	5	1.6
Vinyl Chloride	1/10/100	ug/L	ND	ND	ND	<1.00	ND	2	0.019

Only compounds detected are listed

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RBCs = Risk Based Contaminants

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

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Quarterly Analytical Results for TCL Volatile Organics
on Sampled Monitoring Wells

Sample Identification Number Laboratory & Lab Sample ID No Date Sample Collected	MW-44-Y1Q1 9902125-06 02-Feb-99	MW-44-Y1Q2 9905638-12 25-May-99	MW-44-Y1Q3 9908741-04 26-Aug-99	MW-44-Y1Q4 9911147-03 02-Nov-99	MW-44-Y2Q1 0002423-04 15-Feb-00	MW-44-Y2Q2 0005523-16 16-May-00	MW-44-Y2Q3 0008674-10 24-Aug-00	Maximum Contaminant Level (MCL)-Primary Drinking Water Standard	USEPA Region III RBCs-Tap Water (October 7, 1999)
pH	6.1	6.3	7.1	5.8	6.1	6.2	7.46		
Conductivity (umhos)	292	289	247	294	307	284	274		
Temperature	NA	18.3	20.4	18	17.2	22.1	NP		
Turbidity (ntu)	NA	10	391	676	13.4	424	NP		
Laboratory Analyses									
TCL Volatile Organics (Method 8260B)	DL	Units							
Benzene	1/10/100	ug/L	ND	ND	ND	ND	ND	5	0.32
Bromodichloromethane	1/10/100	ug/L	ND	ND	ND	<1.00	ND	NS	0.17
Carbon Tetrachloride	1/10/100	ug/L	ND	ND	ND	2.3	5.3	5	0.16
Chlorobenzene	1/10/100	ug/L	ND	ND	ND	<1.00	ND	100	110
Chloroform	1/10/100	ug/L	ND	ND	ND	1.88	3.62	NS	0.15
Chloromethane	1/10/100	ug/L	ND	ND	ND	<1.00	ND	NS	3.6
1,1-Dichloroethane	1/10/100	ug/L	ND	ND	ND	<1.00	ND	NS	800
1,2-Dichloroethane	1/10/100	ug/L	ND	ND	ND	<1.00	ND	5	0.12
1,1,1-Trichloroethane	1/10/100	ug/L	ND	ND	ND	<1.00	ND	7	0.044
Trans 1,2-Dichloroethane	1/10/100	ug/L	ND	ND	ND	<1.00	ND	100	120
Cis 1,2-Dichloroethane	1/10/100	ug/L	ND	ND	ND	<1.00	1.35	70	61
1,1,2,2-Tetrachloroethane	1/10/100	ug/L	ND	ND	ND	0.65 J	ND	NS	0.053
Tetrachloroethene	1/10/100	ug/L	ND	ND	ND	<1.00	4.92	5	1.1
Toluene	1/10/100	ug/L	ND	ND	ND	<1.00	ND	1000	750
1,1,1-Trichloroethane	1/10/100	ug/L	ND	ND	ND	<1.00	ND	200	540
1,1,2-Trichloroethane	1/10/100	ug/L	ND	ND	ND	<1.00	ND	5	0.19
Trichloroethene	1/10/100	ug/L	ND	ND	ND	<1.00	ND	5	1.6
Vinyl Chloride	1/10/100	ug/L	ND	ND	ND	1.36	ND	2	0.019

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TABLE 2
Quarterly Analytical Results for TCL Volatile Organics
on Sampled Monitoring Wells

Sample Identification Number Laboratory & Lab Sample ID No Date Sample Collected	MW-51-Y101 9902125-05 02-Feb-99	MW-51-Y102 9905638-11 24-May-99	MW-51-Y103 9908741-03 26-Aug-99	MW-51-Y104 9911147-08 03-Nov-99	MW-51-Y2Q1 0002423-03 15-Feb-00	MW-51-Y2Q2 0005523-13 16-May-00	MW-51-Y2Q3 0008674-14 24-Aug-00	Maximum Contaminant Level (MCL)-Primary Drinking Water Standard	USEPA Region III RBCs-Tap Water (October 7, 1999)
pH	5.9	4.8	7.3	5.9	5.9	5.9	7.46		
Conductivity (umhos)	295	186	249	256	309	290	274		
Temperature	NA	19.3	20.8	18	16.8	20.3	NP		
Turbidity (ntu)	NA	15	330	9.2	17.5	4.9	NP		
Laboratory Analyses									
TCL Volatile Organics (Method 8260B)									
Benzene	1/10/100	ug/L	ND	ND	ND	ND	ND	5	0.32
Bromodichloromethane	1/10/100	ug/L	ND	ND	ND	<1.00	ND	NS	0.17
Carbon Tetrachloride	1/10/100	ug/L	ND	ND	ND	<1.00	ND	5	0.16
Chlorobenzene	1/10/100	ug/L	ND	ND	ND	<1.00	ND	100	110
Chloroform	1/10/100	ug/L	ND	ND	ND	<1.00	ND	NS	0.15
Chloromethane	1/10/100	ug/L	ND	ND	ND	<1.00	ND	NS	3.6
1,1-Dichloroethane	1/10/100	ug/L	ND	ND	ND	<1.00	ND	NS	800
1,2-Dichloroethane	1/10/100	ug/L	ND	ND	ND	<1.00	ND	5	0.12
1,1,1-Trichloroethane	1/10/100	ug/L	23.4	8.19	1.08	8.23	12.9	7	0.044
Trans 1,2-Dichloroethene	1/10/100	ug/L	ND	ND	ND	<1.00	ND	100	120
Cis 1,2-Dichloroethene	1/10/100	ug/L	ND	ND	ND	<1.00	ND	70	61
1,1,2,2-Tetrachloroethane	1/10/100	ug/L	ND	ND	ND	<1.00	ND	NS	0.053
Toluene	1/10/100	ug/L	1.5	0.54 J	0.83 J	<1.00	1.49	5	1.1
1,1,1-Trichloroethane	1/10/100	ug/L	ND	ND	ND	<1.00	ND	1000	750
1,1,2-Trichloroethane	1/10/100	ug/L	ND	ND	ND	<1.00	ND	200	540
Trichloroethene	1/10/100	ug/L	8.44	3.71	2.93	<1.00	ND	5	0.19
Vinyl Chloride	1/10/100	ug/L	ND	ND	0.70 J	4.63	6.33	5	1.6
					ND	<1.00	ND	2	0.019

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TABLE 2
Quarterly Analytical Results for TCL Volatile Organics
on Sampled Monitoring Wells

Sample Identification Number Laboratory & Lab Sample ID No		Date Sample Collected	pH	Conductivity (umhos)	Temperature	Turbidity (ntu)	MW-54-Y1Q1										MW-54-Y1Q2	MW-54-Y1Q3	MW-54-Y1Q4	MW-54-Y2Q1	MW-54-Y2Q2	MW-54-Y2Q3	Maximum Contaminant Level (MCL)-Primary Drinking Water Standard	USEPA Region III RBCs-Tap Water (October 7, 1999)
							MW-54-Y1Q1	MW-54-Y1Q2	MW-54-Y1Q3	MW-54-Y1Q4	MW-54-Y2Q1	MW-54-Y2Q2	MW-54-Y2Q3											
9902125-10		03-Feb-99	5.6	213	18.2	NA	9905638-15	9905638-15	9908741-07	9911147-11	0002423-10	0005523-03	0008592-07								5	0.32		
							25-May-99	25-May-99	26-Aug-99	03-Nov-99	05-Feb-00	17-May-00	22-Aug-00								NS	0.17		
							6.4	253	7.4	5.7	5.9	5.9	7.6								5	0.16		
							213	253	216	366	385	347	264								100	110		
							NA	18.2	19.7	17.2	17.7	20.4	NP								NS	0.15		
							NA	0	149	9.93	16.6	11.8	NP								NS	3.6		
																					NS	800		
																					5	0.12		
																					7	0.044		
																					100	120		
																					70	61		
																					NS	0.053		
																					5	1.1		
																					1000	750		
																					200	540		
																					5	0.19		
																					5	1.6		
																					2	0.019		

Only compounds detected are listed

ug/L = micrograms per liter

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TCL = Target Compound List

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MCL = Maximum Contaminant Level - Primary Drinking Water S

RBCs = Risk Based Contaminants

NS = no standard NP = not performed

NA = not available

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

J = Estimated value - presence of the compound was confirmed

J* = estimated value - quality control recoveries outside accepta

TABLE 2
Quarterly Analytical Results for TCL Volatile Organics
on Sampled Monitoring Wells

Sample Identification Number Laboratory & Lab Sample ID No Date Sample Collected	MW-56-Y2Q1 0002480-11 16-Feb-00	MW-56-Y2Q2 0005523-01 17-May-00	MW-56-Y2Q3 0008592-05 22-Aug-00	MW-57-Y2Q1 0002480-05 16-Feb-00	MW-57-Y2Q2 0005523-19 17-May-00	MW-57-Y2Q3 0008592-02 22-Aug-00	MW-58-Y2Q1 0002480-12 16-Feb-00	MW-58-Y2Q2 0005523-02 17-May-00	MW-58-Y2Q3 0008592-04 22-Aug-00	Maximum Contaminant Level (MCL)-Primary Drinking Water Standard	USEPA Region III RBCs-Tap Water (October 7, 1999)
pH	6.1	5.9	7.24	5.7	5.8	7.8	6	6	8.1		
Conductivity (umhos)	238	249	208	189	191	141	222	219	178		
Temperature	16.2	19.7	NP	19.2	19	NP	17.7	20	NP		
Turbidity (ntu)	NA	>999	NP	>999	>999	NP	>999	>999	NP		
Laboratory Analyses	DL	Units									
TCL Volatile Organics (Method 8260B)	1/10/100	ug/L									
Benzene	1/10/100	ug/L	ND	ND	<1.00	ND	ND	<1.00	ND	5	0.32
Bromodichloromethane	1/10/100	ug/L	ND	ND	<1.00	ND	ND	<1.00	ND	NS	0.17
Carbon Tetrachloride	1/10/100	ug/L	0.57 J	39.9	50.6	45.7	ND	<1.00	0.26 J	5	0.16
Chlorobenzene	1/10/100	ug/L	ND	ND	<1.00	ND	ND	<1.00	ND	100	110
Chloroform	1/10/100	ug/L	38.2	13.2	10.3	11.3	3.68	5.88	2.42	NS	0.15
Chloromethane	1/10/100	ug/L	ND	ND	ND	ND	ND	<1.00	ND	NS	3.6
1,1-Dichloroethane	1/10/100	ug/L	ND	ND	<1.00	ND	ND	<1.00	ND	NS	800
1,2-Dichloroethane	1/10/100	ug/L	ND	ND	<1.00	ND	ND	<1.00	ND	5	0.12
1,1,1-Trichloroethane	1/10/100	ug/L	ND	ND	<1.00	ND	ND	<1.00	ND	7	0.044
Trans 1,2-Dichloroethene	1/10/100	ug/L	ND	1.55	1.51	1.83	ND	<1.00	ND	100	120
Cis 1,2-Dichloroethene	1/10/100	ug/L	ND	ND	<1.00	0.53 J	ND	<1.00	ND	70	61
1,1,2,2-Tetrachloroethane	1/10/100	ug/L	ND	ND	<1.00	ND	ND	<1.00	ND	NS	0.053
Tetrachloroethene	1/10/100	ug/L	ND	5.38	5.1	5.88	ND	<1.00	0.41 J	5	1.1
Toluene	1/10/100	ug/L	ND	ND	<1.00	ND	ND	<1.00	ND	1000	750
1,1,1-Trichloroethane	1/10/100	ug/L	ND	ND	<1.00	ND	ND	<1.00	ND	200	540
1,1,2-Trichloroethane	1/10/100	ug/L	ND	ND	<1.00	ND	ND	<1.00	ND	5	0.19
Trichloroethene	1/10/100	ug/L	1.7	0.74 J	46.5	49.2	4.36	4.22	1.44	5	1.6
Vinyl Chloride	1/10/100	ug/L	ND	ND	<1.00	ND	ND	<1.00	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 S

RBCs = Risk Based Contaminants

NS = no standard NP = not performed

NA = not available

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

J = Estimated value - presence of the compound was confirmed

J* = estimated value - quality control recoveries outside acceptance

TABLE 2
Quarterly Analytical Results for TCL Volatile Organics
on Sampled Monitoring Wells

Sample Identification Number Laboratory & Lab Sample ID No Date Sample Collected	MW-59-Y2Q1 0002480-06 16-Feb-00	MW-59-Y2Q2 0005523-06 17-May-00	MW-59-Y2Q3 0008592-10 22-Aug-00	MW-67-Y2Q1 0002480-10 16-Feb-00	MW-67-Y2Q2 NP	MW-67-Y2Q3 NP	MW-68-Y2Q2 0005523-29 18-May-00	MW-68-Y2Q3 NP	MW-68-Y2Q4 0008634-09 23-Aug-00	Maximum Contaminant Level (MCL)-Primary Drinking Water Standard	USEPA Region III RBCs-Tap Water (October 7, 1999)
pH	5.8	5.9	8.1	6	NP	NP	5.84	NP	7.9		
Conductivity (umhos)	227	227	178	189	NP	NP	268	NP	210		
Temperature	18.8	20.4	NP	17.7	NP	NP	22.4	NP	NP		
Turbidity (ntu)	362	155	NP	0	NP	NP	>999	NP	NP		
DL	1/10/100	1/10/100	1/10/100	1/10/100	1/10/100	1/10/100	1/10/100	1/10/100	1/10/100		
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L		
Laboratory Analyses											
TCL Volatile Organics (Method 8260B)											
Benzene	ND	<1.00	ND	ND	NP	NP	<1.00	NP	ND	5	0.32
Bromodichloromethane	ND	<1.00	ND	ND	NP	NP	<1.00	NP	ND	NS	0.17
Carbon Tetrachloride	ND	<1.00	ND	ND	NP	NP	0.89 J	NP	ND	5	0.16
Chlorobenzene	ND	1.82	ND	ND	NP	NP	<1.00	NP	ND	100	110
Chloroform	ND	<1.00	ND	ND	NP	NP	6.44	NP	ND	NS	0.15
Chloromethane	ND	<1.00	ND	ND	NP	NP	<1.00	NP	ND	NS	3.6
1,1-Dichloroethane	ND	<1.00	ND	ND	NP	NP	<1.00	NP	ND	NS	800
1,2-Dichloroethane	ND	<1.00	ND	ND	NP	NP	<1.00	NP	ND	5	0.12
1,1,1-Trichloroethane	ND	<1.00	ND	ND	NP	NP	<1.00	NP	ND	7	0.044
Trans 1,2-Dichloroethane	ND	0.82 J	ND	ND	NP	NP	13.1	NP	9.36	100	120
Cis 1,2-Dichloroethane	ND	2.38	ND	ND	NP	NP	13.7	NP	31	70	61
1,1,2,2-Tetrachloroethane	ND	<1.00	0.38 J	ND	NP	NP	<1.00	NP	6.55	NS	0.053
Tetrachloroethene	35	24.1	22	ND	NP	NP	2.07	NP	8.35	5	1.1
Toluene	ND	<1.00	ND	ND	NP	NP	<1.00	NP	ND	1000	750
1,1,1-Trichloroethane	ND	<1.00	ND	ND	NP	NP	<1.00	NP	ND	200	540
1,1,2-Trichloroethane	ND	<1.00	ND	ND	NP	NP	<1.00	NP	ND	5	0.19
Trichloroethene	1.49	4.94	0.88 J	1.26	NP	NP	44.5	NP	48.9	5	1.6
Vinyl Chloride	ND	<1.00	ND	ND	NP	NP	<1.00	NP	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

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RBCs = Risk Based Contaminants

NS = no standard NP = not performed

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J = Estimated value - presence of the compound was confirmed

J* = estimated value - quality control recoveries outside accepta

Quarterly Analytical Results for TCL Volatile Organics
on Sampled Monitoring Wells

Table 2

Sample Identification Number Laboratory & Lab Sample ID No Date Sample Collected	MW-69-Y2Q1 0002480-01 16-Feb-00	MW-69-Y2Q2 0005523-25 17-May-00	MW-69-Y2Q3 0008674-02 24-Aug-00	MW-70-Y2Q1 0002423-08 15-Feb-00	MW-70-Y2Q2 0005523-30 18-May-00	MW-70-Top-Y2Q2 0005523-30 18-May-00	MW-70-Bottom-Y2Q2 0005523-31 18-May-00	MW-70-Y2Q3 0008674-01 24-Aug-00	Maximum Contaminant Level (MCL)-Primary Drinking Water Standard	USEPA Region III RBCs-Tap Water (October 7, 1999)
pH	5.8	5.9	7.63	5.8	5.9	5.9	5.9	6.98		
Conductivity (umhos)	251	213	215	233	213	213	213	209		
Temperature	16.9	19.9		18.5	23.1	23.1	23.1	NP		
Turbidity (ntu)	>999	>999		>999	601	601	601	NP		
Laboratory Analyses	DL	Units								
TCL Volatile Organics (Method 8260B)										
Benzene	1/10/100	ug/L	ND	ND	<1.00	<1.00	<1.00	ND	5	0.32
Bromodichloromethane	1/10/100	ug/L	ND	ND	<1.00	<1.00	<1.00	ND	NS	0.17
Carbon Tetrachloride	1/10/100	ug/L	ND	3.48	<1.00	<1.00	0.64 J	2.46	5	0.16
Chlorobenzene	1/10/100	ug/L	ND	ND	<1.00	<1.00	<1.00	ND	100	1.10
Chloroform	1/10/100	ug/L	ND	18.2	4.36	<1.00	5.18	8.46	NS	0.15
Chloromethane	1/10/100	ug/L	ND	ND	<1.00	<1.00	<1.00	ND	NS	3.6
1,1-Dichloroethane	1/10/100	ug/L	ND	ND	<1.00	<1.00	<1.00	ND	NS	800
1,2-Dichloroethane	1/10/100	ug/L	ND	1.77	<1.00	<1.00	<1.00	ND	5	0.12
1,1,1-Trichloroethane	1/10/100	ug/L	ND	0.61 J	<1.00	<1.00	<1.00	ND	7	0.044
Trans 1,2-Dichloroethane	1/10/100	ug/L	2.26	149	10.1	12	12	50.4	100	120
Cis 1,2-Dichloroethane	1/10/100	ug/L	4.11	522	38.8	54.8	342	218 E	70	61
1,1,2,2-Tetrachloroethane	1/10/100	ug/L	ND	4830	284	342	5.35	1040 E	NS	0.053
Tetrachloroethane	1/10/100	ug/L	1.76	89.7	2.92	<1.00	<1.00	35.8	5	1.1
Toluene	1/10/100	ug/L	ND	ND	<1.00	<1.00	<1.00	ND	1000	750
1,1,1-Trichloroethane	1/10/100	ug/L	ND	ND	<1.00	<1.00	<1.00	ND	200	540
1,1,2-Trichloroethane	1/10/100	ug/L	ND	39.7	2.64	<1.00	3.93	15.2	5	0.19
Trichloroethane	1/10/100	ug/L	99.2	11700	538	720	720	1120 E	5	1.6
Vinyl Chloride	1/10/100	ug/L	ND	1.88	<1.00	<1.00	<1.00	0.62 J	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 S

RBCs = Risk Based Contaminants

NS = no standard NP = not performed

NA = not available

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J = Estimated value - presence of the compound was confirmed

J* = estimated value - quality control recoveries outside acceptance

Table 2
Quarterly Analytical Results for TCL Volatile Organics
on Sampled Monitoring Wells

Sample Identification Number Laboratory & Lab Sample ID No Date Sample Collected	MW-71-Y2Q1 15-Feb-00	MW-71-Y2Q2 18-May-00	MW-71-Y2Q3 23-Aug-00	Maximum Contaminant Level (MCL)-Primary Drinking Water Standard	USEPA Region III RBCs-Tap Water (October 7, 1999)
pH	5.9	5.9	5.7		
Conductivity (umhos)	226	203	149		
Temperature	18.1	20.2	NP		
Turbidity (ntu)	>999	>999	NP		
Laboratory Analyses	DL	Units			
TCL Volatile Organics (Method 8260B)					
Benzene	1/10/100	ug/L	ND	<1.00	ND
Bromodichloromethane	1/10/100	ug/L	ND	<1.00	ND
Carbon Tetrachloride	1/10/100	ug/L	63.9	34	32.9
Chlorobenzene	1/10/100	ug/L	ND	<1.00	ND
Chloroform	1/10/100	ug/L	996	1080	831 E
Chloromethane	1/10/100	ug/L	ND	<1.00	ND
1,1-Dichloroethane	1/10/100	ug/L	ND	<1.00	ND
1,2-Dichloroethane	1/10/100	ug/L	ND	<1.00	ND
1,1,1-Trichloroethane	1/10/100	ug/L	ND	<1.00	ND
Trans 1,2-Dichloroethane	1/10/100	ug/L	4.7	3.72	2.94
Cis 1,2-Dichloroethane	1/10/100	ug/L	11.5	9.98	8.94
1,1,2,2-Tetrachloroethane	1/10/100	ug/L	97.7	181	168
Tetrachloroethene	1/10/100	ug/L	10	4.54	7.02
Toluene	1/10/100	ug/L	ND	<1.00	ND
1,1,1-Trichloroethane	1/10/100	ug/L	ND	<1.00	ND
1,1,2-Trichloroethane	1/10/100	ug/L	3.21	<1.00	ND
Trichloroethene	1/10/100	ug/L	330	239	224 E
Vinyl Chloride	1/10/100	ug/L	ND	<1.00	ND

Only compounds detected are listed

ug/L = micrograms per liter

DL = Detection Limit

YCL = Target Compound List

BDL = Below Detection Limit

MCL = Maximum Contaminant Level - Primary Drinking Water S

RBCs = Risk Based Contaminants

NS = no standard NP = not performed

NA = not available

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

J = Estimated value - presence of the compound was confirmed

J* = estimated value - quality control recoveries outside accepta

TABLE 3
Quarterly Analytical Results for TCL Volatile Organics
on System Recovery Wells

Sample Identification Number Laboratory & Lab Sample ID No Date Sample Collected	pH	Conductivity (umhos)	Temperature	Turbidity (ntu)	DL Units		RW-1A-Y2Q1	RW-1A-Y2Q2	RW-1A-Y2Q3	RW-1B-Y2Q1	RW-1B-Y2Q2	RW-1B-Y2Q3	Maximum Contaminant Level (MCL)-Primary Drinking Water Standard	USEPA Region III RBCs-Tap Water (October 7, 1999)
					DL	Units	0002423-16	0005523-20	0006634-08	0002480-03	0005523-10	0006634-04		
							15-Feb-00	17-May-00	8/23/00	16-Feb-00	17-May-00	23-Aug-00		
							5.8	5.8	7.6	6.0	6.1	7.5		
							254	262	201	300	285	257		
							17.4	19.4	NP	17.2	19.7	NP		
							12.7	62.4	NP	35.5	66.4	NP		
Laboratory Analyses														
TCL Volatile Organics (Method 8260B)														
Carbon Tetrachloride	1/10/100	ug/L					15.20	10.60	9.47	20.60	12.30	26.10	5	0.16
Chloroform	1/10/100	ug/L					397.00	339.00	284 E	20.70	15.30	49.40	NS	0.15
1,1-Dichloroethane	1/10/100	ug/L					ND	<1.00	ND	ND	<1.00	ND	NS	800
1,2-Dichloroethane	1/10/100	ug/L					ND	<1.00	ND	ND	<1.00	ND	5	0.12
1,1-Dichloroethene	1/10/100	ug/L					ND	<1.00	ND	ND	<1.00	ND	7	0.044
Trans 1,2-Dichloroethene	1/10/100	ug/L					1.40	0.96 J	0.96 J	1.23	0.80 J	1.70	100	120
Cis 1,2-Dichloroethene	1/10/100	ug/L					3.63	2.49	2.75	3.32	2.18	5.57	70	61
1,1,2,2-Tetrachloroethane	1/10/100	ug/L					49.80	25.80	35.30	ND	<1.00	ND	NS	0.053
Tetrachloroethene	1/10/100	ug/L					3.14	2.31	2.20	2.37	1.08	2.84	5	1.1
1,1,1-Trichloroethane	1/10/100	ug/L					ND	<1.00	ND	ND	<1.00	ND	200	540
1,1,2-Trichloroethane	1/10/100	ug/L					1.54	0.82 J	1.08	ND	<1.00	0.32 J	5	0.19
Trichloroethene	1/10/100	ug/L					119.00	73.00	73.90	21.90	13.60	35.70	5	1.6

Only compounds detected are listed

ug/L = micrograms per liter

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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 recovers 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 Laboratory & Lab Sample ID No Date Sample Collected	RW-01-Y2Q1 0002480-04 16-Feb-00	RW-01-Y2Q2 0005523-21 17-May-00	RW-01-Y2Q3 0008634-10 23-Aug-00	RW-02-Y2Q1 0002840-02 15-Feb-00	RW-02-Y2Q2 0005523-08 17-May-00	RW-02-Y2Q3 0008634-02 23-Aug-00	Maximum Contaminant Level (MCL)-Primary Drinking Water Standard	USEPA Region III RBCs-Tap Water (October 7, 1999)
pH	6.1	6.1	7.5	5.8	5.9	7.9		
Conductivity (umhos)	358	407	291	296	287	286		
Temperature	18.2	19.3	NP	17.4	19.7	NP		
Turbidity (ntu)	101	138	NP	168	128	NP		
Laboratory Analyses								
	DL	Units						
TCL Volatile Organics (Method 8260B)								
Carbon Tetrachloride	1/10/100	ug/L						
Chloroform	1/10/100	ug/L						
1,1-Dichloroethane	1/10/100	ug/L						
1,2-Dichloroethane	1/10/100	ug/L						
1,1-Dichloroethene	1/10/100	ug/L						
Trans 1,2-Dichloroethene	1/10/100	ug/L						
Cis 1,2-Dichloroethene	1/10/100	ug/L						
1,1,2,2-Tetrachloroethane	1/10/100	ug/L						
Tetrachloroethene	1/10/100	ug/L						
1,1,1-Trichloroethane	1/10/100	ug/L						
1,1,2-Trichloroethane	1/10/100	ug/L						
Trichloroethene	1/10/100	ug/L						

Only compounds detected are listed

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

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E = Concentration exceeds the established method calibration

TABLE 3
Quarterly Analytical Results for TCL Volatile Organics
on System Recovery Wells

Sample Identification Number Laboratory & Lab Sample ID No Date Sample Collected							pH	Conductivity (umhos)	Temperature	Turbidity (ntu)	Laboratory Analyses										DL	Units	Maximum Contaminant Level (MCL)-Primary Drinking Water Standard	USEPA Region III RBCs-Tap Water (October 7, 1999)		
RW-03P-Y1Q1	RW-03-Y1Q2	RW-03-Y1Q3	RW-03-Y1Q4	RW-03-Y2Q1	RW-03-Y2Q2	RW-03-Y2Q3																				
9902206-01	9905638-01	9908741-15	9911028-01	0002385-01	0005523-33	0008674-08																				
05-Feb-99	24-May-99	27-Aug-99	01-Nov-99	14-Feb-00	18-May-00	24-Aug-00																				
NA	5.9	7.4	6.0	5.8	NP	7.2																				
							NA	231	272	313	258	NP	410											NP		
							NA	18.6	19.8	18.3	16.3	NP	NP											NP		
							NA	10	6	0.1	0.2	NP	NP											NP		
Laboratory Analyses																										
TCL Volatile Organics (Method 8260B)																										
Carbon Tetrachloride	1/10/100	ug/L	16.40	13.30	10.50	13.20	10.90	16.30	13.80	5	0.16															
Chloroform	1/10/100	ug/L	5.89	1.36	5.66	5.24	4.57	5.51	4.77	NS	0.15															
1,1-Dichloroethane	1/10/100	ug/L	ND	ND	ND	ND	ND	<1.00	ND	NS	800															
1,2-Dichloroethane	1/10/100	ug/L	ND	ND	ND	ND	ND	<1.00	ND	5	0.12															
1,1-Dichloroethene	1/10/100	ug/L	ND	ND	ND	ND	ND	<1.00	ND	7	0.044															
Trans 1,2-Dichloroethene	1/10/100	ug/L	5.51	3.94	2.97	3.31	4.52	7.42	4.78	100	120															
Cis 1,2-Dichloroethene	1/10/100	ug/L	79.30	58.00	47.00	44.00	101.00	138.00	70.80	70	61															
1,1,2,2-Tetrachloroethane	1/10/100	ug/L	80.00	42.50	40.80	42.30	61.90	85.50	59.60	NS	0.053															
Tetrachloroethene	1/10/100	ug/L	ND	ND	0.73 J	1.01	0.65 J	0.73 J	0.84 J	5	1.1															
1,1,1-Trichloroethane	1/10/100	ug/L	ND	ND	ND	ND	ND	<1.00	ND	200	540															
1,1,2-Trichloroethane	1/10/100	ug/L	3.23	2.73	1.98	1.85	2.80	3.23	2.39	5	0.19															
Tnchloroethene	1/10/100	ug/L	78.20	54.30	42.10	55.00	57.80	78.80	57.40	5	1.6															

Only compounds detected are listed

ug/L = micrograms per liter

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

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E = Concentration exceeds the established method calibration

Only compounds detected are listed

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TABLE 3
Quarterly Analytical Results for TCL Volatile Organics
on System Recovery Wells

Sample Identification Number Laboratory & Lab Sample ID No Date Sample Collected	RW-05-P-Y1Q1	RW-05-Y1Q2	RW-05-Y1Q3	RW-05-Y1Q4	RW-05-Y2Q1	RW-05-Y2Q2	RW-05-Y2Q3	Maximum Contaminant Level (MCL)-Primary Drinking Water Standard	USEPA Region III RBCs-Tap Water (October 7, 1999)
pH	NA	5.9	7.4	6.0	5.9	NP	7.3		
Conductivity (umhos)	NA	151	190	220	220	NP	214		
Temperature	NA	18	19.7	17.8	16.4	NP	NP		
Turbidity (ntu)	NA	6	17	0.1	0.6	NP	NP		
Laboratory Analyses									
TCL Volatile Organics (Method 8260B)									
Carbon Tetrachloride	DL	ug/L	DL	ug/L	DL	ug/L	DL	ug/L	DL
Chloroform	1/10/100	1/10/100	1/10/100	1/10/100	1/10/100	1/10/100	1/10/100	1/10/100	1/10/100
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trans 1,2-Dichloroethene	6.45	15.70	14.30	<100	12.30	NP	2.28	100	120
Cis 1,2-Dichloroethene	17.90	50.10	49.60	48.4 J	50.20	NP	17.90	70	61
1,1,2,2-Tetrachloroethane	11.40	582.00	1380.00	2260.00	3120.00	NP	167.00	NS	0.053
Tetrachloroethene	5.87	12.90	12.20	45.1 J	10.80	NP	1.45	5	1.1
1,1,1-Trichloroethane	ND	ND	ND	<100	ND	NP	ND	200	540
1,1,2-Trichloroethane	ND	ND	1.15	<100	1.93	NP	0.60 J	5	0.19
Trichloroethene	433.00	1180.00	1270.00	1290.00	1170.00	NP	132.00	5	1.6

Only compounds detected are listed

ug/L = micrograms per liter

DL = Detection Limit

TCL = Target Compound List

BOL = Below Detection Limit

MCL = Maximum Contaminant Level - Primary Drinking Water

RBCs = Risk Based Contaminants

NS = no standard NP = not performed

NA = not available

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

J = Estimated value - presence of the compound was confirmed

J* = estimated value - quality control recoveries outside acceptance

E = Concentration exceeds the established method calibration

Sample Identification Number Laboratory & Lab Sample ID No		RW-06P-Y1Q1	RW-06-Y1Q2	RW-06-Y1Q3	RW-06-Y1Q4	RW-06-Y2Q1	RW-06-Y2Q2	RW-06-Y2Q3	Maximum Contaminant Level (MCL)-Primary Drinking Water Standard	USEPA Region III RBCs-Tap Water (October 7, 1999)
Date Sample Collected		9902206-05	9905638-04	9908741-18	9911028-04	0002385-04	0005399-06	0008674-17		
pH		05-Feb-99	24-May-99	27-Aug-99	01-Nov-99	14-Feb-00	15-May-00	24-Aug-00		
Conductivity (umhos)		NA	4.6	7.4	6.2	5.9	5.9	7.5		
Temperature		NA	168	208	250	268	250	251		
Turbidity (ntu)		NA	19	20	17.8	16.6	20.8	NP		
DL		NA	6	31	0.5	0.2	0.1	NP		
Laboratory Analyses										
TCL Volatile Organics (Method 8260B)										
Carbon Tetrachloride	1/10/100	ND	ND	ND	ND	ND	ND	ND	5	0.16
Chloroform	1/10/100	2.11	ND	3.09	2.48	3.20	2.26	1.98	NS	0.15
1,1-Dichloroethane	1/10/100	ND	ND	ND	ND	ND	<1.00	ND	NS	800
1,2-Dichloroethane	1/10/100	ND	ND	ND	ND	ND	<1.00	ND	5	0.12
1,1,1-Dichloroethane	1/10/100	ND	ND	ND	ND	ND	<1.00	ND	7	0.044
Trans 1,2-Dichloroethene	1/10/100	1.39	1.49	1.89	1.59	0.69 J	2.03	2.28	100	120
Cis 1,2-Dichloroethene	1/10/100	3.67	4.53	5.10	2.34	1.18	5.12	5.96	70	61
1,1,2,2-Tetrachloroethane	1/10/100	ND	ND	ND	ND	ND	<1.00	ND	NS	0.053
Tetrachloroethene	1/10/100	24.20	4.93	10.10	5.80	6.48	5.52	5.90	5	1.1
1,1,1-Trichloroethane	1/10/100	ND	ND	ND	ND	ND	<1.00	ND	200	540
1,1,2-Trichloroethane	1/10/100	ND	ND	ND	ND	ND	<1.00	ND	5	0.19
Trichloroethene	1/10/100	27.60	22.00	32.70	24.20	17.00	37.90	34.00	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

RBCs = Risk Based Contaminants

NS = no standard NP = not performed

NA = not available

8 = Analyte detected in associated method and/or equipment b

I = Estimated value - presence of the compound was confirmed

$\hat{v}$ = estimated value - quality control recovers outside accep

E = Concentration exceeds the established method calibration

T

TABLE 3
Quarterly Analytical Results for TCL Volatile Organics
on System Recovery Wells

Sample Identification Number Laboratory & Lab Sample ID No Date Sample Collected					Maximum Contaminant Level (MCL)-Primary Drinking Water Standard												USEPA Region III RBCs-Tap Water (October 7, 1999)
pH					RW-07-P-Y1Q1	RW-07-Y1Q2	RW-07-Y1Q3	RW-07-Y1Q4	RW-07-Y2Q1	RW-07-Y2Q2	RW-07-Y2Q3						
Conductivity (umhos)					9902206-05	9905638-05	9908741-19	9911028-05	0002385-05	0005399-04	0008674-13						
Temperature					05-Feb-99	24-May-99	27-Aug-99	01-Nov-99	14-Feb-00	15-May-00	24-Aug-00						
Turbidity (ntu)					NA	59	74	59	59	58	73						
					NA	162	211	250	268	257	251						
					NA	18	20	18.2	16.6	21.6	NP						
					NA	3	5	0.1	0.2	0.2	NP						
Laboratory Analyses																	
					DL	Units											
TCL Volatile Organics (Method 8260B)																	
Carbon Tetrachloride					1/10/100	ug/L	ND	ND	0.54 J	ND	ND	ND	<1.00	ND	5	0.18	
Chloroform					1/10/100	ug/L	1.91	ND	3.39	2.28	1.84	1.27	1.59	NS	0.15		
1,1-Dichloroethane					1/10/100	ug/L	ND	ND	ND	ND	ND	<1.00	ND	NS	800		
1,2-Dichloroethane					1/10/100	ug/L	ND	ND	ND	ND	ND	<1.00	ND	5	0.12		
1,1-Dichloroethene					1/10/100	ug/L	ND	ND	ND	ND	ND	<1.00	ND	7	0.044		
Trans 1,2-Dichloroethene					1/10/100	ug/L	15.60	17.10	17.30	23.60	19.20	17.40	19.70	100	120		
Cis 1,2-Dichloroethene					1/10/100	ug/L	45.30	54.60	59.10	74.70	70.30	59.60	70.60	70	81		
1,1,2,2-Tetrachloroethane					1/10/100	ug/L	19.50	28.80	43.20	60.70	49.90	52.20	65.80	NS	0.053		
Tetrachloroethene					1/10/100	ug/L	11.20	7.94	9.81	12.20	9.33	7.76	10.70	5	1.1		
1,1,1-Trichloroethane					1/10/100	ug/L	ND	ND	ND	ND	ND	<1.00	ND	200	540		
1,1,2-Trichloroethane					1/10/100	ug/L	ND	ND	0.85 J	1.08	1.03	0.95 J	1.44	5	0.19		
Trichloroethene					1/10/100	ug/L	86.60	89.50	94.00	145.00	102.00	97.20	98.90	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

RBCs = Risk Based Contaminants

NS = no standard NP = not performed

NA = not available

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

J = Estimated value - presence of the compound was confirmed

J* = estimated value - quality control recoveries outside acceptance

E = Concentration exceeds the established method calibration

TABLE 3
Quarterly Analytical Results for TCL Volatile Organics
on System Recovery Wells

Sample Identification Number Laboratory & Lab Sample ID No Date Sample Collected							Laboratory Analyses							DL	Units	Maximum Contaminant Level (MCL)-Primary Drinking Water Standard	USEPA Region III RBCs-Tap Water (October 7, 1999)
RW-08P-Y1Q1	RW-08-Y1Q2	RW-08-Y1Q3	RW-08-Y1Q4	RW-08-Y2Q1	RW-08-Y2Q2	RW-08-Y2Q3											
9902206-06	9905638-06	9908741-20	9911028-06	0002385-05	0005399-03	0008674-16											
05-Feb-99	24-May-99	27-Aug-99	01-Nov-99	14-Feb-00	15-May-00	24-Aug-00											
NA	5.8	7.5	6.1	5.8	6.0	7.5											
NA	195	252	316	323	301	298											
NA	17.7	19.1	18.4	15.7	20.4	NP											
NA	3	0	0.3	0.2	0.1	NP											
Laboratory Analyses																	
TCL Volatile Organics (Method 8260B)																	
Carbon Tetrachloride	1/10/100	ug/L	1.21	1.38	1.30	1.11	1.03	0.89 J	0.94 J	5	0.16						
Chloroform	1/10/100	ug/L	13.10	10.30	14.10	10.30	10.50	8.41	8.72	NS	0.15						
1,1-Dichloroethane	1/10/100	ug/L	ND	ND	ND	7.84	ND	<1.00	ND	NS	800						
1,2-Dichloroethane	1/10/100	ug/L	ND	ND	ND	27.80	ND	<1.00	ND	5	0.12						
1,1-Dichloroethene	1/10/100	ug/L	16.00	15.20	9.79	ND	6.82	4.98	5.10	7	0.044						
Trans 1,2-Dichloroethene	1/10/100	ug/L	20.10	42.10	27.00	ND	30.80	37.60	39.70	100	120						
Cis 1,2-Dichloroethene	1/10/100	ug/L	64.70	126.00	93.00	89.10	115.00	120.00	128.00	70	61						
1,1,2,2-Tetrachloroethane	1/10/100	ug/L	45.90	88.00	108.00	119.00	121.00	121.00	109.00	NS	0.053						
Tetrachloroethene	1/10/100	ug/L	5.35	5.96	5.50	6.14	6.67	5.19	5.66	5	1.1						
1,1,1-Trichloroethane	1/10/100	ug/L	ND	ND	ND	ND	ND	<1.00	ND	200	540						
1,1,2-Trichloroethane	1/10/100	ug/L	ND	1.66	1.32	1.28	1.58	1.74	1.97	5	0.19						
Trichloroethene	1/10/100	ug/L	140.00	273.00	173.00	261.00	190.00	268.00	190.00	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

RBCs = Risk Based Contaminants

NS = no standard NP = not performed

NA = not available

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

J = Estimated value - presence of the compound was confirmed

J* = estimated value - quality control recoveries outside acceptance

E = Concentration exceeds the established method calibration

TABLE 3
Quarterly Analytical Results for TCL Volatile Organics
on System Recovery Wells

Sample Identification Number Laboratory & Lab Sample ID No Date Sample Collected					DL Units										Maximum Contaminant Level (MCL)-Primary Drinking Water Standard	USEPA Region III RBCs-Tap Water (October 7, 1999)
pH	Conductivity (umhos)	Temperature	Turbidity (ntu)	Laboratory Analyses												
				TCL Volatile Organics (Method 8260B)												
				RW-09P-Y1Q1	RW-09-Y1Q2	RW-09-Y1Q3	RW-09-Y1Q4	RW-09-Y2Q1	RW-09-Y2Q2	RW-09-Y2Q3						
9902206-07	9905638-07	9908741-21	9911028-06	0002385-08	0005399-01	0008674-11										
05-Feb-99	24-May-99	27-Aug-99	01-Nov-99	14-Feb-00	15-May-00	24-Aug-00										
NA	5 9	7 4	6 0	5 9	6 0	7 6										
NA	220	282	327	388	340	345										
NA	17 4	19 2	18 7	15 7	20 6	NP										
NA	2	183	0 1	0 5	0 2	NP										
Laboratory Analyses					DL Units											
Carbon Tetrachloride					1/10/100	ug/L										
Chloroform					1/10/100	ug/L	ND	1 43	1 21	1 12	0 78 J	0 90 J	1 17	5	0 16	
1,1-Dichloroethane					1/10/100	ug/L	10 10	10 20	15 40	11 80	12 50	10 80	12 50	NS	0 15	
1,2-Dichloroethane					1/10/100	ug/L	1 17	1 45	1 35	1 24	1 88	1 15	1 18	NS	800	
1,1-Dichloroethene					1/10/100	ug/L	ND	ND	0 63 J	0 53 J	0 70 J	<1 00	ND	5	0 12	
Trans 1,2-Dichloroethene					1/10/100	ug/L	40 40	49 20	45 10	44 40	52 90	35 90	45 40	7	0 044	
Cis 1,2-Dichloroethene					1/10/100	ug/L	2 28	3 18	1 94	1 86	2 23	2 24	2 53	100	120	
1,1,2,2-Tetrachloroethane					1/10/100	ug/L	5 20	8 47	5 65	4 95	5 45	6 03	7 68	70	61	
Tetrachloroethene					1/10/100	ug/L	ND	1 21	1 52	ND	2 98	<1 00	2 55	NS	0 053	
1,1,1-Trichloroethane					1/10/100	ug/L	35 40	41 50	37 70	38 80	61 20	32 10	32 90	5	1 1	
1,1,2-Trichloroethane					1/10/100	ug/L	1 58	2 01	1 67	1 73	1 56	1 40	1 25	200	540	
Trichloroethene					1/10/100	ug/L	ND	ND	ND	ND	ND	<1 00	ND	5	0 19	
					1/10/100	ug/L	39 10	52 00	41 10	43 30	51 40	37 70	35 50	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

RBCs = Risk Based Contaminants

NS = no standard NP = not performed

NA = not available

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

J = Estimated value - presence of the compound was confirmed

J* = estimated value - quality control recoveries outside acceptance

E = Concentration exceeds the established method calibration

Quarterly Quality Control Samples
Year Two, Quarter Three

Sample Identification Number		MMV-30-Y2Q3	MMV-A	Relative Percent Diff (RPD)	RVW-02	RVW-B	Relative Percent Diff (RPD)	MMV-70-Y2Q3	MMV-B	Relative Percent Diff (RPD)	Maximum Contaminant Level (MCL)-Primary Drinking Water Standard	USEPA Region III RBCs-Tap Water (October 7, 1999)
Laboratory & Lab Sample ID No		0008592-09	0008592-08		0008634-02	0008634-03		0008674-01	0008674-03			
Date Sample Collected		23-Aug-00	8/22/00		23-Aug-00	8/23/00		8/24/00	8/24/00			
DL		Units										
Laboratory Analyses												
TCL Volatile Organics (Method 8260B)												
Benzene	1/10/100	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	5	0.32
Bromodichloromethane	1/10/100	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	NS	0.17
Carbon Tetrachloride	1/10/100	ug/L	ND	ND	16.8	17	1	2.46	2.25	9	5	0.16
Chlorobenzene	1/10/100	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	100	110
Chloroform	1/10/100	ug/L	ND	ND	15.4	15.5	1	8.46	8.09	4	NS	0.15
Chloromethane	1/10/100	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	NS	3.6
1,1-Dichloroethane	1/10/100	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	NS	800
1,2-Dichloroethane	1/10/100	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	5	0.12
1,1-Dichloroethene	1/10/100	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	7	0.044
Trans 1,2-Dichloroethene	1/10/100	ug/L	ND	ND	1.77	1.78	1	50.4	46.8	7	100	120
Cis 1,2-Dichloroethene	1/10/100	ug/L	ND	ND	13.6	14	3	218 E	202 E	8	70	61
1,1,2,2-Tetrachloroethane	1/10/100	ug/L	ND	ND	ND	ND	ND	1049 E	1010 E	3	NS	0.053
Tetrachloroethene	1/10/100	ug/L	ND	ND	1.29	1.31	2	35.8	33.7	6	5	1.1
Toluene	1/10/100	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	1000	750
1,1,1-Trichloroethane	1/10/100	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	200	540
1,1,2 Trichloroethane	1/10/100	ug/L	ND	ND	0.51 J	0.62 J	19	15.2	14.6	3	5	0.19
Trichloroethene	1/10/100	ug/L	ND	ND	20.6	21	2	1120 E	1080 E	4	5	1.6
Vinyl Chloride	1/10/100	ug/L	ND	ND	ND	ND	ND	0.62 J	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

Quarterly Quality Control Samples
Year Two, Quarter Three

Sample Identification Number		ERB	FB	Trip Blank	Trip Blank	Trip Blank	Maximum Contaminant Level (MCL) Primary Drinking Water Standard	USEPA Region III RBCs-Tap Water (October 7, 1999)
Laboratory & Lab Sample ID No.		Equipment Rinseate Blank	Field Blank					
Date Sample Collected		0008674-12	0008674-05	0008592-01	0008634-01	0008674-08		
Units		6/24/00	6/24/00	6/22/00	6/23/00	6/24/00		
Laboratory Analytes								
TCL Volatile Organics (Method 8260B)								
Benzene	1/10/100	ND	ND	ND	ND	ND	5	0.32
Bromochloromethane	1/10/100	ND	ND	ND	ND	ND	NS	0.17
Carbon Tetrachloride	1/10/100	ND	ND	ND	ND	ND	5	0.18
Chlorobenzene	1/10/100	ND	ND	ND	ND	ND	100	1.10
Chloroform	1/10/100	ND	ND	ND	ND	ND	NS	0.15
Chloromethane	1/10/100	ND	ND	ND	ND	ND	NS	3.6
1,1-Dichloroethane	1/10/100	ND	ND	ND	ND	ND	NS	800
1,2-Dichloroethane	1/10/100	ND	ND	ND	ND	ND	5	0.12
1,1-Dibromoethene	1/10/100	ND	ND	ND	ND	ND	7	0.044
Trans 1,2-Dichloroethene	1/10/100	ND	ND	ND	ND	ND	100	120
Cis 1,2-Dichloroethene	1/10/100	ND	ND	ND	ND	ND	70	61
1,1,2,2-Tetrachloroethane	1/10/100	ND	ND	ND	ND	ND	NS	0.053
Tetrachloroethene	1/10/100	ND	ND	ND	ND	ND	5	1.1
Toluene	1/10/100	ND	ND	ND	ND	ND	1000	750
1,1,1-Trichloroethane	1/10/100	ND	ND	ND	ND	ND	200	540
1,1,2-Trichloroethane	1/10/100	ND	ND	ND	ND	ND	5	0.19
Trichloroethene	1/10/100	ND	ND	ND	ND	ND	5	1.6
Vinyl Chloride	1/10/100	ND	ND	ND	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 I

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

TABLE 5
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	226.16

Notes:

Groundwater elevations are in feet above mean sea level (msl)

Table contains data corresponding to quarterly sampled groundwater wells only

NA = not available

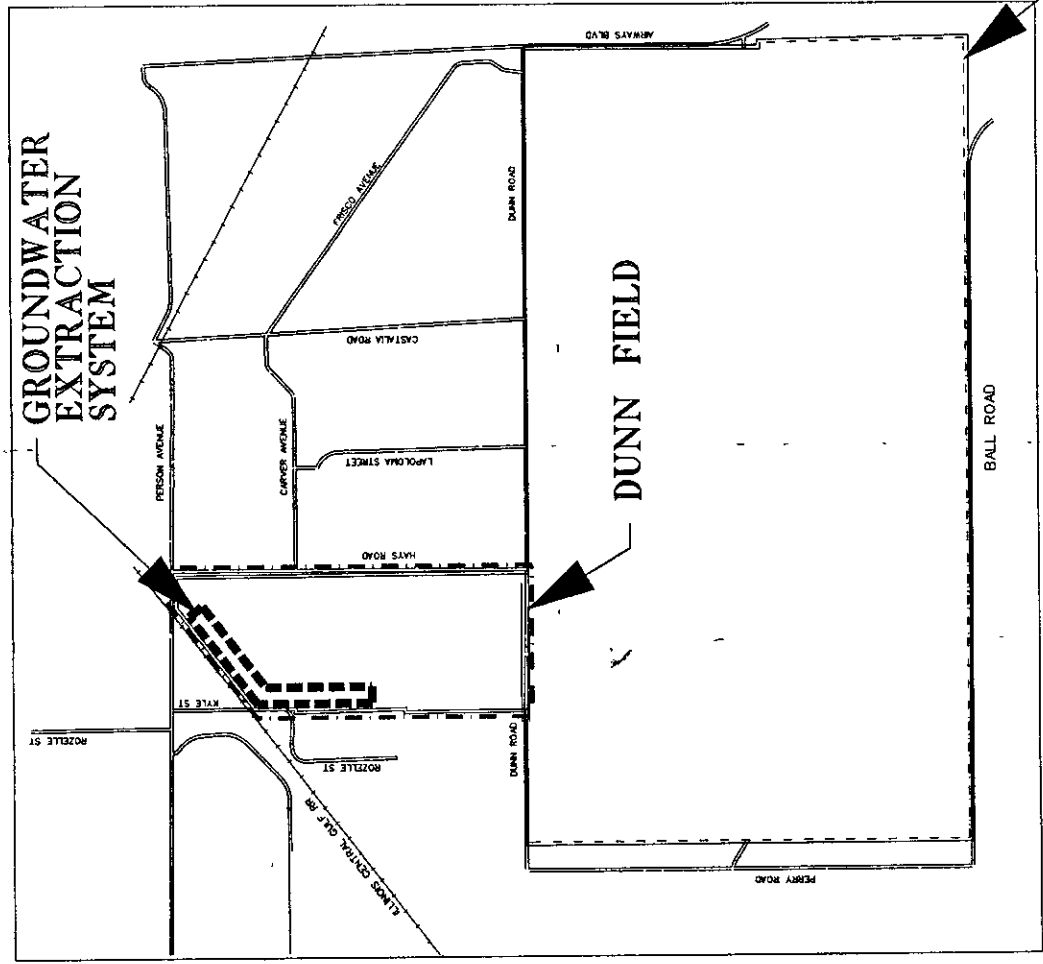
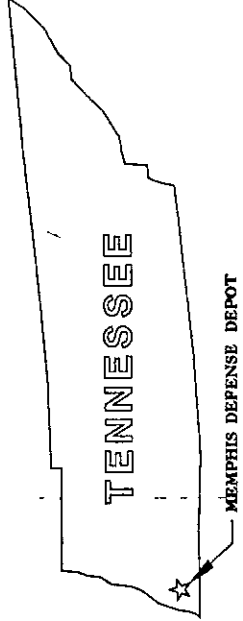
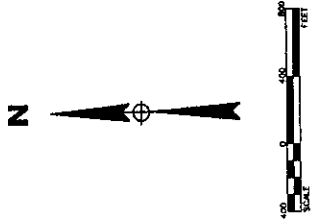
TABLE 5
Groundwater Levels Corresponding
to Quarterly Sampled Wells

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

Notes

Groundwater ele
 Table contains d
 NA = not availab

FIGURES

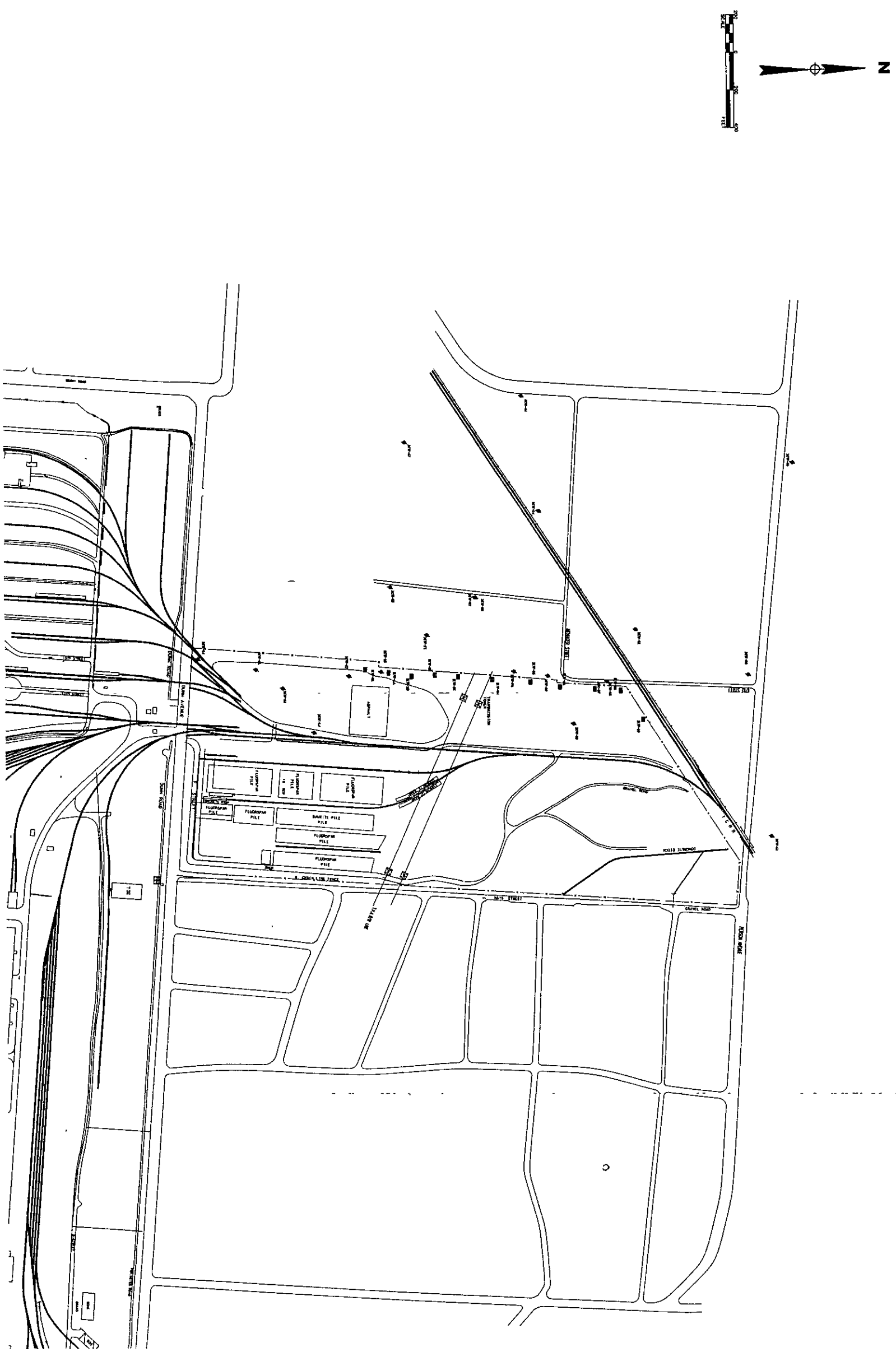


MEMPHIS DEFENSE DEPOT

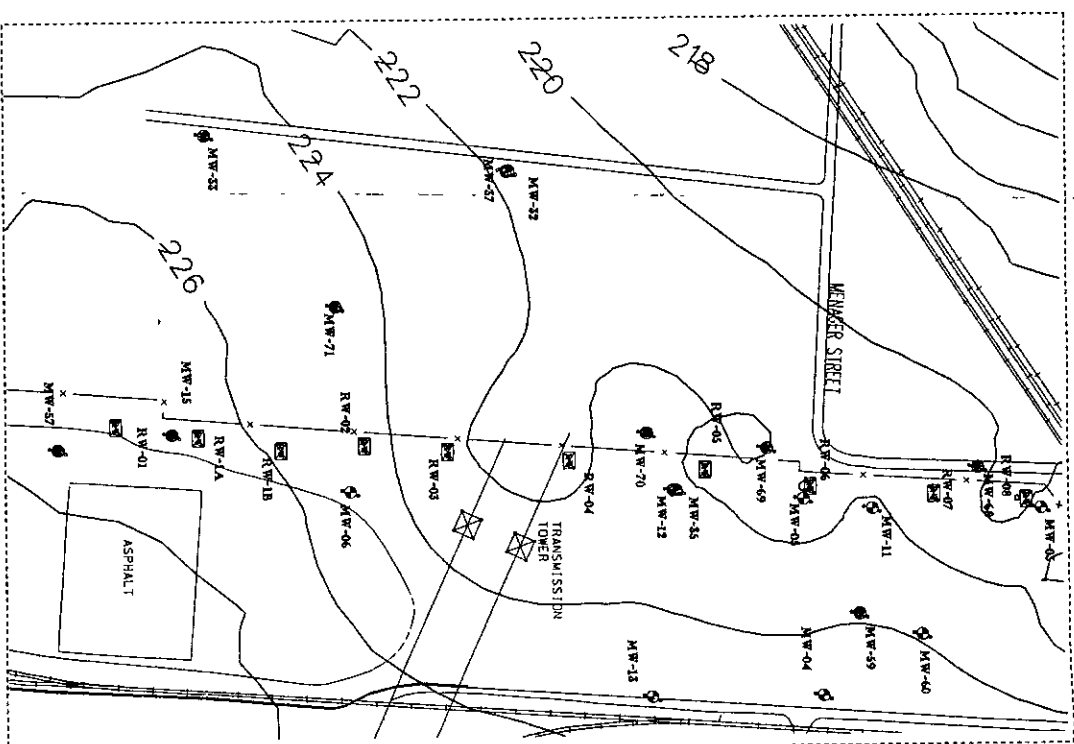
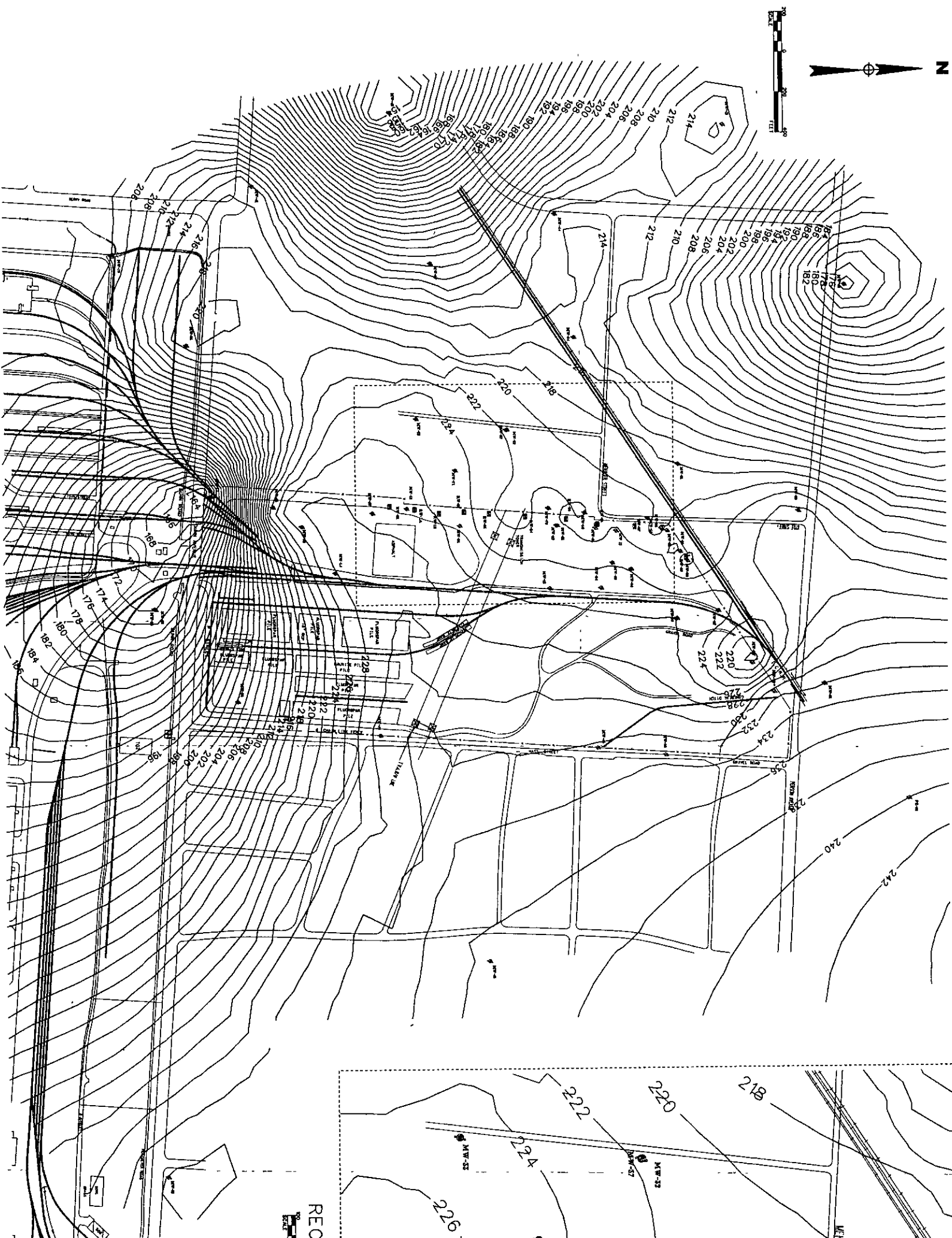
APPROXIMATE SCALE 1" = 400'

- LEGEND**
- GROUNDWATER EXTRACTION SYSTEM
 - DUNN FIELD
 - MEMPHIS DEFENSE DEPOT

		MEMPHIS DEFENSE DEPOT, DUNN FIELD, AND THE GROUNDWATER EXTRACTION SYSTEM		DRAWING No.		FIG. 1	SHEET No. 1 OF 5
DUNN FIELD GROUNDWATER EXTRACTION SYSTEM MEMPHIS DEFENSE DEPOT, TENNESSEE		JE Sverdrup A Jacobs Company NASHVILLE, TENNESSEE SVDRUP PROJECT No. C020701		MEMPHIS DEFENSE DEPOT, DUNN FIELD, AND THE GROUNDWATER EXTRACTION SYSTEM		DRAWING No.	
REVISIONS		SCALE: 1" = 200'		DESIGNED: E. SMITH		DATE: OCT 16, 2000	
NO.		DATE		CHECKED: S. M. JENSEN		APPROVED: V. JENSEN	
DESCRIPTION		APPROVED		DATE		APPROVED	



NO.	DATE	DESCRIPTION	APPROVED	DATE
		REVISIONS		
SCALE: 1" = 200' DESIGNED: K. SMITH DRAWN: S. H. JENSEN CHECKED: D. GRYNN APPROVED: V. JENSEN DATE: OCT. 18, 2000				
DUNN FIELD GROUNDWATER EXTRACTION SYSTEM MEMPHIS DEFENSE DEPOT, TENNESSEE				
JE Sverdrup A JACOBS COMPANY NASHVILLE, TENNESSEE SVERDRUP PROJECT NO. C253010				
GROUNDWATER MONITORING AND RECOVERY WELL LOCATIONS				
FIG. 2				
SHEET No. 3 OF 5 604 57				



- LEGEND
- MONITORING WELL
 - SELECTED SAMPLING MONITORING WELL
 - RECOVERY WELL
 - GROUNDWATER CONTOUR

RECOVERY ZONE

NO.	DATE	DESCRIPTION	APPROVED
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100			

SCALE	1" = 200'
DESIGNED	S. M. JENSEN
DRAWN	D. DAVIS
CHECKED	V. JENSEN
APPROVED	
DATE	OCT 18 2000

DUNN FIELD
GROUNDWATER EXTRACTION SYSTEM
MEMPHIS DEFENSE DEPOT, TENNESSEE

JE **Swadlow**
A JACOBS COMPANY
NASHVILLE, TENNESSEE
SHEET NO. 5 OF 5

POTENTIOMETRIC SURFACE MAP
Y203 (AUGUST 2000)
INCLUDES "DEEPWELLS"
MW-18, 38, 40, 34 AND 43

DRAWING NO.
FIG. 5
SHEET NO. 5 OF 5
604 60

APPENDIX A
GROUNDWATER MEASUREMENT DATA

Well ID TOC Elevation Total Depth (ft)	MW-2		MW-3		MW-4		MW-5		MW-6		MW-7		MW-8		MW-9		MW-10	
	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
Location	Dunn Field		Dunn Field		Dunn Field		Dunn Field		Dunn Field		Dunn Field		Dunn Field		Dunn Field		Dunn Field	
DATE																		
1-Nov-99	DRY	-	70 89	221 48	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
2-Nov-99	NM				NM		NM		NM		NM		NM		NM		NM	
3-Nov-99	NM				NM		NM		NM		NM		NM		NM		NM	
4-Nov-99	NM				NM		NM		NM		NM		NM		NM		NM	
5-Nov-99	NM				NM		NM		NM		NM		NM		NM		NM	
6-Nov-99	NM				NM		NM		NM		NM		NM		NM		NM	
7-Nov-99	NM				NM		NM		NM		NM		NM		NM		NM	
8-Nov-99	NM				NM		NM		NM		NM		NM		NM		NM	
9-Nov-99	NM				NM		NM		NM		NM		NM		NM		NM	
10-Nov-99	NM				NM		NM		NM		NM		NM		NM		NM	
11-Nov-99	NM				NM		NM		NM		NM		NM		NM		NM	
12-Nov-99	NM				NM		NM		NM		NM		NM		NM		NM	
13-Nov-99	NM				NM		NM		NM		NM		NM		NM		NM	
14-Nov-99	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 08	65 67	223 16
16-Nov-99	NM				NM		NM		NM		NM		NM		NM		NM	
17-Nov-99	NM				NM		NM		NM		NM		NM		NM		NM	
18-Nov-99	NM				NM		NM		NM		NM		NM		NM		NM	
19-Nov-99	NM				NM		NM		NM		NM		NM		NM		NM	
20-Nov-99	NM				NM		NM		NM		NM		NM		NM		NM	
21-Nov-99	NM				NM		NM		NM		NM		NM		NM		NM	
22-Nov-99	NM				NM		NM		NM		NM		NM		NM		NM	
23-Nov-99	NM				NM		NM		NM		NM		NM		NM		NM	
24-Nov-99	NM				NM		NM		NM		NM		NM		NM		NM	
25-Nov-99	NM				NM		NM		NM		NM		NM		NM		NM	
26-Nov-99	NM				NM		NM		NM		NM		NM		NM		NM	
27-Nov-99	NM				NM		NM		NM		NM		NM		NM		NM	
28-Nov-99	NM				NM		NM		NM		NM		NM		NM		NM	
29-Nov-99	NM				NM		NM		NM		NM		NM		NM		NM	
30-Nov-99	31 50	260 54	70 95	221 40	76 20	225 41	DRY	-	63 12	225 99	69 08	227 02	63 40	229 19	77 25	227 07	65 85	222 98
1-Dec-99	NM				NM		NM		NM		NM		NM		NM		NM	
2-Dec-99	NM				NM		NM		NM		NM		NM		NM		NM	
3-Dec-99	NM				NM		NM		NM		NM		NM		NM		NM	
4-Dec-99	NM				NM		NM		NM		NM		NM		NM		NM	
5-Dec-99	NM				NM		NM		NM		NM		NM		NM		NM	
6-Dec-99	NM				NM		NM		NM		NM		NM		NM		NM	
7-Dec-99	NM				NM		NM		NM		NM		NM		NM		NM	
8-Dec-99	NM				NM		NM		NM		NM		NM		NM		NM	
9-Dec-99	NM				NM		NM		NM		NM		NM		NM		NM	
10-Dec-99	NM				NM		NM		NM		NM		NM		NM		NM	
11-Dec-99	NM				NM		NM		NM		NM		NM		NM		NM	
12-Dec-99	NM				NM		NM		NM		NM		NM		NM		NM	
13-Dec-99	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	228 97	65 56	223 27
15-Dec-99	NM				NM		NM		NM		NM		NM		NM		NM	
16-Dec-99	NM				NM		NM		NM		NM		NM		NM		NM	
17-Dec-99	NM				NM		NM		NM		NM		NM		NM		NM	
18-Dec-99	NM				NM		NM		NM		NM		NM		NM		NM	
19-Dec-99	NM				NM		NM		NM		NM		NM		NM		NM	
20-Dec-99	NM				NM		NM		NM		NM		NM		NM		NM	
21-Dec-99	NM				NM		NM		NM		NM		NM		NM		NM	
22-Dec-99	NM				NM		NM		NM		NM		NM		NM		NM	
23-Dec-99	NM				NM		NM		NM		NM		NM		NM		NM	
24-Dec-99	NM				NM		NM		NM		NM		NM		NM		NM	
25-Dec-99	NM				NM		NM		NM		NM		NM		NM		NM	
26-Dec-99	NM				NM		NM		NM		NM		NM		NM		NM	
27-Dec-99	NM				NM		NM		NM		NM		NM		NM		NM	
28-Dec-99	NM				NM		NM		NM		NM		NM		NM		NM	
29-Dec-99	NM				NM		NM		NM		NM		NM		NM		NM	
30-Dec-99	NM				NM		NM		NM		NM		NM		NM		NM	
31-Dec-99	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	
TOC Elevation	292.04	292.35	301.81	304.64	289.11	295.1	292.59	304.32	288.83	
Total Depth (ft)	35.00	77.00	81.80	79.25	70.24	77.20	69.00	82.50	71.00	
Location	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
1-Jan-00	NM				NM		NM		NM	
2-Jan-00	NM				NM		NM		NM	
3-Jan-00	NM				NM		NM		NM	
4-Jan-00	DRY				DRY				65.79	223.04
5-Jan-00	NM	221.19	225.37	-	63.00	226.79	63.65	228.84	NM	
6-Jan-00	NM				NM		NM		NM	
7-Jan-00	NM				NM		NM		NM	
8-Jan-00	NM				NM		NM		NM	
9-Jan-00	NM				NM		NM		NM	
10-Jan-00	DRY								65.84	222.99
11-Jan-00	NM	221.18	225.38	-	62.86	226.79	63.69	227.86	NM	
12-Jan-00	NM				NM		NM		NM	
13-Jan-00	NM				NM		NM		NM	
14-Jan-00	NM				NM		NM		NM	
15-Jan-00	NM				NM		NM		NM	
16-Jan-00	NM				NM		NM		NM	
17-Jan-00	NM				NM		NM		NM	
18-Jan-00	NM				NM		NM		NM	
19-Jan-00	NM				NM		NM		NM	
20-Jan-00	NM				NM		NM		NM	
21-Jan-00	NM				NM		NM		NM	
22-Jan-00	NM				NM		NM		NM	
23-Jan-00	NM				NM		NM		NM	
24-Jan-00	DRY	221.16	231.39	-	63.01	226.10	63.78	228.81	65.85	222.98
25-Jan-00	NM				NM		NM		NM	
26-Jan-00	NM				NM		NM		NM	
27-Jan-00	NM				NM		NM		NM	
28-Jan-00	NM				NM		NM		NM	
29-Jan-00	NM				NM		NM		NM	
30-Jan-00	NM				NM		NM		NM	
31-Jan-00	NM				NM		NM		NM	
1-Feb-00	NM				NM		NM		NM	
2-Feb-00	NM				NM		NM		NM	
3-Feb-00	NM				NM		NM		NM	
4-Feb-00	NM				NM		NM		NM	
5-Feb-00	NM				NM		NM		NM	
6-Feb-00	NM				NM		NM		NM	
7-Feb-00	DRY				62.94	226.17	63.98	228.71	65.91	222.92
8-Feb-00	NM	221.09	225.31	-	NM		NM		NM	
9-Feb-00	NM				NM		NM		NM	
10-Feb-00	NM				NM		NM		NM	
11-Feb-00	NM				NM		NM		NM	
12-Feb-00	NM				NM		NM		NM	
13-Feb-00	NM				NM		NM		NM	
14-Feb-00	NM				NM		NM		NM	
15-Feb-00	NM				NM		NM		NM	
16-Feb-00	NM				NM		NM		NM	
17-Feb-00	NM				NM		NM		NM	
18-Feb-00	NM				NM		NM		NM	
19-Feb-00	NM				NM		NM		NM	
20-Feb-00	NM				NM		NM		NM	
21-Feb-00	NM				NM		NM		NM	
22-Feb-00	NM				NM		NM		NM	
23-Feb-00	DRY	221.13	225.16	-	63.64	225.47	63.95	228.64	65.95	222.88
24-Feb-00	NM				NM		NM		NM	
25-Feb-00	NM				NM		NM		NM	
26-Feb-00	NM				NM		NM		NM	
27-Feb-00	NM				NM		NM		NM	
28-Feb-00	NM				NM		NM		NM	

Well ID	MW-2		MW-3		MW-4		MW-5		MW-6		MW-7		MW-8		MW-9		MW-10	
	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
TOC Elevation	292.04	301.81	292.35	301.81	292.64	304.84	289.11	295.1	292.59	304.32	288.83							
Total Depth (ft)	35.00	81.80	77.00	81.80	79.25	82.64	70.24	77.20	69.00	82.90	71.00							
Location	Dunn Field		Dunn Field		Dunn Field		Dunn Field		Dunn Field		Dunn Field		Dunn Field		Dunn Field		Dunn Field	
DATE																		
1-Mar-00	NM																	
2-Mar-00	NM																	
3-Mar-00	NM																	
4-Mar-00	NM																	
5-Mar-00	NM																	
6-Mar-00	DRY		69.95	222.40			63.30	225.81										
7-Mar-00	NM																	
8-Mar-00	NM																	
9-Mar-00	NM																	
10-Mar-00	NM																	
11-Mar-00	NM																	
12-Mar-00	NM																	
13-Mar-00	NM																	
14-Mar-00	NM																	
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17-Mar-00	NM																	
18-Mar-00	NM																	
19-Mar-00	NM																	
20-Mar-00	NM																	
21-Mar-00	NM																	
22-Mar-00	DRY		71.40	220.95			63.29	225.82										
23-Mar-00	NM																	
24-Mar-00	NM																	
25-Mar-00	NM																	
26-Mar-00	NM																	
27-Mar-00	NM																	
28-Mar-00	NM																	
29-Mar-00	NM																	
30-Mar-00	NM																	
1-Apr-00	NM																	
2-Apr-00	NM																	
3-Apr-00	NM																	
4-Apr-00	NM																	
5-Apr-00	NM																	
6-Apr-00	NM																	
7-Apr-00	DRY		71.38	220.97			63.27	225.84										
8-Apr-00	NM																	
9-Apr-00	NM																	
10-Apr-00	NM																	
11-Apr-00	NM																	
12-Apr-00	NM																	
13-Apr-00	NM																	
14-Apr-00	NM																	
15-Apr-00	NM																	
16-Apr-00	NM																	
17-Apr-00	DRY		71.42	220.93			63.38	225.73										
18-Apr-00	NM																	
19-Apr-00	NM																	
20-Apr-00	NM																	
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27-Apr-00	NM																	
28-Apr-00	NM																	
29-Apr-00	NM																	
30-Apr-00	NM																	

Well ID	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	MW-10	
TOC Elevation	292.04	292.35	301.61	304.64	289.11	295.1	292.59	304.32	288.83	
Total Depth (ft)	35.00	77.00	81.80	79.25	70.24	77.20	69.00	82.50	71.00	
Location	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
1-May-00	NM								NM	
2-May-00	NM								NM	
3-May-00	NM								NM	
4-May-00	NM								NM	
5-May-00	NM								NM	
6-May-00	NM								NM	
7-May-00	NM								NM	
8-May-00	NM								NM	
9-May-00	NM								NM	
10-May-00	NM								NM	
11-May-00	NM								NM	
12-May-00	NM								NM	
13-May-00	NM								NM	
14-May-00	NM								NM	
15-May-00	NM								NM	
16-May-00	NM								NM	
17-May-00	NM								NM	
18-May-00	NM								NM	
19-May-00	NM								NM	
20-May-00	NM								NM	
21-May-00	NM								NM	
22-May-00	NM								NM	
23-May-00	NM								NM	
24-May-00	NM								NM	
25-May-00	NM								NM	
26-May-00	NM								NM	
27-May-00	NM								NM	
28-May-00	NM								NM	
29-May-00	NM								NM	
30-May-00	NM								NM	
31-May-00	DRY	69.58	222.77		63.07	226.57	64.03	226.53	65.64	223.19
1-Jun-00	NM		225.21							
2-Jun-00	NM									
3-Jun-00	NM									
4-Jun-00	NM									
5-Jun-00	NM									
6-Jun-00	NM									
7-Jun-00	NM									
8-Jun-00	NM									
9-Jun-00	NM									
10-Jun-00	NM									
11-Jun-00	NM									
12-Jun-00	NM									
13-Jun-00	NM									
14-Jun-00	NM									
15-Jun-00	NM									
16-Jun-00	NM									
17-Jun-00	NM									
18-Jun-00	NM									
19-Jun-00	NM									
20-Jun-00	NM									
21-Jun-00	NM									
22-Jun-00	NM									
23-Jun-00	DRY	71.46	220.89		63.30	225.81	64.19	226.31	66.19	222.64
24-Jun-00	NM									
25-Jun-00	NM									
26-Jun-00	NM									
27-Jun-00	NM									
28-Jun-00	NM									
29-Jun-00	NM									
30-Jun-00	DRY	71.49	220.86		63.37	225.74	64.22	226.29	66.27	222.58

[illegible]

Well ID	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	MW-10
TOC Elevation	292.04	292.35	301.61	304.64	289.11	295.1	292.59	304.32	288.83
Total Depth (ft)	35.00	77.00	81.80	81.25	70.24	77.20	69.00	82.50	71.00
Location	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

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 S-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-42 gauging required as of year two O&M location unknown until 15-Nov-99

MW-87 Has obstruction since May and cannot be gauged

TOC = top of casing

DTW = depth to water

NA = not measured

* = 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-11		MW-12		MW-13		MW-14		MW-15		MW-18		MW-19		MW-27		MW-28		MW-29		MW-30	
	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		
TOC Elevation		299.47		301.35		299.73		302.22		295.12		308.02		290.57		303.86		294.79		273.22	274.87	
Total Depth (ft)		85.00		87.00		83.00		80.00		81.00		140.00		96.40		93.80		69.00		54.00	59.00	
Location	Dunn Field		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	78.09	223.38		224.15	73.50	226.17		73.70	228.52	67.95	227.17	136.20	171.82	NM	NA	NA	59.66	235.13	39.80	233.42	47.74	227.13
2-Nov-99	NM				NM			NM		NM				NM			NM		NM			
3-Nov-99	NM				NM			NM		NM				NM			NM		NM			
4-Nov-99	NM				NM			NM		NM				NM			NM		NM			
5-Nov-99	NM				NM			NM		NM				NM			NM		NM			
6-Nov-99	NM				NM			NM		NM				NM			NM		NM			
7-Nov-99	NM				NM			NM		NM				NM			NM		NM			
8-Nov-99	NM				NM			NM		NM				NM			NM		NM			
9-Nov-99	NM				NM			NM		NM				NM			NM		NM			
10-Nov-99	NM				NM			NM		NM				NM			NM		NM			
11-Nov-99	NM				NM			NM		NM				NM			NM		NM			
12-Nov-99	NM				NM			NM		NM				NM			NM		NM			
13-Nov-99	NM				NM			NM		NM				NM			NM		NM			
14-Nov-99	NM				NM			NM		NM				NM			NM		NM			
15-Nov-99	78.47	223.00		223.98	73.64	226.09		73.85	228.37	68.15	228.97	138.60	171.42	91.15	212.71	203.51	59.90	234.89	40.09	233.13	47.85	227.02
16-Nov-99	NM				NM			NM		NM				NM			NM		NM			
17-Nov-99	NM				NM			NM		NM				NM			NM		NM			
18-Nov-99	NM				NM			NM		NM				NM			NM		NM			
19-Nov-99	NM				NM			NM		NM				NM			NM		NM			
20-Nov-99	NM				NM			NM		NM				NM			NM		NM			
21-Nov-99	NM				NM			NM		NM				NM			NM		NM			
22-Nov-99	NM				NM			NM		NM				NM			NM		NM			
23-Nov-99	NM				NM			NM		NM				NM			NM		NM			
24-Nov-99	NM				NM			NM		NM				NM			NM		NM			
25-Nov-99	NM				NM			NM		NM				NM			NM		NM			
26-Nov-99	NM				NM			NM		NM				NM			NM		NM			
27-Nov-99	NM				NM			NM		NM				NM			NM		NM			
28-Nov-99	NM				NM			NM		NM				NM			NM		NM			
29-Nov-99	78.55	222.82		223.81	73.70	226.03		74.15	228.07	68.35	228.77	135.00	173.02	90.75	213.11	203.07	60.10	234.89	40.30	232.92	48.00	228.87
30-Nov-99	NM				NM			NM		NM				NM			NM		NM			
1-Dec-99	NM				NM			NM		NM				NM			NM		NM			
2-Dec-99	NM				NM			NM		NM				NM			NM		NM			
3-Dec-99	NM				NM			NM		NM				NM			NM		NM			
4-Dec-99	NM				NM			NM		NM				NM			NM		NM			
5-Dec-99	NM				NM			NM		NM				NM			NM		NM			
6-Dec-99	NM				NM			NM		NM				NM			NM		NM			
7-Dec-99	NM				NM			NM		NM				NM			NM		NM			
8-Dec-99	NM				NM			NM		NM				NM			NM		NM			
9-Dec-99	NM				NM			NM		NM				NM			NM		NM			
10-Dec-99	NM				NM			NM		NM				NM			NM		NM			
11-Dec-99	NM				NM			NM		NM				NM			NM		NM			
12-Dec-99	NM				NM			NM		NM				NM			NM		NM			
13-Dec-99	NM				NM			NM		NM				NM			NM		NM			
14-Dec-99	76.64	222.83		223.80	73.71	226.02		74.00	228.22	68.25	228.87	132.00	178.02	98.00	215.86	203.37	60.10	234.89	40.15	233.07	48.15	228.72
15-Dec-99	NM				NM			NM		NM				NM			NM		NM			
16-Dec-99	NM				NM			NM		NM				NM			NM		NM			
17-Dec-99	NM				NM			NM		NM				NM			NM		NM			
18-Dec-99	NM				NM			NM		NM				NM			NM		NM			
19-Dec-99	NM				NM			NM		NM				NM			NM		NM			
20-Dec-99	NM				NM			NM		NM				NM			NM		NM			
21-Dec-99	NM				NM			NM		NM				NM			NM		NM			
22-Dec-99	NM				NM			NM		NM				NM			NM		NM			
23-Dec-99	NM				NM			NM		NM				NM			NM		NM			
24-Dec-99	NM				NM			NM		NM				NM			NM		NM			
25-Dec-99	NM				NM			NM		NM				NM			NM		NM			
26-Dec-99	NM				NM			NM		NM				NM			NM		NM			
27-Dec-99	NM				NM			NM		NM				NM			NM		NM			
28-Dec-99	NM				NM			NM		NM				NM			NM		NM			
29-Dec-99	NM				NM			NM		NM				NM			NM		NM			
30-Dec-99	NM				NM			NM		NM				NM			NM		NM			
31-Dec-99	NM				NM			NM		NM				NM			NM		NM			

Well ID	MW-11		MW-12		MW-13		MW-14		MW-15		MW-18		MW-19		MW-27		MW-28		MW-29		MW-30	
	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	DTW (BTC)	GW Elev
TOC Elevation	299.47		301.35		299.73		302.22		295.12		308.02		290.57		303.86		294.79		273.22		274.87	
Total Depth (ft)	85.00		87.00		83.00		90.00		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		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	DTW (BTC)	GW Elev
1-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
2-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
3-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
4-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
5-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
6-Mar-00	76.61	222.86	73.81	223.83		225.82	74.31	227.81	68.44	228.68	134.81	173.21	87.53	203.04	91.32	212.54	60.78	234.01	40.89	232.33	48.62	228.25
7-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
8-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
9-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
10-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
11-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
12-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
13-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
14-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
15-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
16-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
17-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
18-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
19-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
20-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
21-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
22-Mar-00	78.87	222.80	73.45	224.00		228.28	74.35	227.87	68.48	228.68	134.50	173.52	87.70	202.87	91.55	212.31	60.80	233.99	40.94	232.28	48.71	228.18
23-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
24-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
25-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
26-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
27-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
28-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
29-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
30-Mar-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
1-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
2-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
3-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
4-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
5-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
6-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
7-Apr-00	78.71	222.78	74.07	223.89		225.68	74.24	227.98	68.41	228.71	134.28	173.78	87.42	203.15	90.48	213.38	60.88	233.93	40.94	232.28	48.77	228.10
8-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
9-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
10-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
11-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
12-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
13-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
14-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
15-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
16-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
17-Apr-00	78.77	222.70	74.11	224.95		225.62	74.308	227.91	68.52	228.60	130.05	177.97	87.60	202.97	91.11	212.75	60.88	233.81	40.79	232.43	48.82	228.05
18-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
19-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
20-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
21-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
22-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
23-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
24-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
25-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
26-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
27-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
28-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
29-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
30-Apr-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	

Well ID	MW-11	MW-12	MW-13	MW-14	MW-15	MW-18	MW-19	MW-27	MW-28	MW-29	MW-30
TOC Elevation	299.47	301.35	299.73	302.22	295.12	308.02	290.57	303.86	294.78	273.22	274.97
Total Depth (ft)	85.00	87.00	83.00	80.00	81.00	140.00	98.40	93.80	69.00	54.00	59.00
Location	Dunn Field	Dunn Field	Dunn Field	Dunn Field	Dunn Field	Dunn Field	Depot	Depot	Dunn Field	Dunn Field	MLGW Facility
DATE	DTW	DTW	DTW	DTW	DTW	DTW	DTW	DTW	DTW	DTW	DTW
	(BTC)	(BTC)	(BTC)	(BTC)	(BTC)	(BTC)	(BTC)	(BTC)	(BTC)	(BTC)	(BTC)
1-May-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
2-May-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
3-May-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
4-May-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
5-May-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
6-May-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
7-May-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
8-May-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
9-May-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
10-May-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
11-May-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
12-May-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
13-May-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
14-May-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
15-May-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
16-May-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
17-May-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
18-May-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
19-May-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
20-May-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
21-May-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
22-May-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
23-May-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
24-May-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
25-May-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
26-May-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
27-May-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
28-May-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
29-May-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
30-May-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
1-Jun-00	76.41	223.06	225.67	227.85	228.75	131.91	87.82	91.23	NM	232.55	228.14
2-Jun-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
3-Jun-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
4-Jun-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
5-Jun-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
6-Jun-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
7-Jun-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
8-Jun-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
9-Jun-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
10-Jun-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
11-Jun-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
12-Jun-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
13-Jun-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
14-Jun-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
15-Jun-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
16-Jun-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
17-Jun-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
18-Jun-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
19-Jun-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
20-Jun-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
21-Jun-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
22-Jun-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
23-Jun-00	76.82	222.65	225.53	227.84	228.67	134.52	87.88	92.04	60.90	233.89	228.05
24-Jun-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
25-Jun-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
26-Jun-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
27-Jun-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
28-Jun-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
29-Jun-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
30-Jun-00	76.86	222.61	225.50	227.82	228.61	134.69	87.96	89.80	60.93	233.86	228.01

[illegible]

Well ID	MW-31	MW-32	MW-33	MW-34	MW-35	MW-36	MW-37	MW-38	MW-40	MW-41	MW-42
TOC Elevation	280.17	284.88	280.58	289.72	300.52	310.24	284.89	307.44	262.45	283.81	274.87
Total Depth (ft)	79.00	87.80	60.00	159.90	90.00	208.00	182.80	155.00	95.00	87.00	59.00
Location	MLGW Facility	Kyle	Off-Site	Depot Field	Dunn Field	Dunn Field	Kyle	Depot	Off-Site	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)
1-Nov-99	70.58	219.59	NA	NA	76.31	224.21	NA	175.39	85.90	218.56	54.40
2-Nov-99	NM		NM	NM	NM		NM		NM		NM
3-Nov-99	NM		NM	NM	NM		NM		NM		NM
4-Nov-99	NM		NM	NM	NM		NM		NM		NM
5-Nov-99	NM		NM	NM	NM		NM		NM		NM
6-Nov-99	NM		NM	NM	NM		NM		NM		NM
7-Nov-99	NM		NM	NM	NM		NM		NM		NM
8-Nov-99	NM		NM	NM	NM		NM		NM		NM
9-Nov-99	NM		NM	NM	NM		NM		NM		NM
10-Nov-99	NM		NM	NM	NM		NM		NM		NM
11-Nov-99	NM		NM	NM	NM		NM		NM		NM
12-Nov-99	NM		NM	NM	NM		NM		NM		NM
13-Nov-99	NM		NM	NM	NM		NM		NM		NM
14-Nov-99	NM		NM	NM	NM		NM		NM		NM
15-Nov-99	70.75	219.42	62.70	155.14	76.58	223.98	137.17	171.14	86.48	218.41	54.41
16-Nov-99	NM		NM	NM	NM		NM		NM		NM
17-Nov-99	NM		NM	NM	NM		NM		NM		NM
18-Nov-99	NM		NM	NM	NM		NM		NM		NM
19-Nov-99	NM		NM	NM	NM		NM		NM		NM
20-Nov-99	NM		NM	NM	NM		NM		NM		NM
21-Nov-99	NM		NM	NM	NM		NM		NM		NM
22-Nov-99	NM		NM	NM	NM		NM		NM		NM
23-Nov-99	NM		NM	NM	NM		NM		NM		NM
24-Nov-99	NM		NM	NM	NM		NM		NM		NM
25-Nov-99	NM		NM	NM	NM		NM		NM		NM
26-Nov-99	NM		NM	NM	NM		NM		NM		NM
27-Nov-99	NM		NM	NM	NM		NM		NM		NM
28-Nov-99	70.98	219.19	62.90	154.92	76.68	223.84	135.00	170.64	87.10	218.21	55.10
29-Nov-99	NM		NM	NM	NM		NM		NM		NM
30-Nov-99	NM		NM	NM	NM		NM		NM		NM
1-Dec-99	NM		NM	NM	NM		NM		NM		NM
2-Dec-99	NM		NM	NM	NM		NM		NM		NM
3-Dec-99	NM		NM	NM	NM		NM		NM		NM
4-Dec-99	NM		NM	NM	NM		NM		NM		NM
5-Dec-99	NM		NM	NM	NM		NM		NM		NM
6-Dec-99	NM		NM	NM	NM		NM		NM		NM
7-Dec-99	NM		NM	NM	NM		NM		NM		NM
8-Dec-99	NM		NM	NM	NM		NM		NM		NM
9-Dec-99	NM		NM	NM	NM		NM		NM		NM
10-Dec-99	NM		NM	NM	NM		NM		NM		NM
11-Dec-99	NM		NM	NM	NM		NM		NM		NM
12-Dec-99	NM		NM	NM	NM		NM		NM		NM
13-Dec-99	NM		NM	NM	NM		NM		NM		NM
14-Dec-99	71.16	219.01	62.90	156.42	76.56	223.96	134.00	172.54	86.28	218.31	55.10
15-Dec-99	NM		NM	NM	NM		NM		NM		NM
16-Dec-99	NM		NM	NM	NM		NM		NM		NM
17-Dec-99	NM		NM	NM	NM		NM		NM		NM
18-Dec-99	NM		NM	NM	NM		NM		NM		NM
19-Dec-99	NM		NM	NM	NM		NM		NM		NM
20-Dec-99	NM		NM	NM	NM		NM		NM		NM
21-Dec-99	NM		NM	NM	NM		NM		NM		NM
22-Dec-99	NM		NM	NM	NM		NM		NM		NM
23-Dec-99	NM		NM	NM	NM		NM		NM		NM
24-Dec-99	NM		NM	NM	NM		NM		NM		NM
25-Dec-99	NM		NM	NM	NM		NM		NM		NM
26-Dec-99	NM		NM	NM	NM		NM		NM		NM
27-Dec-99	NM		NM	NM	NM		NM		NM		NM
28-Dec-99	NM		NM	NM	NM		NM		NM		NM
29-Dec-99	NM		NM	NM	NM		NM		NM		NM
30-Dec-99	NM		NM	NM	NM		NM		NM		NM
31-Dec-99	NM		NM	NM	NM		NM		NM		NM

Well ID TOC Elevation Total Depth (ft) Location	MW-31 280.17 79.00 MLGW Facility	MW-32 284.88 67.80 Kyle	MW-33 280.56 60.00 Off-Site	MW-34 299.72 156.90 Depot Field	MW-35 300.52 90.00 Dunn Field	MW-36 310.24 209.00 Dunn Field	MW-37 284.89 182.80 Kyle	MW-38 307.44 155.00 Depot	MW-40 262.45 95.00 Off-Site	MW-41 283.81 67.00 Off-Site	MW-42 274.87 59.00 Off-Site
	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	DTW (BTC) GW Elev
1-Jan-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
2-Jan-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
3-Jan-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
4-Jan-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
5-Jan-00	71.10	219.07	225.57	141.83	76.61	154.77	129.92	135.60	85.75	65.58	55.41
6-Jan-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
7-Jan-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
8-Jan-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
9-Jan-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
10-Jan-00	71.10	219.07	225.65	140.65	76.60	154.19	129.37	135.07	85.14	65.41	55.39
11-Jan-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
12-Jan-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
13-Jan-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
14-Jan-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
15-Jan-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
16-Jan-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
17-Jan-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
18-Jan-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
19-Jan-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
20-Jan-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
21-Jan-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
22-Jan-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
23-Jan-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
24-Jan-00	71.23	218.84	225.56	140.09	76.53	153.81	128.85	134.30	84.89	65.65	55.61
25-Jan-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
26-Jan-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
27-Jan-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
28-Jan-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
29-Jan-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
30-Jan-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
31-Jan-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
1-Feb-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
2-Feb-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
3-Feb-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
4-Feb-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
5-Feb-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
6-Feb-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
7-Feb-00	71.25	218.92	225.60	139.33	76.65	153.90	128.76	134.69	84.47	65.60	55.75
8-Feb-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
9-Feb-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
10-Feb-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
11-Feb-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
12-Feb-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
13-Feb-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
14-Feb-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
15-Feb-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
16-Feb-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
17-Feb-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
18-Feb-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
19-Feb-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
20-Feb-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
21-Feb-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
22-Feb-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
23-Feb-00	71.26	218.91	225.60	138.68	76.61	152.95	127.48	134.21	84.09	65.60	55.60
24-Feb-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
25-Feb-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
26-Feb-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
27-Feb-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
28-Feb-00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
29-Feb-00	NM	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	MW-42
TOC Elevation	290 17	284 88	280 56	289 72	300 52	310 24	284 89	307 44	282 45	283 81	274 87
Total Depth (ft)	79 00	67 80	60 00	158 90	80 00	209 00	182 80	155 00	95 00	67 00	59 00
Location	MLGW Facility	Kyle	Off-Site	Depot Field	Dunn Field	Dunn Field	Kyle	Depot	Off-Site	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)
1-Mar-00	NM		NM		NM		NM		NM		NM
2-Mar-00	NM		NM		NM		NM		NM		NM
3-Mar-00	NM		NM		NM		NM		NM		NM
4-Mar-00	NM		NM		NM		NM		NM		NM
5-Mar-00	NM		NM		NM		NM		NM		NM
6-Mar-00	71 41	218 76	55 10	160 47	223 82	152 70	128 80	173 54	178 59	218 15	218 77
7-Mar-00	NM		NM		NM		NM		NM		NM
8-Mar-00	NM		NM		NM		NM		NM		NM
9-Mar-00	NM		NM		NM		NM		NM		NM
10-Mar-00	NM		NM		NM		NM		NM		NM
11-Mar-00	NM		NM		NM		NM		NM		NM
12-Mar-00	NM		NM		NM		NM		NM		NM
13-Mar-00	NM		NM		NM		NM		NM		NM
14-Mar-00	NM		NM		NM		NM		NM		NM
15-Mar-00	NM		NM		NM		NM		NM		NM
16-Mar-00	NM		NM		NM		NM		NM		NM
17-Mar-00	NM		NM		NM		NM		NM		NM
18-Mar-00	NM		NM		NM		NM		NM		NM
19-Mar-00	NM		NM		NM		NM		NM		NM
20-Mar-00	NM		NM		NM		NM		NM		NM
21-Mar-00	71 57	218 80	55 56	159 28	224 02	154 06	130 20	173 74	178 82	218 11	218 57
22-Mar-00	NM		NM		NM		NM		NM		NM
23-Mar-00	NM		NM		NM		NM		NM		NM
24-Mar-00	NM		NM		NM		NM		NM		NM
25-Mar-00	NM		NM		NM		NM		NM		NM
26-Mar-00	NM		NM		NM		NM		NM		NM
27-Mar-00	NM		NM		NM		NM		NM		NM
28-Mar-00	NM		NM		NM		NM		NM		NM
29-Mar-00	NM		NM		NM		NM		NM		NM
30-Mar-00	NM		NM		NM		NM		NM		NM
31-Mar-00	NM		NM		NM		NM		NM		NM
1-Apr-00	NM		NM		NM		NM		NM		NM
2-Apr-00	NM		NM		NM		NM		NM		NM
3-Apr-00	NM		NM		NM		NM		NM		NM
4-Apr-00	NM		NM		NM		NM		NM		NM
5-Apr-00	NM		NM		NM		NM		NM		NM
6-Apr-00	71 55	218 82	55 09	139 139	224 00	154 55	128 94	173 74	178 94	218 07	218 60
7-Apr-00	NM		NM		NM		NM		NM		NM
8-Apr-00	NM		NM		NM		NM		NM		NM
9-Apr-00	NM		NM		NM		NM		NM		NM
10-Apr-00	NM		NM		NM		NM		NM		NM
11-Apr-00	NM		NM		NM		NM		NM		NM
12-Apr-00	NM		NM		NM		NM		NM		NM
13-Apr-00	NM		NM		NM		NM		NM		NM
14-Apr-00	NM		NM		NM		NM		NM		NM
15-Apr-00	NM		NM		NM		NM		NM		NM
16-Apr-00	NM		NM		NM		NM		NM		NM
17-Apr-00	70 68	218 49	55 20	139 29	222 82	154 10	128 791	174 19	178 75	217 94	218 46
18-Apr-00	NM		NM		NM		NM		NM		NM
19-Apr-00	NM		NM		NM		NM		NM		NM
20-Apr-00	NM		NM		NM		NM		NM		NM
21-Apr-00	NM		NM		NM		NM		NM		NM
22-Apr-00	NM		NM		NM		NM		NM		NM
23-Apr-00	NM		NM		NM		NM		NM		NM
24-Apr-00	NM		NM		NM		NM		NM		NM
25-Apr-00	NM		NM		NM		NM		NM		NM
26-Apr-00	NM		NM		NM		NM		NM		NM
27-Apr-00	NM		NM		NM		NM		NM		NM
28-Apr-00	NM		NM		NM		NM		NM		NM
29-Apr-00	NM		NM		NM		NM		NM		NM
30-Apr-00	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	MW-42
TOC Elevation	290.17	284.86	280.58	299.72	300.52	310.24	284.89	307.44	282.45	283.81	274.87
Total Depth (ft)	78.00	87.80	60.00	198.90	90.00	209.00	182.80	155.00	95.00	67.00	59.00
Location	MLGW Facility	Kyle	Off-Site	Depot Field	Dunn Field	Dunn Field	Kyle	Depot	Off-Site	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)
1-May-00	NM		NM		NM		NM		NM		NM
2-May-00	NM		NM		NM		NM		NM		NM
3-May-00	NM		NM		NM		NM		NM		NM
4-May-00	NM		NM		NM		NM		NM		NM
5-May-00	NM		NM		NM		NM		NM		NM
6-May-00	NM		NM		NM		NM		NM		NM
7-May-00	NM		NM		NM		NM		NM		NM
8-May-00	NM		NM		NM		NM		NM		NM
9-May-00	NM		NM		NM		NM		NM		NM
10-May-00	NM		NM		NM		NM		NM		NM
11-May-00	NM		NM		NM		NM		NM		NM
12-May-00	NM		NM		NM		NM		NM		NM
13-May-00	NM		NM		NM		NM		NM		NM
14-May-00	NM		NM		NM		NM		NM		NM
15-May-00	NM		NM		NM		NM		NM		NM
16-May-00	NM		NM		NM		NM		NM		NM
17-May-00	NM		NM		NM		NM		NM		NM
18-May-00	NM		NM		NM		NM		NM		NM
19-May-00	NM		NM		NM		NM		NM		NM
20-May-00	NM		NM		NM		NM		NM		NM
21-May-00	NM		NM		NM		NM		NM		NM
22-May-00	NM		NM		NM		NM		NM		NM
23-May-00	NM		NM		NM		NM		NM		NM
24-May-00	NM		NM		NM		NM		NM		NM
25-May-00	NM		NM		NM		NM		NM		NM
26-May-00	NM		NM		NM		NM		NM		NM
27-May-00	NM		NM		NM		NM		NM		NM
28-May-00	NM		NM		NM		NM		NM		NM
29-May-00	NM		NM		NM		NM		NM		NM
30-May-00	NM		NM		NM		NM		NM		NM
1-Jun-00	71.53	221.83	225.28	139.385	76.37	157.12	123.988	133.48	84.44	217.94	56.72
2-Jun-00	NM		NM		NM		NM		NM		NM
3-Jun-00	NM		NM		NM		NM		NM		NM
4-Jun-00	NM		NM		NM		NM		NM		NM
5-Jun-00	NM		NM		NM		NM		NM		NM
6-Jun-00	NM		NM		NM		NM		NM		NM
7-Jun-00	NM		NM		NM		NM		NM		NM
8-Jun-00	NM		NM		NM		NM		NM		NM
9-Jun-00	NM		NM		NM		NM		NM		NM
10-Jun-00	NM		NM		NM		NM		NM		NM
11-Jun-00	NM		NM		NM		NM		NM		NM
12-Jun-00	NM		NM		NM		NM		NM		NM
13-Jun-00	NM		NM		NM		NM		NM		NM
14-Jun-00	NM		NM		NM		NM		NM		NM
15-Jun-00	NM		NM		NM		NM		NM		NM
16-Jun-00	NM		NM		NM		NM		NM		NM
17-Jun-00	NM		NM		NM		NM		NM		NM
18-Jun-00	NM		NM		NM		NM		NM		NM
19-Jun-00	NM		NM		NM		NM		NM		NM
20-Jun-00	NM		NM		NM		NM		NM		NM
21-Jun-00	NM		NM		NM		NM		NM		NM
22-Jun-00	NM		NM		NM		NM		NM		NM
23-Jun-00	71.78	221.88	225.35	141.273	76.53	161.63	132.988	134.76	85.49	217.89	56.71
24-Jun-00	NM		NM		NM		NM		NM		NM
25-Jun-00	NM		NM		NM		NM		NM		NM
26-Jun-00	NM		NM		NM		NM		NM		NM
27-Jun-00	NM		NM		NM		NM		NM		NM
28-Jun-00	NM		NM		NM		NM		NM		NM
29-Jun-00	NM		NM		NM		NM		NM		NM
30-Jun-00	71.84	221.88	225.30	141.912	76.59	162.07	133.909	134.91	85.77	217.88	56.78

Well ID	MW-31		MW-32		MW-33		MW-34		MW-35		MW-36		MW-37		MW-38		MW-40		MW-41		MW-42		
	290.17		284.88		280.56		299.72		300.52		310.24		284.89		307.44		282.45		283.81		274.87		
	78.00		87.80		60.00		158.90		90.00		209.00		182.80		155.00		95.00		87.00		59.00		
Location		MLGW Facility		Kyle		Off-Site		Depot Field		Dunn Field		Dunn Field		Kyle		Depot		Off-Site		Off-Site		Off-Site	
DATE	DTW	GW	DTW	GW	DTW	GW	DTW	GW	DTW	GW	DTW	GW	DTW	GW	DTW	GW	DTW	GW	DTW	GW	DTW	GW	
	(BTC)	Elev	(BTC)	Elev	(BTC)	Elev	(BTC)	Elev	(BTC)	Elev	(BTC)	Elev	(BTC)	Elev	(BTC)	Elev	(BTC)	Elev	(BTC)	Elev	(BTC)	Elev	
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	71.87	218.30	82.95	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	56.77	218.10	
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	82.98	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	56.79	218.08	
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	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	56.84	218.03	
3-Aug-00																							
4-Aug-00																							
5-Aug-00																							
6-Aug-00																							
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17-Aug-00																							
18-Aug-00																							
19-Aug-00																							
20-Aug-00																							
21-Aug-00																							
22-Aug-00																							
23-Aug-00																							

Well ID TOC Elevation Total Depth (ft)	MW-43 284.99 173.00 Elementary School		MW-44 269.07 74.00 Off-Site		MW-45 292.81 68.00 Off-Site		MW-46 287.56 72.00 Dunn Field		MW-49 310.49 90.00 Dunn Field		MW-51 275.24 65.00 Off-Site		MW-53 308.38 82.50 Off-Site		MW-54 295.38 94.50 MLGW Facility		MW-55 292.05 74.00 Depot		MW-56 293.80 69.50 Dunn Field		MW-57 290.79 70.50 Dunn Field	
	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.	DTW (BTC)	GW Elev.
DATE																						
1-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
2-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
3-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
4-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
5-Jan-00	130.70	154.28	54.15	214.92	58.10	236.71	54.65	232.91	79.12	231.37	42.57	232.67	73.81	232.57	79.70	215.68	71.07	220.98	67.42	226.38	63.56	227.23
6-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
7-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
8-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
9-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
10-Jan-00	129.78	155.21	54.10	214.97	55.75	237.06	54.57	232.96	78.79	231.70	42.62	232.62	73.27	233.11	78.71	215.65	70.88	221.17	67.14	226.66	63.14	227.65
11-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
12-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
13-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
14-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
15-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
16-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
17-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
18-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
19-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
20-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
21-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
22-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
23-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
24-Jan-00	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	67.40	226.40	63.60	227.19
25-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
26-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
27-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
28-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
29-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
30-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
31-Jan-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
1-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
2-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
3-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
4-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
5-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
6-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
7-Feb-00	128.59	156.40	54.30	214.77	56.00	236.81	54.77	232.76	79.00	231.49	42.86	232.38	73.56	232.82	79.90	215.48	71.05	221.00	67.35	226.45	63.54	227.25
8-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
9-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
10-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
11-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
12-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
13-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
14-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
15-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
16-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
17-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
18-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
19-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
20-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
21-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
22-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
23-Feb-00	127.78	157.21	54.22	214.85	56.00	236.81	54.80	232.76	78.98	231.51	42.96	232.26	73.50	232.88	79.95	215.41	71.05	221.00	67.32	226.48	63.57	227.22
24-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
25-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
26-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
27-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
28-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
29-Feb-00	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	

Well ID	MW-43	MW-44	MW-45	MW-46	MW-49	MW-51	MW-53	MW-54	MW-55	MW-56	MW-57
TOC Elevation	284.89	269.07	292.51	287.58	310.49	275.24	308.38	295.36	292.05	293.80	290.79
Total Depth (ft)	173.00	74.00	68.00	72.00	90.00	85.00	82.50	94.50	74.00	69.50	70.50
Location	Elementary School	Off-Site	Off-Site	Dunn Field	Dunn Field	Off-Site	Off-Site	MLGW Facility	Depot	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)
1-Mar-00	NM										
2-Mar-00	NM										
3-Mar-00	NM										
4-Mar-00	NM										
5-Mar-00	NM										
6-Mar-00	127.89	157.30	56.31	232.53	79.32	231.17	73.84	80.21	71.22	67.54	63.70
7-Mar-00	NM										
8-Mar-00	NM										
9-Mar-00	NM										
10-Mar-00	NM										
11-Mar-00	NM										
12-Mar-00	NM										
13-Mar-00	NM										
14-Mar-00	NM										
15-Mar-00	NM										
16-Mar-00	NM										
17-Mar-00	NM										
18-Mar-00	NM										
19-Mar-00	NM										
20-Mar-00	NM										
21-Mar-00	NM										
22-Mar-00	128.38	158.61	58.51	232.47	79.40	231.09	74.09	80.40	71.31	67.80	63.73
23-Mar-00	NM										
24-Mar-00	NM										
25-Mar-00	NM										
26-Mar-00	NM										
27-Mar-00	NM										
28-Mar-00	NM										
29-Mar-00	NM										
30-Mar-00	NM										
1-Apr-00	NM										
2-Apr-00	NM										
3-Apr-00	NM										
4-Apr-00	NM										
5-Apr-00	NM										
6-Apr-00	NM										
7-Apr-00	128.00	158.99	54.42	232.42	79.28	231.23	73.71	80.33	71.17	67.00	63.67
8-Apr-00	NM										
9-Apr-00	NM										
10-Apr-00	NM										
11-Apr-00	NM										
12-Apr-00	NM										
13-Apr-00	NM										
14-Apr-00	NM										
15-Apr-00	NM										
16-Apr-00	NM										
17-Apr-00	128.21	158.78	55.00	232.31	79.45	231.04	73.89	80.55	71.27	68.50	63.23
18-Apr-00	NM										
19-Apr-00	NM										
20-Apr-00	NM										
21-Apr-00	NM										
22-Apr-00	NM										
23-Apr-00	NM										
24-Apr-00	NM										
25-Apr-00	NM										
26-Apr-00	NM										
27-Apr-00	NM										
28-Apr-00	NM										
29-Apr-00	NM										
30-Apr-00	NM										

Well ID	MW-43	MW-44		MW-45		MW-46		MW-49		MW-51		MW-53		MW-54		MW-55		MW-56		MW-57
	284.99	269.07	292.81	287.58	310.49	275.24	308.38	295.36	292.05	293.80	290.79									
Total Depth (ft)	173.00	74.00	68.00	72.00	90.00	65.00	82.90	94.90	74.00	89.50	70.50									
Location	Elementary School	Off-Site	Off-Site	Dunn Field	Dunn Field	Off-Site	Off-Site	MLGW Facility	Depot	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		
1-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM			
2-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM			
3-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM			
4-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM			
5-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM			
6-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM			
7-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM			
8-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM			
9-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM			
10-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM			
11-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM			
12-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM			
13-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM			
14-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM			
15-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM			
16-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM			
17-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM			
18-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM			
19-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM			
20-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM			
21-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM			
22-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM			
23-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM			
24-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM			
25-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM			
26-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM			
27-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM			
28-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM			
29-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM			
30-May-00	NM		NM		NM		NM		NM		NM		NM		NM		NM			
31-May-00	130.83	154.36	55.21	213.86	236.50	55.35	232.21	231.09	42.72	232.52	232.35	80.85	214.51	221.03	67.69	228.11	63.58	227.21		
1-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM			
2-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM			
3-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM			
4-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM			
5-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM			
6-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM			
7-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM			
8-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM			
9-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM			
10-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM			
11-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM			
12-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM			
13-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM			
14-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM			
15-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM			
16-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM			
17-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM			
18-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM			
19-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM			
20-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM			
21-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM			
22-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM			
23-Jun-00	133.51	151.48	55.18	213.81	236.63	55.33	232.23	230.81	42.85	232.39	232.48	80.81	214.55	221.34	67.65	228.15	63.60	227.19		
24-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM			
25-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM			
26-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM			
27-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM			
28-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM			
29-Jun-00	NM		NM		NM		NM		NM		NM		NM		NM		NM			
30-Jun-00	133.81	151.18	55.23	213.84	236.58	55.36	232.20	230.84	42.91	232.33	232.41	80.87	214.49	221.33	67.68	228.12	63.84	227.15		

Well ID TOC Elevation Total Depth (ft) Location	MW-58		MW-59		MW-60		MW-62		MW-63		MW-65		MW-67		MW-68		MW-69		MW-70		MW-71	
	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.	DTW (BTC)	GW Elev.
1-Nov-99	63.00	227.52	75.40	224.72	72.02	224.83	NA	NA	NM	NM	NM	NA	NA	NA	NM	NA	NA	NA	NA	NA	NA	NA
2-Nov-99	NM		NM		NM				NM	NM	NM				NM							
3-Nov-99	NM		NM		NM				NM	NM	NM				NM							
4-Nov-99	NM		NM		NM				NM	NM	NM				NM							
5-Nov-99	NM		NM		NM				NM	NM	NM				NM							
6-Nov-99	NM		NM		NM				NM	NM	NM				NM							
7-Nov-99	NM		NM		NM				NM	NM	NM				NM							
8-Nov-99	NM		NM		NM				NM	NM	NM				NM							
9-Nov-99	NM		NM		NM				NM	NM	NM				NM							
10-Nov-99	NM		NM		NM				NM	NM	NM				NM							
11-Nov-99	NM		NM		NM				NM	NM	NM				NM							
12-Nov-99	NM		NM		NM				NM	NM	NM				NM							
13-Nov-99	NM		NM		NM				NM	NM	NM				NM							
14-Nov-99	NM		NM		NM				NM	NM	NM				NM							
15-Nov-99	63.16	227.36	75.57	224.55	72.20	224.65	199.50	200.88	103.60	200.98	NA	NA	NA	NA	NM	NA	NA	NA	NA	NA	NA	NA
16-Nov-99	NM		NM		NM				NM	NM	NM				NM							
17-Nov-99	NM		NM		NM				NM	NM	NM				NM							
18-Nov-99	NM		NM		NM				NM	NM	NM				NM							
19-Nov-99	NM		NM		NM				NM	NM	NM				NM							
20-Nov-99	NM		NM		NM				NM	NM	NM				NM							
21-Nov-99	NM		NM		NM				NM	NM	NM				NM							
22-Nov-99	NM		NM		NM				NM	NM	NM				NM							
23-Nov-99	NM		NM		NM				NM	NM	NM				NM							
24-Nov-99	NM		NM		NM				NM	NM	NM				NM							
25-Nov-99	NM		NM		NM				NM	NM	NM				NM							
26-Nov-99	NM		NM		NM				NM	NM	NM				NM							
27-Nov-99	NM		NM		NM				NM	NM	NM				NM							
28-Nov-99	NM		NM		NM				NM	NM	NM				NM							
29-Nov-99	63.50	227.02	75.70	224.42	72.27	224.58	199.47	200.29	104.29	200.29	NA	NA	NA	NA	NM	NA	NA	NA	NA	NA	NA	NA
30-Nov-99	NM		NM		NM				NM	NM	NM				NM							
1-Dec-99	NM		NM		NM				NM	NM	NM				NM							
2-Dec-99	NM		NM		NM				NM	NM	NM				NM							
3-Dec-99	NM		NM		NM				NM	NM	NM				NM							
4-Dec-99	NM		NM		NM				NM	NM	NM				NM							
5-Dec-99	NM		NM		NM				NM	NM	NM				NM							
6-Dec-99	NM		NM		NM				NM	NM	NM				NM							
7-Dec-99	NM		NM		NM				NM	NM	NM				NM							
8-Dec-99	NM		NM		NM				NM	NM	NM				NM							
9-Dec-99	NM		NM		NM				NM	NM	NM				NM							
10-Dec-99	NM		NM		NM				NM	NM	NM				NM							
11-Dec-99	NM		NM		NM				NM	NM	NM				NM							
12-Dec-99	NM		NM		NM				NM	NM	NM				NM							
13-Dec-99	NM		NM		NM				NM	NM	NM				NM							
14-Dec-99	63.37	227.15	75.70	224.42	72.30	224.55	199.15	200.67	103.91	200.67	NA	NA	NA	NA	NM	NA	NA	NA	NA	NA	NA	NA
15-Dec-99	NM		NM		NM				NM	NM	NM				NM							
16-Dec-99	NM		NM		NM				NM	NM	NM				NM							
17-Dec-99	NM		NM		NM				NM	NM	NM				NM							
18-Dec-99	NM		NM		NM				NM	NM	NM				NM							
19-Dec-99	NM		NM		NM				NM	NM	NM				NM							
20-Dec-99	NM		NM		NM				NM	NM	NM				NM							
21-Dec-99	NM		NM		NM				NM	NM	NM				NM							
22-Dec-99	NM		NM		NM				NM	NM	NM				NM							
23-Dec-99	NM		NM		NM				NM	NM	NM				NM							
24-Dec-99	NM		NM		NM				NM	NM	NM				NM							
25-Dec-99	NM		NM		NM				NM	NM	NM				NM							
26-Dec-99	NM		NM		NM				NM	NM	NM				NM							
27-Dec-99	NM		NM		NM				NM	NM	NM				NM							
28-Dec-99	NM		NM		NM				NM	NM	NM				NM							
29-Dec-99	NM		NM		NM				NM	NM	NM				NM							
30-Dec-99	NM		NM		NM				NM	NM	NM				NM							
31-Dec-99	NM		NM		NM				NM	NM	NM				NM							

Well ID	MW-56	MW-59	MW-60	MW-62	MW-63	MW-65		MW-67		MW-68		MW-69		MW-70		MW-71
						DTW (BTC)	GW Elev	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev	DTW (BTC)	GW Elev	
TOC Elevation	290.52	300.12	298.85	283.60	304.58	263.22	278.21	275.00	291.68	307.04	305.05	294.39				
Total Depth (ft)	67.50	85.00	84.00	112.50	135.00	52.00	TBD			92.20	91.00	75.40				
Location	Dunn Field	Dunn Field	Dunn Field	Depot	Depot	Cloverdale	Off-Site	Off-Site	Off-Site	Off-Site	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
1-Mar-00	NM												NM		NM	
2-Mar-00	NM												NM		NM	
3-Mar-00	NM												NM		NM	
4-Mar-00	NM												NM		NM	
5-Mar-00	NM												NM		NM	
6-Mar-00	83.64	228.88	224.19	199.50	104.39	253.32	123.39	139.83	69.68	222.79	81.46	69.15	NM		NM	
7-Mar-00	NM												NM		NM	
8-Mar-00	NM												NM		NM	
9-Mar-00	NM												NM		NM	
10-Mar-00	NM												NM		NM	
11-Mar-00	NM												NM		NM	
12-Mar-00	NM												NM		NM	
13-Mar-00	NM												NM		NM	
14-Mar-00	NM												NM		NM	
15-Mar-00	NM												NM		NM	
16-Mar-00	NM												NM		NM	
17-Mar-00	NM												NM		NM	
18-Mar-00	NM												NM		NM	
19-Mar-00	NM												NM		NM	
20-Mar-00	NM												NM		NM	
21-Mar-00	63.70	228.82	224.18	199.35	104.65	253.17	125.25	NA	69.22	222.82	81.20	69.30	NM		NM	
22-Mar-00	NM												NM		NM	
23-Mar-00	NM												NM		NM	
24-Mar-00	NM												NM		NM	
25-Mar-00	NM												NM		NM	
26-Mar-00	NM												NM		NM	
27-Mar-00	NM												NM		NM	
28-Mar-00	NM												NM		NM	
29-Mar-00	NM												NM		NM	
30-Mar-00	NM												NM		NM	
31-Mar-00	NM												NM		NM	
1-Apr-00	NM												NM		NM	
2-Apr-00	NM												NM		NM	
3-Apr-00	NM												NM		NM	
4-Apr-00	NM												NM		NM	
5-Apr-00	NM												NM		NM	
6-Apr-00	63.60	228.92	224.12	199.50	104.41	254.22	125.18	NA	70.17	221.51	81.12	89.18	NM		NM	
7-Apr-00	NM												NM		NM	
8-Apr-00	NM												NM		NM	
9-Apr-00	NM												NM		NM	
10-Apr-00	NM												NM		NM	
11-Apr-00	NM												NM		NM	
12-Apr-00	NM												NM		NM	
13-Apr-00	NM												NM		NM	
14-Apr-00	NM												NM		NM	
15-Apr-00	NM												NM		NM	
16-Apr-00	67.70	222.82	NM	199.50	104.41	254.20	125.20	NA	70.25	221.43	81.23	69.27	NM		NM	
17-Apr-00	NM												NM		NM	
18-Apr-00	NM												NM		NM	
19-Apr-00	NM												NM		NM	
20-Apr-00	NM												NM		NM	
21-Apr-00	NM												NM		NM	
22-Apr-00	NM												NM		NM	
23-Apr-00	NM												NM		NM	
24-Apr-00	NM												NM		NM	
25-Apr-00	NM												NM		NM	
26-Apr-00	NM												NM		NM	
27-Apr-00	NM												NM		NM	
28-Apr-00	NM												NM		NM	
29-Apr-00	NM												NM		NM	
30-Apr-00	NM												NM		NM	

[illegible]

Well ID	PZ-02 284.39 54.50 Off-Site	RW-3 289.40 78.50 Dunn Field	RW-4 305.22 85.50 Dunn Field	RW-5 307.25 92.50 Dunn Field	RW-6 304.67 87.50 Dunn Field	RW-7 297.53 80.00 Dunn Field	RW-8 293.09 81.00 Dunn Field	RW-9 290.79 75.50 Dunn Field	Average System Effluent				Rainfall 24-hr Period (inches)					
									DTW (BTC)	GW Elev	Flow Rate (gpm)	Flow Rate (gpm)		Flow Rate (gpm)	Flow Rate (gpm)	Totalized Flow* (gal)	Adjusted Totalized Flow (gallons)	Time
DATE																		
1-Nov-99	NM	NA	5.6	4.4	4.2	2.0	5.1	21.7	68.8	53,449,502	53,449,502	12.00	0.93					
2-Nov-99	NM		4.8	4.6	4.1	7.8	4.2	20.8	70.8	53,551,512	A	12.00	0.06					
3-Nov-99	NM		NM	NM	NM	NM	NM	NM	NM	132,617		12.00	0.00					
4-Nov-99	NM		5.8	4.2	4.1	8.8	4.1	20.9	73.5	238,414		12.00	0.00					
5-Nov-99	NM		5.3	4.1	4.0	8.6	4.1	20.9	73.1	343,608		12.00	0.00					
6-Nov-99	NM		5.2	4.4	4.1	8.5	4.3	21.2	73.6	449,633		12.00	0.00					
7-Nov-99	NM		5.5	4.2	4.1	8.5	4.5	21.3	73.9	558,035		12.00	0.00					
8-Nov-99	NM		5.4	4.5	4.1	8.4	4.4	21.2	73.5	661,918		12.00	0.00					
9-Nov-99	NM		5.3	4.4	4.1	8.4	4.2	21.1	72.7	768,635		12.00	0.00					
10-Nov-99	NM		5.3	4.4	4.1	8.3	4.1	21.1	72.7	871,380		12.00	0.00					
11-Nov-99	NM		5.0	3.8	4.0	8.3	3.4	20.7	70.9	973,505		12.00	0.00					
12-Nov-99	NM		5.0	4.2	4.1	8.3	4.2	21.0	72.0	1,077,166		12.00	0.00					
13-Nov-99	NM		5.2	4.2	4.1	8.3	4.3	21.0	72.5	1,181,571		12.00	0.00					
14-Nov-99	NM		5.1	4.5	4.1	8.3	4.2	20.9	72.0	1,285,294		12.00	0.00					
15-Nov-99	43.84	240.75	5.1	4.3	4.1	8.3	4.1	20.9	71.5	1,388,239		12.00	0.00					
16-Nov-99	NM		4.8	4.1	4.1	8.2	4.1	20.8	69.7	1,488,651		12.00	0.00					
17-Nov-99	NM		7.7	3.9	4.0	8.2	4.0	20.7	71.5	1,591,611		12.00	0.00					
18-Nov-99	NM		3.5	4.0	4.0	8.2	4.1	20.7	70.1	1,692,612		12.00	0.00					
19-Nov-99	NM		4.9	4.1	4.0	8.2	4.1	20.7	70.9	1,794,751		12.00	1.29					
20-Nov-99	NM		4.6	3.9	4.0	8.2	4.2	20.8	69.2	1,896,531		12.00	<0.01					
21-Nov-99	NM		4.8	4.2	4.1	8.3	4.4	21.1	72.0	1,978,531		12.00	0.00					
22-Nov-99	NM		4.6	3.9	4.0	8.2	4.2	20.8	69.8	2,042,849		12.00	0.00					
23-Nov-99	NM		4.6	4.0	4.0	8.2	4.2	22.1	72.3	2,146,947		12.00	0.01					
24-Nov-99	NM		4.4	3.8	4.0	8.2	4.1	21.2	70.2	2,248,049		12.00	0.08					
25-Nov-99	NM		1.3	4.0	4.1	8.3	4.4	22.2	71.4	2,347,740		12.00	0.00					
26-Nov-99	NM		0.0	4.1	4.0	8.2	4.2	20.8	67.0	2,444,263		12.00	0.00					
27-Nov-99	NM		0.0	4.2	4.0	8.1	4.0	21.7	85.3	2,522,441		12.00	0.00					
28-Nov-99	NM		1.3	3.9	4.0	8.1	4.0	22.0	85.5	2,598,928		12.00	0.00					
29-Nov-99	40.10	244.29	2.5	4.1	4.0	8.2	4.2	22.3	81.5	2,677,500		12.00	0.00					
30-Nov-99	NM		1.7	4.2	4.0	8.3	4.3	22.5	87.3	2,774,441		12.00	0.00					
1-Dec-99	NM		2.0	4.5	4.1	8.3	4.4	22.0	87.5	2,871,699		12.00	0.00					
2-Dec-99	NM		0.0	4.4	4.0	8.2	4.4	22.3	84.8	2,964,982		12.00	0.36					
3-Dec-99	NM		1.4	4.6	4.0	8.1	4.3	22.1	85.5	3,059,331		12.00	0.28					
4-Dec-99	NM		0.0	4.6	4.0	8.1	4.1	21.7	83.2	3,150,281		12.00	0.69					
5-Dec-99	NM		4.2	4.3	4.0	8.1	4.0	21.6	82.7	3,240,497		12.00	0.00					
6-Dec-99	NM		3.9	4.4	4.0	8.1	3.9	21.9	80.0	3,306,924		12.00	0.00					
7-Dec-99	NM		2.3	4.4	4.0	8.2	4.3	22.4	85.1	3,390,531		12.00	0.00					
8-Dec-99	NM		0.6	4.1	4.0	8.2	4.2	22.0	85.0	3,484,073		12.00	0.00					
9-Dec-99	NM		2.7	4.9	4.1	8.2	4.4	22.1	88.0	3,581,979		12.00	0.45					
10-Dec-99	NM		2.8	4.1	4.0	8.1	3.8	21.5	86.9	3,683,886		12.00	<0.01					
11-Dec-99	NM		1.3	4.1	4.0	8.1	4.2	21.9	85.1	3,757,630		12.00	0.00					
12-Dec-99	NM		2.0	4.6	4.0	8.2	4.3	22.0	86.2	3,852,943		12.00	2.55					
13-Dec-99	NM		1.5	4.2	4.0	8.2	4.1	21.7	84.2	3,945,391		12.00	0.42					
14-Dec-99	43.95	240.44	2.3	4.2	4.0	8.0	3.9	21.4	82.8	4,035,638		12.00	0.00					
15-Dec-99	NM		4.2	4.0	4.0	8.0	3.6	21.3	82.8	4,121,028		12.00	0.00					
16-Dec-99	NM		1.7	4.0	4.0	8.0	3.9	21.5	83.7	4,212,614		12.00	0.00					
17-Dec-99	NM		3.6	4.2	4.0	8.1	3.9	21.5	86.6	4,307,220		12.00	0.00					
18-Dec-99	NM		0.0	4.3	4.0	8.1	4.1	21.6	82.8	4,397,350		12.00	0.00					
19-Dec-99	NM		1.5	4.3	4.0	8.0	4.1	21.6	82.3	4,487,119		12.00	0.00					
20-Dec-99	NM		0.0	3.9	4.0	7.9	3.8	21.5	82.3	4,546,289		12.00	0.00					
21-Dec-99	NM		0.0	4.1	4.0	8.0	4.1	22.0	84.2	4,608,998		12.00	0.00					
22-Dec-99	NM		0.0	4.3	4.0	8.1	4.3	22.2	85.9	4,687,481		12.00	0.00					
23-Dec-99	NM		0.0	4.1	4.2	8.1	4.2	22.1	84.7	4,760,678		12.00	0.00					
24-Dec-99	NM		0.0	4.4	4.0	8.0	4.1	21.6	83.1	4,871,499		12.00	0.00					
25-Dec-99	NM		0.0	4.4	4.0	8.1	4.1	21.5	82.7	4,961,743		12.00	0.00					
26-Dec-99	NM		0.0	4.7	4.1	8.1	4.2	21.8	83.6	5,053,313		12.00	0.00					
27-Dec-99	NM		0.0	4.8	4.0	8.0	4.2	21.6	83.2	5,144,249		12.00	0.00					
28-Dec-99	NM		0.0	4.4	4.0	8.0	4.2	21.6	82.7	5,234,565		12.00	<0.01					
29-Dec-99	NM		0.0	4.2	4.0	8.0	4.0	21.2	81.4	5,323,011		12.00	<0.01					
30-Dec-99	NM		0.0	4.5	4.0	8.0	4.1	20.1	81.9	5,412,089		12.00	0.00					
31-Dec-99	NM		0.0	4.2	3.9	7.8	3.9	19.7	81.0	5,499,900		12.00	0.00					

Well ID TOC Elevation Total Depth (ft) Location	PZ-02 284.39 54.50 Off-Site	DTW (BTC)	GW Elev	Average System Effluent										Rainfall 24-hr Period (inches)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
				RW-3 299.40 78.50 Dunn Field	RW-4 85.50 Dunn Field	RW-5 307.25 92.50 Dunn Field	RW-6 304.67 87.50 Dunn Field	RW-7 297.53 80.00 Dunn Field	RW-8 293.08 81.00 Dunn Field	RW-9 290.79 75.50 Dunn Field	Flow Rate		Adjusted Totalized Flow (gallons)		Time																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
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Well ID TOC Elevation Total Depth (ft) Location	PZ-02 284.39 54.50 Off Site	RW-3 289.40 78.50 Dunn Field	RW-4 305.22 85.50 Dunn Field	RW-5 307.25 92.50 Dunn Field	RW-6 304.67 87.50 Dunn Field	RW-7 297.53 80.00 Dunn Field	RW-8 293.09 81.00 Dunn Field	RW-9 290.79 75.50 Dunn Field	Average System Effluent			Rainfall 24-hr Period (inches)	
									DTW (BTC)	GW Elev	Time		
													Flow Rate (gpm)
DATE													
1-Mar-00	NM	37	37	39	65	30	201	183	59.2	10,694,343	64,245,895	12.00	<0.01
2-Mar-00	NM	40	35	39	65	36	204	186	60.4	10,781,345	64,332,857	12.00	0.00
3-Mar-00	NM	35	39	39	66	38	207	189	61.4	10,869,761	64,421,273	12.00	0.09
4-Mar-00	NM	38	34	39	65	34	57	183	45.0	10,934,547	64,486,058	12.00	<0.01
5-Mar-00	NM	45	38	32	66	42	0	190	41.3	10,993,975	64,545,487	12.00	0.00
6-Mar-00	44.00	37	31	26	67	43	123	192	51.9	11,068,711	64,620,223	12.00	0.00
7-Mar-00	NM	38	36	30	68	39	213	184	60.7	11,156,148	64,707,660	12.00	0.00
8-Mar-00	NM	38	33	28	67	39	216	191	61.1	11,244,175	64,795,687	12.00	0.00
9-Mar-00	NM	38	40	24	66	37	209	186	59.9	11,330,431	64,881,943	12.00	0.85
10-Mar-00	NM	38	35	41	65	36	205	185	60.5	11,417,566	64,969,077	12.00	0.12
11-Mar-00	NM	38	37	31	65	23	202	181	57.7	11,500,811	65,052,122	12.00	0.05
12-Mar-00	NM	33	34	28	64	31	202	182	57.2	11,582,983	65,134,505	12.00	0.00
13-Mar-00	NM	43	33	25	65	38	203	183	59.0	11,667,895	65,219,407	12.00	0.00
14-Mar-00	NM	38	39	00	66	36	205	185	56.8	11,749,673	65,301,185	12.00	0.00
15-Mar-00	NM	40	39	00	67	36	204	185	57.1	11,831,897	65,383,409	12.00	0.54
16-Mar-00	NM	40	31	00	67	29	202	183	55.1	11,911,299	65,462,810	12.00	0.72
17-Mar-00	NM	36	44	00	65	23	199	178	54.6	11,989,894	65,541,405	12.00	<0.01
18-Mar-00	NM	40	44	00	66	37	205	186	57.8	12,073,155	65,624,866	12.00	0.17
19-Mar-00	NM	42	42	00	68	37	207	188	58.2	12,156,905	65,708,417	12.00	1.56
20-Mar-00	NM	37	31	00	68	30	198	177	54.0	12,234,907	65,786,119	12.00	0.00
21-Mar-00	NM	36	31	00	66	25	198	176	53.0	12,310,655	65,862,367	12.00	0.00
22-Mar-00	43.97	35	34	00	66	30	201	180	54.6	12,389,422	65,940,933	12.00	0.00
23-Mar-00	NM	37	33	00	67	38	203	184	56.0	12,470,091	66,021,802	12.00	0.00
24-Mar-00	NM	36	35	00	67	35	201	182	55.5	12,550,068	66,101,580	12.00	0.00
25-Mar-00	NM	35	33	00	68	35	200	180	54.9	12,628,124	66,180,638	12.00	0.09
26-Mar-00	NM	39	38	00	66	38	204	185	56.9	12,711,075	66,262,586	12.00	0.01
27-Mar-00	NM	18	38	00	67	37	204	184	57.4	12,789,785	66,341,297	12.00	<0.01
28-Mar-00	NM	00	38	00	67	32	200	179	51.2	12,863,556	66,415,068	12.00	0.00
29-Mar-00	NM	00	35	00	68	32	199	178	51.0	12,936,939	66,488,450	12.00	0.02
30-Mar-00	NM	47	39	00	68	31	197	176	55.7	13,017,089	66,568,601	12.00	8.19
1-Apr-00	NM	45	34	00	68	33	187	176	55.2	13,096,548	66,648,080	12.00	0.81
2-Apr-00	NM	44	43	00	67	36	202	181	57.4	13,179,175	66,730,687	12.00	0.18
3-Apr-00	NM	47	43	00	66	37	201	180	56.6	13,260,678	66,812,191	12.00	1.58
4-Apr-00	NM	47	48	00	65	20	198	173	54.7	13,342,659	66,894,170	12.00	0.01
5-Apr-00	NM	48	38	00	68	36	202	181	57.1	13,421,398	66,972,909	12.00	0.00
6-Apr-00	NM	50	33	00	68	36	200	180	56.5	13,503,636	67,055,148	12.00	0.00
7-Apr-00	43.30	48	38	00	66	36	201	179	56.8	13,585,025	67,136,537	12.00	0.00
8-Apr-00	NM	47	15	00	65	13	192	168	49.9	13,666,745	67,218,257	12.00	0.47
9-Apr-00	NM	43	37	00	66	33	200	178	55.7	13,738,658	67,290,170	12.00	0.00
10-Apr-00	NM	50	38	00	66	36	201	178	56.9	13,818,623	67,370,335	12.00	0.00
11-Apr-00	NM	48	34	00	68	31	199	176	55.3	13,900,817	67,452,329	12.00	<0.01
12-Apr-00	NM	49	34	00	68	28	198	175	55.0	13,980,492	67,532,004	12.00	0.58
13-Apr-00	NM	48	35	00	66	37	202	180	57.4	14,059,820	67,611,132	12.00	<0.01
14-Apr-00	NM	53	36	00	66	37	201	179	57.1	14,142,233	67,693,745	12.00	0.05
15-Apr-00	NM	48	37	00	65	35	200	177	56.3	14,224,471	67,775,983	12.00	0.01
16-Apr-00	NM	50	33	00	65	34	201	178	56.1	14,305,471	67,856,983	12.00	0.00
17-Apr-00	NM	43	35	00	65	34	197	175	54.9	14,386,198	67,937,709	12.00	0.06
18-Apr-00	48.80	47	42	00	68	33	197	177	56.1	14,465,268	68,016,780	12.00	0.00
19-Apr-00	NM	57	14	00	72	35	201	196	57.5	14,546,038	68,097,549	12.00	0.00
20-Apr-00	NM	00	00	00	80	31	199	201	51.1	14,628,881	68,180,393	12.00	0.00
21-Apr-00	NM	00	00	00	79	27	195	198	49.8	14,702,422	68,253,933	12.00	<0.01
22-Apr-00	NM	00	00	00	79	32	199	201	51.1	14,774,105	68,325,617	12.00	0.00
23-Apr-00	NM	00	00	00	80	36	201	204	52.0	14,847,660	68,399,172	12.00	0.00
24-Apr-00	NM	00	00	00	79	32	217	198	52.6	14,922,598	68,474,109	12.00	0.35
25-Apr-00	NM	00	00	00	79	36	201	199	31.4	14,998,284	68,549,786	12.00	0.21
26-Apr-00	NM	00	00	00	81	41	00	205	32.7	15,043,515	68,585,026	12.00	0.00
27-Apr-00	NM	00	00	00	83	48	00	215	34.6	15,090,531	68,642,042	12.00	0.00
28-Apr-00	NM	00	28	00	83	45	256	211	62.3	15,140,340	68,691,852	12.00	<0.01
29-Apr-00	NM	00	10	00	83	39	225	207	56.4	15,230,008	68,781,521	12.00	0.00
30-Apr-00	NM	00	21	00	83	38	212	203	55.8	15,311,153	68,862,065	12.00	0.00
										15,391,260	68,942,772	12.00	0.00

Well ID TOC Elevation Total Depth (ft) Location	PZ-02 284.39 54.50 Off-Site	RW-3 299.40 85.50 Dunn Field	RW-4 305.22 85.50 Dunn Field	RW-5 307.25 92.50 Dunn Field	RW-6 304.87 87.50 Dunn Field	RW-7 297.53 80.00 Dunn Field	RW-8 293.09 81.00 Dunn Field	RW-9 290.79 75.50 Dunn Field	Average System Effluent				Rainfall 24-hr Period																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
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Well ID IOC Elevation Total Depth (ft) Location	PZ-02 284.39 54.50 Off-Site	DTW (BTC)	GW Elev	Average System Effluent												Rainfall 24-hr Period (inches)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
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APPENDIX B

QUARTERLY MONITORING WELL SAMPLES
ANALYTICAL LABORATORY DATA



ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road • Memphis, TN 38111 • (901) 327-2750 • FAX (901) 327-6334

Founded 1972

September 8, 2000

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

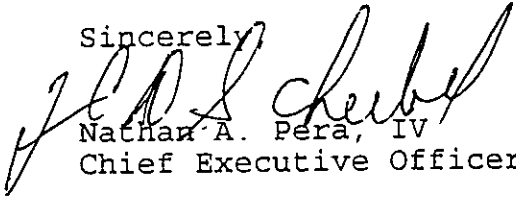
Ref: Analytical Testing	
ETC Order #	0008592
Project Description	Memphis Depot Dunn Field
Project Number	C5X51101

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
Arkansas	#40730
Kentucky	#90047
North Carolina	#415
South Carolina	#84002002

Mississippi	
Oklahoma	#9311
Virginia	#00106
Washington	#C248
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
GC/MS VOLATILE COMPOUNDS - AQUEOUS

Client Name Sverdrup/Jacobs Engineering
Project Name Memphis Defense Depot
ETC Order# 0008-592
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

<u>QC Batch</u>	<u>Form 4 Summary</u>
V4090101	V4090111LB
V4090501	V4090511LB

System Monitoring Compounds FORM 2

Surrogate recoveries within QC limits.

Method Blank FORM 4

V4090111LB
V4090511LB

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

V4090111LB

Methylene Chloride was detected at a concentration of 2.37J ug/L. This analyte was not identified in associated project samples. There is no effect on the data.

V4090511LB

Methylene Chloride was detected at a concentration of 2.82J ug/L. This analyte was not identified in associated project samples. There is no effect on the data.

Laboratory Control Sample FORM 3

V4090111LCS
V4090511LCS

All acceptance criteria met, except as listed below.

V4090111LCS

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

CASE NARRATIVE
GC/MS VOLATILE COMPOUNDS - AQUEOUS

Client Name Sverdrup/Jacobs Engineering
Project Name Memphis Defense Depot
ETC Order# 0008-592
Method (SW-846) 8260B/5030B

QUALITY CONTROL

V4090511LCS

Bromomethane, Pentachloroethane (non-target analyte), and Vinyl Acetate were flagged for high recovery in the LCS. The target analytes were not detected in associated samples. There is no effect on the data.

Matrix Spike / Matrix Spike Dup FORM 3

Batch V4090101

Due to an instrumentation malfunction, data for the associated Matrix Spike and Matrix Spike Duplicate were not acquired.

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

Matrix Spike / Matrix Spike Dup FORM 3

Batch V4090501

0008-594-05	RPD	All analytes within QC limits.
	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 09/01/00 Time: 1017

Analyte	%Diff(30% Max)	Response
Bromomethane	+50.4	High

Samples affected by this CV include V4090111LB, V4090111LCS, 0008-592-01, 0008-592-02, 0008-592-05 through 0008-592-10. 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.

Calibration Verification (CV): Date 09/05/00 Time: 1124

Analyte	%Diff(30% Max)	Response
Bromomethane	+69.4	High
Vinyl Acetate	+53.5	High

Samples affected by this CV include V4090511LB, V4090511LCS, 0008-594-05 MS/MSD, 0008-592-03, and 0008-592-04. High responses indicate that reported levels for these analytes may be biased high. These analytes were not identified in associated project samples. There is no effect on the data.

604 98

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

Client Name Sverdrup/Jacobs Engineering
Project Name Memphis Defense Depot
ETC Order# 0008-592
Method (SW-846) 8260B/5030B

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.

C/S

Project Manager

000004

ENVIRONMENTAL TESTING & CONSULTING, INC.

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

ANALYTICAL SUMMARY/CROSS REFERENCE TABLE

604 99

Client Name Sverdrup/Jacobs Eng.
Site ID Memphis Depot
Dunn Field

ETC Order #0008592
C5X51101

<u>ETC Sample ID</u>	<u>Field ID</u>	<u>Matrix</u>	<u>Method</u>	<u>Method Description</u>
000859201	Trip Blank	AQUEOUS	8260B	GC/MS Volatile Organics
000859202	MW-57-Y2Q3	AQUEOUS	8260B	GC/MS Volatile Organics
000859203	MW-15-Y2Q3	AQUEOUS	8260B	GC/MS Volatile Organics
000859204	MW-58-Y2Q3	AQUEOUS	8260B	GC/MS Volatile Organics
000859205	MW-56-Y2Q3	AQUEOUS	8260B	GC/MS Volatile Organics
000859206	MW-33-Y2Q3	AQUEOUS	8260B	GC/MS Volatile Organics
000859207	MW-54-Y2Q3	AQUEOUS	8260B	GC/MS Volatile Organics
000859208	MW-A	AQUEOUS	8260B	GC/MS Volatile Organics
000859209	MW-30-Y2Q3	AQUEOUS	8260B	GC/MS Volatile Organics
000859210	MW-59-Y2Q3	AQUEOUS	8260B	GC/MS Volatile Organics

11/12/06

604 100

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 **08/23/00**
 ETC Order Number **0008592**

ETC Lab ID **0008592-01**
 Field ID : **Trip Blank**

Matrix : **AQUEOUS**
 Sample Date : **08/22/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
GC/MS Volatile Organics				09/01/00	EM	8260B 5030B
QC Batch	V4090101					
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			
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			
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	95	74 123
S2 - Toluene-d8	92	86 112
S3 - 4-Bromofluorobenzene	93	81 115
S4 - 1,2-Dichloroethane-d4	86	80 120

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000006

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

604 101
CLIENT SAMPLE NO.

0008-592-1

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0008-592

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: 09/01/00

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. _____				

FORM I VOA-GCMS-TIC

000007

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 **08/23/00**
 ETC Order Number **0008592**

ETC Lab ID **0008592-02**
 Field ID : **MW-57-Y2Q3**

Matrix : **AQUEOUS**
 Sample Date : **08/22/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
GC/MS Volatile Organics				09/01/00	EM	8260B 5030B
QC Batch	V4090101					
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	45.7	ug/L	1.00			
Chlorobenzene	ND	ug/L	1.00			
Chlorodibromomethane	ND	ug/L	1.00			
Chloroethane	ND	ug/L	1.00			
Chloroform	11.3	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			
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	5.86	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	49.2	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	0.53J	ug/L	1.00			

Surrogate Standard	% Recovery	QC Limits
S1 - Dibromofluoromethane	96	74 123
S2 - Toluene-d8	94	86 112
S3 - 4-Bromofluorobenzene	94	81 115
S4 - 1,2-Dichloroethane-d4	91	80 120

Data Validator *CDS*

ND - Not Detected

Q - Recovery Outside QC Limits

000008

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

604 103 CLIENT SAMPLE NO.

0008-592-2

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0008-592

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: 09/01/00

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 I VOA-GCMS-TIC

000009

604 104

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 #

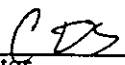
Date Arrived 08/23/00
 ETC Order Number 0008592

ETC Lab ID 0008592-03
 Field ID : MW-15-Y2Q3

Matrix : AQUEOUS
 Sample Date : 08/22/00

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
GC/MS Volatile Organics				09/01/00	EM	8260B 5030B
QC Batch	V4090101					
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	24.7	ug/L	1.00			
Chlorobenzene	ND	ug/L	1.00			
Chlorodibromomethane	ND	ug/L	1.00			
Chloroethane	ND	ug/L	1.00			
Chloroform	848	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	4.17	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	389	ug/L	1.00			
Tetrachloroethene	7.18	ug/L	1.00			
Toluene	ND	ug/L	1.00			
1,1,1-Trichloroethane	ND	ug/L	1.00			
1,1,2-Trichloroethane	5.70	ug/L	1.00			
Trichloroethene	234	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	12.0	ug/L	1.00			

Surrogate Standard	% Recovery	QC Limits
S1 - Dibromofluoromethane	95	74 123
S2 - Toluene-d8	96	86 112
S3 - 4-Bromofluorobenzene	95	81 115
S4 - 1,2-Dichloroethane-d4	97	80 120

Data Validator 

ND - Not Detected

Q - Recovery Outside QC Limits

000010

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

604 105

CLIENT SAMPLE NO.

0008-592-3

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0008-592

Matrix: (soil/water) WATER

Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML

Lab File ID: 0501008

Level: (low/med) LOW

Date Received: _____

% Moisture: not dec. _____

Date Analyzed: 09/05/00

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. _____	_____	_____	_____	_____
8. _____	_____	_____	_____	_____
9. _____	_____	_____	_____	_____
10. _____	_____	_____	_____	_____
11. _____	_____	_____	_____	_____
12. _____	_____	_____	_____	_____
13. _____	_____	_____	_____	_____
14. _____	_____	_____	_____	_____
15. _____	_____	_____	_____	_____
16. _____	_____	_____	_____	_____
17. _____	_____	_____	_____	_____
18. _____	_____	_____	_____	_____
19. _____	_____	_____	_____	_____
20. _____	_____	_____	_____	_____
21. _____	_____	_____	_____	_____
22. _____	_____	_____	_____	_____
23. _____	_____	_____	_____	_____
24. _____	_____	_____	_____	_____
25. _____	_____	_____	_____	_____
26. _____	_____	_____	_____	_____
27. _____	_____	_____	_____	_____
28. _____	_____	_____	_____	_____
29. _____	_____	_____	_____	_____
30. _____	_____	_____	_____	_____

604 106

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 **08/23/00**
 ETC Order Number **0008592**

ETC Lab ID **0008592-04**
 Field ID : **MW-58-Y2Q3**

Matrix : **AQUEOUS**
 Sample Date : **08/22/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
GC/MS Volatile Organics				09/05/00	EM	8260B 5030B
QC Batch	V4090501					
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	0.26J	ug/L	1.00			
Chlorobenzene	ND	ug/L	1.00			
Chlorodibromomethane	ND	ug/L	1.00			
Chloroethane	ND	ug/L	1.00			
Chloroform	2.42	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			
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	0.41J	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	1.44	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	95	74 123
S2 - Toluene-d8	100	86 112
S3 - 4-Bromofluorobenzene	93	81 115
S4 - 1,2-Dichloroethane-d4	102	80 120

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000012

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

604 107 CLIENT SAMPLE NO.

0008-592-4

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0008-592

Matrix: (soil/water) WATER

Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML

Lab File ID: 0401007

Level: (low/med) LOW

Date Received: _____

% Moisture: not dec. _____

Date Analyzed: 09/05/00

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 I VOA-GCMS-TIC

000013

604 108

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 **08/23/00**
 ETC Order Number **0008592**

ETC Lab ID **0008592-05**
 Field ID : **MW-56-Y2Q3**

Matrix : **AQUEOUS**
 Sample Date : **08/22/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
GC/MS Volatile Organics				09/01/00	EM	8260B 5030B
QC Batch	V4090101					
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			
Chloroform	1.67	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			
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	0.41J	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	0.74J	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	97	74 123
S2 - Toluene-d8	97	86 112
S3 - 4-Bromofluorobenzene	94	81 115
S4 - 1,2-Dichloroethane-d4	101	80 120

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000014

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

604 109 CLIENT SAMPLE NO.

0008-592-5

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0008-592

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: 09/01/00

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 I VOA-GCMS-TIC

000015

604 110

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 **08/23/00**
 ETC Order Number **0008592**

ETC Lab ID **0008592-06**
 Field ID : **MW-33-Y2Q3**

Matrix : **AQUEOUS**
 Sample Date : **08/22/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
GC/MS Volatile Organics				09/01/00	EM	8260B 5030B
QC Batch	V4090101					
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			
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			
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
S2 - Toluene-d8	98	86 112
S3 - 4-Bromofluorobenzene	95	81 115
S4 - 1,2-Dichloroethane-d4	99	80 120

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000016

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

604 111 CLIENT SAMPLE NO.

0008-592-6

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0008-592

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: 09/01/00

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 I VOA-GCMS-TIC

000017

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 08/23/00
 ETC Order Number 0008592

ETC Lab ID 0008592-07
 Field ID : MW-54-Y2Q3

Matrix : AQUEOUS
 Sample Date : 08/22/00

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
GC/MS Volatile Organics				09/01/00	EM	8260B 5030B
QC Batch	V4090101					
Dilution Factor	1					
Acetone	ND	ug/L	20.0			
Benzene	0.33J	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	7.97	ug/L	1.00			
Chlorobenzene	ND	ug/L	1.00			
Chlorodibromomethane	ND	ug/L	1.00			
Chloroethane	ND	ug/L	1.00			
Chloroform	13.8	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	1.39	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	4.90	ug/L	1.00			
Tetrachloroethene	0.74J	ug/L	1.00			
Toluene	ND	ug/L	1.00			
1,1,1-Trichloroethane	ND	ug/L	1.00			
1,1,2-Trichloroethane	0.56J	ug/L	1.00			
Trichloroethene	28.1	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	14.9	ug/L	1.00			

Surrogate Standard	% Recovery	QC Limits
S1 - Dibromofluoromethane	98	74 123
S2 - Toluene-d8	98	86 112
S3 - 4-Bromofluorobenzene	92	81 115
S4 - 1,2-Dichloroethane-d4	100	80 120

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

604 113 CLIENT SAMPLE NO.

0008-592-7

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0008-592

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: 09/01/00

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 I VOA-GCMS-TIC

000019

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 **08/23/00**
 ETC Order Number **0008592**

ETC Lab ID **0008592-08**
 Field ID : **MW-A**

Matrix : **AQUEOUS**
 Sample Date : **08/22/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
GC/MS Volatile Organics				09/01/00	EM	8260B 5030B
QC Batch	V4090101					
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			
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			
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	99	74 123
S2 - Toluene-d8	99	86 112
S3 - 4-Bromofluorobenzene	94	81 115
S4 - 1,2-Dichloroethane-d4	105	80 120

ADS
 Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

600020

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

004 115 CLIENT SAMPLE NO.

0008-592-8

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0008-592

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: 09/01/00

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 I VOA-GCMS-TIC

000021

604 116

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 **08/23/00**
 ETC Order Number **0008592**

ETC Lab ID **0008592-09**
 Field ID : **MW-30-Y2Q3**

Matrix : **AQUEOUS**
 - Sample Date : **08/22/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
GC/MS Volatile Organics				09/01/00	EM	8260B 5030B
QC Batch	V4090101					
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			
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			
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	97	74 123
S2 - Toluene-d8	100	86 112
S3 - 4-Bromofluorobenzene	94	81 115
S4 - 1,2-Dichloroethane-d4	102	80 120

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

604 117 CLIENT SAMPLE NO.

0008-592-9

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0008-592

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: 09/01/00

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 I VOA-GCMS-TIC

000023

604 118 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 08/23/00
 ETC Order Number 0008592

ETC Lab ID 0008592-10
 Field ID : MW-59-Y2Q3

Matrix : AQUEOUS
 Sample Date : 08/22/00

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
GC/MS Volatile Organics				09/01/00	EM	8260B 5030B
QC Batch	V4090101					
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			
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			
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	22.0	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	0.88J	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	0.38J	ug/L	1.00			

Surrogate Standard	% Recovery	QC Limits
S1 - Dibromofluoromethane	99	74 123
S2 - Toluene-d8	100	86 112
S3 - 4-Bromofluorobenzene	93	81 115
S4 - 1,2-Dichloroethane-d4	107	80 120

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000024

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

604 119

CLIENT SAMPLE NO.

0008-592-10

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0008-592

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: 09/01/00

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 I VOA-GCMS-TIC

000025

Environmental Testing & Consulting, Inc.

Login
Chain-of-Custody



ETC Work Order :

0008592

Company Name		Project/Site		Project #		Project Manager/Contact		Analysis Requested		Sample Delivery Group ID	
JACOBS/SVERDRUP		Memphis Depot - Dunn Field		CSXS1101		KRAIG SMITH		(Note special detection limits or methods)			
Phone # : 615 331-9232		Fax # : 615 835 8328		FID # :		PO # : CSXS1101					
RUSH		Ice									
Matrix		Matrix		Matrix		Matrix					
1 Wastewater		4 Sludge		5 Oil/Solvent		6 Other					
2 Aqueous											
3 Soil/Sediment											
# of cont.	Sample ID/Number	Depth	Sample Date	Sample Time	Matrix	Type Grab/Comp	Comments				
	TRIP BLANK		8-22		Water	GRAB	X				
	MW-57-Y2Q3		8-22	1630	"	"	X				
	MW-15-Y2Q3		8-22	1700	"	"	X				
	MW-58-Y2Q3		8-22	1215	"	"	X				
	MW-56-Y2Q3		8-22	1615	"	"	X				
	MW-33-Y2Q3		8-22	1530	"	"	X				
	MW-54-Y2Q3		8-22	1545	"	"	X				
	MW-A		8-22	1400	"	"	X				
	MW-30-Y2Q3		8-22	1400	"	"	X				
	MW-59-Y2Q3		8-22	1245	"	"	X				
Sampled By KRAIG SMITH							VOC method SW 8260B				
Method of Shipment Personal Delivery							Remarks				
Blank/Cooler Temp							RECEIVED BY (sign)				
DATE 8-23-00							TIME 0800				
RELINQUISHED BY (sign) <i>Kraig Smith</i>							DATE 8-23-00				
RELINQUISHED BY (sign)							TIME				
RELINQUISHED BY (sign)							DATE 8-23-00				
RELINQUISHED BY (sign)							TIME 0800				

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.

Environmental Testing & Consulting, Inc.
Cooler Receipt Form

Date Received 8/23/00 LIMS# 0008-592
Date/Time Checked In 8/23/00-08:00 Project Memphis Depot
Carrier/Bill# _____ Hand-Delivered _____ By RB Dunn Field _____

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) < 4°C	OK
5. Ice & Packing-Ice, Bags, 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 ₂ O) 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)



ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road • Memphis, TN 38111 • (901) 327-2750 • FAX (901) 327-6334

Founded 1972

September 11, 2000

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

SVERDRUP

SEP 18 2000

RECEIVED

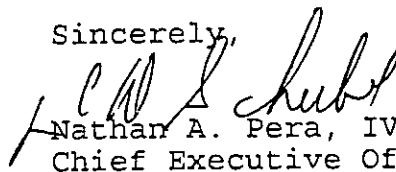
Ref: Analytical Testing
ETC Order # 0008634
Project Description Memphis DDMT
Dunn Field
Project Number C5X51101

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
Arkansas #40730
Kentucky #90047
North Carolina #415
South Carolina #84002002

Mississippi
Oklahoma #9311
Virginia #00106
Washington #C248
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)

CASE NARRATIVE
GC/MS VOLATILE COMPOUNDS - AQUEOUS

Client Name Sverdrup/Jacobs Engineering
Project Name Memphis Defense Depot
ETC Order# 0008-634
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

<u>QC Batch</u>	<u>Form 4 Summary</u>
V4090502	V4090521LB
V4090601	V4090611LB

System Monitoring Compounds FORM 2
Surrogate recoveries within QC limits.

Method Blank FORM 4
V4090521LB
V4090611LB

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

V4090521LB

Methylene Chloride was detected at a concentration of 2.63J ug/L. This analyte was not identified in associated project samples. There is no effect on the data.

V4090611LB

Methylene Chloride was detected at a concentration of 2.04J ug/L. This analyte was not identified in associated project samples. There is no effect on the data.

Laboratory Control Sample FORM 3
V4090521LCS
V4090611LCS

All acceptance criteria met, except as listed below.

V4090521LCS

Acrolein (non-target analyte), Bromochloromethane (non-target analyte), Naphthalene (non-target analytes), and Bromomethane were flagged for high recovery in the LCS. Bromomethane was not detected in associated 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 Defense Depot
 ETC Order# 0008-634
 Method (SW-846) 8260B/5030B

QUALITY CONTROL

V4090611LCS

Bromomethane was flagged for high recovery in the LCS. This analyte was not detected in associated samples. There is no effect on the data.

Matrix Spike / Matrix Spike Dup. FORM 3

Batch V4090502

0008-634-10	RPD	All analytes within QC limits.
RW-01-Y2Q3	Spike Recovery	All analytes within QC limits.

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

Matrix Spike / Matrix Spike Dup. FORM 3

Batch V4090601

0008-675-04	RPD	All analytes within QC limits.
	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 09/06/00 Time: 0109

Analyte	%Diff(30% Max)	Response
Bromomethane	+51.8	High

Samples affected by this CV include V4090521LB, V4090521LCS, 0008-634-10MS/MSD, 0008-634-01 through 0008-634-08, and 0008-634-10. 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.

Calibration Verification (CV): Date 09/06/00 Time: 1216

Analyte	%Diff(30% Max)	Response
Bromomethane	+51.4	High

Samples affected by this CV include V4090611LB, V4090611LCS, 0008-675-04 MS/MSD, 0008-634-07DIL, 0008-634-08DIL, and 0008-634-09. High responses indicate that reported levels for these analytes may be biased high. These analytes were not identified in associated project samples. There is no effect on the data.

CASE NARRATIVE

GC/MS VOLATILE COMPOUNDS - AQUEOUS

Client Name Sverdrup/Jacobs Engineering
Project Name Memphis Defense Depot
ETC Order# 0008-634
Method (SW-846) 8260B/5030B

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.

Dilutions were performed on two samples to bring Target Analyte(s) within calibration range as shown on the Sample Report Forms.

POS
Project Manager

000004

604 128 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 DDMT
Dunn Field

ETC Order #0008634
C5X51101

<u>ETC Sample ID</u>	<u>Field ID</u>	<u>Matrix</u>	<u>Method</u>	<u>Method Description</u>
000863401	Trip Blank	AQUEOUS	8260B	GC/MS Volatile Organics
000863402	RW-2-Y2Q3	AQUEOUS	8260B	GC/MS Volatile Organics
000863403	RW-B	AQUEOUS	8260B	GC/MS Volatile Organics
000863404	RW-1B-Y2Q3	AQUEOUS	8260B	GC/MS Volatile Organics
000863405	MW-40-Y2Q3	AQUEOUS	8260B	GC/MS Volatile Organics
000863406	MW-31-Y2Q3	AQUEOUS	8260B	GC/MS Volatile Organics
000863407	MW-71-Y2Q3	AQUEOUS	150.1	pH
000863407	MW-71-Y2Q3	AQUEOUS	8260B	GC/MS Volatile Organics
000863408	RW-1A-Y2Q3	AQUEOUS	8260B	GC/MS Volatile Organics
000863409	MW-68-Y2Q3	AQUEOUS	8260B	GC/MS Volatile Organics
000863410	RW-01-Y2Q3	AQUEOUS	8260B	GC/MS Volatile Organics

Environmental Testing & Consulting, Inc.

Sample Reports

604 130

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 DDMT
 Dunn Field

Date Arrived 08/24/00
ETC Order Number 0008634

ETC Lab ID : 0008634-07
Field ID : MW-71-Y2Q3

Matrix : AQUEOUS
Sample Date : 08/23/00

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	BY	METHOD	QC BATCH
pH	5.7	SU		08/24/00	RB	150.1	PH082400


Data Validator

ND - Not Detected

000007

ENVIRONMENTAL TESTING & CONSULTING, INC.

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

604 131

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

Site ID Memphis DDMT
 Dunn Field
 FID #

Date Arrived 08/24/00
 ETC Order Number 0008634

ETC Lab ID 0008634-01
 Field ID : Trip Blank

Matrix : AQUEOUS
 Sample Date : 08/23/00

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
GC/MS Volatile Organics				09/06/00	EM	8260B 5030B
QC Batch	V4090502					
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			
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			
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	98	74 123
S2 - Toluene-d8	98	86 112
4-Bromofluorobenzene	92	81 115
1,2-Dichloroethane-d4	103	80 120

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000008

604 132

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

CLIENT SAMPLE NO.

0008-634-1

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0008-634

Matrix: (soil/water) WATER

Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML

Lab File ID: 2201030

Level: (low/med) LOW

Date Received: _____

% Moisture: not dec. _____

Date Analyzed: 09/06/00

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 I VOA-GCMS-TIC

000009

ENVIRONMENTAL TESTING & CONSULTING, INC.

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

604 133

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

Site ID **Memphis DDMT**
Dunn Field
FID #

Date Arrived **08/24/00**
ETC Order Number **0008634**

ETC Lab ID **0008634-02**
Field ID : **RW-2-Y2Q3**

Matrix : **AQUEOUS**
Sample Date : **08/23/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
GC/MS Volatile Organics				09/06/00	EM	8260B 5030B
QC Batch	V4090502					
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	16.8	ug/L	1.00			
Chlorobenzene	ND	ug/L	1.00			
Chlorodibromomethane	ND	ug/L	1.00			
Chloroethane	ND	ug/L	1.00			
Chloroform	15.4	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	1.77	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	1.29	ug/L	1.00			
Toluene	ND	ug/L	1.00			
1,1,1-Trichloroethane	ND	ug/L	1.00			
1,1,2-Trichloroethane	0.51J	ug/L	1.00			
Trichloroethene	20.6	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	13.6	ug/L	1.00			

Surrogate Standard	% Recovery	QC Limits
S1 - Dibromofluoromethane	98	74 123
S2 - Toluene-d8	98	86 112
- 4-Bromofluorobenzene	95	81 115
- 1,2-Dichloroethane-d4	103	80 120

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000010

604 134

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

CLIENT SAMPLE NO.

0008-634-2

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0008-634

Matrix: (soil/water) WATER

Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML

Lab File ID: 2301031

Level: (low/med) LOW

Date Received: -

% Moisture: not dec. _____

Date Analyzed: 09/06/00

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 I VOA-GCMS-TIC

000011

ENVIRONMENTAL TESTING & CONSULTING, INC.

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

604 135

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

Site ID Memphis DDMT
 Dunn Field
 FID #

Date Arrived 08/24/00
 ETC Order Number 0008634

ETC Lab ID 0008634-03
 Field ID : RW-B

Matrix : AQUEOUS
 Sample Date : 08/23/00

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
GC/MS Volatile Organics				09/06/00	EM	8260B 5030B
QC Batch	V4090502					
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	17.0	ug/L	1.00			
Chlorobenzene	ND	ug/L	1.00			
Chlorodibromomethane	ND	ug/L	1.00			
Chloroethane	ND	ug/L	1.00			
Chloroform	15.5	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	1.76	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	1.31	ug/L	1.00			
Toluene	ND	ug/L	1.00			
1,1,1-Trichloroethane	ND	ug/L	1.00			
1,1,2-Trichloroethane	0.62J	ug/L	1.00			
Trichloroethene	21.0	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	14.0	ug/L	1.00			

Surrogate Standard	% Recovery	QC Limits
S1 - Dibromofluoromethane	96	74 123
S2 - Toluene-d8	99	86 112
- 4-Bromofluorobenzene	91	81 115
- 1,2-Dichloroethane-d4	102	80 120

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000012

604 136

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

CLIENT SAMPLE NO.

0008-634-3

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0008-634

Matrix: (soil/water) WATER

Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML

Lab File ID: 2401032

Level: (low/med) LOW

Date Received: _____

% Moisture: not dec. _____

Date Analyzed: 09/06/00

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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FORM I VOA-GCMS-TIC

000013

ENVIRONMENTAL TESTING & CONSULTING, INC.

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

604 137

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

Site ID **Memphis DDMT**
Dunn Field

FID #

Date Arrived **08/24/00**
ETC Order Number **0008634**

ETC Lab ID **0008634-04**
Field ID : **RW-1B-Y2Q3**

Matrix : **AQUEOUS**
Sample Date : **08/23/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
GC/MS Volatile Organics				09/06/00	EM	8260B 5030B
QC Batch	V4090502					
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	26.1	ug/L	1.00			
Chlorobenzene	ND	ug/L	1.00			
Chlorodibromomethane	ND	ug/L	1.00			
Chloroethane	ND	ug/L	1.00			
Chloroform	49.4	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	1.70	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	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	0.32	ug/L	1.00			
Trichloroethene	35.7	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	5.57	ug/L	1.00			

Surrogate Standard	% Recovery	QC Limits
S1 - Dibromofluoromethane	100	74 123
S2 - Toluene-d8	99	86 112
4-Bromofluorobenzene	95	81 115
1,2-Dichloroethane-d4	109	80 120

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000014

604 138

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

CLIENT SAMPLE NO.

0008-634-4

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0008-634

Matrix: (soil/water) WATER

Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML

Lab File ID: 2501033

Level: (low/med) LOW

Date Received: _____

% Moisture: not dec. _____

Date Analyzed: 09/06/00

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 I VOA-GCMS-TIC

000015

ENVIRONMENTAL TESTING & CONSULTING, INC.

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

604 139

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

Site ID Memphis DDMT
 Dunn Field

FID #

Date Arrived 08/24/00
 ETC Order Number 0008634

ETC Lab ID 0008634-05
 Field ID : MW-40-Y2Q3

Matrix : AQUEOUS
 Sample Date : 08/23/00

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
GC/MS Volatile Organics				09/06/00	EM	8260B 5030B
QC Batch	V4090502					
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			
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			
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	99	74 123
S2 - Toluene-d8	99	86 112
4-Bromofluorobenzene	94	81 115
1,2-Dichloroethane-d4	106	80 120

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000016

604 140

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

CLIENT SAMPLE NO.

0008-634-5

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0008-634

Matrix: (soil/water) WATER

Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML

Lab File ID: 2601034

Level: (low/med) LOW

Date Received: _____

% Moisture: not dec. _____

Date Analyzed: 09/06/00

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 I VOA-GCMS-TIC

000017

ENVIRONMENTAL TESTING & CONSULTING, INC.

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

604 141

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

Site ID **Memphis DDMT**
Dunn Field
FID #

Date Arrived **08/24/00**
ETC Order Number **0008634**

ETC Lab ID **0008634-06**
Field ID : **MW-31-Y2Q3**

Matrix : **AQUEOUS**
Sample Date : **08/23/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
GC/MS Volatile Organics				09/06/00	EM	8260B 5030B
QC Batch	V4090502					
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	0.40J	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	18.9	ug/L	1.00			
1,2-Dichloroethane	9.58	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	2.08	ug/L	1.00			
Toluene	ND	ug/L	1.00			
1,1,1-Trichloroethane	0.42J	ug/L	1.00			
1,1,2-Trichloroethane	ND	ug/L	1.00			
Trichloroethene	68.1	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	12.3	ug/L	1.00			

Surrogate Standard	% Recovery	QC Limits
S1 - Dibromofluoromethane	95	74 123
S2 - Toluene-d8	98	86 112
4-Bromofluorobenzene	93	81 115
1,2-Dichloroethane-d4	103	80 120

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000018

604 142

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

CLIENT SAMPLE NO.

0008-634-6

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0008-634

Matrix: (soil/water) WATER

Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML

Lab File ID: 2701035

Level: (low/med) LOW

Date Received: -

% Moisture: not dec. _____

Date Analyzed: 09/06/00

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 I VOA-GCMS-TIC

000019

ENVIRONMENTAL TESTING & CONSULTING, INC.

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

604 143

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

Site ID **Memphis DDMT**
Dunn Field
FID #

Date Arrived **08/24/00**
ETC Order Number **0008634**

ETC Lab ID **0008634-07**
Field ID : **MW-71-Y2Q3**

Matrix : **AQUEOUS**
Sample Date : **08/23/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
GC/MS Volatile Organics				09/06/00	EM	8260B 5030B
QC Batch	V4090502					
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	32.9	ug/L	1.00			
Chlorobenzene	ND	ug/L	1.00			
Chlorodibromomethane	ND	ug/L	1.00			
Chloroethane	ND	ug/L	1.00			
Chloroform	831E	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			
1,1,1-Trichloroethane	ND	ug/L	1.00			
trans-1,2-Dichloroethene	2.94	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	168	ug/L	1.00			
Tetrachloroethene	7.02	ug/L	1.00			
Toluene	ND	ug/L	1.00			
1,1,1-Trichloroethane	ND	ug/L	1.00			
1,1,2-Trichloroethane	4.04	ug/L	1.00			
Trichloroethene	224E	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	8.94	ug/L	1.00			

Surrogate Standard	% Recovery	QC Limits
S1 - Dibromofluoromethane	97	74 123
S2 - Toluene-d8	99	86 112
S3 - 4-Bromofluorobenzene	91	81 115
1,2-Dichloroethane-d4	107	80 120

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000020

604 144

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

CLIENT SAMPLE NO.

0008-634-7

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0008-634

Matrix: (soil/water) WATER

Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML

Lab File ID: 2801036

Level: (low/med) LOW

Date Received: _____

% Moisture: not dec. _____

Date Analyzed: 09/06/00

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 I VOA-GCMS-TIC

000021

ENVIRONMENTAL TESTING & CONSULTING, INC.

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

604 145

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

Site ID Memphis DDMT
 Dunn Field
 FID #

Date Arrived 08/24/00
 ETC Order Number 0008634

ETC Lab ID 0008634-07
 Field ID : MW-71-Y2Q3-DIL

Matrix : AQUEOUS
 Sample Date : 08/23/00

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
GC/MS Volatile Organics				09/06/00	EM	8260B 5030B
QC Batch	V4090601					
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			
Carbon Disulfide	ND	ug/L	10.0			
Carbon Tetrachloride	31.8	ug/L	10.0			
Chlorobenzene	ND	ug/L	10.0			
Chlorodibromomethane	ND	ug/L	10.0			
Chloroethane	ND	ug/L	10.0			
Chloroform	989	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			
2-Butanone (MEK)	ND	ug/L	200			
Methylene Chloride	ND	ug/L	50.0			
Styrene	ND	ug/L	10.0			
1,1,2,2-Tetrachloroethane	142	ug/L	10.0			
Tetrachloroethene	7.82J	ug/L	10.0			
Toluene	ND	ug/L	10.0			
1,1,1-Trichloroethane	ND	ug/L	10.0			
1,1,2-Trichloroethane	3.79J	ug/L	10.0			
Trichloroethene	247	ug/L	10.0			
Vinyl Acetate	ND	ug/L	200			
Vinyl Chloride	ND	ug/L	10.0			
o-Xylenes	ND	ug/L	10.0			
m-Xylenes	ND	ug/L	10.0			
p-Xylenes	ND	ug/L	10.0			
cis-1,2-Dichloroethene	9.53J	ug/L	10.0			

Surrogate Standard	% Recovery	QC Limits
S1 - Dibromofluoromethane	99	74 123
S2 - Toluene-d8	101	86 112
4-Bromofluorobenzene	94	81 115
1,2-Dichloroethane-d4	108	80 120

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000022

604 146

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

CLIENT SAMPLE NO.

0008-634-7

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0008-634

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: 09/06/00

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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FORM I VOA-GCMS-TIC

000023

ENVIRONMENTAL TESTING & CONSULTING, INC.

604 147

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 DDMT
Dunn Field

FID #

Date Arrived 08/24/00
ETC Order Number 0008634

ETC Lab ID 0008634-08
Field ID : RW-1A-Y2Q3

Matrix : AQUEOUS
Sample Date : 08/23/00

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
GC/MS Volatile Organics				09/06/00	EM	8260B 5030B
QC Batch	V4090502					
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	9.47	ug/L	1.00			
Chlorobenzene	ND	ug/L	1.00			
Chlorodibromomethane	ND	ug/L	1.00			
Chloroethane	ND	ug/L	1.00			
Chloroform	284E	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	0.96J	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	35.3	ug/L	1.00			
Tetrachloroethene	2.20	ug/L	1.00			
Toluene	ND	ug/L	1.00			
1,1,1-Trichloroethane	ND	ug/L	1.00			
1,1,2-Trichloroethane	1.08	ug/L	1.00			
Trichloroethene	73.9	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	2.75	ug/L	1.00			

Surrogate Standard	% Recovery	QC Limits
S1 - Dibromofluoromethane	98	74 123
S2 - Toluene-d8	101	86 112
4-Bromofluorobenzene	94	81 115
1,2-Dichloroethane-d4	107	80 120

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000024

604 148

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

CLIENT SAMPLE NO.

0008-634-8

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0008-634

Matrix: (soil/water) WATER

Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML

Lab File ID: 2901037

Level: (low/med) LOW

Date Received: _____

% Moisture: not dec. _____

Date Analyzed: 09/06/00

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 I VOA-GCMS-TIC

000025

ENVIRONMENTAL TESTING & CONSULTING, INC. 604 149

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 DDMT**
Dunn Field
 FID #

Date Arrived **08/24/00**
 ETC Order Number **0008634**

ETC Lab ID **0008634-08**
 Field ID : **RW-1A-Y2Q3-DIL**

Matrix : **AQUEOUS**
 Sample Date : **08/23/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
GC/MS Volatile Organics				09/06/00	EM	8260B 5030B
QC Batch	V4090601					
Dilution Factor	5					
Acetone	ND	ug/L	100			
Benzene	ND	ug/L	5.00			
Bromodichloromethane	ND	ug/L	5.00			
Bromoform	ND	ug/L	5.00			
Bromomethane	ND	ug/L	5.00			
Carbon Disulfide	ND	ug/L	5.00			
Carbon Tetrachloride	8.88	ug/L	5.00			
Chlorobenzene	ND	ug/L	5.00			
Chlorodibromomethane	ND	ug/L	5.00			
Chloroethane	ND	ug/L	5.00			
Chloroform	292	ug/L	5.00			
Chloromethane	ND	ug/L	5.00			
1,1-Dichloroethane	ND	ug/L	5.00			
1,2-Dichloroethane	ND	ug/L	5.00			
1,1-Dichloroethene	ND	ug/L	5.00			
trans-1,2-Dichloroethene	ND	ug/L	5.00			
1,2-Dichloropropane	ND	ug/L	5.00			
cis-1,3-Dichloropropene	ND	ug/L	5.00			
trans-1,3-Dichloropropene	ND	ug/L	5.00			
Ethylbenzene	ND	ug/L	5.00			
2-Hexanone (MBK)	ND	ug/L	25.0			
4-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0			
2-Butanone (MEK)	ND	ug/L	100			
Methylene Chloride	ND	ug/L	25.0			
Styrene	ND	ug/L	5.00			
1,1,2,2-Tetrachloroethane	14.9	ug/L	5.00			
Tetrachloroethene	2.34J	ug/L	5.00			
Toluene	ND	ug/L	5.00			
1,1,1-Trichloroethane	ND	ug/L	5.00			
1,1,2-Trichloroethane	ND	ug/L	5.00			
Trichloroethene	73.8	ug/L	5.00			
Vinyl Acetate	ND	ug/L	100			
Vinyl Chloride	ND	ug/L	5.00			
o-Xylenes	ND	ug/L	5.00			
m-Xylenes	ND	ug/L	5.00			
p-Xylenes	ND	ug/L	5.00			
cis-1,2-Dichloroethene	2.35J	ug/L	5.00			

Surrogate Standard	% Recovery	QC Limits
S1 - Dibromofluoromethane	96	74 123
S2 - Toluene-d8	102	86 112
4-Bromofluorobenzene	92	81 115
1,2-Dichloroethane-d4	104	80 120

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000026

604 150

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

CLIENT SAMPLE NO.

0008-634-8

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0008-634

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: 09/06/00

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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FORM I VOA-GCMS-TIC

000027

ENVIRONMENTAL TESTING & CONSULTING, INC.

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

604 151

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

Site ID Memphis DDMT
Dunn Field
FID #

Date Arrived 08/24/00
ETC Order Number 0008634

ETC Lab ID 0008634-09
Field ID : MW-68-Y2Q3

Matrix : AQUEOUS
Sample Date : 08/23/00

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
GC/MS Volatile Organics				09/06/00	EM	8260B 5030B
QC Batch	V4090502					
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			
Chloroform	ND	ug/L	1.00			
Chloromethane	1.81	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	9.36	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	6.55	ug/L	1.00			
Tetrachloroethene	8.35	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	48.9	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	31.0	ug/L	1.00			

Surrogate Standard	% Recovery	QC Limits
S1 - Dibromofluoromethane	98	74 123
S2 - Toluene-d8	102	86 112
4-Bromofluorobenzene	94	81 115
1,2-Dichloroethane-d4	107	80 120

000028

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

604 152

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

CLIENT SAMPLE NO.

0008-634-9

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0008-634

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: 09/06/00

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 I VOA-GCMS-TIC

000029

ENVIRONMENTAL TESTING & CONSULTING, INC.

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

604 153

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

Site ID **Memphis DDMT**
Dunn Field
FID #

Date Arrived **08/24/00**
ETC Order Number **0008634**

ETC Lab ID **0008634-10**
Field ID : **RW-01-Y2Q3**

Matrix : **AQUEOUS**
Sample Date : **08/23/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
GC/MS Volatile Organics				09/06/00	EM	8260B 5030B
QC Batch	V4090502					
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	41.5	ug/L	1.00			
Chlorobenzene	ND	ug/L	1.00			
Chlorodibromomethane	ND	ug/L	1.00			
Chloroethane	ND	ug/L	1.00			
Chloroform	15.5	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	0.80J	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	3.99	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	40.2	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	98	74 123
S2 - Toluene-d8	102	86 112
4-Bromofluorobenzene	88	81 115
1,2-Dichloroethane-d4	107	80 120

000030

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

Environmental Testing & Consulting, Inc.

Login
Chain-of-Custody

000054

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 : 0008634

Company Name JACOBS/SVERDRUP		Phone # : 615 355-6437		Fax Results RUSH		Analysis Requested (Note special detection limits or methods)	
Project/Site Memphis DDMT Dunn Field		FID # :		RUSH			
Project # CSX51101		PO # :		Ice			
Project Manager/Contact KRAIG SMITH		Matrix		4 Sludge			
		1 Wastewater		5 Oil/Solvent			
		2 Aqueous		6 Other			
		3 Soil/Sediment					
# of cont	Sample ID/Number	Depth	Sample Date	Sample Time	Matrix	Type Grab/Comp	Comments
3	TRIP BLANK		8-23		Water Grab		
3	RW-2-Y2Q3		11	1145	11	11	
3	RW-B		11	1145	11	11	
3	RW-1B-Y2Q3		11	1115	11	11	
3	MW-40-Y2Q3		11	1415	11	11	
3	MW-31-Y2Q3		11	1630	11	11	
4	MW-71-Y2Q3		11	1530	11	11	
3	RW-1A-Y2Q3		11	1015	11	11	
3	MW-68-Y2Q3		11	1500	11	11	
3	RW-01-Y2Q3		11	0930	11	11	
Sampled By KRAIG SMITH		Method of Shipment Pers. Delivery		Blank/Cooler Temp 24°C		Remarks	
RELINQUISHED BY (sign) Kraig Smith		DATE 8-24		TIME 0800		RECEIVED BY (sign)	
RELINQUISHED BY (sign)		DATE		TIME		RECEIVED BY (sign)	
RELINQUISHED BY (sign)		DATE		TIME		RECEIVED BY LAB (print/sign)	
						DATE 8-24	
						TIME 0800	

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:\QAC\ISLOPCOC0986.XLS

604 155

Environmental Testing & Consulting, Inc.
Cooler Receipt Form

Date Received 8/24/00
Date/Time Checked In 8/24/00-08:00
Carrier/Bill# Hand-Delivered

LIMS# 0008-634
Project Memphis DDMT
Dunn Field
By RBane

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)	OK
5. Ice & Packing-Bags, Bubble Wrap, Ice	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 ₂ O) 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)

000055



ENVIRONMENTAL TESTING & CONSULTING, INC.
2924 Walnut Grove Road • Memphis, TN 38111 • (901) 327-2750 • FAX (901) 327-6334

Founded 1972

September 14, 2000

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

SVERDRUP
SEP 18 2000
RECEIVED

Ref: Analytical Testing
ETC Order # 0008674
Project Description Memphis DDMT
Dunn Field
Project Number C5X51101

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,

A handwritten signature in cursive script, appearing to read 'Chet Scheibel', is written over the typed name.

Chet Scheibel
Laboratory Project Manager

rt
Attachment

SVE_MHDDMT

Certifications

Tennessee #TN02027
Arkansas #40730
Kentucky #90047
North Carolina #415
South Carolina #84002002

Mississippi
Oklahoma #9311
Virginia #00106
Washington #C248
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
GC/MS VOLATILE COMPOUNDS - AQUEOUS

Client Name Sverdrup/Jacobs Engineering
Project Name Memphis Defense Depot
ETC Order# 0008-674
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, except as listed below

<u>ETC Sample ID</u>	<u>Client Sample ID</u>
0008-674-01	MW-70-Y2Q3 DIL
0008-674-02	MW-B DIL
0008-674-04	MW-14-Y2Q3 RE
0008-674-15	RW-04-Y2Q3 DIL

These samples were analyzed one day out of the 14-day holding time. Per EPA protocol, the time out of holding time should be utilized for qualification of the data. The samples analyzed out of holding time were dilutions and a re-analysis. One day out of holding time would not affect the sample results

QUALITY CONTROL

<u>QC Batch</u>	<u>Form 4 Summary</u>
V2090701	V2090711LB
V1090701	V1090711LB
V1090801	V1090811LB
V2090801	V2090811LB

System Monitoring Compounds FORM 2

Surrogate recoveries within QC limits, except as listed below.

Surrogate Toluene-d8 was flagged for slightly high recovery in V1090711LCS and V1090711LB. There is no effect on the data.

Method Blank FORM 4

V2090711LB
V1090711LB
V2090811LB
V0090811LB

Target Analytes were not detected in the Method Blanks.

Laboratory Control Sample FORM 3

V2090711LCS
V1090711LCS
V2090811LCS
V1090811LCS

All acceptance criteria met, except as listed below.

CASE NARRATIVE
GC/MS VOLATILE COMPOUNDS - AQUEOUS

Client Name Sverdrup/Jacobs Engineering
Project Name Memphis Defense Depot
ETC Order# 0008-674
Method (SW-846) 8260B/5030B

QUALITY CONTROL

V2090711LCS

Furan, a non-target analytes, was flagged for high recovery in the LCS. There is no effect on the data.

V1090711LCS

Acetone and Pentachloroethane (non-target analyte) were flagged for high recovery in the LCS. Acetone was not detected in associated samples. There is no effect on the data.

V2090811LCS

Furan, a non-target analytes, was flagged for high recovery in the LCS. There is no effect on the data.

Matrix Spike / Matrix Spike Dup FORM 3

Batch V2090701

0008-674-08	RPD	All analytes within QC limits.
RW-03-Y2Q3	Spike Recovery	All analytes within QC limits.

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

Matrix Spike / Matrix Spike Dup FORM 3

Batch V1090701

0008-674-18	RPD	All analytes within QC limits.
RW-05-Y2Q3	Spike Recovery	All analytes within QC limits, except as listed below.

Trichloroethene was flagged for low recovery in the MS/MSD indicating a matrix interference. Sample results may be biased slightly low.

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

Matrix Spike / Matrix Spike Dup FORM 3

Batch V2090801

0008-754-05	RPD	All analytes within QC limits.
	Spike Recovery	All analytes within QC limits.

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

Matrix Spike / Matrix Spike Dup FORM 3

Batch V1090801

0008-731-04	RPD	All analytes within QC limits.
	Spike Recovery	All analytes within QC limits, except as listed below.

ENVIRONMENTAL TESTING AND CONSULTING, INC.

CASE NARRATIVE

GC/MS VOLATILE COMPOUNDS - AQUEOUS

Client Name Sverdrup/Jacobs Engineering
Project Name Memphis Defense Depot
ETC Order# 0008-674
Method (SW-846) 8260B/5030B

QUALITY CONTROL

1,1-Dichloroethene was flagged for high 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.

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

Calibration Verification (CV): Date 09/07/00 Time: 1254

Analyte	%Diff(30% Max)	Response
Acetone	+53.2	High

Samples affected by this CV include V1090711LB, V1090711LCS, 0008-674-18MS/MSD, 0008-674-10 through 0008-674-18. 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.

Calibration Verification (CV): Date 09/08/00 Time: 1101

Analyte	%Diff(30% Max)	Response
Vinyl Acetate	+34.4	High

Samples affected by this CV include V1090811LB, V1090811LCS, 0008-731-04MS/MSD, 0008-674-15DIL. 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, except as listed below.

Dilutions were performed on three samples to bring Target Analyte(s) within calibration range as shown on the Sample Report Forms.

ENVIRONMENTAL TESTING AND CONSULTING, INC.

CASE NARRATIVE

604 162

GC/MS VOLATILE COMPOUNDS - AQUEOUS

Client Name Sverdrup/Jacobs Engineering
Project Name Memphis Defense Depot
ETC Order# 0008-674
Method (SW-846) 8260B/5030B

OTHER

Sample 0008-754-05MSD was analyzed outside the 12-hour tune time. There is no effect on the data.

Sample 0008-674-04 (MW-14-Y2Q3) was re-analyzed on 9/08/00 since analytes detected were suspected to be carry-over analytes from 0008-674-03 (MW-B). MW-B contained high levels of some target analytes.



Project Manager

000005

604 163

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 DDMT
Dunn Field

ETC Order #0008674
C5X51101

<u>ETC Sample ID</u>	<u>Field ID</u>	<u>Matrix</u>	<u>Method</u>	<u>Method Description</u>
000867401	MW-70-Y2Q3	AQUEOUS	8260B	GC/MS Volatile Organics
000867402	MW-69-Y2Q3	AQUEOUS	8260B	GC/MS Volatile Organics
000867403	MW-B	AQUEOUS	8260B	GC/MS Volatile Organics
000867404	MW-14-Y2Q3	AQUEOUS	8260B	GC/MS Volatile Organics
000867405	FB	AQUEOUS	8260B	GC/MS Volatile Organics
000867406	MW-32-Y2Q3	AQUEOUS	8260B	GC/MS Volatile Organics
000867407	MW-34-Y2Q3	AQUEOUS	8260B	GC/MS Volatile Organics
000867408	RW-03-Y2Q3	AQUEOUS	8260B	GC/MS Volatile Organics
000867409	TB	AQUEOUS	8260B	GC/MS Volatile Organics
000867410	MW-44-Y2Q3	AQUEOUS	8260B	GC/MS Volatile Organics
000867411	RW-09-Y2Q3	AQUEOUS	8260B	GC/MS Volatile Organics
000867412	ERB	AQUEOUS	8260B	GC/MS Volatile Organics
000867413	RW-07-Y2Q3	AQUEOUS	8260B	GC/MS Volatile Organics
000867414	MW-51-Y2Q3	AQUEOUS	8260B	GC/MS Volatile Organics
000867415	RW-04-Y2Q3	AQUEOUS	8260B	GC/MS Volatile Organics
000867416	RW-08-Y2Q3	AQUEOUS	8260B	GC/MS Volatile Organics
000867417	RW-06-Y2Q3	AQUEOUS	8260B	GC/MS Volatile Organics
000867418	RW-05-Y2Q3	AQUEOUS	8260B	GC/MS Volatile Organics

CS 6/25/00

Environmental Testing & Consulting, Inc.

Sample Reports

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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 DDMT**
Dunn Field
 FID #

Date Arrived **08/25/00**
 ETC Order Number **0008674**

ETC Lab ID **0008674-01**
 Field ID : **MW-70-Y2Q3**

Matrix : **AQUEOUS**
 Sample Date : **08/24/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
GC/MS Volatile Organics				09/07/00	LS	8260B 5030B
QC Batch	V2090701					
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	2.46	ug/L	1.00			
Chlorobenzene	ND	ug/L	1.00			
Chlorodibromomethane	ND	ug/L	1.00			
Chloroethane	ND	ug/L	1.00			
Chloroform	8.46	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	50.4	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	1,040E	ug/L	1.00			
Tetrachloroethene	35.8	ug/L	1.00			
Toluene	ND	ug/L	1.00			
1,1,1-Trichloroethane	ND	ug/L	1.00			
1,1,2-Trichloroethane	15.2	ug/L	1.00			
Trichloroethene	1,120E	ug/L	1.00			
Vinyl Acetate	ND	ug/L	20.0			
Vinyl Chloride	0.62J	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	218E	ug/L	1.00			

Surrogate Standard	% Recovery	QC Limits
S1 - Dibromofluoromethane	100	74 123
S2 - Toluene-d8	98	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

000008

604 166

FORM 1

CLIENT SAMPLE NO.

VOA-GCMS ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

0008-674-1

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0008-674

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: 09/07/00

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 I VOA-GCMS-TIC

000009

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 DDMT**
Dunn Field
 FID #

Date Arrived **08/25/00**
 ETC Order Number **0008674**

ETC Lab ID **0008674-01**
 Field ID : **MW-70-Y2Q3-DIL**

Matrix : **AQUEOUS**
 Sample Date : **08/24/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
GC/MS Volatile Organics				09/08/00	LS	8260B 5030B
QC Batch	V2090801					
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			
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			
Chloromethane	ND	ug/L	100			
1,1-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			
2-Butanone (MEK)	ND	ug/L	2000			
Methylene Chloride	ND	ug/L	500			
Styrene	ND	ug/L	100			
1,1,2,2-Tetrachloroethane	930	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	4,240	ug/L	100			
Vinyl Acetate	ND	ug/L	2000			
Vinyl Chloride	ND	ug/L	100			
o-Xylenes	ND	ug/L	100			
m-Xylenes	ND	ug/L	100			
p-Xylenes	ND	ug/L	100			
cis-1,2-Dichloroethene	211	ug/L	100			

Surrogate Standard	% Recovery	QC Limits
S1 - Dibromofluoromethane	101	74 123
S2 - Toluene-d8	100	86 112
S3 - 4-Bromofluorobenzene	105	81 115
S4 - 1,2-Dichloroethane-d4	106	80 120

CD>
 Data Validator ND - Not Detected

Q - Recovery Outside QC Limits

000010

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

604 168

CLIENT SAMPLE NO.

0008-674-1

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0008-674

Matrix: (soil/water) WATER

Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML

Lab File ID: 0601005

Level: (low/med) LOW

Date Received: _____

% Moisture: not dec. _____

Date Analyzed: 09/08/00

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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FORM I VOA-GCMS-TIC

000011

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 DDMT**
Dunn Field
 FID #

Date Arrived **08/25/00**
 ETC Order Number **0008674**

ETC Lab ID **0008674-02**
 Field ID : **MW-69-Y2Q3**

Matrix : **AQUEOUS**
 Sample Date : **08/24/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
GC/MS Volatile Organics				09/07/00	LS	8260B 5030B
QC Batch	V2090701					
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			
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	0.86J	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	4.36	ug/L	1.00			
Tetrachloroethene	0.68J	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	50.4	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	2.26	ug/L	1.00			

Surrogate Standard	% Recovery	QC Limits
S1 - Dibromofluoromethane	97	74 123
S2 - Toluene-d8	100	86 112
S3 - 4-Bromofluorobenzene	102	81 115
S4 - 1,2-Dichloroethane-d4	97	80 120

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

604 170

CLIENT SAMPLE NO.

0008-674-2

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0008-674

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: 09/07/00

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 I VOA-GCMS-TIC

000013

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 DDMT**
Dunn Field
 FID #

Date Arrived **08/25/00**
 ETC Order Number **0008674**

ETC Lab ID **0008674-03**
 Field ID : **MW-B**

Matrix : **AQUEOUS**
 Sample Date : **08/24/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
GC/MS Volatile Organics				09/07/00	LS	8260B 5030B
QC Batch	V2090701					
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	2.25	ug/L	1.00			
Chlorobenzene	ND	ug/L	1.00			
Chlorodibromomethane	ND	ug/L	1.00			
Chloroethane	ND	ug/L	1.00			
Chloroform	8.09	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	46.8	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	1,010E	ug/L	1.00			
Tetrachloroethene	33.7	ug/L	1.00			
Toluene	ND	ug/L	1.00			
1,1,1-Trichloroethane	ND	ug/L	1.00			
1,1,2-Trichloroethane	14.8	ug/L	1.00			
Trichloroethene	1,080E	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	202E	ug/L	1.00			

Surrogate Standard	% Recovery	QC Limits
S1 - Dibromofluoromethane	100	74 123
S2 - Toluene-d8	98	86 112
S3 - 4-Bromofluorobenzene	100	81 115
S4 - 1,2-Dichloroethane-d4	102	80 120

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

604 172

CLIENT SAMPLE NO.

0008-674-3

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0008-674

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: 09/07/00

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 I VOA-GCMS-TIC

000015

604 173 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 DDMT**
Dunn Field
 FID #

Date Arrived **08/25/00**
 ETC Order Number **0008674**

ETC Lab ID **0008674-03**
 Field ID : **MW-B-DIL**

Matrix : **AQUEOUS**
 Sample Date : **08/24/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
GC/MS Volatile Organics				09/08/00	LS	8260B 5030B
QC Batch	V2090801					
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			
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			
Chloromethane	ND	ug/L	100			
1,1-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			
2-Butanone (MEK)	ND	ug/L	2000			
Methylene Chloride	ND	ug/L	500			
Styrene	ND	ug/L	100			
1,1,2,2-Tetrachloroethane	807	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	3,620	ug/L	100			
Vinyl Acetate	ND	ug/L	2000			
Vinyl Chloride	ND	ug/L	100			
o-Xylenes	ND	ug/L	100			
m-Xylenes	ND	ug/L	100			
p-Xylenes	ND	ug/L	100			
cis-1,2-Dichloroethene	168	ug/L	100			

Surrogate Standard	% Recovery	QC Limits
S1 - Dibromofluoromethane	97	74 123
S2 - Toluene-d8	99	86 112
S3 - 4-Bromofluorobenzene	103	81 115
S4 - 1,2-Dichloroethane-d4	102	80 120

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000016

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

604 174 CLIENT SAMPLE NO.

0008-674-3

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0008-674

Matrix: (soil/water) WATER

Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML

Lab File ID: 0701006

Level: (low/med) LOW

Date Received: -

% Moisture: not dec. _____

Date Analyzed: 09/08/00

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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FORM I VOA-GCMS-TIC

000017

604 175 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 DDMT
Dunn Field
FID #

Date Arrived 08/25/00
ETC Order Number 0008674

ETC Lab ID 0008674-04
Field ID : MW-14-Y2Q3

Matrix : AQUEOUS
Sample Date : 08/24/00

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
GC/MS Volatile Organics				09/07/00	LS	8260B 5030B
QC Batch	V2090701					
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			
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			
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	2.50	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	4.77	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
S2 - Toluene-d8	96	86 112
S3 - 4-Bromofluorobenzene	102	81 115
S4 - 1,2-Dichloroethane-d4	98	80 120

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000018

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

604 176

CLIENT SAMPLE NO.

0008-674-4

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0008-674

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: 09/07/00

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. _____	_____	_____	_____	_____

604 177

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 DDMT**
Dunn Field
 FID #

Date Arrived **08/25/00**
 ETC Order Number **0008674**

ETC Lab ID **0008674-04**
 Field ID : **MW-14-Y2Q3-RE**

Matrix : **AQUEOUS**Sample Date : **08/24/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
GC/MS Volatile Organics				09/08/00	LS	8260B 5030B
QC Batch	V2090801					
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			
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			
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
S2 - Toluene-d8	100	86 112
S3 - 4-Bromofluorobenzene	101	81 115
S4 - 1,2-Dichloroethane-d4	100	80 120

PDS

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000020

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

604 178 CLIENT SAMPLE NO.

0008-674-4

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0008-674

Matrix: (soil/water) WATER

Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML

Lab File ID: 0501004

Level: (low/med) LOW

Date Received: -

% Moisture: not dec. _____

Date Analyzed: 09/08/00

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 I VOA-GCMS-TIC

000021

604 179
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 DDMT**
Dunn Field
 FID #

Date Arrived **08/25/00**
 ETC Order Number **0008674**

ETC Lab ID **0008674-05**
 Field ID : **FB**

Matrix : **AQUEOUS**
 - Sample Date : **08/24/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
GC/MS Volatile Organics				09/07/00	LS	8260B 5030B
QC Batch	V2090701					
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			
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			
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
S2 - Toluene-d8	95	86	112
S3 - 4-Bromofluorobenzene	96	81	115
S4 - 1,2-Dichloroethane-d4	98	80	120

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000022

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

604 180 CLIENT SAMPLE NO.

0008-674-5

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0008-674

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: 09/07/00

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 I VOA-GCMS-TIC

000023

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 DDMT**
Dunn Field
 FID #

Date Arrived **08/25/00**
 ETC Order Number **0008674**

ETC Lab ID **0008674-06**
 Field ID : **MW-32-Y2Q3**

Matrix : **AQUEOUS**
 - Sample Date : **08/24/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
GC/MS Volatile Organics				09/07/00	LS	8260B 5030B
QC Batch	V2090701					
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	47.2	ug/L	1.00			
Chlorobenzene	ND	ug/L	1.00			
Chlorodibromomethane	ND	ug/L	1.00			
Chloroethane	ND	ug/L	1.00			
Chloroform	171	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	2.68	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	2.12	ug/L	1.00			
Tetrachloroethene	5.90	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	89.2	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	5.66	ug/L	1.00			

Surrogate Standard	% Recovery	QC Limits
S1 - Dibromofluoromethane	97	74 123
S2 - Toluene-d8	99	86 112
S3 - 4-Bromofluorobenzene	100	81 115
S4 - 1,2-Dichloroethane-d4	100	80 120

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

604 182 CLIENT SAMPLE NO.

0008-674-6

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0008-674

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: 09/07/00

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 I VOA-GCMS-TIC

000025

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 DDMT**
Dunn Field
 FID #

Date Arrived **08/25/00**
 ETC Order Number **0008674**

ETC Lab ID **0008674-07**
 Field ID : **MW-34-Y2Q3**

Matrix : **AQUEOUS**
 - Sample Date : **08/24/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
GC/MS Volatile Organics				09/07/00	LS	8260B 5030B
QC Batch	V2090701					
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	0.86J	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			
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	2.55	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	99	74 123
S2 - Toluene-d8	96	86 112
S3 - 4-Bromofluorobenzene	100	81 115
S4 - 1,2-Dichloroethane-d4	102	80 120

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000026

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

604 184

CLIENT SAMPLE NO.

0008-674-7

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0008-674

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: 09/07/00

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 I VOA-GCMS-TIC

000027

604 185
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 DDMT**
Dunn Field
 FID #

Date Arrived **08/25/00**
 ETC Order Number **0008674**

ETC Lab ID **0008674-08**
 Field ID : **RW-03-Y2Q3**

Matrix : **AQUEOUS**
 Sample Date : **08/24/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
GC/MS Volatile Organics				09/07/00	LS	8260B 5030B
QC Batch	V2090701					
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	13.8	ug/L	1.00			
Chlorobenzene	ND	ug/L	1.00			
Chlorodibromomethane	ND	ug/L	1.00			
Chloroethane	ND	ug/L	1.00			
Chloroform	4.77	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	4.78	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	59.6	ug/L	1.00			
Tetrachloroethene	0.84J	ug/L	1.00			
Toluene	ND	ug/L	1.00			
1,1,1-Trichloroethane	ND	ug/L	1.00			
1,1,2-Trichloroethane	2.39	ug/L	1.00			
Trichloroethene	57.4	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	70.8	ug/L	1.00			

Surrogate Standard	% Recovery	QC Limits
S1 - Dibromofluoromethane	99	74 123
S2 - Toluene-d8	101	86 112
S3 - 4-Bromofluorobenzene	100	81 115
S4 - 1,2-Dichloroethane-d4	102	80 120

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

604 186

CLIENT SAMPLE NO.

0008-674-8

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0008-674

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: 09/07/00

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 I VOA-GCMS-TIC

000029

Date Arrived 08/25/00
ETC Order Number 0008674

ETC Lab ID 0008674-09
TP

Matrix : AQUEOUS
08/24/00

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
S2 - Toluene-d8	98	86	112
S3 - 4-Bromofluorobenzene	99	81	115
S4 - 1,2-Dichloroethane-d4	95	80	120

Data Validator

005

ND - Not Detected

Q - Recovery Outside QC Limits

000030

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

604 188

CLIENT SAMPLE NO.

0008-674-9

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0008-674

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: 09/07/00

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 I VOA-GCMS-TIC

000031

604 189

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 DDMT**
Dunn Field
 FID #

Date Arrived **08/25/00**
 ETC Order Number **0008674**

ETC Lab ID **0008674-10**
 Field ID : **MW-44-Y2Q3**

Matrix : **AQUEOUS**
 Sample Date : **08/24/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
GC/MS Volatile Organics				09/07/00	LS	8260B 5030B
QC Batch	V1090701					
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	5.30	ug/L	1.00			
Chlorobenzene	ND	ug/L	1.00			
Chlorodibromomethane	ND	ug/L	1.00			
Chloroethane	ND	ug/L	1.00			
Chloroform	3.62	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			
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	4.92	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	1.35	ug/L	1.00			

Surrogate Standard	% Recovery	QC Limits
S1 - Dibromofluoromethane	91	74 123
S2 - Toluene-d8	110	86 112
S3 - 4-Bromofluorobenzene	106	81 115
S4 - 1,2-Dichloroethane-d4	98	80 120

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000032

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

604 190 CLIENT SAMPLE NO.

0008-674-10

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0008-674

Matrix: (soil/water) WATER

Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML

Lab File ID: 0401007

Level: (low/med) LOW

Date Received: _____

% Moisture: not dec. _____

Date Analyzed: 09/07/00

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 I VOA-GCMS-TIC

000033

604 191
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 DDMT**
Dunn Field
 FID #

Date Arrived **08/25/00**
 ETC Order Number **0008674**

ETC Lab ID **0008674-11**
 Field ID : **RW-09-Y2Q3**

Matrix : **AQUEOUS**
 Sample Date : **08/24/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
GC/MS Volatile Organics				09/07/00	LS	8260B 5030B
QC Batch	V1090701					
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	1.17	ug/L	1.00			
Chlorobenzene	ND	ug/L	1.00			
Chlorodibromomethane	ND	ug/L	1.00			
Chloroethane	ND	ug/L	1.00			
Chloroform	12.5	ug/L	1.00			
Chloromethane	ND	ug/L	1.00			
1,1-Dichloroethane	1.18	ug/L	1.00			
1,2-Dichloroethane	ND	ug/L	1.00			
1,1-Dichloroethene	45.4	ug/L	1.00			
trans-1,2-Dichloroethene	2.53	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			
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	2.55	ug/L	1.00			
Tetrachloroethene	32.9	ug/L	1.00			
Toluene	ND	ug/L	1.00			
1,1,1-Trichloroethane	1.25	ug/L	1.00			
1,1,2-Trichloroethane	ND	ug/L	1.00			
Trichloroethene	35.5	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	7.68	ug/L	1.00			

Surrogate Standard	% Recovery	QC Limits
S1 - Dibromofluoromethane	91	74 123
S2 - Toluene-d8	111	86 112
S3 - 4-Bromofluorobenzene	108	81 115
S4 - 1,2-Dichloroethane-d4	99	80 120

CD
 Data Validator ND - Not Detected

Q - Recovery Outside QC Limits

000034

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

604 192

CLIENT SAMPLE NO.

0008-674-11

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0008-674

Matrix: (soil/water) WATER

Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML

Lab File ID: 0501008

Level: (low/med) LOW

Date Received: -

% Moisture: not dec. _____

Date Analyzed: 09/07/00

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 I VOA-GCMS-TIC

000035

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 DDMT**
Dunn Field
 FID #

Date Arrived **08/25/00**
 ETC Order Number **0008674**

ETC Lab ID **0008674-12**
 Field ID : **ERB**

Matrix : **AQUEOUS**
 Sample Date : **08/24/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
GC/MS Volatile Organics				09/07/00	LS	8260B 5030B
QC Batch	V2090701					
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			
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			
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	99	74 123
S2 - Toluene-d8	95	86 112
S3 - 4-Bromofluorobenzene	98	81 115
S4 - 1,2-Dichloroethane-d4	97	80 120

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

604 194 CLIENT SAMPLE NO.

0008-674-12

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0008-674

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: 09/07/00

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 I VOA-GCMS-TIC

000037

604 195

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 DDMT**
Dunn Field
 FID #

Date Arrived **08/25/00**
 ETC Order Number **0008674**

ETC Lab ID **0008674-13**
 Field ID : **RW-07-Y2Q3**

Matrix : AQUEOUS

Sample Date : 08/24/00

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
GC/MS Volatile Organics				09/07/00	LS	8260B 5030B
QC Batch	V1090701					
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			
Chloroform	1.59	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	19.7	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	65.8	ug/L	1.00			
Tetrachloroethene	10.7	ug/L	1.00			
Toluene	ND	ug/L	1.00			
1,1,1-Trichloroethane	ND	ug/L	1.00			
1,1,2-Trichloroethane	1.44	ug/L	1.00			
Trichloroethene	98.9	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	70.6	ug/L	1.00			

Surrogate Standard	% Recovery	QC Limits
S1 - Dibromofluoromethane	89	74 123
S2 - Toluene-d8	109	86 112
S3 - 4-Bromofluorobenzene	106	81 115
S4 - 1,2-Dichloroethane-d4	97	80 120

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000038

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

604 196 CLIENT SAMPLE NO.

0008-674-13

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0008-674

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: 09/07/00

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 I VOA-GCMS-TIC

000039

604 197
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 DDMT**
Dunn Field
 FID #

Date Arrived **08/25/00**
 ETC Order Number **0008674**

ETC Lab ID **0008674-14**
 Field ID : **MW-51-Y2Q3**

Matrix : **AQUEOUS**
 - Sample Date : **08/24/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
GC/MS Volatile Organics				09/07/00	LS	8260B 5030B
QC Batch	V1090701					
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			
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	12.9	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			
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	1.49	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	6.33	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	90	74	123
S2 - Toluene-d8	109	86	112
S3 - 4-Bromofluorobenzene	104	81	115
S4 - 1,2-Dichloroethane-d4	101	80	120

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

604 198 CLIENT SAMPLE NO.

0008-674-14

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0008-674

Matrix: (soil/water) WATER

Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML

Lab File ID: 0701010

Level: (low/med) LOW

Date Received: -

% Moisture: not dec. _____

Date Analyzed: 09/07/00

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 I VOA-GCMS-TIC

000041

604 199
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 DDMT**
Dunn Field
 FID #

Date Arrived **08/25/00**
 ETC Order Number **0008674**

ETC Lab ID **0008674-15**
 Field ID : **RW-04-Y2Q3**

Matrix : **AQUEOUS**
 Sample Date : **08/24/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
GC/MS Volatile Organics				09/07/00	LS	8260B 5030B
QC Batch	V1090701					
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	5.83	ug/L	1.00			
Chlorobenzene	ND	ug/L	1.00			
Chlorodibromomethane	ND	ug/L	1.00			
Chloroethane	ND	ug/L	1.00			
Chloroform	2.82	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	4.72	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	20.2	ug/L	1.00			
Tetrachloroethene	5.14	ug/L	1.00			
Toluene	ND	ug/L	1.00			
1,1,1-Trichloroethane	ND	ug/L	1.00			
1,1,2-Trichloroethane	1.41	ug/L	1.00			
Trichloroethene	334E	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	29.6	ug/L	1.00			

Surrogate Standard	% Recovery	QC Limits
S1 - Dibromofluoromethane	95	74 123
S2 - Toluene-d8	106	86 112
S3 - 4-Bromofluorobenzene	103	81 115
S4 - 1,2-Dichloroethane-d4	100	80 120

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000042

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

604 200 CLIENT SAMPLE NO.

0008-674-15

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0008-674

Matrix: (soil/water) WATER

Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML

Lab File ID: 0801011

Level: (low/med) LOW

Date Received: _____

% Moisture: not dec. _____

Date Analyzed: 09/07/00

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 I VOA-GCMS-TIC

000043

604 201

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 DDMT**
Dunn Field
 FID #

Date Arrived **08/25/00**
 ETC Order Number **0008674**

ETC Lab ID **0008674-15**
 Field ID : **RW-04-Y2Q3-DIL**

Matrix : **AQUEOUS**
 Sample Date : **08/24/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
GC/MS Volatile Organics				09/08/00	LS	8260B 5030B
QC Batch	V1090801					
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			
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			
Chloroethane	ND	ug/L	10.0			
Chloroform	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	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			
2-Butanone (MEK)	ND	ug/L	200			
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	438	ug/L	10.0			
Vinyl Acetate	ND	ug/L	200			
Vinyl Chloride	ND	ug/L	10.0			
o-Xylenes	ND	ug/L	10.0			
m-Xylenes	ND	ug/L	10.0			
p-Xylenes	ND	ug/L	10.0			
cis-1,2-Dichloroethene	39.4	ug/L	10.0			

Surrogate Standard	% Recovery	QC Limits
S1 - Dibromofluoromethane	98	74 123
S2 - Toluene-d8	97	86 112
S3 - 4-Bromofluorobenzene	102	81 115
S4 - 1,2-Dichloroethane-d4	95	80 120

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000044

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

604 202

CLIENT SAMPLE NO.

0008-674-15

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0008-674

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: 09/08/00

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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FORM I VOA-GCMS-TIC

000045

604 203

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 DDMT
 Dunn Field

FID #

Date Arrived 08/25/00
 ETC Order Number 0008674

ETC Lab ID 0008674-16
 Field ID : RW-08-Y2Q3

Matrix : AQUEOUS

Sample Date : 08/24/00

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
GC/MS Volatile Organics				09/07/00	LS	8260B 5030B
QC Batch	V1090701					
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	0.94J	ug/L	1.00			
Chlorobenzene	ND	ug/L	1.00			
Chlorodibromomethane	ND	ug/L	1.00			
Chloroethane	ND	ug/L	1.00			
Chloroform	8.72	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	5.10	ug/L	1.00			
trans-1,2-Dichloroethene	39.7	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	109	ug/L	1.00			
Tetrachloroethene	5.66	ug/L	1.00			
Toluene	ND	ug/L	1.00			
1,1,1-Trichloroethane	ND	ug/L	1.00			
1,1,2-Trichloroethane	1.97	ug/L	1.00			
Trichloroethene	190	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	128	ug/L	1.00			

Surrogate Standard	% Recovery	QC Limits
S1 - Dibromofluoromethane	93	74 123
S2 - Toluene-d8	108	86 112
S3 - 4-Bromofluorobenzene	104	81 115
S4 - 1,2-Dichloroethane-d4	98	80 120

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Data Validator ND - Not Detected

Q - Recovery Outside QC Limits

000046

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

604 204 CLIENT SAMPLE NO.

0008-674-16

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0008-674

Matrix: (soil/water) WATER

Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML

Lab File ID: 0901012

Level: (low/med) LOW

Date Received: -

% Moisture: not dec. _____

Date Analyzed: 09/07/00

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 I VOA-GCMS-TIC

000047

604 205

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 DDMT**
Dunn Field
 FID #

Date Arrived **08/25/00**
 ETC Order Number **0008674**

ETC Lab ID **0008674-17**
 Field ID : **RW-06-Y2Q3**

Matrix : **AQUEOUS**
 Sample Date : **08/24/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
GC/MS Volatile Organics				09/07/00	LS	8260B 5030B
QC Batch	V1090701					
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			
Chloroform	1.98	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	2.28	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	5.90	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	34.0	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	5.96	ug/L	1.00			

Surrogate Standard	% Recovery	QC Limits
S1 - Dibromofluoromethane	92	74 123
S2 - Toluene-d8	107	86 112
S3 - 4-Bromofluorobenzene	106	81 115
S4 - 1,2-Dichloroethane-d4	91	80 120

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000048

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

604 206

CLIENT SAMPLE NO.

0008-674-17

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0008-674

Matrix: (soil/water) WATER

Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML

Lab File ID: 1001013

Level: (low/med) LOW

Date Received: _____

% Moisture: not dec. _____

Date Analyzed: 09/07/00

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 I VOA-GCMS-TIC

000049

604 207
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 DDMT**
Dunn Field
 FID #

Date Arrived **08/25/00**
 ETC Order Number **0008674**

ETC Lab ID **0008674-18**
 Field ID : **RW-05-Y2Q3**

Matrix : **AQUEOUS**
 Sample Date : **08/24/00**

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
GC/MS Volatile Organics				09/07/00	LS	8260B 5030B
QC Batch	V1090701					
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	2.65	ug/L	1.00			
Chlorobenzene	ND	ug/L	1.00			
Chlorodibromomethane	ND	ug/L	1.00			
Chloroethane	ND	ug/L	1.00			
Chloroform	1.29	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	2.28	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	167	ug/L	1.00			
Tetrachloroethene	1.45	ug/L	1.00			
Toluene	ND	ug/L	1.00			
1,1,1-Trichloroethane	ND	ug/L	1.00			
1,1,2-Trichloroethane	0.60J	ug/L	1.00			
Trichloroethene	132	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	17.9	ug/L	1.00			

Surrogate Standard	% Recovery	QC Limits
S1 - Dibromofluoromethane	90	74 123
S2 - Toluene-d8	101	86 112
S3 - 4-Bromofluorobenzene	101	81 115
S4 - 1,2-Dichloroethane-d4	90	80 120

Data Validator

ND - Not Detected

Q - Recovery Outside QC Limits

000050

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

604 208

CLIENT SAMPLE NO.

0008-674-18

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0008-674

Matrix: (soil/water) WATER

Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML

Lab File ID: 1101014

Level: (low/med) LOW

Date Received: _____

% Moisture: not dec. _____

Date Analyzed: 09/07/00

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

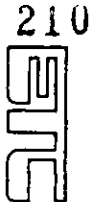
CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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FORM I VOA-GCMS-TIC

000051

Environmental Testing & Consulting, Inc.

Login
Chain-of-Custody



Environmental Testing & Consulting, Inc.
2924 Walnut Grove Rd.
Memphis, TN 38111
(901)327-2750 FAX (901)327-6334

CHAIN OF CUSTODY RECORD

ETC Work Order : 0008674

000096

Company Name SEARND		Phone # 615 305 6437		Fax Results		Analysis Requested (Note special detection limits or methods)														
Project/Site Memphis - DDMT Dunn Field		Fax # : 615 833-8728		RUSH																
Project # CSX57101		FID # : 2 Aqueous		Ice																
Project Manager/Contact KATHY SMITH		PO # :																		
Matrix		1 Wastewater		4 Sludge																
		2 Aqueous		5 Oil/Solvent																
3 Soil/Sediment		6 Other																		
# of cont.	Sample ID/ Number	Depth	Sample Date	Sample Time	Matrix	Type	Comments													
3	MW-70-Y2Q3		8-24	1215	GW	GRA3	X													
	MW-69-Y2Q3			1400			X													
	MW-B			1215			X													
	MW-14-Y2Q3			1045			X													
	FB			1547			X													
	MW-32-Y2Q3			1130			X													
	MW-34-Y2Q3			1000			X													
	RW-03-Y2Q3			1540			X													
	TB			0900			X													
	MW-44-Y2Q3			1530			X													
	RW-09-Y2Q3			1615			X													
Sampled By Kathy Smith		Method of Shipment Per. Delivery		Blank/Cooler Temp 41.00		Remarks														
RELINQUISHED BY (sign) Kathy Smith		DATE 8-25		TIME 0800		RECEIVED BY (sign)		DATE		TIME		Sample Delivery Group ID								
RELINQUISHED BY (sign)		DATE		TIME		RECEIVED BY (sign)		DATE		TIME										
RELINQUISHED BY (sign)		DATE		TIME		RECEIVED BY (sign)		DATE		TIME										
RELINQUISHED BY (sign)		DATE		TIME		RECEIVED BY (sign)		DATE		TIME										

APPENDIX C**MONTHLY EFFLUENT SAMPLES
ANALYTICAL LABORATORY DATA**



ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road • Memphis, TN 38111 • (901) 327-2750 • FAX (901) 327-6334

Founded 1972

July 6, 2000

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

Ref: Analytical Testing
ETC Order # 0006716
Project Description Memphis Depot Dunn Field
Project # Memphis Defense Depot

The above referenced project has been analyzed per your instructions. The analyses were performed in our laboratory in accordance with Standard Methods 17th/18th Edition; The Solid Waste Manual SW-846; EPA Methods for the 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,

A handwritten signature in cursive script, appearing to read 'C D Scheibel', is written over the typed name.

Chester D. Scheibel
Project Manager

rt
Attachment

SVE_MHDDMT

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)

CASE NARRATIVE
METALS - AQUEOUS

Client Name Sverdrup/Jacobs Engineering
Project Name Memphis Depot Dunn Field

ETC Order # 0006-716

HOLDING TIMES

QC Batch(s) for this order	ICP/GFAA V20-AQ-92
	Mercury V7-AQ-11
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
Varian 640Z Zeeman Graphite Furnace
Perkin Elmer 5100ZL Graphite Furnace
Perkin Elmer 6000 Graphite Furnace
Thermo Jarrell Ash AA-Scan 4 Graphite Furnace
CETAC M-6000A Mercury Analyzer

Dilutions Required No dilutions required.

QUALITY CONTROL

0006-716.MQCBLANK

Method Blank

V20-AQ-92BLK	ICP/GFAA Metals
V7-AQ-11BLK	Mercury

No analytes detected in the Method Blank

0006-716.MQCLCS

Laboratory Control Sample(s)

V20-AQ-92LCS	ICP/GFAA Metals
V7-AQ-11LCS	Mercury

All criteria met.

0006-716.MQCMSMSD

Matrix Spike / Matrix Spike Dup - ICP Metals

0006-716-01	RPD	All analytes within QC limits
ST-EFF-025	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 Dunn Field

ETC Order # 0006-716

QUALITY CONTROL

Matrix Spike / Matrix Spike Dup - Graphite Metals

0006-716-01	RPD	All analytes within QC limits.
ST-EFF-025	Spike Recovery	All analytes within QC limits, except as listed below.

Arsenic was flagged for slightly high recovery in the Matrix Spike. MSD recovery was within QC Limits.

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

Matrix Spike / Matrix Spike Dup - Hg

0006-716-01	RPD	All analytes within QC limits.
ST-EFF-025	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 +/-15% of expected value for GFAA.
Recovery must be +/-25% of expected value for ICP.

CPs
Project Manager

CASE NARRATIVE
GC/MS VOLATILE COMPOUNDS - AQUEOUS

Client Name Sverdrup/Jacobs Engineering
Project Name Memphis Depot Dunn Field

ETC Order # 0006-716
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
V2062601 V2062611LB

System Monitoring Compounds FORM 2
Surrogate recoveries within QC limits.

Surrogate 1,2-Dichloroethane-d4 was flagged for slightly high recovery in all field samples, V2062611LB, V2062611LCS, V2062612LCS, and 0006-716-01 MS/MSD. This surrogate has been recently added to the reports and the 80%-120% range are default limits until ETC can develop a laboratory acceptance range. The high recovery of this surrogate does not affect the data.

Method Blank FORM 4
V2062611LB

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

Methylene Chloride was detected at a concentration of 6.52 ug/L. This analyte was not identified in associated project samples. There is no effect on the data.

Laboratory Control Sample FORM 3
V2062611LCS
V2062612LCS

All acceptance criteria met, except as listed below.

Furan (non-target analyte), Methylene Chloride, and Trichlorotrifluoroethane (non-target analyte) were flagged for slightly high recovery in the LCS. The target analytes were not detected in the associated samples. There is no effect on the data.

Matrix Spike / Matrix Spike Dup. FORM 3
Batch V2062601

0006-716-01	RPD	All analytes within QC limits.
ST-EFF-025	Spike Recovery	All analytes within QC limits, except as listed below.

Chlorobenzene exceeded control limits in the MS/MSD. Toluene was flagged for slightly high recovery in the MS indicating matrix interferences. Sample results may be biased slightly high.

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

Client Name Sverdrup/Jacobs Engineering
Project Name Memphis Depot Dunn Field

ETC Order # 0006-716
Method (SW-846) 8260B/5030B

QUALITY CONTROL

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 06/26/00 Time. 1021

Analyte	%Diff(30% Max)	Response
Acrolein	-32.9	Low
2-Chloroethyl Vinyl Ether	-33.4	Low
Dichlorodifluoromethane	+41.5	High
Dibromofluoromethane	+35.4	High (Surrogate)

Samples affected by this CV include V2062611LB, V2062611LCS, V2062612LCS, 0006-716-01MS/MSD, and samples 0006-716-01, and 0006-716-02. High responses indicate that reported level for this analyte and surrogate may be biased high. These analytes were not identified in associated project samples. There is no effect on the data. The high response may account for the high recovery of surrogate 1,2-Dichloroethane-d4. Low response indicates that reported levels for these analytes may be biased low. These analytes were not identified in associated project samples. The LCS recoveries were within control limits. 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.

CDs
Project Manager

604 219

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

Client Name Sverdrup/Jacobs Engineering
Project Name Memphis Depot Dunn Field

ETC Order # 0006-716
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
P05348 P05348LB

System Monitoring Compounds FORM 2
Surrogate recoveries within QC limits.

Method Blank FORM 4
P05348LB

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

Bis (2-ethylhexyl) phthalate and Di-n-Butylphthalate were detected at concentrations of 1.44J ug/L and 0.379J ug/L, respectively. These analytes were not identified in associated project samples. There is no effect on the data.

Laboratory Control Sample FORM 3
P05348RLCS/RLCSD

All acceptance criteria met, except as listed below.

Benzo(b)fluoranthene, Benzo(k)fluoranthene, and 3,3'-Dimethylbenzidine were flagged for slightly high recovery in RLCS/RLCSD. Benzo(a)pyrene was flagged for high recovery in RLCS. RLCSD recovery was within control limits. These analytes were not detected in the associated samples. There is no effect on the data.

Matrix Spike / Matrix Spike Dup FORM 3
Batch P05348

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, except as listed below.

000006

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

Client Name Sverdrup/Jacobs Engineering
Project Name Memphis Depot Dunn Field

ETC Order # 0006-716
Method (SW-846) 8270C/3510C

CALIBRATION

Calibration Verification (CV): Date 06/27/00 Time 1647/1728

Analyte	%Diff(30% Max)	Response
Bis(2-Chloroisopropyl)ether	+32.1	High
Bis(2-ethylhexyl) phthalate	+41.6	High
Chlorobenzilate	+38.9	High
2,4-Dinitrophenol	+32.4	High
4-Nitroaniline	+43.1	High
4-Nitrophenol	+37.8	High
Pyrene	+32.1	High

Samples affected by this CV include P05348LB, P05348RLCS/RLCSD and 0006-716-01. High responses indicate that reported levels for these analytes may be biased high. These analytes were not identified in the associated field samples. The RLCS/RLCSD recoveries for these analytes were within control limits.

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.

OTHER

The initial LCS/LCSD were spiked with a full list spiking solution that had previously been determined to be defective. Approximately 45 of 83 compounds failed recovery limits in LCS/LCSD. There was not an adequate quantity of each sample to re-extract the Batch. Therefore, the laboratory extracted a second LCS/LCSD spike with a laboratory approved spiking solution. The re-extracted LCS/LCSD are presented with this report.



Project Manager

ENVIRONMENTAL TESTING & CONSULTING, INC.

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

604 221

ANALYTICAL SUMMARY TABLE

Client Name Sverdrup/Jacobs Eng.
Site ID Memphis Depot Dunn Field

<u>ETC</u> <u>Sample ID</u>	<u>Field ID</u>	<u>Matrix</u>	<u>Method</u>	<u>Method Description</u>
000671601	ST-EFF-025	AQUEOUS	200.7	Silver
000671601	ST-EFF-025	AQUEOUS	200.7	Aluminum
000671601	ST-EFF-025	AQUEOUS	206.2	Arsenic
000671601	ST-EFF-025	AQUEOUS	8270C	GC/MS Base/Neutral & Acid
000671601	ST-EFF-025	AQUEOUS	200.7	Barium
000671601	ST-EFF-025	AQUEOUS	200.7	Beryllium
000671601	ST-EFF-025	AQUEOUS	200.7	Calcium
000671601	ST-EFF-025	AQUEOUS	200.7	Cadmium
000671601	ST-EFF-025	AQUEOUS	200.7	Cobalt
000671601	ST-EFF-025	AQUEOUS	200.7	Chromium
000671601	ST-EFF-025	AQUEOUS	200.7	Copper
000671601	ST-EFF-025	AQUEOUS	200.7	Iron
000671601	ST-EFF-025	AQUEOUS	245.1	Mercury
000671601	ST-EFF-025	AQUEOUS	200.7	Potassium
000671601	ST-EFF-025	AQUEOUS	200.7	Magnesium
000671601	ST-EFF-025	AQUEOUS	200.7	Manganese
000671601	ST-EFF-025	AQUEOUS	200.7	Sodium
000671601	ST-EFF-025	AQUEOUS	200.7	Nickel
000671601	ST-EFF-025	AQUEOUS	200.7	Lead
000671601	ST-EFF-025	AQUEOUS	150.1	pH
000671601	ST-EFF-025	AQUEOUS	200.7	Antimony
000671601	ST-EFF-025	AQUEOUS	200.7	Selenium
000671601	ST-EFF-025	AQUEOUS	200.7	Thallium
000671601	ST-EFF-025	AQUEOUS	8260B	GC/MS Volatile Organics
000671601	ST-EFF-025	AQUEOUS	200.7	Vanadium
000671601	ST-EFF-025	AQUEOUS	200.7	Zinc
000671602	Trip Blank	AQUEOUS	8260B	GC/MS Volatile Organics

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Environmental Testing & Consulting, Inc.

Sample Reports

000009

ENVIRONMENTAL TESTING & CONSULTING, INC.

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

INORGANIC ANALYSIS DATA SHEET

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

Project #

Date Arrived 06/23/00
ETC Order Number 0006716

ETC Lab ID 0006716-01
Sample ID: ST-EFF-025

Matrix :AQUEOUS
Sample Date :06/23/00

TEST	RESULT	UNITS	DETECTION LIMIT	TIME ANALYZED	DATE ANALYZED BY	METHOD
pH	5.7	SU		1535	06/26/00 RB	150.1

CD
LABORATORY MANAGER

000010

604 224

ENVIRONMENTAL TESTING & CONSULTING, INC.

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

INORGANIC ANALYSIS DATA SHEET

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

Project #

Date Arrived 06/23/00
 ETC Order Number 0006716

ETC Lab ID 0006716-01
Sample ID: ST-EFF-025

Matrix :AQUEOUS
 Sample Date :06/23/00

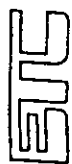
TEST	RESULT	UNITS	DETECTION LIMIT	TIME ANALYZED	DATE ANALYZED BY	METHOD
Mercury Digestion Batch	V7-AQ-11				06/26/00 SH	245.1
Metals Digestion Batch	V20-AQ-92				06/26/00 NR	3030K
Silver	<0.009	mg/L	0.009	1317	06/27/00 SH	200.7
Aluminum	<0.060	mg/L	0.060	1317	06/27/00 SH	200.7
Arsenic	<0.003	mg/L	0.003	0345	06/27/00 JF	206.2
Barium	0.109	mg/L	0.003	1317	06/27/00 SH	200.7
Beryllium	<0.002	mg/L	0.002	1317	06/27/00 SH	200.7
Calcium	21.8	mg/L	0.015	1317	06/27/00 SH	200.7
Cadmium	<0.005	mg/L	0.005	1317	06/27/00 SH	200.7
Cobalt	<0.009	mg/L	0.009	1317	06/27/00 SH	200.7
Chromium	<0.009	mg/L	0.009	1317	06/27/00 SH	200.7
Copper	<0.008	mg/L	0.008	1317	06/27/00 SH	200.7
Iron	0.094	mg/L	0.009	1317	06/27/00 SH	200.7
Mercury	<0.0002	mg/L	0.0002	1405	06/26/00 SH	245.1
Potassium	0.829	mg/L	0.250	1317	06/27/00 SH	200.7
Magnesium	11.4	mg/L	0.040	1317	06/27/00 SH	200.7
Manganese	0.014	mg/L	0.003	1317	06/27/00 SH	200.7
Sodium	22.0	mg/L	0.050	1317	06/27/00 SH	200.7
Nickel	<0.020	mg/L	0.020	1317	06/27/00 SH	200.7
Lead	<0.060	mg/L	0.060	1317	06/27/00 SH	200.7
Antimony	<0.040	mg/L	0.040	1317	06/27/00 SH	200.7
Selenium	<0.100	mg/L	0.100	1317	06/27/00 SH	200.7
Thallium	<0.065	mg/L	0.065	1317	06/27/00 SH	200.7
Vanadium	<0.010	mg/L	0.010	1317	06/27/00 SH	200.7
Zinc	0.040	mg/L	0.010	1317	06/27/00 SH	200.7

LABORATORY MANAGER

000011

Environmental Testing & Consulting, Inc.

Login
Chain-of-Custody



Environmental Testing & Consulting, Inc.
2924 Walnut Grove Rd.
Memphis, TN 38111
(901)327-2750 FAX (901)327-6334

CHAIN OF CUSTODY RECORD

ETC Work Order: 0006716

Company Name <u>SVERDRUP / JACOBS</u>		Phone #: <u>314-770-4025</u>		Fax Results <u>RUSH</u>		Analysis Requested (Note special detection limits or methods)											
Project/Site <u>MEMPHIS DEPOT, DUNN FIELD</u>		FID #:		Fax #: <u>314-770-5188</u>		Ice		VOCs 8220 D		SVCS 8270		TAL METALS 200		PH			
Project #		Matrix		PO #:		1 Wastewater		4 Sludge		5 Oil/Solvent		6 Other					
Project Manager/Contact		Sample ID/Number		Depth		Sample Date		Sample Time		Matrix		Type Grab/Comp					
11		ST-EFF-025				6-23-00		1220		Z		G		X		X	
3		TRIC BLANK								Z				X		X	
																pH 6.29	
																SPEC COND. 116.1	
																TEMP. 18.5	
																TURB 0.6 NTU	
Sampled By <u>T Campbell</u>		Method of Shipment		Blank/Cooler Temp <u>64003 ms/msd</u>		Remarks											
RELINQUISHED BY (sign) <u>T Campbell</u>		DATE <u>6-23-00</u>		TIME <u>1306</u>		RECEIVED BY (sign)		DATE <u>6-23-00</u>		TIME <u>1306</u>		DATE <u>6-23-00</u>		TIME <u>1306</u>		Sample Delivery Group ID	
RELINQUISHED BY (sign)		DATE		TIME		RECEIVED BY (sign)		DATE		TIME		DATE		TIME			
RELINQUISHED BY (sign)		DATE		TIME		RECEIVED BY (sign)		DATE		TIME		DATE		TIME			

Environmental Testing & Consulting, Inc.
Cooler Receipt Form

Date Received 6/23/00
Date/Time Checked In 6/23/00-1306 *
Carrier/Bill# Hand-Delivered

LIMS# 0006-716
Project Mphs Depot
Dunn Field
By *[Signature]*

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) < 40C	OK
5. Ice & Packing-Bags, Bubble Wrap, Ice	Yes
6. Chain of Custody filled out properly?	No
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 ₂ O) 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 _____
 _____MS/MSD not listed on chain of custody. _____

*Validated Date and Time of Sample Receipt (VDTSR)



ENVIRONMENTAL TESTING & CONSULTING, INC.
2924 Walnut Grove Road • Memphis, TN 38111 • (901) 327-2750 • FAX (901) 327-6334

Founded 1972

July 20, 2000

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

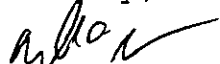
Ref: Analytical Testing
ETC Order # 0007278
Project Description Memphis Depot
Dunn Field

The above referenced project has been analyzed per your instructions. The analyses were performed in accordance with Standard Methods 17th/18th Edition; The Solid Waste Manual SW-846; EPA Methods for the 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
Arkansas
Alabama #40730
Kentucky #90047
North Carolina #415
South Carolina #84002002

Mississippi
Oklahoma #9311
Virginia #00106
Washington #C248
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)

604 230

Environmental Testing & Consulting, Inc.

Login
Chain-of-Custody

000002



Environmental Testing & Consulting, Inc.
1924 Walnut Grove Rd.
Memphis, TN 38111

FAX (901)327-6334
(901)327-2750

ETC Work Order : 00073278

[illegible]

000003

Distribution :

Original and Yellow accompany samples to the laboratory. Pink copy for Field
Original copy returned with results. Yellow copy for ETC, Inc files.

5

Environmental Testing & Consulting, Inc.
Cooler Receipt Form

Date Received 7/13/00
Date/Time Checked In 7/13/00-1410
Carrier/Bill# Hand-Delivered

LIMS# 0007-278
Project Memphis Depot
Dunn Field
By [Signature]

1. Custody Seals?/Location-front	Yes
2. Samples are non-radioactive?	Yes
3. Chain of Custody in plastic?	Yes
4. Temperature at receipt (ok = 4 ± 2 °C) <4°C	OK
5. Ice & Packing-Bagged Ice, Bubble Wrap	Yes
6. Chain of Custody filled out properly?	No
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 ₂ O) 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 _____

_____ Did not indicate to analyze for MS/MSD on COC. Run per Virgil Jansen. _____

*Validated Date and Time of Sample Receipt (VDTSR)

000004

ENVIRONMENTAL TESTING & CONSULTING, INC.

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

604 233

ANALYTICAL SUMMARY TABLE

ent Name Sverdrup/Jacobs Eng.
e ID Memphis Depot
Dunn Field

ETC				
<u>Sample ID</u>	<u>Field ID</u>	<u>Matrix</u>	<u>Method</u>	<u>Method Description</u>
000727801	ST-EFF-026	AQUEOUS	200.7	Silver
000727801	ST-EFF-026	AQUEOUS	200.7	Aluminum
000727801	ST-EFF-026	AQUEOUS	206.2	Arsenic
000727801	ST-EFF-026	AQUEOUS	8270C	GC/MS Base/Neutral & Acid
000727801	ST-EFF-026	AQUEOUS	200.7	Barium
000727801	ST-EFF-026	AQUEOUS	200.7	Beryllium
000727801	ST-EFF-026	AQUEOUS	200.7	Calcium
000727801	ST-EFF-026	AQUEOUS	200.7	Cadmium
000727801	ST-EFF-026	AQUEOUS	200.7	Cobalt
000727801	ST-EFF-026	AQUEOUS	200.7	Chromium
000727801	ST-EFF-026	AQUEOUS	200.7	Copper
000727801	ST-EFF-026	AQUEOUS	200.7	Iron
000727801	ST-EFF-026	AQUEOUS	245.1	Mercury
000727801	ST-EFF-026	AQUEOUS	200.7	Potassium
000727801	ST-EFF-026	AQUEOUS	200.7	Magnesium
000727801	ST-EFF-026	AQUEOUS	200.7	Manganese
000727801	ST-EFF-026	AQUEOUS	200.7	Sodium
000727801	ST-EFF-026	AQUEOUS	200.7	Nickel
000727801	ST-EFF-026	AQUEOUS	200.7	Lead
000727801	ST-EFF-026	AQUEOUS	150.1	pH
000727801	ST-EFF-026	AQUEOUS	200.7	Antimony
000727801	ST-EFF-026	AQUEOUS	200.7	Selenium
000727801	ST-EFF-026	AQUEOUS	200.7	Thallium
000727801	ST-EFF-026	AQUEOUS	8260B	GC/MS Volatile Organics
000727801	ST-EFF-026	AQUEOUS	200.7	Vanadium
000727801	ST-EFF-026	AQUEOUS	200.7	Zinc
000727802	EQB-026	AQUEOUS	200.7	Silver
000727802	EQB-026	AQUEOUS	200.7	Aluminum
000727802	EQB-026	AQUEOUS	206.2	Arsenic
000727802	EQB-026	AQUEOUS	8270C	GC/MS Base/Neutral & Acid
000727802	EQB-026	AQUEOUS	200.7	Barium
000727802	EQB-026	AQUEOUS	200.7	Beryllium
000727802	EQB-026	AQUEOUS	200.7	Calcium
000727802	EQB-026	AQUEOUS	200.7	Cadmium
000727802	EQB-026	AQUEOUS	200.7	Cobalt
000727802	EQB-026	AQUEOUS	200.7	Chromium
000727802	EQB-026	AQUEOUS	200.7	Copper
000727802	EQB-026	AQUEOUS	200.7	Iron
000727802	EQB-026	AQUEOUS	245.1	Mercury
000727802	EQB-026	AQUEOUS	200.7	Potassium
000727802	EQB-026	AQUEOUS	200.7	Magnesium
000727802	EQB-026	AQUEOUS	200.7	Manganese
000727802	EQB-026	AQUEOUS	200.7	Sodium
000727802	EQB-026	AQUEOUS	200.7	Nickel
000727802	EQB-026	AQUEOUS	200.7	Lead
000727802	EQB-026	AQUEOUS	150.1	pH
000727802	EQB-026	AQUEOUS	200.7	Antimony
000727802	EQB-026	AQUEOUS	200.7	Selenium
000727802	EQB-026	AQUEOUS	200.7	Thallium
000727802	EQB-026	AQUEOUS	8260B	GC/MS Volatile Organics
000727802	EQB-026	AQUEOUS	200.7	Vanadium
000727802	EQB-026	AQUEOUS	200.7	Zinc
7803	Trip Blanks	AQUEOUS	8260B	GC/MS Volatile Organics

000005

604 234

Environmental Testing & Consulting, Inc.

Sample Reports

000006

ENVIRONMENTAL TESTING & CONSULTING, INC.

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

INORGANIC ANALYSIS DATA SHEET

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

Project #

Date Arrived 07/13/00
ETC Order Number 0007278

ETC Lab ID 0007278-01
Sample ID: ST-EFF-026

Matrix :AQUEOUS
Sample Date :07/13/00

TEST	RESULT	UNITS	DETECTION LIMIT	TIME ANALYZED	DATE ANALYZED BY	METHOD
pH	7.7	SU		1600	07/13/00 RB	150.1

000007

CDJ
LABORATORY MANAGER

604 236

ENVIRONMENTAL TESTING & CONSULTING, INC.

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

INORGANIC ANALYSIS DATA SHEET

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

Project #

Date Arrived 07/13/00
ETC Order Number 0007278

ETC Lab ID 0007278-02
Sample ID: EQB-026

Matrix :AQUEOUS
Sample Date :07/13/00

TEST	RESULT	UNITS	DETECTION LIMIT	TIME ANALYZED	DATE ANALYZED BY	METHOD
pH	8.4	SU		1600	07/13/00 RB	150.1

000008

CDs
LABORATORY MANAGER

ENVIRONMENTAL TESTING & CONSULTING, INC.

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

INORGANIC ANALYSIS DATA SHEET

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

Project #

Date Arrived 07/13/00
 ETC Order Number 0007278

ETC Lab ID 0007278-01
Sample ID: ST-EFF-026

Matrix :AQUEOUS
 Sample Date :07/13/00

TEST	RESULT	UNITS	DETECTION LIMIT	TIME ANALYZED	DATE ANALYZED BY	METHOD
Mercury Digestion Batch	V7-AQ-19				07/18/00 SH	245.1
Metals Digestion Batch	V21-AQ-29				07/17/00 SH	3030K
Silver	<0.009	mg/L	0.009	1250	07/18/00 SH	200.7
Aluminum	<0.060	mg/L	0.060	1250	07/18/00 SH	200.7
Arsenic	<0.003	mg/L	0.003	0338	07/18/00 JF	206.2
Barium	0.104	mg/L	0.003	1250	07/18/00 SH	200.7
Beryllium	<0.002	mg/L	0.002	1250	07/18/00 SH	200.7
Calcium	21.3	mg/L	0.015	1250	07/18/00 SH	200.7
Cadmium	<0.005	mg/L	0.005	1250	07/18/00 SH	200.7
Cobalt	<0.009	mg/L	0.009	1250	07/18/00 SH	200.7
Chromium	<0.009	mg/L	0.009	1250	07/18/00 SH	200.7
Copper	<0.008	mg/L	0.008	1250	07/18/00 SH	200.7
Iron	0.029	mg/L	0.009	1250	07/18/00 SH	200.7
Mercury	<0.0002	mg/L	0.0002	0838	07/19/00 SH	245.1
Potassium	0.836	mg/L	0.250	1250	07/18/00 SH	200.7
Magnesium	11.0	mg/L	0.040	1250	07/18/00 SH	200.7
Manganese	0.009	mg/L	0.003	1250	07/18/00 SH	200.7
Sodium	23.7	mg/L	0.050	1250	07/18/00 SH	200.7
Nickel	<0.020	mg/L	0.020	1250	07/18/00 SH	200.7
Lead	<0.060	mg/L	0.060	1250	07/18/00 SH	200.7
Antimony	<0.040	mg/L	0.040	1250	07/18/00 SH	200.7
Selenium	<0.100	mg/L	0.100	1250	07/18/00 SH	200.7
Thallium	<0.065	mg/L	0.065	1250	07/18/00 SH	200.7
Vanadium	<0.010	mg/L	0.010	1250	07/18/00 SH	200.7
Zinc	0.061	mg/L	0.010	1250	07/18/00 SH	200.7

000009

CDS

LABORATORY MANAGER

604 238

ENVIRONMENTAL TESTING & CONSULTING, INC.

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

INORGANIC ANALYSIS DATA SHEET

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

Site ID Memphis Depot
 Dunn Field

Project #

Date Arrived 07/13/00
 ETC Order Number 0007278

ETC Lab ID 0007278-02
Sample ID: EQB-026

Matrix :AQUEOUS
 Sample Date :07/13/00

TEST	RESULT	UNITS	DETECTION LIMIT	TIME ANALYZED	DATE ANALYZED BY	METHOD
Mercury Digestion Batch	V7-AQ-19				07/18/00 SH	245.1
Metals Digestion Batch	V21-AQ-29				07/17/00 SH	3030K
Silver	<0.009	mg/L	0.009	1250	07/18/00 SH	200.7
Aluminum	<0.060	mg/L	0.060	1250	07/18/00 SH	200.7
Arsenic	<0.003	mg/L	0.003	0338	07/18/00 JF	206.2
Barium	<0.003	mg/L	0.003	1250	07/18/00 SH	200.7
Beryllium	<0.002	mg/L	0.002	1250	07/18/00 SH	200.7
Calcium	0.067	mg/L	0.015	1250	07/18/00 SH	200.7
Cadmium	<0.005	mg/L	0.005	1250	07/18/00 SH	200.7
Cobalt	<0.009	mg/L	0.009	1250	07/18/00 SH	200.7
Chromium	<0.009	mg/L	0.009	1250	07/18/00 SH	200.7
Copper	<0.008	mg/L	0.008	1250	07/18/00 SH	200.7
Iron	<0.009	mg/L	0.009	1250	07/18/00 SH	200.7
Mercury	<0.0002	mg/L	0.0002	0838	07/19/00 SH	245.1
Potassium	<0.250	mg/L	0.250	1250	07/18/00 SH	200.7
Magnesium	<0.040	mg/L	0.040	1250	07/18/00 SH	200.7
Manganese	<0.003	mg/L	0.003	1250	07/18/00 SH	200.7
Sodium	3.20	mg/L	0.050	1250	07/18/00 SH	200.7
Nickel	<0.020	mg/L	0.020	1250	07/18/00 SH	200.7
Lead	<0.060	mg/L	0.060	1250	07/18/00 SH	200.7
Antimony	<0.040	mg/L	0.040	1250	07/18/00 SH	200.7
Selenium	<0.100	mg/L	0.100	1250	07/18/00 SH	200.7
Thallium	<0.065	mg/L	0.065	1250	07/18/00 SH	200.7
Vanadium	<0.010	mg/L	0.010	1250	07/18/00 SH	200.7
Zinc	<0.010	mg/L	0.010	1250	07/18/00 SH	200.7

000010

PES

LABORATORY MANAGER

ENVIRONMENTAL TESTING & CONSULTING, INC.

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

604 239

ORGANIC ANALYSIS DATA SHEET

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

Project #
 FID #

Date Arrived 07/13/00
 ETC Order Number 0007278

ETC Lab ID 0007278-01
Sample ID: ST-EFF-026

Matrix :AQUEOUS
 Sample Date :07/13/00

TEST	RESULT	UNITS	DETECTION LIMIT	DATE EXTRACTED	DATE ANALYZED	BY	METHOD
GC/MS Volatile Organics							8260B
QC Batch	V2071401	ug/L			07/14/00	EM	
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	1.20	ug/L	1.00				
Chlorobenzene	ND	ug/L	1.00				
1,1-Dibromomethane	ND	ug/L	1.00				
1,1-Dichloroethane	ND	ug/L	1.00				
Chloroform	8.92	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	15.0	ug/L	1.00				
trans-1,2-Dichloroethene	15.9	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				
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	52.0	ug/L	1.00				
Tetrachloroethene	13.8	ug/L	1.00				
Toluene	ND	ug/L	1.00				
1,1,1-Trichloroethane	ND	ug/L	1.00				
1,1,2-Trichloroethane	0.699J	ug/L	1.00				
Trichloroethene	123	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	54.4	ug/L	1.00				

Surrogate Standard	% Recovery	QC Limits	
Dibromofluoromethane	94	74	123
1,2,4-Trichlorobenzene	104	86	112

000011

LABORATORY MANAGER

ND - Not Detected

604 240

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

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

Project #
FID #

Date Arrived 07/13/00
ETC Order Number 0007278

ETC Lab ID 0007278-01
Sample ID: ST-EFF-026

Matrix :AQUEOUS
Sample Date :07/13/00

TEST	RESULT	UNITS	DETECTION LIMIT	DATE EXTRACTED	DATE ANALYZED	BY	METHOD
GC/MS Volatile Organics					07/14/00	EM	8260B
<u>Surrogate Standard</u>	<u>% Recovery</u>		<u>QC Limits</u>				
S3 - 4-Bromofluorobenzene	107		81	115			
S4 - 1,2-Dichloroethane-d4	90		80	120			

0000012

LABORATORY MANAGER

ND - Not Detected

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

604 241
CLIENT SAMPLE NO.

0007-278-1

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0007-278

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: 07/14/00

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.				
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26.				
27.				
28.				
29.				
30.				

FORM I VOA-GCMS-TIC

000013

604 242

ENVIRONMENTAL TESTING & CONSULTING, INC.

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

ORGANIC ANALYSIS DATA SHEET

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

Project #
 FID #

Date Arrived 07/13/00
 ETC Order Number 0007278

ETC Lab ID 0007278-02
Sample ID: EQB-026

Matrix :AQUEOUS
 Sample Date :07/13/00

TEST	RESULT	UNITS	DETECTION LIMIT	DATE EXTRACTED	DATE ANALYZED	BY	METHOD
GC/MS Volatile Organics					07/14/00	EM	8260B
QC Batch	V2071401	ug/L					
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				
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				
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	99	74 123
S2 - Toluene-d8	102	86 112

000014

LABORATORY MANAGER

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

604 243

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

ORGANIC ANALYSIS DATA SHEET

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

Project #
FID #

Date Arrived 07/13/00
ETC Order Number 0007278

ETC Lab ID 0007278-02
Sample ID: EQB-026

Matrix :AQUEOUS
Sample Date :07/13/00

TEST	RESULT	UNITS	DETECTION LIMIT	DATE EXTRACTED	DATE ANALYZED	BY	METHOD

GC/MS Volatile Organics

8260B
07/14/00 EM

Surrogate Standard	% Recovery	QC Limits
S3 - 4-Bromofluorobenzene	106	81 115
S4 - 1,2-Dichloroethane-d4	94	80 120

000015

LABORATORY MANAGER

ND - Not Detected

604 244

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

CLIENT SAMPLE NO.

0007-278-2

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0007-278

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: 07/14/00

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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20.				
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23.				
24.				
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26.				
27.				
28.				
29.				
30.				

FORM I VOA-GCMS-TIC

000016

ENVIRONMENTAL TESTING & CONSULTING, INC.

2924 Walnut Grove Road - Memphis, TN 38111 - (901)327-2750
ORGANIC ANALYSIS DATA SHEET

604 245

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

Project #
FID #

Date Arrived 07/13/00
ETC Order Number 0007278

ETC Lab ID 0007278-03
Sample ID: Trip Blanks

Matrix :AQUEOUS
Sample Date :07/13/00

TEST	RESULT	UNITS	DETECTION LIMIT	DATE EXTRACTED	DATE ANALYZED	BY	METHOD
GC/MS Volatile Organics							8260B
					07/14/00	EM	
QC Batch	V2071401	ug/L					
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				
lorodibromomethane	ND	ug/L	1.00				
loroethane	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				
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	
- Dibromofluoromethane	100	74	123
- Toluene-d8	103	86	112

000017

LABORATORY MANAGER

ND - Not Detected

604 246

ENVIRONMENTAL TESTING & CONSULTING, INC.

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

ORGANIC ANALYSIS DATA SHEET

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

Project #
FID #

Date Arrived 07/13/00
ETC Order Number 0007278

ETC Lab ID 0007278-03
Sample ID: Trip Blanks

Matrix :AQUEOUS
Sample Date :07/13/00

TEST	RESULT	UNITS	DETECTION LIMIT	DATE EXTRACTED	DATE ANALYZED	BY	METHOD

GC/MS Volatile Organics

07/14/00 EM 8260B

Surrogate Standard	% Recovery	QC Limits
S3 - 4-Bromofluorobenzene	106	81 115
S4 - 1,2-Dichloroethane-d4	98	80 120

000018

105
LABORATORY MANAGER

ND - Not Detected

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

CLIENT SAMPLE NO.

604 247

0007-278-3

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0007-278

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: 07/14/00

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. _____	_____	_____	_____	_____
7. _____	_____	_____	_____	_____
8. _____	_____	_____	_____	_____
9. _____	_____	_____	_____	_____
10. _____	_____	_____	_____	_____
11. _____	_____	_____	_____	_____
12. _____	_____	_____	_____	_____
13. _____	_____	_____	_____	_____
14. _____	_____	_____	_____	_____
15. _____	_____	_____	_____	_____
16. _____	_____	_____	_____	_____
17. _____	_____	_____	_____	_____
18. _____	_____	_____	_____	_____
19. _____	_____	_____	_____	_____
20. _____	_____	_____	_____	_____
21. _____	_____	_____	_____	_____
22. _____	_____	_____	_____	_____
23. _____	_____	_____	_____	_____
24. _____	_____	_____	_____	_____
25. _____	_____	_____	_____	_____
26. _____	_____	_____	_____	_____
27. _____	_____	_____	_____	_____
28. _____	_____	_____	_____	_____
29. _____	_____	_____	_____	_____
30. _____	_____	_____	_____	_____

604 248

ENVIRONMENTAL TESTING & CONSULTING, INC.

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

ORGANIC ANALYSIS DATA SHEET

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

Project #
 FID #

Date Arrived 07/13/00
 ETC Order Number 0007278

ETC Lab ID 0007278-01
Sample ID: ST-EFF-026

Matrix :AQUEOUS
 Sample Date :07/13/00

TEST	RESULT	UNITS	DETECTION LIMIT	DATE EXTRACTED	DATE ANALYZED	BY	METHOD
GC/MS Base/Neutral & Acid				07/13/00	07/14/00	PF	8270C 3510C
QC Batch	P05353						
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				

000020

LABORATORY MANAGER

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

604 249

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

ORGANIC ANALYSIS DATA SHEET

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

Project #
 FID #

Date Arrived 07/13/00
 ETC Order Number 0007278

ETC Lab ID 0007278-01
Sample ID: ST-EFF-026

Matrix :AQUEOUS
 Sample Date :07/13/00

TEST	RESULT	UNITS	DETECTION LIMIT	DATE EXTRACTED	DATE ANALYZED	BY	METHOD
GC/MS Base/Neutral & Acid				07/13/00	07/14/00	PF	8270C 3510C
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				
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-Trichlorophenol	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	71	38	107
S3 - 4-Terphenyl-d14	71	33	122
S4 - Phenol-d6	27	7	58
S5 - 2,4,6-Tribromophenol	75	16	138
S6 - 2-Fluorophenol	44	8	88

LABORATORY MANAGER

ND - Not Detected

000021

604 250

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

CLIENT SAMPLE NO.

0007-278-1

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0007-278

Matrix: (soil/water) WATER

Lab Sample ID:

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: 0301004

Level: (low/med) LOW

Date Received: _____

% Moisture: _____ decanted: (Y/N) _____

Date Extracted: _____

Concentrated Extract Volume: 1(mL)

Date Analyzed: 07/14/00

Injection Volume: 1.0(uL)

Dilution Factor: 1.0

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

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

Number TICs found: 4

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 127-18-4	TETRACHLOROETHYLENE	3.59	5.37	NJ
2. 79-34-5	ETHANE, 1,1,2,2-TETRACHLORO-	4.46	30.15	NJ
3. 1674686-45-3	2,3-DIMETHYL-1-HEXENE	4.53	4.34	NJ
4. 565-77-5	2-PENTENE, 2,3,4-TRIMETHYL-	4.64	10.97	NJ
5.				
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FORM I BNA-GCMS-TIC

000022

ENVIRONMENTAL TESTING & CONSULTING, INC.

604 251

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

ORGANIC ANALYSIS DATA SHEET

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

Project #
 FID #

Date Arrived 07/13/00
 ETC Order Number 0007278

ETC Lab ID 0007278-02
Sample ID: EQB-026

Matrix :AQUEOUS
 Sample Date :07/13/00

TEST	RESULT	UNITS	DETECTION LIMIT	DATE EXTRACTED	DATE ANALYZED	BY	METHOD
GC/MS Base/Neutral & Acid				07/13/00	07/14/00	PF	8270C 3510C
QC Batch	P05353						
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				
n-octyl phthalate	ND	ug/L	5.00				
fluoranthene	ND	ug/L	2.00				
Fluorene	ND	ug/L	2.00				

000023

LABORATORY MANAGER

ND - Not Detected

ENVIRONMENTAL TESTING & CONSULTING, INC.

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

ORGANIC ANALYSIS DATA SHEET

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

Project #
 FID #

Date Arrived 07/13/00
 ETC Order Number 0007278

ETC Lab ID 0007278-02
Sample ID: EQB-026

Matrix :AQUEOUS
 Sample Date :07/13/00

TEST	RESULT	UNITS	DETECTION LIMIT	DATE EXTRACTED	DATE ANALYZED	BY	METHOD
GC/MS Base/Neutral & Acid				07/13/00	07/14/00	PF	8270C 3510C
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				
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-Trichlorophenol	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	64	38 107
S3 - 4-Terphenyl-d14	60	33 122
S4 - Phenol-d6	24	7 58
S5 - 2,4,6-Tribromophenol	67	16 138
S6 - 2-Fluorophenol	38	8 88

000024

LABORATORY MANAGER

ND - Not Detected

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

604 253
CLIENT SAMPLE NO.

0007-278-2

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0007-278

Matrix: (soil/water) WATER

Lab Sample ID:

Sample wt/vol: 990.0 (g/mL) ML

Lab File ID: 0401005

Level: (low/med) LOW

Date Received: _____

% Moisture: _____ decanted: (Y/N) _____

Date Extracted: _____

Concentrated Extract Volume: 1 (mL)

Date Analyzed: 07/14/00

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. 691-38-3	2-PENTENE, 4-METHYL-, (Z)-	4.43	8.27	NJ
2. 0-00-0	2,3,3-TRIMETHYL-1-HEXENE	4.53	4.08	NJ
3. 590-66-9	CYCLOHEXANE, 1,1-DIMETHYL-	4.64	9.78	NJ
4.				
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FORM I BNA-GCMS-TIC

000025



ENVIRONMENTAL TESTING & CONSULTING, INC.
2924 Walnut Grove Road • Memphis, TN 38111 • (901) 327-2750 • FAX (901) 327-6334

Founded 1972

August 22, 2000

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

Ref: Analytical Testing
ETC Order # 0008325
Project Description Memphis Defense Depot
Dunn Field

The above referenced project has been analyzed per your instructions. The analyses were performed in accordance with Standard Methods 17th/18th Edition; The Solid Waste Manual SW-846; EPA Methods for the 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
Arkansas
Alabama #40730
Kentucky #90047
North Carolina #415
South Carolina #84002002

Mississippi
Oklahoma #9311
Virginia #00106
Washington #C248
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 Eng.
Project Name Memphis Depot
ETC Order# 0008-325

HOLDING TIMES

QC Batch(s) for this order	ICP/GFAA V21-AQ-71
	Mercury V7-AQ-30
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
 Varian 640Z Zeeman Graphite Furnace
 Perkin Elmer 5100ZL Graphite Furnace
 Perkin Elmer 6000 Graphite Furnace
 Thermo Jarrell Ash AA-Scan 4 Graphite Furnace
 CETAC M-6000A Mercury Analyzer

Dilutions Required No dilutions required.

QUALITY CONTROL**0008-325.MQCBLANK****Method Blank**

V21-AQ-71BLK	ICP/GFAA Metals
V7-AQ-30BLK	Mercury

Calcium was detected in the V12-AQ-71BLK at 0.023 mg/L. Sample concentration less than 5 times the Method Blank value (0.115 mg/L) should be attributed to Lab contamination. This analyte was detected in the sample 0008-325-01 (ST-EFF-027) at 21.7 mg/L.

0008-325.MQCLCS**Laboratory Control Sample(s)**

V21-AQ-71LCS	ICP/GFAA Metals
V7-AQ-30LCS	Mercury

All criteria met.

0008-325.MQCMSMSD**Matrix Spike / Matrix Spike Dup - ICP Metals**

0008-325-01	RPD	All analytes within QC limits.
ST-EFF-027	Spike Recovery	All analytes within QC limits, except as listed below.

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

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

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

Client Name Sverdrup/Jacobs Eng.

Project Name Memphis Depot

ETC Order# 0008-325

QUALITY CONTROL

Matrix Spike / Matrix Spike Dup - Graphite Metals

0008-325-01 RPD All analytes within QC limits.

ST-EFF-027 Spike Recovery All analytes within QC limits.

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

Matrix Spike / Matrix Spike Dup - Hg

0008-325-01 RPD All analytes within QC limits.

ST-EFF-027 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 +/-15% of expected value for GFAA.
Recovery must be +/-25% of expected value for ICP.

CDs
Project Manager

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

Client Name Sverdrup/Jacobs Eng.
Project Name Memphis Depot
ETC Order# 0008-325
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

<u>QC Batch</u>	<u>Form 4 Summary</u>
V2081501	V2081511LB
V2081601	V2081611LB

System Monitoring Compounds FORM 2
Surrogate recoveries within QC limits.

Method Blank FORM 4
V2081511LB
V2081611LB

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

V2081511LB

Methylene Chloride was detected at a concentration of 1.08J ug/L. This analyte was not identified in associated project samples. There is no effect on the data.

V2081611LB

Methylene Chloride was detected at a concentration of 1.20J ug/L. This analyte was not identified in associated project samples. There is no effect on the data.

Laboratory Control Sample FORM 3
V2081511LCS
V2081611LCS

All acceptance criteria met, except as listed below.

V2081511LCS

Bromodichloromethane, 1,1,2-Trichloroethene, Trichloroethene, and six non-target analytes were flagged for high recovery in the LCS. 1,1,2-Trichloroethene and Trichloroethene were detected in sample 0007-278-01 (ST-EFF-027). These slightly high recoveries do not affect the data.

V2081611LCS

Vinyl Acetate and two non-target analytes were flagged for high recovery in the LCS. This target analyte was not detected in the associated sample. There is no effect on the data.

CASE NARRATIVE

GC/MS VOLATILE COMPOUNDS - AQUEOUS

Client Name Sverdrup/Jacobs Eng.
Project Name Memphis Depot
ETC Order# 0008-325
Method (SW-846) 8260B/5030B

QUALITY CONTROL

Matrix Spike / Matrix Spike Dup. FORM 3

Batch V2081501

0008-325-01	RPD	All analytes within QC limits.
ST-EFF-027	Spike Recovery	All analytes within QC limits.

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

Matrix Spike / Matrix Spike Dup. FORM 3

Batch V2081601

0008-257-04	RPD	All analytes within QC limits.
	Spike Recovery	All analytes within QC limits, except as listed below.

Trichloroethene was flagged for high recovery in the MS/MSD. Toluene was flagged for high recovery in the MS. MSD 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.

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 08/15/00 Time: 1549

Analyte	%Diff(30% Max)	Response
Vinyl Acetate	+43.4	High

Samples affected by this CV include V2081511LB, V2081511LCS, 0008-325-01MS/MSD, 0008-325-01. 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.

Calibration Verification (CV): Date 08/16/00 Time: 0855

Analyte	%Diff(30% Max)	Response
Vinyl Acetate	+48.7	High

Samples affected by this CV include V2081611LB, V2081611LCS, 0008-257-04MS/MSD, 0008-325-02. 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.

604 260

ENVIRONMENTAL TESTING AND CONSULTING, INC.

CASE NARRATIVE

GC/MS VOLATILE COMPOUNDS - AQUEOUS

Client Name Sverdrup/Jacobs Eng.
Project Name Memphis Depot
ETC Order# 0008-325
Method (SW-846) 8260B/5030B

SAMPLE ANALYSIS

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

CDL
Project Manager

000006

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

604 261

Client Name Sverdrup/Jacobs Eng.
Project Name Memphis Depot
ETC Order# 0008-325
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
P05365 P05365LB

System Monitoring Compounds FORM 2
Surrogate recoveries within QC limits.

Method Blank FORM 4
P05365LB

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

Bis (2-ethylhexyl) phthalate was detected at a concentration of 6.36 ug/L. This analyte was not identified in associated project samples. There is no effect on the data.

Laboratory Control Sample FORM 3
P05365LCS/LCSD

All acceptance criteria met, except as listed below.

Acetophenone (non-target analyte), Benzoic Acid, Hexachlorobutadiene, and 1,2,4,5-Tetrachlorobenzene (non-target analyte) were flagged for low recovery in the LCS. LCSD recoveries were within control limits. 3,3-Dimethylbenzidine (non-target analyte) was flagged for high recovery in the LCSD. LCS recovery for this analyte was within control limits. These target analytes were not detected in the associated samples. There is no effect on the data.

RPDs for six analytes were flagged for high recovery due to variances in the LCS/LCSD recoveries.

Matrix Spike / Matrix Spike Dup FORM 3
Batch P05365

0008-325-01	RPD	All analytes within QC limits, except as listed below.
ST-EFF-027	Spike Recovery	All analytes within QC limits, except as listed below.

4-Nitrophenol was flagged for low recovery in the MS/MSD. LCS/LCSD recovery for this analyte was within control limits. Target analytes were not detected in the associated samples. There is no effect on the data.

RPD for 1,4-Dichlorobenzene was flagged for high recovery due to variances in the MS/MSD recoveries.

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

000007

604 262

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

Client Name Sverdrup/Jacobs Eng.
Project Name Memphis Depot
ETC Order# 0008-325
Method (SW-846) 8270C/3510C

CALIBRATION

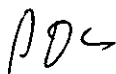
DFTPP Daily 12-Hour Tune All criteria met. FORM 5
Initial Calibration All criteria met. FORM 6
Calibration Verification All criteria met. FORM 7

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

000008

ENVIRONMENTAL TESTING & CONSULTING, INC.

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

604 263

ANALYTICAL SUMMARY/CROSS REFERENCE TABLE

Client Name Sverdrup/Jacobs Eng.
Site ID Memphis Defense Depot
Dunn Field

ETC Order #0008325

<u>ETC</u> <u>Sample ID</u>	<u>Field</u> <u>ID</u>	<u>Matrix</u>	<u>Method</u>	<u>Method Description</u>
000832501	ST-EFF-027	AQUEOUS	150.1	pH
000832501	ST-EFF-027	AQUEOUS	200.7	Silver
000832501	ST-EFF-027	AQUEOUS	200.7	Aluminum
000832501	ST-EFF-027	AQUEOUS	200.7	Arsenic
000832501	ST-EFF-027	AQUEOUS	200.7	Barium
000832501	ST-EFF-027	AQUEOUS	200.7	Beryllium
000832501	ST-EFF-027	AQUEOUS	200.7	Calcium
000832501	ST-EFF-027	AQUEOUS	200.7	Cadmium
000832501	ST-EFF-027	AQUEOUS	200.7	Cobalt
000832501	ST-EFF-027	AQUEOUS	200.7	Chromium
000832501	ST-EFF-027	AQUEOUS	200.7	Copper
000832501	ST-EFF-027	AQUEOUS	200.7	Iron
000832501	ST-EFF-027	AQUEOUS	245.1	Mercury
000832501	ST-EFF-027	AQUEOUS	200.7	Potassium
000832501	ST-EFF-027	AQUEOUS	200.7	Magnesium
000832501	ST-EFF-027	AQUEOUS	200.7	Manganese
000832501	ST-EFF-027	AQUEOUS	200.7	Sodium
000832501	ST-EFF-027	AQUEOUS	200.7	Nickel
000832501	ST-EFF-027	AQUEOUS	200.7	Lead
000832501	ST-EFF-027	AQUEOUS	200.7	Antimony
000832501	ST-EFF-027	AQUEOUS	200.7	Selenium
000832501	ST-EFF-027	AQUEOUS	200.7	Thallium
000832501	ST-EFF-027	AQUEOUS	200.7	Vanadium
000832501	ST-EFF-027	AQUEOUS	200.7	Zinc
000832501	ST-EFF-027	AQUEOUS	8260B	GC/MS Volatile Organics
000832501	ST-EFF-027	AQUEOUS	8270C	GC/MS Base/Neutral & Acid
000832502	Trip Blank	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
INORGANIC ANALYSIS DATA SHEET

604 265

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

Project #

Date Arrived 08/11/00
 ETC Order Number 0008325

ETC Lab ID 0008325-01
Sample ID: ST-EFF-027

Matrix :AQUEOUS
 Sample Date :08/11/00

TEST	RESULT	UNITS	DETECTION LIMIT	TIME ANALYZED	DATE ANALYZED BY	METHOD
pH	6.1	SU		1305	08/11/00 RB	150.1
Mercury Digestion Batch	V7-AQ-30				08/17/00 JF	245.1
Metals Digestion Batch	V21-AQ-71				08/14/00 NR	3030K
Silver	<0.009	mg/L	0.009	1540	08/19/00 SH	200.7
Aluminum	<0.060	mg/L	0.060	1046	08/21/00 SH	200.7
Arsenic	<0.003	mg/L	0.003	1540	08/19/00 SH	200.7
Barium	0.111	mg/L	0.003	1540	08/19/00 SH	200.7
Beryllium	<0.002	mg/L	0.002	1540	08/19/00 SH	200.7
Cesium	21.7	mg/L	0.015	1540	08/19/00 SH	200.7
Cadmium	<0.005	mg/L	0.005	1540	08/19/00 SH	200.7
Cobalt	<0.009	mg/L	0.009	1540	08/19/00 SH	200.7
Chromium	<0.009	mg/L	0.009	1540	08/19/00 SH	200.7
Copper	<0.008	mg/L	0.008	1540	08/19/00 SH	200.7
Iron	0.137	mg/L	0.009	1540	08/19/00 SH	200.7
Mercury	<0.0002	mg/L	0.0002	0840	08/18/00 JF	245.1
Potassium	0.870	mg/L	0.250	1540	08/19/00 SH	200.7
Magnesium	10.8	mg/L	0.040	1540	08/19/00 SH	200.7
Manganese	0.011	mg/L	0.003	1540	08/19/00 SH	200.7
Sodium	23.8	mg/L	0.050	1540	08/19/00 SH	200.7
Nickel	<0.020	mg/L	0.020	1540	08/19/00 SH	200.7
Lead	<0.060	mg/L	0.060	1540	08/19/00 SH	200.7
Antimony	<0.040	mg/L	0.040	1540	08/19/00 SH	200.7
Selenium	<0.100	mg/L	0.100	1540	08/19/00 SH	200.7
Thallium	<0.065	mg/L	0.065	1540	08/19/00 SH	200.7
Vanadium	<0.010	mg/L	0.010	1540	08/19/00 SH	200.7
Zinc	0.045	mg/L	0.010	1540	08/19/00 SH	200.7

604 266

Environmental Testing & Consulting, Inc.

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

000012

FORM 6
WATER MATRIX SPIKE / MATRIX SPIKE DUPLICATE
METALS

604 267

Lab Name: Environmental Testing and Consulting, Inc

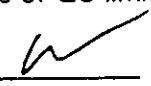
Laboratory ID MS ICP/GFAA Metals	0008-325-01	QC Batch V21-AQ-71
Laboratory ID MS Mercury	0008-325-01	V7-AQ-30
Date Sample Prepared	08/14/00	ICP/GFAA Metals
	08/17/00	Mercury

Metals	SPIKE Added mg/L	SAMPLE Conc mg/L	MS Conc mg/L	RPD <20% #	MS % Rec #	QC Limits	
Silver	0.200	ND	0.052	13	26 *	75	125
Aluminum	2.00	ND	1.84	2	92	75	125
Arsenic	0.080	ND	0.080	1	100	75	125
Barium	2.00	0.111	2.23	1	106	75	125
Beryllium	0.200	ND	0.206	1	103	75	125
Calcium	4.00	21.7	26.6	2	123	75	125
Cadmium	0.016	ND	0.017	0	106	75	125
Cobalt	1.00	ND	1.02	1	102	75	125
Chromium	0.400	ND	0.415	1	104	75	125
Copper	0.400	ND	0.420	1	105	75	125
Iron	2.00	0.137	2.30	1	108	75	125
Potassium	4.00	0.870	5.15	1	107	75	125
Magnesium	4.00	10.8	15.2	1	110	75	125
Manganese	0.200	0.011	0.223	1	106	75	125
Sodium	4.00	23.8	28.4	1	115	75	125
Nickel	1.00	ND	1.01	0	101	75	125
Lead	0.080	ND	0.082	2	103	75	125
Antimony	0.160	ND	0.164	2	103	75	125
Selenium	0.080	ND	0.083	1	104	75	125
Thallium	0.080	ND	0.084	2	105	75	125
Vanadium	1.00	ND	1.03	1	103	75	125
Zinc	0.200	0.045	0.254	2	105	75	125
Mercury	0.0050	ND	0.0061	0	122	75	125

ND - Not Detected

Column to be used to flag recovery values with an asterisk

* Values outside of QC limits

Reviewed by 

000015
0008-325.mqc MSMSD

604 268

FORM 3A
WATER METHOD BLANK
METALS

Lab Name: Environmental Testing and Consulting, Inc

Laboratory ID ICP/GFAA Metals
Laboratory ID Mercury

V21-AQ-71 BLK
V7-AQ-30 BLK

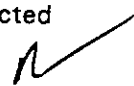
QC Batch
V21-AQ-71
V7-AQ-30

Date Sample Prepared

08/14/00 ICP/GFAA Metals
08/17/00 Mercury

Metals	Concentration mg/L	Detection Limit mg/L	Date Analyzed	Method
Silver	ND	0.009	08/19/00	200.7
Aluminum	ND	0.060	08/21/00	200.7
Arsenic	ND	0.003	08/19/00	200.7
Barium	ND	0.003	08/19/00	200.7
Beryllium	ND	0.002	08/19/00	200.7
Calcium	0.023	0.015	08/19/00	200.7
Cadmium	ND	0.005	08/19/00	200.7
Cobalt	ND	0.009	08/19/00	200.7
Chromium	ND	0.009	08/19/00	200.7
Copper	ND	0.008	08/19/00	200.7
Iron	ND	0.009	08/19/00	200.7
Potassium	ND	0.250	08/19/00	200.7
Magnesium	ND	0.040	08/19/00	200.7
Manganese	ND	0.003	08/19/00	200.7
Sodium	ND	0.050	08/21/00	200.7
Nickel	ND	0.020	08/19/00	200.7
Lead	ND	0.060	08/19/00	200.7
Antimony	ND	0.040	08/19/00	200.7
Selenium	ND	0.100	08/19/00	200.7
Thallium	ND	0.065	08/19/00	200.7
Vanadium	ND	0.010	08/19/00	200.7
Zinc	ND	0.010	08/19/00	200.7
Mercury	ND	0.0002	08/18/00	245.1

ND - Not Detected

Reviewed by 

000013

0008-325.mqc BLANK

FORM 6
WATER MATRIX SPIKE / MATRIX SPIKE DUPLICATE
METALS

Lab Name: Environmental Testing and Consulting, Inc

Laboratory ID MS ICP/GFAA Metals	0008-325-01	QC Batch V21-AQ-71
Laboratory ID MS Mercury	0008-325-01	V7-AQ-30
Date Sample Prepared	08/14/00	ICP/GFAA Metals
	08/17/00	Mercury

Metals	SPIKE Added mg/L	SAMPLE Conc mg/L	MSD Conc mg/L		MSD % Rec	#	QC Limits	
Silver	0.200	ND	0.059		30	*	75	125
Aluminum	2.00	ND	1.80		90		75	125
Arsenic	0.080	ND	0.079		99		75	125
Barium	2.00	0.111	2.21		105		75	125
Beryllium	0.200	ND	0.204		102		75	125
Calcium	4.00	21.7	26.2		113		75	125
Cadmium	0.016	ND	0.017		106		75	125
Cobalt	1.00	ND	1.01		101		75	125
Chromium	0.400	ND	0.410		103		75	125
Copper	0.400	ND	0.416		104		75	125
Iron	2.00	0.137	2.27		107		75	125
Potassium	4.00	0.870	5.12		106		75	125
Magnesium	4.00	10.8	15.0		105		75	125
Manganese	0.200	0.011	0.220		105		75	125
Sodium	4.00	23.8	28.1		108		75	125
Nickel	1.00	ND	1.01		101		75	125
Lead	0.080	ND	0.084		105		75	125
Antimony	0.160	ND	0.161		101		75	125
Selenium	0.080	ND	0.082		103		75	125
Thallium	0.080	ND	0.082		103		75	125
Vanadium	1.00	ND	1.02		102		75	125
Zinc	0.200	0.045	0.248		102		75	125
Mercury	0.0050	ND	0.0061		122		75	125

ND - Not Detected

Column to be used to flag recovery values with an asterisk

* Values outside of QC limits

Reviewed by

0008-325.mqc MSMSD 000016

FORM 7
WATER LABORATORY CONTROL SAMPLE
METALS

Lab Name: Environmental Testing and Consulting, Inc

Laboratory Control ID

ICP/GFAA Metals V21-AQ-71 LCS
Mercury V7-AQ-30 LCS

QC Batch

V21-AQ-71

V7-AQ-30

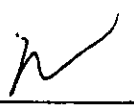
Date Prepared

ICP/GFAA Metals 08/14/00 ✓
Mercury 08/17/00 ✓

Metals	Spike Added mg/L	Found mg/L	% R	#	QC Limits
Silver	0.200	0.200	100		80 120
Aluminum	2.00	1.85	93		80 120
Arsenic	0.080	0.078	98		80 120
Barium	2.00	2.06	103		80 120
Beryllium	0.200	0.200	100		80 120
Calcium	4.00	4.21	105		80 120
Cadmium	0.016	0.016	100		80 120
Cobalt	1.00	0.993	99		80 120
Chromium	0.400	0.399	100		80 120
Copper	0.400	0.402	101		80 120
Iron	2.00	2.08	104		80 120
Potassium	4.00	4.12	103		80 120
Magnesium	4.00	3.96	99		80 120
Manganese	0.200	0.204	102		80 120
Sodium	4.00	4.25	106		80 120
Nickel	1.00	0.992	99		80 120
Lead	0.080	0.081	101		80 120
Antimony	0.160	0.153	96		80 120
Selenium	0.080	0.081	101		80 120
Thallium	0.080	0.082	103		80 120
Vanadium	1.00	1.00	100		80 120
Zinc	0.200	0.204	102		80 120
Mercury	0.0050	0.0058	116		80 120

Column to be used to flag recovery values with an asterisk

* Values outside of QC limits

Reviewed by 

000014
0008-325.mqc LCS

FORM 5B
POST DIGESTION SPIKE
METALS

604 271

Lab Name: Environmental Testing and Consulting, Inc.

QC Batch ICP/GFAA Metals V21-AQ-71

Date Sample Prepared 08/14/00 ICP/GFAA Metals

Metals	Spike Expected mg/L	Spike Found mg/L	% Recovery	QC Limits	
Silver	0.025	0.025	100	75	125

Post Digestion Spikes (PDS) were performed on those samples with recoveries outside QC limits for both the MS and MSD.

Spike expected is based on approximately 1/2 the sample result plus a spike at a level that gives a value equal to the original sample result.

* - PDS performed on specified dilution of sample.

Reviewed by 

000017
PDS 0008-325.mqc

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 08/11/00
 ETC Order Number 0008325

ETC Lab ID 0008325-01
 Field ID : ST-EFF-027

Matrix : AQUEOUS
 Sample Date : 08/11/00

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
GC/MS Volatile Organics				08/15/00	LS	8260B 5030B
QC Batch	V2081501					
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	1.82	ug/L	1.00			
Chlorobenzene	ND	ug/L	1.00			
Chlorodibromomethane	ND	ug/L	1.00			
Chloroethane	ND	ug/L	1.00			
Chloroform	7.96	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	13.2	ug/L	1.00			
trans-1,2-Dichloroethene	11.6	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	42.7	ug/L	1.00			
Tetrachloroethene	13.8	ug/L	1.00			
Toluene	ND	ug/L	1.00			
1,1,1-Trichloroethane	ND	ug/L	1.00			
1,1,2-Trichloroethane	0.861	ug/L	1.00			
Trichloroethene	148	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	44.5	ug/L	1.00			

Surrogate Standard	% Recovery	QC Limits
S1 - Dibromofluoromethane	101	74 123
S2 - Toluene-d8	106	86 112
S3 - 4-Bromofluorobenzene	100	81 115
S4 - 1,2-Dichloroethane-d4	88	80 120

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

604 273
CLIENT SAMPLE NO.

0008-325-1

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0008-325

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: 08/15/00

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
=====	=====	=====	=====	=====
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 VOA-GCMS-TIC

000019

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 **08/11/00**
 ETC Order Number **0008325**

ETC Lab ID **0008325-02**
 Field ID : **Trip Blank**

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

TEST	RESULT	UNITS	DETECTION LIMIT	DATE ANALYZED	DATE EXTRACTED BY	METHOD
GC/MS Volatile Organics				08/16/00	LS	8260B 5030B
QC Batch	V2081601					
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			
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			
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	98	74 123
S2 - Toluene-d8	108	86 112
S3 - 4-Bromofluorobenzene	106	81 115
S4 - 1,2-Dichloroethane-d4	98	80 120

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

604 275
CLIENT SAMPLE NO.

0008-325-2

Lab Name: ETC, INC.

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 0008-325

Matrix: (soil/water) WATER

Lab Sample ID:

Sample wt/vol: 10.00 (g/mL) ML

Lab File ID: 1101010

Level: (low/med) LOW

Date Received: _____

% Moisture: not dec. _____

Date Analyzed: 08/16/00

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.				
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20.				
21.				
22.				
23.				
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27.				
28.				
29.				
30.				

FORM I VOA-GCMS-TIC

000021

604 276

Environmental Testing & Consulting, Inc.

Login
Chain-of-Custody

000061



604 277

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 :

000325

Company Name		Phone # : 615-331-4232		Fax Results		Analysis Requested															
Project/Site		Fax # : 615-833-8328		RUSH		(Note special detection limits or methods)															
Project #		FID # :		PO # :																	
Project Manager/Contact		Matrix		1 Wastewater		4 Sludge		5 Oil/Solvent		6 Other											
Kane Smith / Sverdrup		2 Aqueous		3 Soil/Sediment		6 Other															
# of cont.	Sample ID/ Number	Depth	Sample Date	Sample Time	Matrix	Type	Grab/Comp	VOCs 8260B		SVOCs 8270C		TAL METALS (200.7)		As (206.2)		Hg (245.1)		Pb		Comments	
11	ST-277-027		8-11-00	1110	2	G		X	X	X	X	X	X	X	X	X	X	X	X	X	msmsd
3	TEP BLANK				TEP 2			X													
																					Temp 19.1
																					pH 6.21
																					SGWA 85.3
																					TEOS 0.6
Sampled By		Method of Shipment		Blank/Cooler Temp		Remarks															
Ten Campbell				21°C																	
RELINQUISHED BY (sign)		DATE		TIME		RECEIVED BY (sign)		DATE		TIME		RECEIVED BY (sign)		DATE		TIME		Sample Delivery Group ID			
Ten Campbell		8-11-00		1215																	
RELINQUISHED BY (sign)		DATE		TIME		RECEIVED BY (sign)		DATE		TIME		RECEIVED BY (sign)		DATE		TIME					
RELINQUISHED BY (sign)		DATE		TIME		RECEIVED BY (sign)		DATE		TIME		RECEIVED BY (sign)		DATE		TIME					
RELINQUISHED BY (sign)		DATE		TIME		RECEIVED BY (sign)		DATE		TIME		RECEIVED BY (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.

Environmental Testing & Consulting, Inc.
Cooler Receipt Form

Date Received 8/11/00
Date/Time Checked In 8/11/00-12:15
Carrier/Bill# Hand-Delivered

LIMS# 0008-325
Project Mphs. Defense
Depot-Dunn Field
By RBareg

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) < 4°C	OK
5. Ice & Packing-bags, Bubble Wrap, Ice	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 ₂ O) 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 D

**DATA EVALUATION OF QUARTERLY GROUNDWATER
AND MONTHLY EFFLUENT SAMPLES**

Data Evaluation

Field Quality Control – Monitoring and Recovery Well Sampling

The second year third quarter monitoring well sampling events for the Defense Depot in Memphis, Tennessee took place in August 2000. The required analysis was volatiles (EPA 8260B). Submitted with the samples were three trip blanks, two equipment blanks, one field blank and three duplicate samples. All blanks yielded non-detect results for each analyzed compound.

The three samples taken in duplicate were MW-30, RW-02 and MW-70. 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. "NC" indicates the RPD could not be calculated due to a positive result in a sample but not its duplicate.

Analyte	MW-30	RW-02	MW-70
Carbon Tetrachloride		1	9
Chloroform		1	4
Trans-1,2-Dichloroethene		1	7
1,1,2,2-Tetrachloroethane			3
Tetrachloroethene		2	6
1,1,2-Trichloroethane		19	3
Trichloroethene		2	4
Cis-1,2-Dichloroethene		3	8
Vinyl Chloride			NC

The acceptance criteria used for field duplicates was <20% (reference SW-846 Test Methods for Evaluating Solid Waste). None of the samples yielded a RPD above the acceptance limit.

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.

All method blanks yielded non-detect results for all compounds except methylene chloride, which was not identified in associated project samples. Methylene chloride was detected at low concentrations (<3.0 ug/L) in four method blank samples. The LCS only yielded unacceptable recoveries on non-target compounds with the exception of bromomethane, which was not detected in associated samples. Surrogate recoveries were acceptable. The project completeness criteria of 95% was met.

Field Quality Control – Effluent Sampling

Three effluent samples were collected during the third 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-026. This equipment blank yielded detectable concentrations of calcium and sodium (0.067 and 3.2 mg/L). All other equipment blank recoveries were non-detect.

APPENDIX E

GROUNDWATER INTERPOLATION EXPLANATION

Groundwater Interpolation of August 30, 2000 Data – Memphis DDMT

by USA ERDC at Waterways Experiment Station, Earl V. Edris, Jr.

Groundwater elevation data was collected for the Dunn Field area of Memphis DDMT on August 30, 2000. The groundwater elevations are presented in Table 1. Included in Table 1 are the groundwater elevations for the June 6, 1999 and February 7, 2000 readings. All elevation values were received, except for MW-68, MW-69, MW-70, and the recovery wells. For MW-68, MW-69, MW-70, RW-01, RW-1A, RW-1B, and RW-02 the depth to water was received and subtracted from the top of casing elevation listed in Table 1. For the recovery wells that have transducers, the readings for August 30 were converted to elevations and averaged. The resulting value is included in Table 1. The transducer located in RW-03 was relocated during pump change out. The transducer elevation of 222.80 ft MSL was used in the computations for the RW-03 groundwater elevation. All wells listed in Table 1 contain a groundwater elevation for August 30, 2000. A -999 values indicates that the reading for one of the other dates was not taken.

Two interpolations were performed for the August 30 data set. 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 monitoring 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.

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.

A number of figures were prepared for each data set. Figures 4 through 6 present the August 30 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 through 12 show the data set with the “deep” monitoring wells 18, 38, 40, 34, and 43. Figures 13 through 15 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 measured August 30, 2000

Well ID	EASTING	NORTHING	Top of Casing Elevation	Groundwater Elevation August 30, 2000	Groundwater Elevation February 7, 2000	Groundwater Elevation June 6, 1999
MW-03	802100.69	281596.25	292.35	221.15	221.09	221.89
MW-04	802369.19	281278.87	301.61	224.82	225.31	226.11
MW-06	802069.13	280604.17	289.11	225.59	226.17	226.56
MW-07	802481.70	281839.88	295.1	226.1	226.62	228.24
MW-08	802727.91	282001.04	292.59	215.52	228.71	230.79
MW-09	802516.42	281641.18	304.32	226.14	226.68	228.02
MW-10	802201.26	281662.55	288.83	222.52	222.92	223.81
MW-11	802099.00	281353.10	299.47	222.57	222.80	223.41
MW-12	802071.22	281067.19	301.35	223.54	223.85	224.4
MW-13	802369.21	281033.56	299.73	225.31	225.69	226.61
MW-14	802288.95	280003.37	302.22	228.35	228.12	228.82
MW-15	801985.36	280348.88	295.12	226.79	226.92	227.72
MW-18	802448.08	279136.41	308.02	171.19	172.76	176.47
MW-19	800782.26	278945.87	290.57	202.27	203.26	-999
MW-28	803154.48	281568.58	294.79	233.76	234.30	236.09
MW-29	802863.96	282104.92	273.22	232.12	232.49	234.54
MW-30	802013.96	282229.19	274.87	225.86	226.42	228.31
MW-31	801783.90	281651.53	290.17	218.2	218.92	220.39
MW-32	801615.51	280834.37	284.88	221.93	222.04	-999
MW-33	801561.30	280398.10	280.56	225.2	225.60	226.46
MW-34	801917.96	279411.21	299.72	159.46	160.39	-999
MW-35	802070.44	281072.31	300.52	223.57	223.87	224.37
MW-36	802887.01	279531.02	310.24	142.05	156.44	153.24
MW-37	801616.58	280831.22	284.89	153.68	156.13	-999
MW-38	802450.43	279141.38	307.44	169.67	172.75	176.49
MW-40	800948.23	282460.42	262.45	172.33	177.98	183
MW-41	800457.21	279621.65	283.81	217.75	218.21	218.81
MW-42	800182.40	281883.92	274.87	217.95	219.12	221.27
MW-43	800111.73	280284.33	284.99	146.24	156.40	128.65

MW-44	800601.09	281073.71	269.07	213.66	214.77	-999
MW-45	804125.99	280728.08	292.81	236.48	236.81	238.39
MW-46	803115.96	281256.81	287.56	232.14	232.79	234.16
MW-49	803051.31	280211.84	310.49	230.87	231.49	232.14
MW-51	802828.62	282345.86	275.24	231.97	232.38	235.24
MW-53	805136.05	279176.66	306.38	232.49	232.82	233.2
MW-54	801183.32	281160.10	295.36	214.32	215.46	217.46
MW-55	801204.62	279301.05	292.05	221.22	221.00	222.18
MW-56	801971.55	279708.26	293.62	226.16	226.45	-999
MW-57	802006.19	280184.05	290.79	226.99	227.25	228.38
MW-58	802066.44	279845.07	290.52	226.78	227.07	227.89
MW-59	802252.00	281333.67	300.12	223.9	224.24	225.07
MW-60	802282.05	281424.39	296.85	224.01	224.30	225.25
MW-62	801858.16	278289.89	293.60	199.53	199.50	-999
MW-63	803585.83	278192.29	304.58	198.98	200.42	-999
MW-65	803887.68	283529.72	263.22	247.27	249.33	-999
MW-68	802040.04	281500.76	291.68	221.47	-999	-999
MW-69	802011.49	281202.55	307.04	222.57	222.79	-999
MW-70	801988.49	281029.60	305.05	223.18	-999	-999
MW-71	801804.71	280584.68	294.39	224.99	225.43	-999
PZ-02	803373.00	282748.00	284.39	239.96	240.19	-999
RW-01	801973.88	280267.14	296.57	226.80	226.96	-999
RW-01A	801990.08	280386.26	296.83	226.26	226.83	-999
RW-01B	802009.37	280504.87	290.48	225.90	226.18	-999
RW-02	802003.32	280624.56	290.93	225.19	226.50	-999
RW-03	802012.69	280743.76	299.4	222.27	223.73	223.33
RW-04	802027.11	280918.07	305.22	220.97	222.84	222.916
RW-05	802041.97	281113.38	307.25	221.16	216.74	216.246
RW-06	802067.17	281264.22	304.67	219.72	220.36	219.737
RW-07	802079.19	281442.21	297.53	220.61	220.65	220.227
RW-08	802088.53	281574.72	293.09	217.74	216.05	216.129
RW-09	802232.41	281688.06	290.79	218.73	219.42	214.27

DRAFT

g:\winterploation-aug30-a.gpr

Mesh Used For
Interpolation

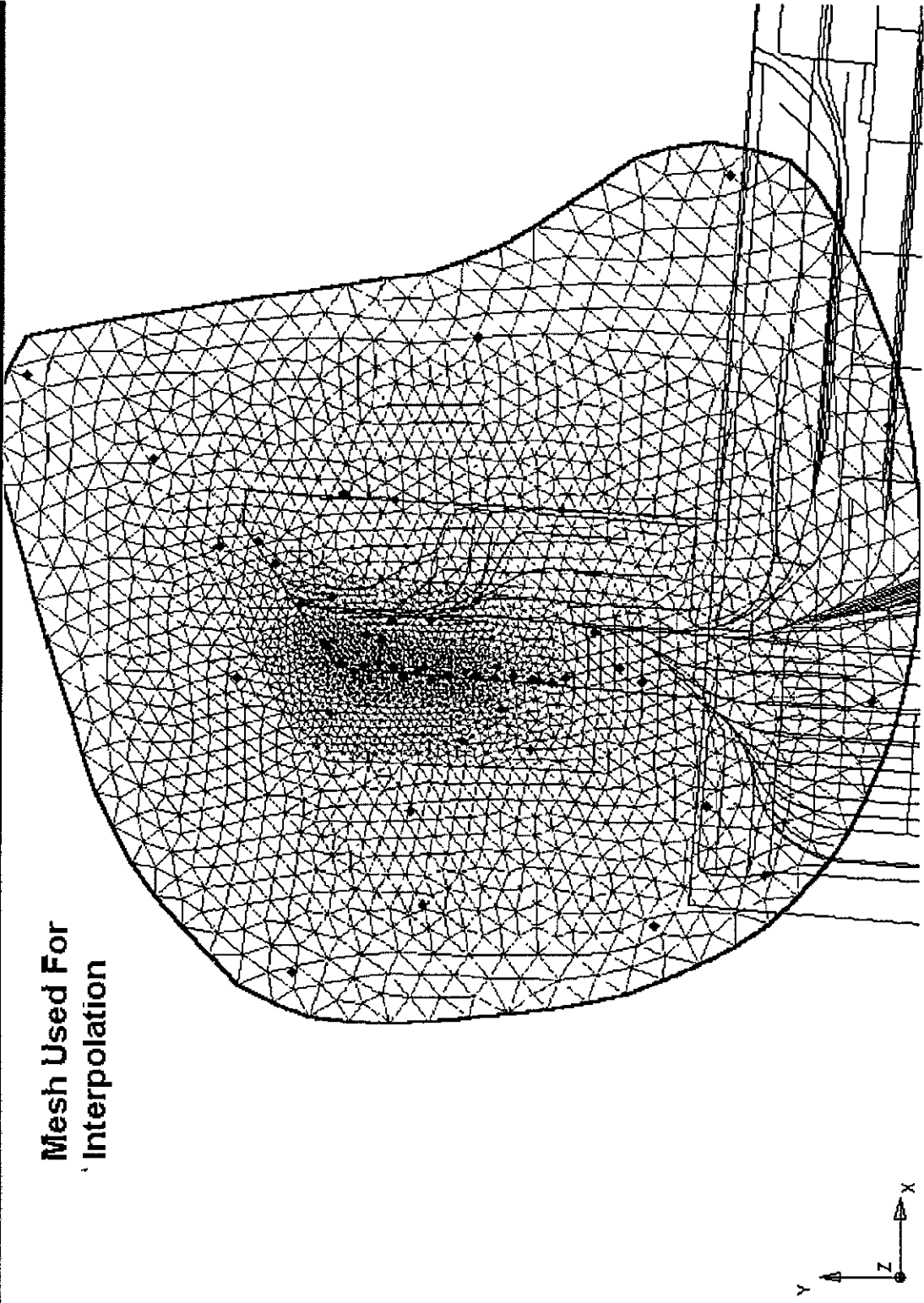


Figure 1. Mesh used for interpolation.

DRAFT

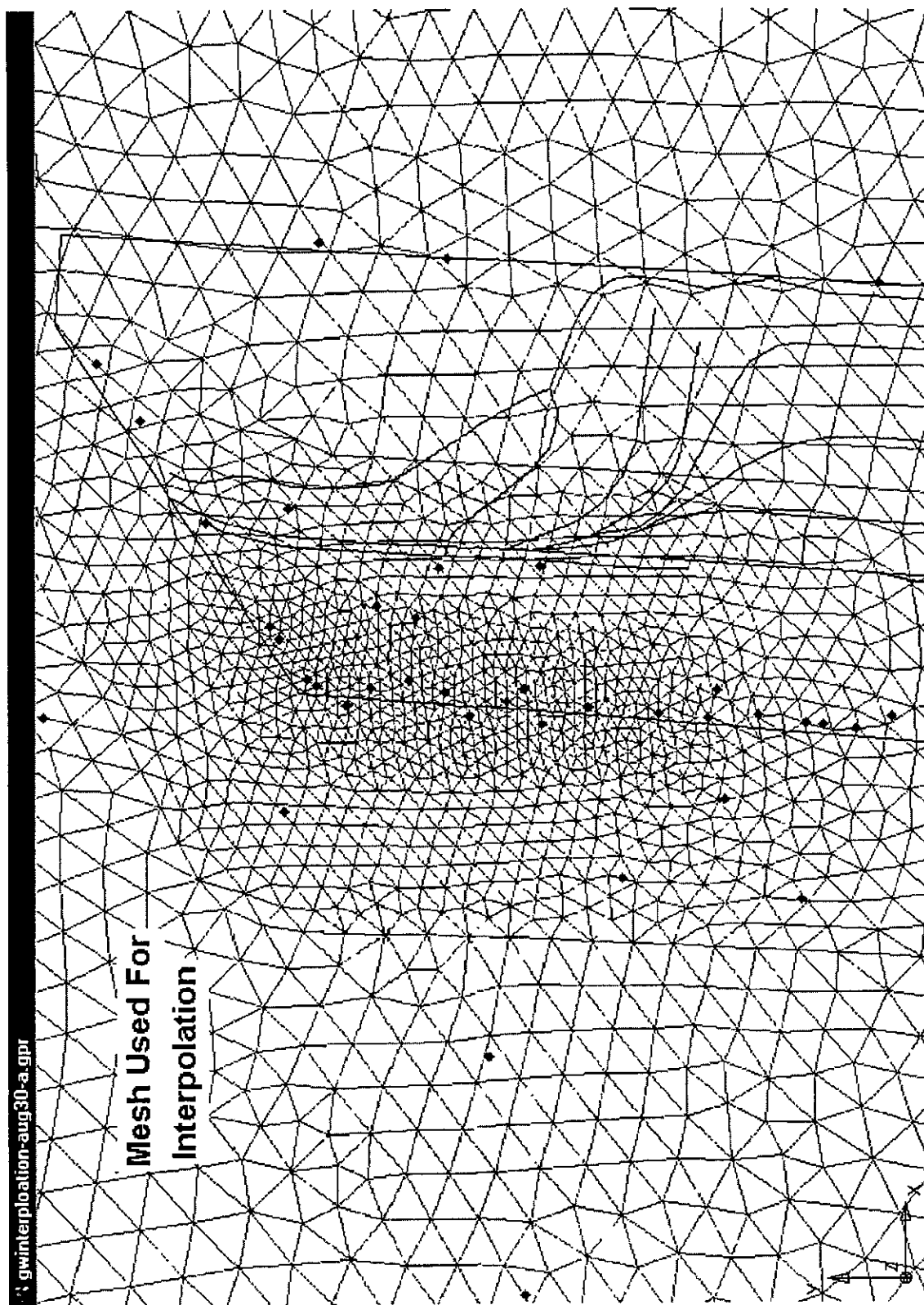


Figure 2. Mesh resolution around area of recovery wells.

DRAFT

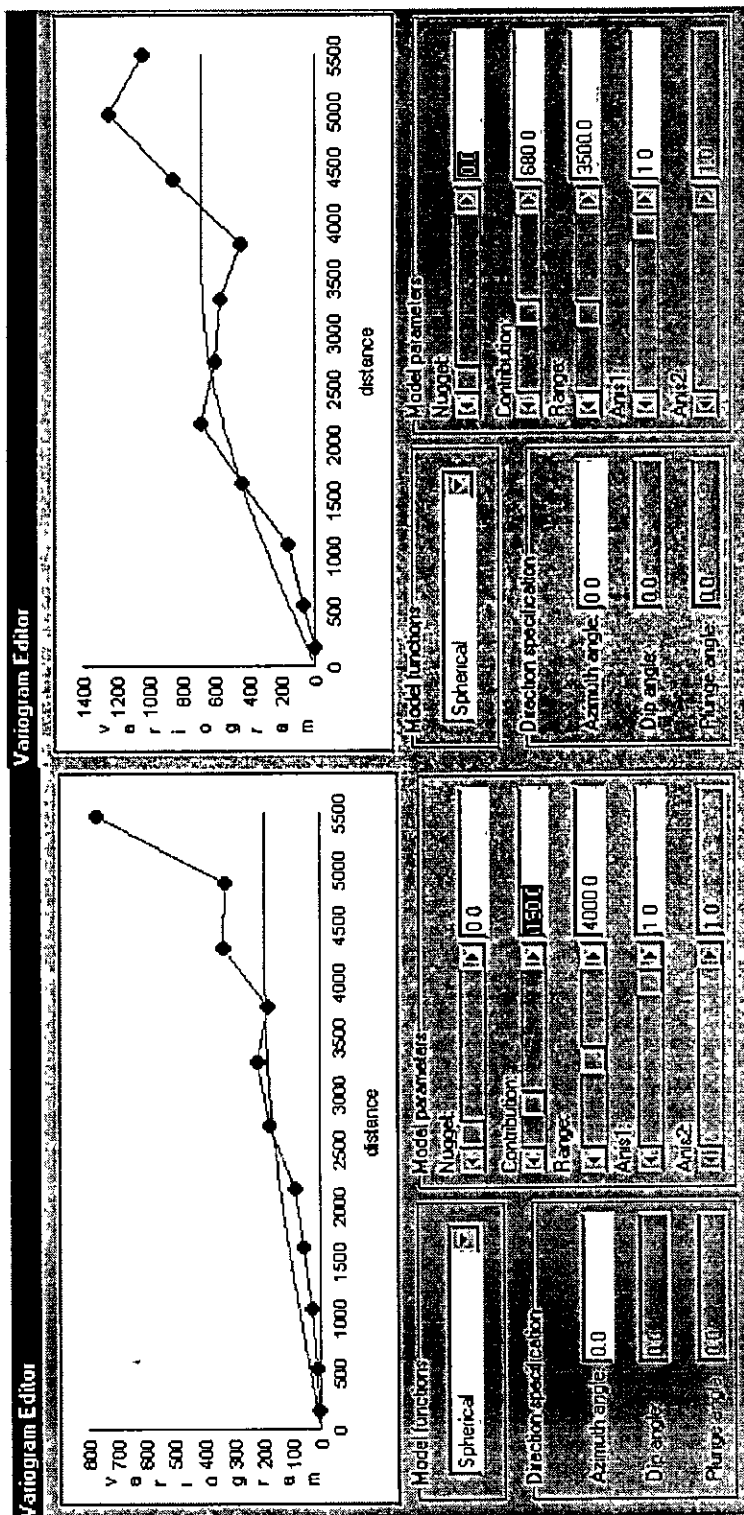
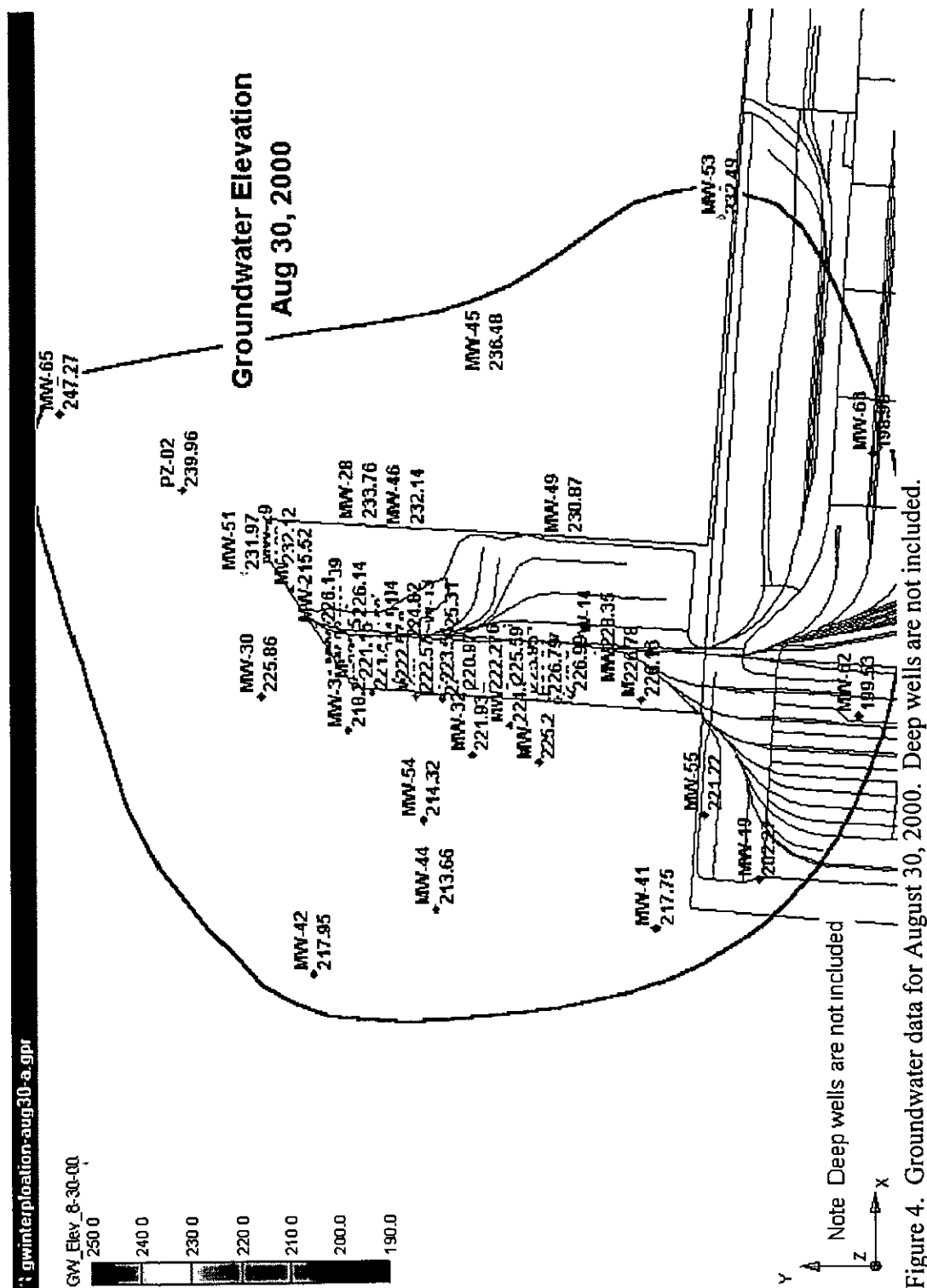


Figure 3. Variograms used for interpolations, left is without “deep” wells, right is with “deep” wells

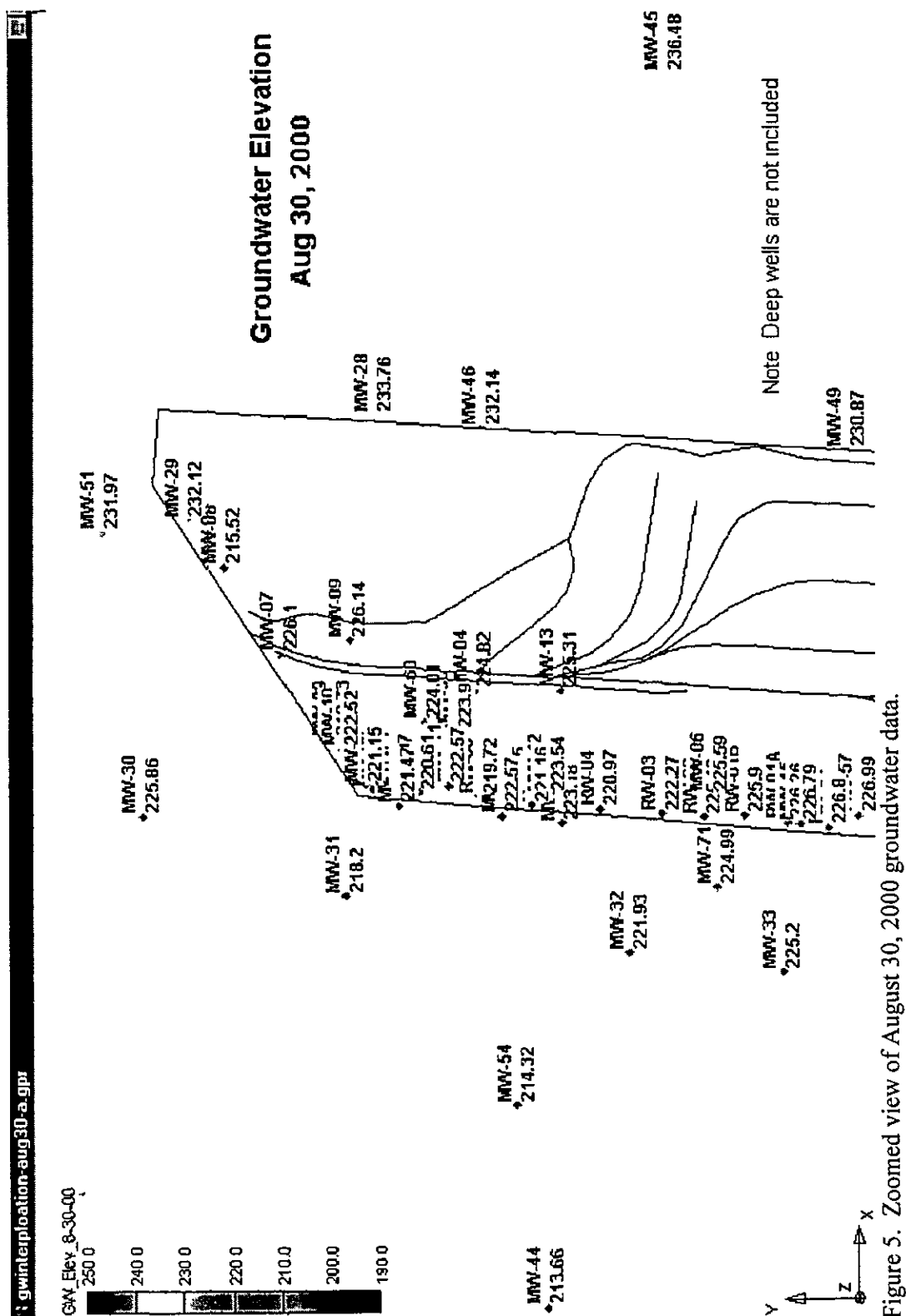
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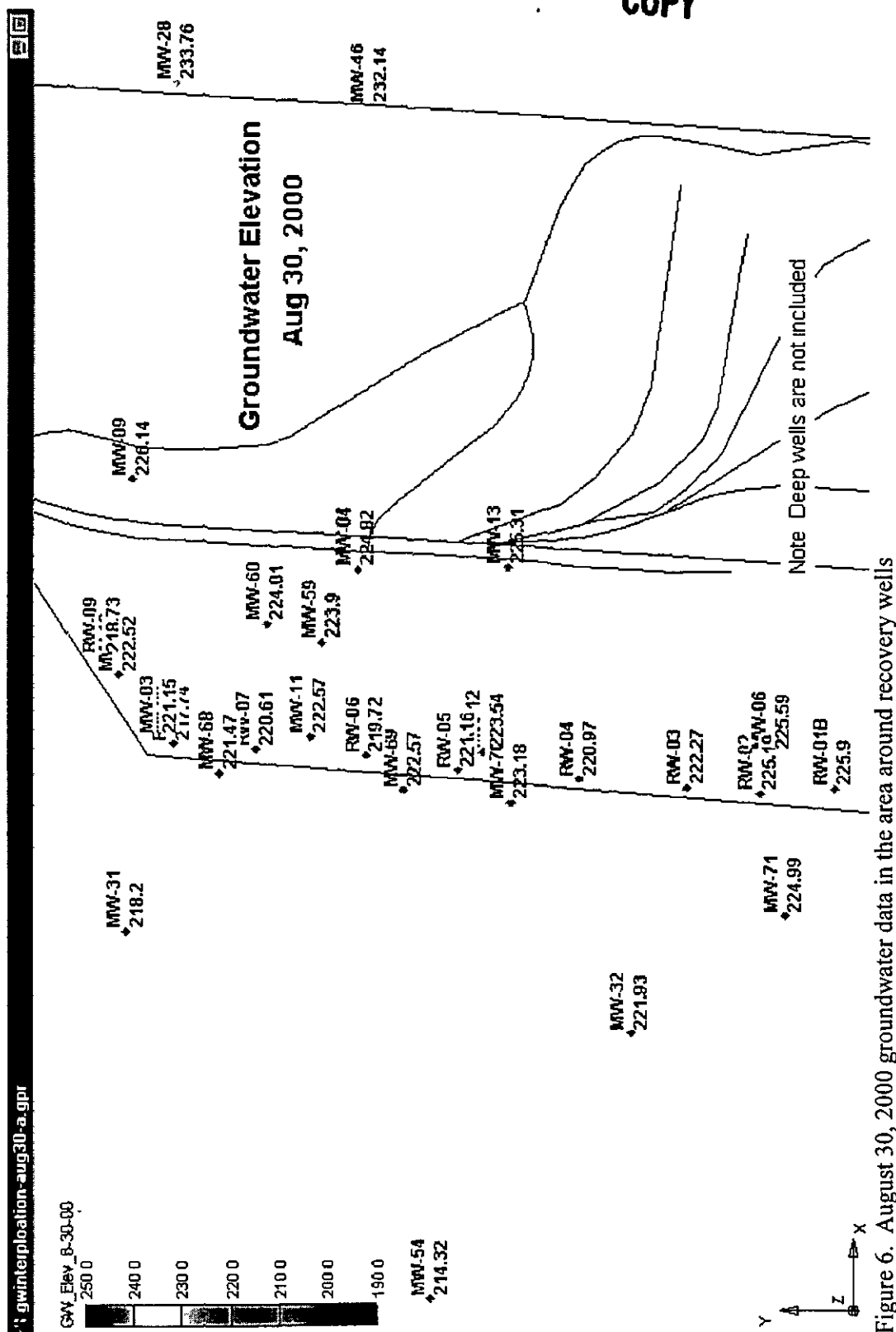


Figure 6. August 30, 2000 groundwater data in the area around recovery wells

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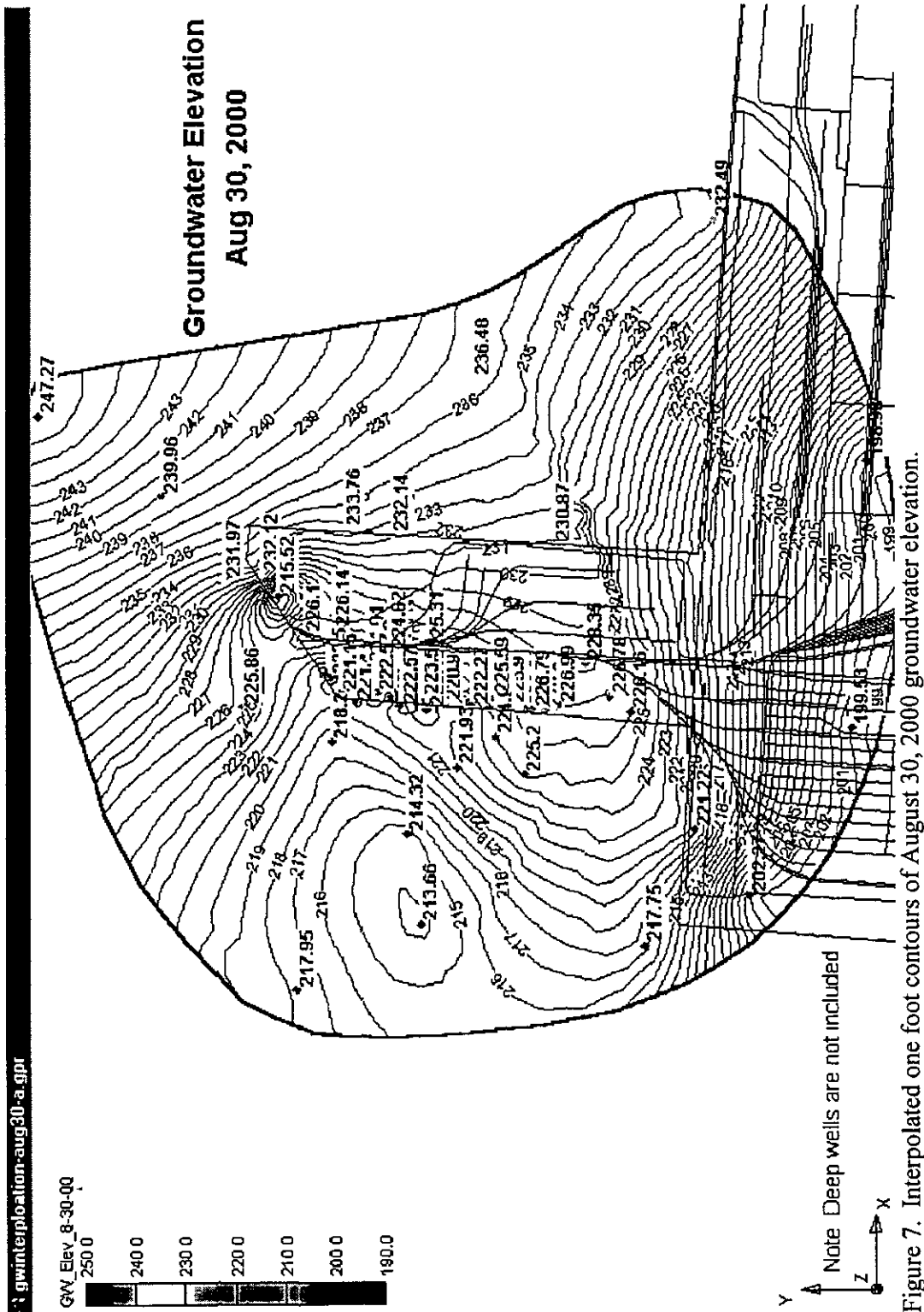


Figure 7. Interpolated one foot contours of August 30, 2000 groundwater elevation.

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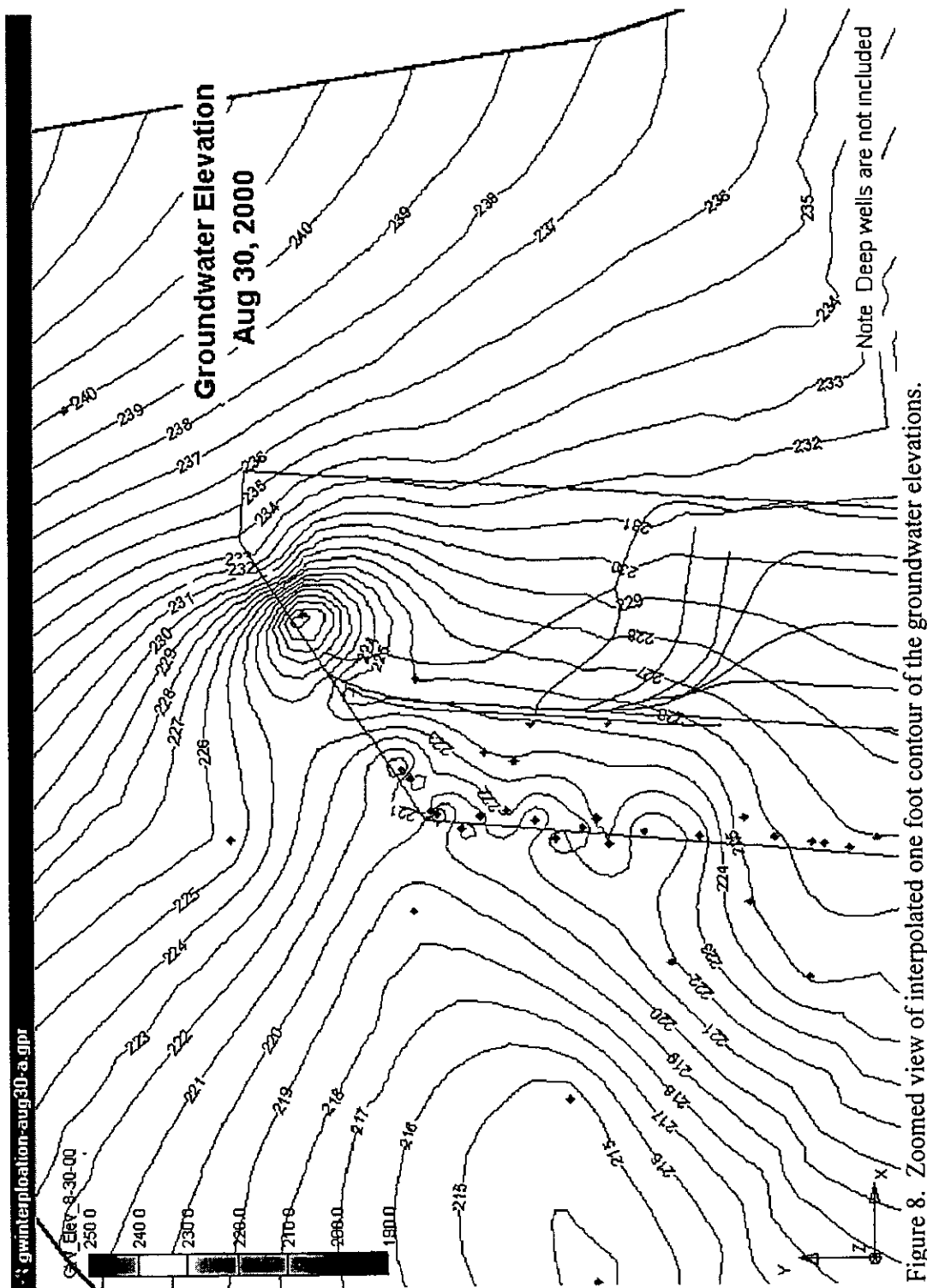


Figure 8. Zoomed view of interpolated one foot contour of the groundwater elevations.

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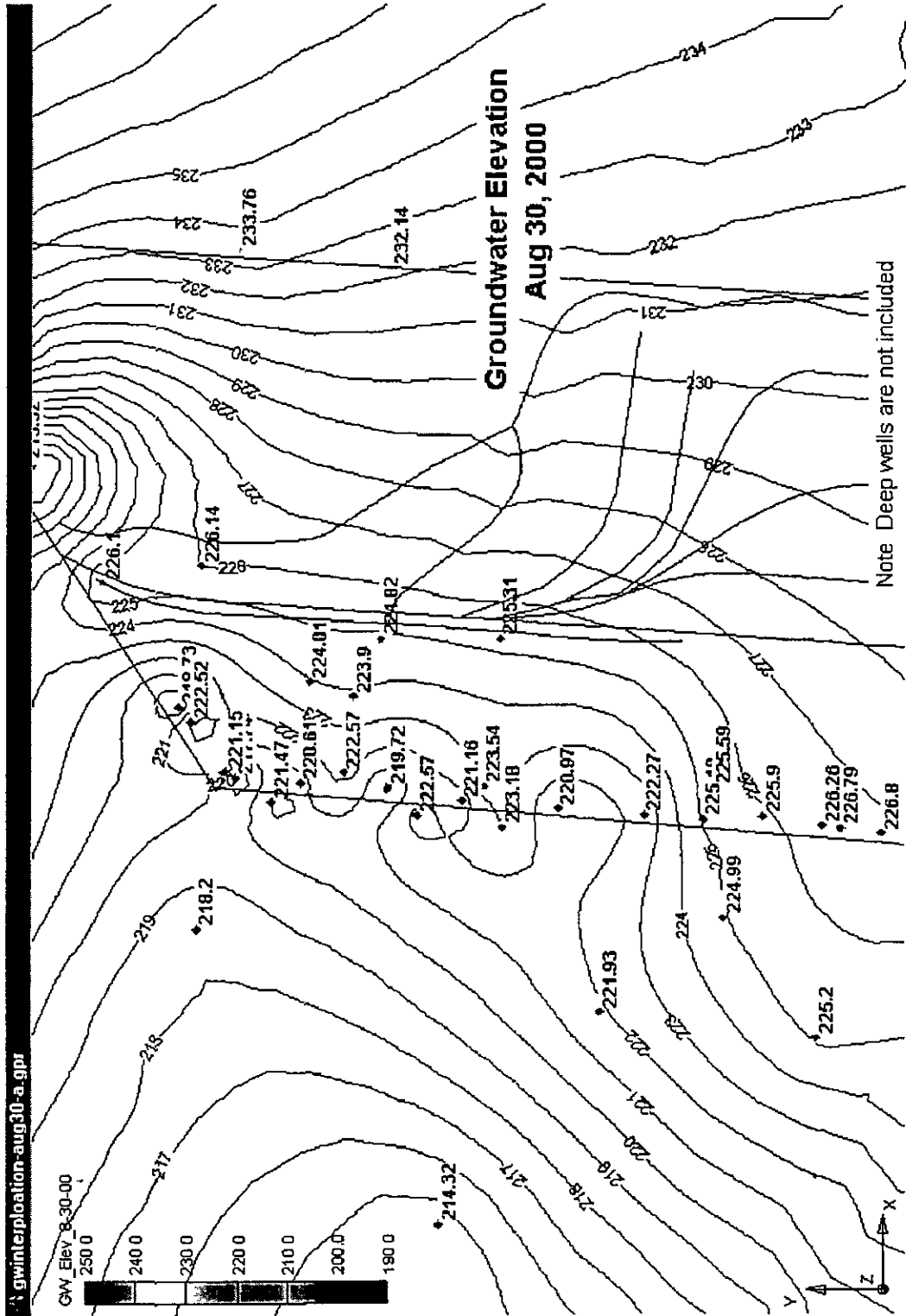


Figure 9. Zoomed view of interpolated one foot contours of the area around the recovery wells.

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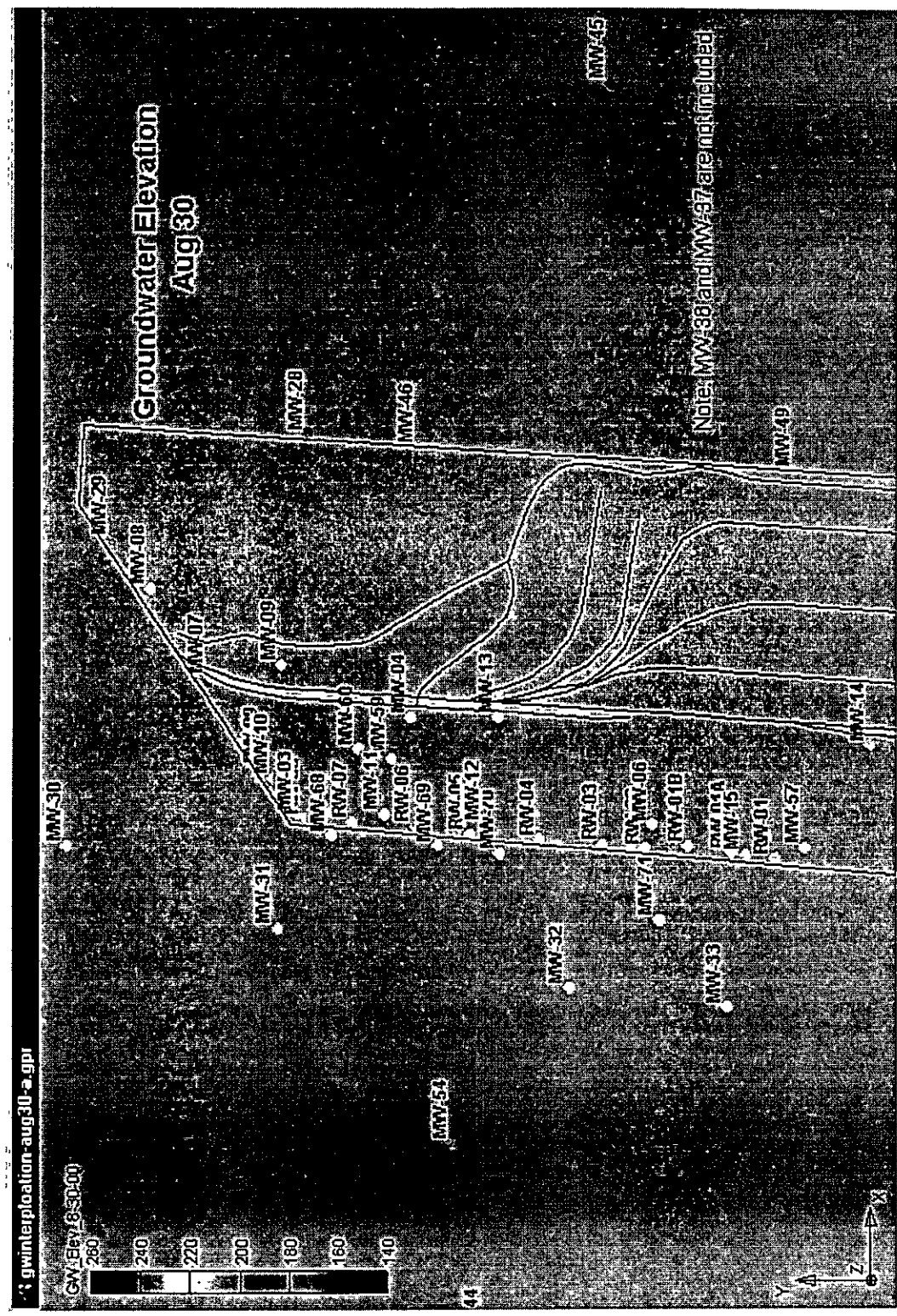


Figure 11. Zoomed view of Figure 10. Color coded groundwater elevations.

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604 297

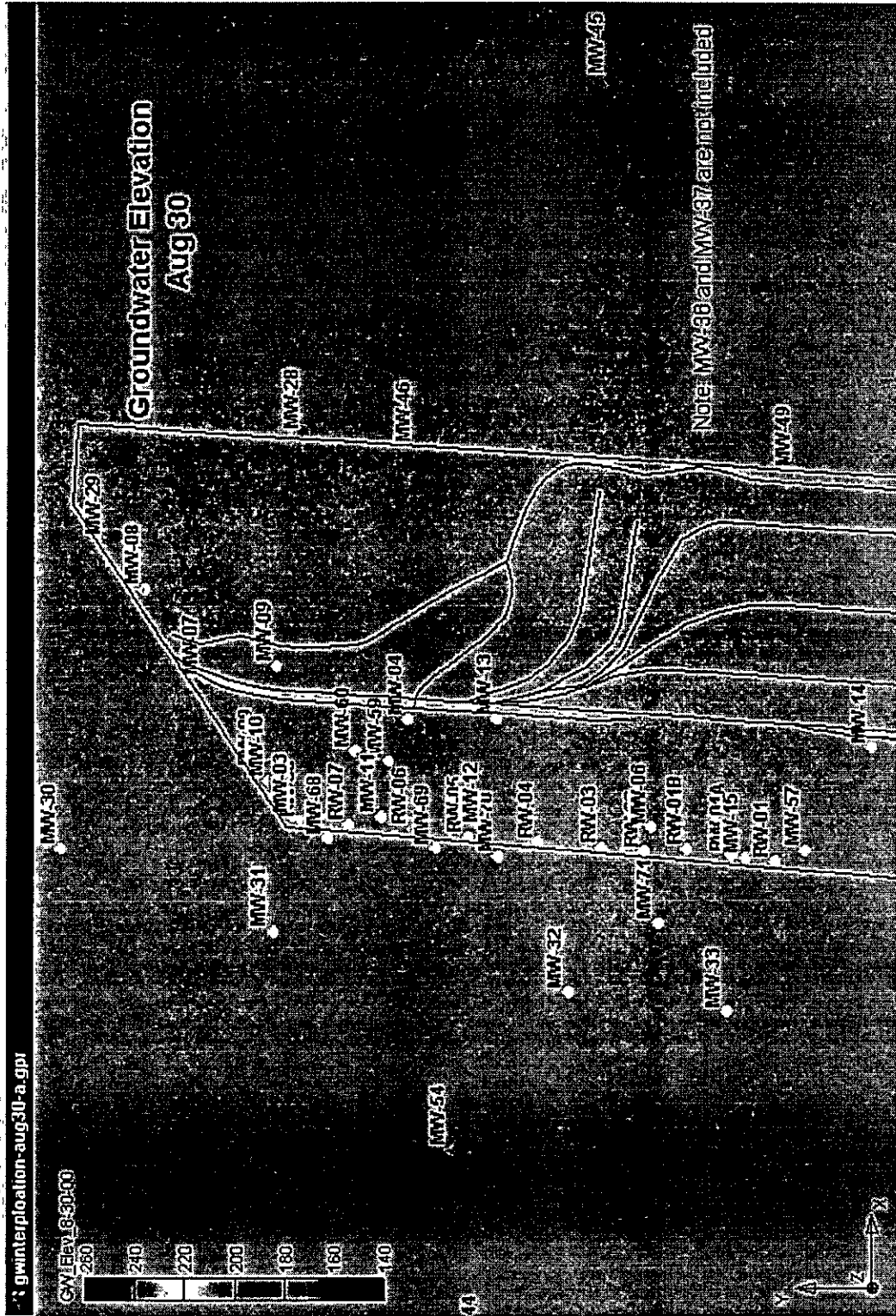


Figure 12. Zoomed view of Figure 10 emphasizing the area around the recovery wells. Color coded groundwater elevations.

BEST AVAILABLE
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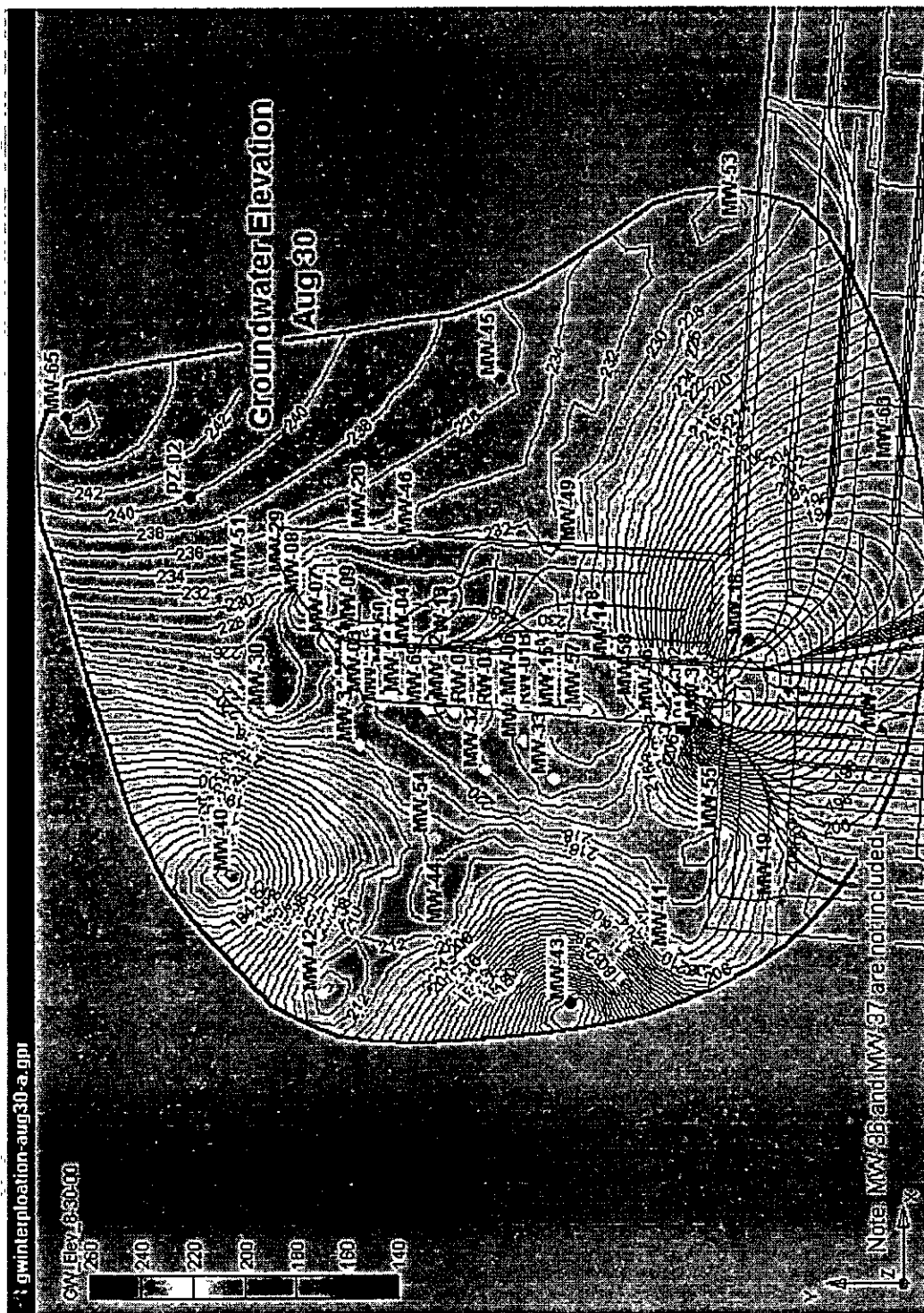


Figure 13. Two foot contours of interpolated groundwater elevation with "deep" wells.

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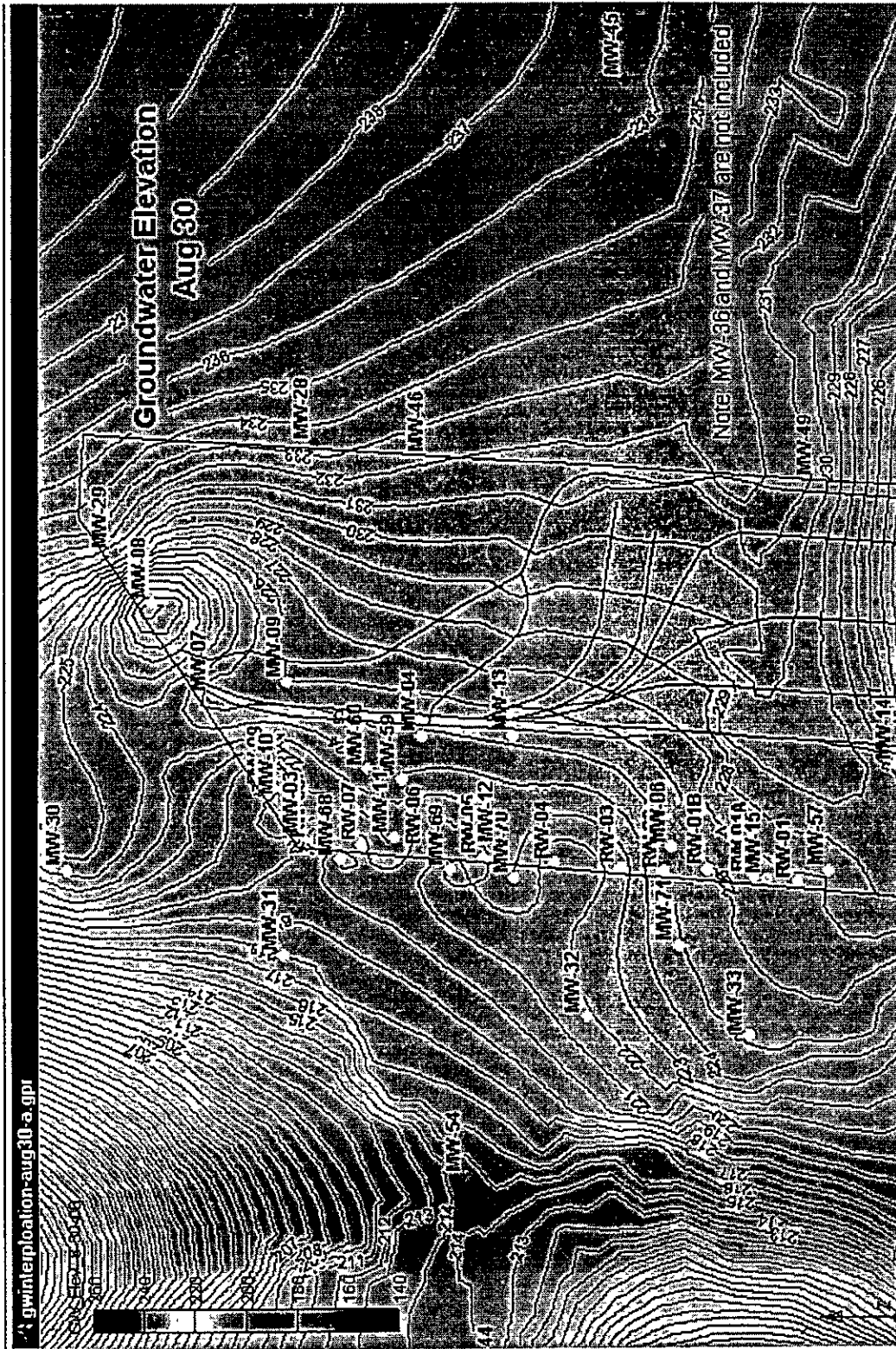


Figure 14. Zoomed view of interpolated groundwater elevation with "deep" wells showing one foot contours

**BEST AVAILABLE
COPY**

Figure 15. Interpolated groundwater elevations with “deep” wells for area around recovery wells

APPENDIX F

**TELEMETRY DATA IN ELECTRONIC FORMAT
FROM RECOVERY WELLS RW-03 THROUGH RW-09 FOR Y2Q3**

Appendix E - Data Logger Download

Year	Julian Date	Time	Head (in feet) of Water Level Above Transducer					
			RW-03	RW-04	RW-05	RW-06	RW-07	RW-08
2000	152	1700	-20.2	4.686	-20.65	5.421	5.387	13.27
2000	152	1800	-20.2	4.686	-20.65	5.387	5.387	6.489
2000	152	1900	-20.3	4.686	-20.69	5.387	5.387	6.522
2000	152	2000	-20.3	4.653	-20.72	5.487	5.337	6.589
2000	152	2100	-20.4	4.636	-20.79	5.32	5.37	6.622
2000	152	2200	-20.4	4.619	-20.84	5.421	5.387	6.572
2000	152	2300	-20.5	4.619	-20.89	5.387	5.387	6.622
2000	152	2400	-20.5	4.719	-20.92	5.454	5.387	6.622
2000	153	100	-20.5	4.719	-20.97	5.287	5.387	6.656
2000	153	200	-20.6	4.619	-21.02	5.454	5.354	6.556
2000	153	300	-20.6	4.719	-21.05	5.37	5.404	6.572
2000	153	400	-20.7	4.705	-21.09	5.39	5.39	6.625
2000	153	500	-20.7	4.693	-21.12	5.461	5.394	6.563
2000	153	600	-20.7	4.66	-21.15	5.395	5.395	6.58
2000	153	700	-20.8	4.662	-21.18	5.43	5.397	6.599
2000	153	800	-20.7	4.626	-21.15	5.394	5.378	6.596
2000	153	900	-20.7	4.69	-21.09	5.391	5.425	6.727
2000	153	1000	-20.6	4.703	-20.99	5.421	5.371	6.606
2000	153	1100	-20.5	4.719	-20.92	5.421	5.37	6.622
2000	153	1200	-20.4	4.719	-20.84	5.454	5.354	6.656
2000	153	1300	-20.3	4.619	-20.75	5.387	5.387	6.522
2000	153	1400	-20.3	4.686	-20.69	5.387	5.387	6.689
2000	153	1500	-20.2	4.686	-20.62	5.421	5.354	6.806
2000	153	1600	-20.1	4.703	-20.59	5.421	5.354	6.656
2000	153	1700	-20.1	4.703	-20.55	5.421	5.354	6.606
2000	153	1800	-20.1	4.719	-20.55	5.421	5.387	6.672
2000	153	1900	-20.2	4.686	-20.59	5.454	5.387	6.556
2000	153	2000	-20.2	4.653	-20.67	5.404	5.354	6.489
2000	153	2100	-20.3	4.653	-20.75	5.354	5.354	6.622
2000	153	2200	-20.4	4.653	-20.8	5.421	5.387	6.656
2000	153	2300	-20.4	4.619	-20.85	5.421	5.354	6.606
2000	153	2400	-20.4	4.703	-20.85	5.387	5.354	6.122
2000	154	100	-20.5	4.719	-20.92	5.354	5.421	6.622
2000	154	200	-20.5	4.719	-20.95	5.387	5.387	6.455
2000	154	300	-20.6	4.653	-21.02	5.421	5.387	6.656
2000	154	400	-20.6	4.654	-21.05	5.455	5.371	6.623
2000	154	500	-20.7	4.658	-21.12	5.393	5.359	6.595
2000	154	600	-20.7	4.695	-21.15	5.38	5.363	6.649
2000	154	700	-20.8	4.696	-21.18	5.397	5.431	6.566
2000	154	800	-20.7	4.695	-21.15	5.396	5.396	6.649
2000	154	900	-20.6	4.692	-21.09	5.41	5.393	6.662
2000	154	1000	-20.5	4.72	-20.99	5.454	5.387	6.622
2000	154	1100	-20.4	4.653	-20.89	5.454	5.337	6.622
2000	154	1200	-20.4	4.653	-20.79	5.387	5.387	6.656
2000	154	1300	-20.3	4.686	-20.72	5.421	5.387	6.622
2000	154	1400	-20.2	4.686	-20.69	5.37	5.387	6.856
2000	154	1500	-20.2	4.719	-20.62	5.487	5.354	6.639
2000	154	1600	-20.1	4.719	-20.55	5.421	5.354	6.639
2000	154	1700	-20.1	4.686	-20.52	5.521	5.354	6.622

2000	154	1800	-20.1	4.685	-20.55	5.353	5.369	6.621
2000	154	1900	-20.2	4.686	-20.59	5.387	5.387	6.556
2000	154	2000	-20.2	4.686	-20.65	5.404	5.387	6.656
2000	154	2100	-20.3	4.653	-20.72	5.421	5.354	6.589
2000	154	2200	-20.4	4.619	-20.79	5.354	5.387	6.489
2000	154	2300	-20.4	4.686	-20.84	5.337	5.387	6.656
2000	154	2400	-20.4	4.719	-20.85	5.504	5.387	6.656
2000	155	100	-20.5	4.536	-20.89	5.421	5.387	6.656
2000	155	200	-20.5	4.653	-20.92	5.421	5.387	6.622
2000	155	300	-20.5	4.686	-20.95	5.421	5.387	6.606
2000	155	400	-20.6	4.686	-20.99	5.454	5.354	6.622
2000	155	500	-20.6	4.669	-21	5.421	5.387	6.589
2000	155	600	-20.6	4.653	-21.04	5.321	5.371	6.656
2000	155	700	-20.6	4.724	-21.07	5.275	5.391	6.627
2000	155	800	-20.7	4.725	-21.09	5.427	5.393	6.612
2000	155	900	-20.7	4.71	-21.12	5.428	5.395	6.664
2000	155	1000	-20.7	4.475	-21.12	5.36	5.393	6.529
2000	155	1100	-20.7	4.626	-21.12	5.378	5.378	6.53
2000	155	1200	-20.7	4.726	-21.12	5.361	5.394	6.646
2000	155	1300	-20.7	4.726	-21.12	5.394	5.36	6.629
2000	155	1400	-20.7	4.658	-21.12	5.426	5.36	6.595
2000	155	1500	-20.7	4.692	-21.12	5.443	5.393	6.645
2000	155	1600	-20.7	4.724	-21.09	5.358	5.425	6.694
2000	155	1700	-20.6	4.653	-21.02	5.454	5.354	6.422
2000	155	1800	-20.6	4.686	-20.99	5.421	5.354	6.656
2000	155	1900	-20.5	4.686	-20.97	5.387	5.387	6.689
2000	155	2000	-20.6	4.686	-20.97	5.37	5.387	6.639
2000	155	2100	-20.6	4.686	-20.99	5.487	5.387	6.706
2000	155	2200	-20.6	4.653	-21.02	5.37	5.37	6.572
2000	155	2300	-20.6	4.686	-21.05	5.421	5.387	6.389
2000	155	2400	-20.6	4.689	-21.07	5.357	5.39	6.625
2000	156	100	-20.7	4.692	-21.09	5.393	5.393	6.645
2000	156	200	-20.7	4.71	-21.12	5.394	5.394	6.713
2000	156	300	-20.7	4.693	-21.12	5.411	5.394	6.63
2000	156	400	-20.7	4.693	-21.12	5.361	5.361	6.596
2000	156	500	-20.7	4.695	-21.15	5.497	5.363	6.599
2000	156	600	-20.7	4.662	-21.15	5.28	5.38	6.633
2000	156	700	-20.8	4.646	-21.18	5.464	5.397	6.599
2000	156	800	-20.8	4.629	-21.18	5.397	5.397	6.633
2000	156	900	-20.8	4.729	-21.18	5.364	5.397	6.766
2000	156	1000	-20.8	4.729	-21.18	5.364	5.397	6.549
2000	156	1100	-20.8	4.629	-21.18	5.397	5.397	6.633
2000	156	1200	-20.7	4.729	-21.15	5.397	5.397	6.633
2000	156	1300	-20.7	4.743	-21.15	5.394	5.394	6.663
2000	156	1400	-20.7	4.675	-21.15	5.376	5.393	6.428
2000	156	1500	-20.7	4.694	-21.15	5.412	5.395	6.581
2000	156	1600	-20.7	4.694	-21.15	5.395	5.361	6.63
2000	156	1700	-20.8	4.694	-21.19	5.429	5.362	6.631
2000	156	1800	-20.8	4.729	-21.18	5.43	5.397	6.615
2000	156	1900	-20.8	4.628	-21.18	5.396	5.396	6.532
2000	156	2000	-20.8	4.762	-21.18	5.396	5.396	6.565
2000	156	2100	-20.8	4.729	-21.18	5.431	5.381	6.616

2000	156	2200	-20.8	4.696	-21.22	5.447	5.364	6.633
2000	156	2300	-20.8	4.729	-21.22	5.431	5.414	6.566
2000	156	2400	-20.8	4.696	-21.25	5.431	5.397	6.633
2000	157	100	-20.8	4.679	-21.22	5.397	5.397	6.499
2000	157	200	-20.8	4.694	-21.22	5.395	5.395	6.664
2000	157	300	-20.8	4.561	-21.22	5.363	5.396	6.632
2000	157	400	-20.8	4.662	-21.22	5.363	5.396	6.599
2000	157	500	-20.8	4.759	-21.22	5.494	5.393	6.629
2000	157	600	-20.8	4.46	-21.2	5.329	5.362	6.597
2000	157	700	-20.8	4.66	-21.22	5.428	5.394	6.597
2000	157	800	-20.8	4.728	-21.18	5.429	5.396	6.598
2000	157	900	-20.8	4.495	-21.22	5.38	5.364	6.599
2000	157	1000	-20.8	4.661	-21.18	5.396	5.463	6.598
2000	157	1100	-20.8	4.662	-21.18	5.363	5.363	6.632
2000	157	1200	-20.8	4.712	-21.22	5.43	5.364	6.599
2000	157	1300	-20.8	4.729	-21.25	5.431	5.397	6.533
2000	157	1400	-20.8	4.663	-21.25	5.447	5.397	6.633
2000	157	1500	-20.8	4.646	-21.25	5.297	5.397	6.666
2000	157	1600	-20.8	4.646	-21.18	5.397	5.364	6.599
2000	157	1700	-20.7	4.693	-21.15	5.394	5.361	6.396
2000	157	1800	-20.7	4.724	-21.14	5.408	5.358	6.527
2000	157	1900	-20.7	4.356	-21.15	5.375	5.375	6.66
2000	157	2000	-20.8	4.693	-21.19	5.394	5.411	6.63
2000	157	2100	-20.8	4.679	-21.25	5.397	5.397	6.666
2000	157	2200	-20.9	4.663	-21.27	5.464	5.364	6.633
2000	157	2300	-20.8	4.663	-21.27	5.431	5.364	6.599
2000	157	2400	-20.9	4.696	-21.28	5.431	5.447	6.65
2000	158	100	-20.9	4.729	-21.28	5.464	5.431	6.633
2000	158	200	-20.9	4.729	-21.28	5.464	5.397	6.616
2000	158	300	-20.8	4.728	-21.25	5.43	5.396	6.632
2000	158	400	-20.9	4.578	-21.29	5.396	5.362	6.665
2000	158	500	-20.9	4.678	-21.29	5.429	5.396	6.565
2000	158	600	-20.9	4.661	-21.29	5.396	5.396	6.632
2000	158	700	-20.9	4.696	-21.3	5.364	5.397	6.633
2000	158	800	-20.9	4.696	-21.3	5.397	5.397	6.599
2000	158	900	-20.9	4.729	-21.28	5.414	5.414	6.7
2000	158	1000	-20.8	4.763	-21.25	5.397	5.431	6.633
2000	158	1100	-20.8	4.596	-21.23	5.397	5.397	6.666
2000	158	1200	-20.8	4.726	-21.22	5.427	5.427	6.696
2000	158	1300	-20.8	4.76	-21.22	5.328	5.395	6.663
2000	158	1400	-20.8	4.662	-21.22	5.464	5.397	6.699
2000	158	1500	-20.7	4.695	-21.18	5.379	5.363	6.665
2000	158	1600	-20.7	4.691	-21.15	5.425	5.358	6.644
2000	158	1700	-20.7	4.686	-21.09	5.421	5.388	6.639
2000	158	1800	-20.6	4.686	-21.05	5.421	5.387	6.656
2000	158	1900	-20.7	4.686	-21.09	5.37	5.387	6.656
2000	158	2000	-20.7	4.453	-21.12	5.354	5.421	6.59
2000	158	2100	-20.8	4.658	-21.19	5.393	5.41	6.662
2000	158	2200	-20.8	4.66	-21.22	5.428	5.361	6.696
2000	158	2300	-20.8	4.692	-21.25	5.427	5.36	6.629
2000	158	2400	-20.8	4.709	-21.27	5.361	5.394	6.629
2000	159	100	-20.8	4.726	-21.25	5.461	5.394	6.63

2000	159	200	-20.8	4.725	-21.25	5.326	5.426	6.762
2000	159	300	-20.8	4.725	-21.25	5.426	5.393	6.662
2000	159	400	-20.8	4.691	-21.25	5.426	5.376	6.594
2000	159	500	-20.8	4.691	-21.25	5.409	5.359	6.595
2000	159	600	-20.9	4.659	-21.27	5.393	5.393	6.629
2000	159	700	-20.9	4.693	-21.29	5.428	5.394	6.597
2000	159	800	-20.9	4.693	-21.29	5.427	5.411	6.679
2000	159	900	-20.8	4.726	-21.25	5.36	5.427	6.629
2000	159	1000	-20.8	4.724	-21.19	5.392	5.392	6.56
2000	159	1100	-20.7	4.653	-21.15	5.421	5.388	6.623
2000	159	1200	-20.7	4.686	-21.09	5.387	5.387	6.689
2000	159	1300	-20.6	4.686	-21.07	5.454	5.354	6.622
2000	159	1400	-20.6	4.719	-21.04	5.354	5.354	6.422
2000	159	1500	-20.6	4.386	-20.99	5.387	5.387	6.489
2000	159	1600	-20.5	4.703	-20.95	5.421	5.387	6.606
2000	159	1700	-20.5	4.703	-20.89	5.437	5.337	6.656
2000	159	1800	-20.4	4.753	-20.85	5.421	5.354	6.689
2000	159	1900	-20.5	4.653	-20.89	5.387	5.387	6.556
2000	159	2000	-20.5	4.653	-20.92	5.387	5.387	6.556
2000	159	2100	-20.6	4.653	-21.02	5.454	5.354	6.639
2000	159	2200	-20.7	4.62	-21.14	5.421	5.388	6.406
2000	159	2300	-20.8	4.709	-21.19	5.41	5.36	6.595
2000	159	2400	-20.8	4.726	-21.22	5.327	5.393	6.629
2000	160	100	-20.8	4.458	-21.22	5.393	5.393	6.628
2000	160	200	-20.8	4.725	-21.24	5.41	5.426	6.662
2000	160	300	-20.8	4.741	-21.25	5.392	5.392	6.644
2000	160	400	-20.8	4.624	-21.22	5.392	5.392	6.611
2000	160	500	-20.8	4.723	-21.22	5.358	5.391	6.61
2000	160	600	-20.8	4.72	-21.22	5.471	5.388	6.623
2000	160	700	-20.8	4.687	-21.22	5.422	5.389	6.624
2000	160	800	-20.8	4.688	-21.19	5.406	5.389	6.658
2000	160	900	-20.7	4.686	-21.15	5.421	5.387	6.656
2000	160	1000	-20.7	4.619	-21.09	5.454	5.421	6.556
2000	160	1100	-20.6	4.619	-21.02	5.404	5.421	6.622
2000	160	1200	-20.5	4.719	-20.95	5.421	5.354	6.622
2000	160	1300	-20.5	4.636	-20.89	5.421	5.387	6.489
2000	160	1400	-20.4	4.653	-20.85	5.354	5.387	6.622
2000	160	1500	-20.4	4.669	-20.79	5.454	5.354	6.489
2000	160	1600	-20.3	4.686	-20.75	5.32	5.354	6.622
2000	160	1700	-20.3	4.686	-20.72	5.487	5.354	6.589
2000	160	1800	-20.3	4.669	-20.69	5.37	5.354	6.889
2000	160	1900	-20.3	4.653	-20.75	5.387	5.387	6.689
2000	160	2000	-20.4	4.653	-20.82	5.421	5.354	6.722
2000	160	2100	-20.5	4.653	-20.89	5.387	5.387	6.622
2000	160	2200	-20.6	4.686	-20.99	5.387	5.354	6.589
2000	160	2300	-20.7	4.703	-21.07	5.387	5.387	6.823
2000	160	2400	-20.7	4.708	-21.14	5.426	5.392	6.594
2000	161	100	-20.8	4.626	-21.19	5.428	5.394	6.496
2000	161	200	-20.8	4.727	-21.22	5.395	5.395	6.597
2000	161	300	-20.8	4.66	-21.22	5.395	5.395	6.63
2000	161	400	-20.8	4.643	-21.22	5.394	5.394	6.596
2000	161	500	-20.8	4.709	-21.22	5.36	5.377	6.646

2000	161	600	-20.8	4.692	-21.22	5.426	5.393	6.628
2000	161	700	-20.8	4.691	-21.22	5.409	5.392	6.628
2000	161	800	-20.8	4.691	-21.19	5.392	5.426	6.594
2000	161	900	-20.7	4.674	-21.15	5.392	5.392	6.628
2000	161	1000	-20.6	4.686	-21.05	5.421	5.354	6.522
2000	161	1100	-20.5	4.686	-20.95	5.437	5.354	6.672
2000	161	1200	-20.4	4.653	-20.85	5.421	5.387	6.672
2000	161	1300	-20.3	4.686	-20.75	5.32	5.421	6.923
2000	161	1400	-20.3	4.703	-20.69	5.421	5.354	6.589
2000	161	1500	-20.2	4.703	-20.62	5.421	5.387	6.355
2000	161	1600	-20.1	4.653	-20.59	5.421	5.32	6.489
2000	161	1700	-20.1	4.686	-20.55	5.42	5.354	6.622
2000	161	1800	-20.2	4.668	-20.59	5.452	5.386	6.687
2000	161	1900	-20.2	4.653	-20.62	5.42	5.354	6.589
2000	161	2000	-20.2	4.619	-20.65	5.487	5.387	6.656
2000	161	2100	-20.3	4.653	-20.72	5.387	5.387	6.656
2000	161	2200	-20.4	4.686	-20.79	5.387	5.404	6.656
2000	161	2300	-20.4	4.719	-20.85	5.454	5.421	6.589
2000	161	2400	-20.5	4.719	-20.92	5.354	5.387	6.639
2000	162	100	-20.5	4.619	-20.95	5.421	5.387	6.689
2000	162	200	-20.6	4.719	-21.02	5.421	5.387	6.656
2000	162	300	-20.6	4.719	-21.05	5.421	5.387	6.622
2000	162	400	-20.7	4.723	-21.09	5.391	5.408	6.643
2000	162	500	-20.7	4.691	-21.09	5.392	5.358	6.627
2000	162	600	-20.7	4.658	-21.12	5.359	5.359	6.644
2000	162	700	-20.7	4.692	-21.12	5.46	5.394	6.629
2000	162	800	-20.7	4.658	-21.09	5.326	5.409	6.595
2000	162	900	-20.6	4.687	-21.02	5.421	5.421	6.639
2000	162	1000	-20.5	4.686	-20.94	5.454	5.387	6.606
2000	162	1100	-20.4	4.686	-20.85	5.421	5.354	6.622
2000	162	1200	-20.3	4.653	-20.79	5.337	5.354	6.622
2000	162	1300	-20.3	4.653	-20.72	5.454	5.387	6.856
2000	162	1400	-20.2	4.703	-20.65	5.387	5.387	6.656
2000	162	1500	-20.2	4.719	-20.62	5.387	5.387	6.556
2000	162	1600	-20.1	4.619	-20.59	5.454	5.32	6.472
2000	162	1700	-20.1	4.753	-20.55	5.387	5.421	6.556
2000	162	1800	-20.1	4.486	-20.55	5.454	5.12	6.656
2000	162	1900	-20.2	4.653	-20.59	5.42	5.387	6.656
2000	162	2000	-20.2	4.619	-20.65	5.421	5.354	6.639
2000	162	2100	-20.3	4.719	-20.72	5.387	5.387	6.622
2000	162	2200	-20.4	4.703	-20.79	5.454	5.354	6.823
2000	162	2300	-20.4	4.686	-20.82	5.454	5.387	6.606
2000	162	2400	-20.5	4.719	-20.89	5.287	5.421	6.639
2000	163	100	-20.5	4.619	-20.95	5.454	5.387	6.722
2000	163	200	-20.6	4.719	-20.99	5.37	5.37	6.355
2000	163	300	-20.6	4.486	-21.05	5.354	5.387	6.622
2000	163	400	-20.7	4.622	-21.05	5.39	5.357	6.625
2000	163	500	-20.7	4.691	-21.09	5.359	5.375	6.611
2000	163	600	-20.7	4.691	-21.1	5.393	5.376	6.628
2000	163	700	-20.7	4.691	-21.12	5.426	5.426	6.661
2000	163	800	-20.7	4.691	-21.09	5.426	5.392	6.628
2000	163	900	-20.6	4.653	-21.02	5.421	5.388	6.623

2000	163	1000	-20.5	4.686	-20.95	5.454	5.387	6.689
2000	163	1100	-20.4	4.703	-20.85	5.387	5.421	6.606
2000	163	1200	-20.3	4.653	-20.79	5.404	5.387	6.656
2000	163	1300	-20.3	4.686	-20.69	5.287	5.32	6.656
2000	163	1400	-20.2	4.719	-20.62	5.421	5.387	6.856
2000	163	1500	-20.1	4.653	-20.55	5.42	5.387	6.656
2000	163	1600	-20.1	4.652	-20.49	5.386	5.386	6.621
2000	163	1700	-20	4.648	-20.45	5.383	5.349	6.651
2000	163	1800	-20	4.614	-20.49	5.449	5.349	6.684
2000	163	1900	-20.1	4.619	-20.52	5.42	5.387	6.589
2000	163	2000	-20.2	4.719	-20.59	5.42	5.387	6.622
2000	163	2100	-20.2	4.619	-20.65	5.387	5.354	6.656
2000	163	2200	-20.3	4.703	-20.75	5.37	5.354	6.656
2000	163	2300	-20.4	4.686	-20.82	5.37	5.354	6.656
2000	163	2400	-20.5	4.619	-20.9	5.387	5.421	6.589
2000	164	100	-20.5	4.719	-20.95	5.454	5.354	6.656
2000	164	200	-20.6	4.703	-21	5.387	5.354	6.639
2000	164	300	-20.6	4.554	-21.05	5.372	5.355	6.623
2000	164	400	-20.7	4.691	-21.09	5.393	5.359	6.628
2000	164	500	-20.7	4.691	-21.15	5.409	5.359	6.661
2000	164	600	-20.8	4.661	-21.18	5.396	5.396	6.631
2000	164	700	-20.8	4.663	-21.18	5.414	5.381	6.65
2000	164	800	-20.7	4.659	-21.12	5.427	5.36	6.729
2000	164	900	-20.6	4.688	-21.02	5.423	5.389	6.624
2000	164	1000	-20.5	4.719	-20.9	5.421	5.421	6.622
2000	164	1100	-20.4	4.419	-20.79	5.32	5.387	6.622
2000	164	1200	-20.3	4.653	-20.69	5.504	5.32	6.656
2000	164	1300	-20.2	4.653	-20.65	5.32	5.387	6.689
2000	164	1400	-20.2	4.686	-20.62	5.487	5.421	6.622
2000	164	1500	-20.1	4.719	-20.55	5.554	5.354	6.622
2000	164	1600	-20.1	4.369	-20.52	5.421	5.354	6.622
2000	164	1700	-20	4.683	-20.45	5.45	5.367	6.652
2000	164	1800	-20	4.681	-20.45	5.315	5.382	6.684
2000	164	1900	-20.1	4.669	-20.52	5.42	5.387	6.638
2000	164	2000	-20.1	4.653	-20.59	5.421	5.354	6.656
2000	164	2100	-20.2	4.603	-20.65	5.421	5.354	6.656
2000	164	2200	-20.3	4.719	-20.75	5.454	5.387	6.656
2000	164	2300	-20.4	4.719	-20.82	5.421	5.404	6.656
2000	164	2400	-20.5	4.619	-20.89	5.421	5.387	6.622
2000	165	100	-20.5	4.719	-20.92	5.337	5.354	6.656
2000	165	200	-20.6	4.352	-20.99	5.387	5.387	6.656
2000	165	300	-20.6	4.719	-21.02	5.404	5.387	6.656
2000	165	400	-20.7	4.74	-21.05	5.424	5.391	6.643
2000	165	500	-20.7	4.691	-21.09	5.359	5.359	6.611
2000	165	600	-20.7	4.693	-21.14	5.395	5.378	6.597
2000	165	700	-20.7	4.694	-21.15	5.462	5.395	6.63
2000	165	800	-20.7	4.691	-21.09	5.376	5.393	6.561
2000	165	900	-20.6	4.687	-20.99	5.388	5.388	6.623
2000	165	1000	-20.4	4.619	-20.89	5.404	5.387	6.656
2000	165	1100	-20.3	4.719	-20.79	5.421	5.387	6.656
2000	165	1200	-20.2	4.386	-20.69	5.454	5.387	6.489
2000	165	1300	-20.2	4.686	-20.59	5.454	5.32	6.689

2000	165	1400	-20.1	4.719	-20.52	5.554	5.354	6.655
2000	165	1500	-20	4.701	-20.49	5.386	5.386	6.587
2000	165	1600	-20	4.648	-20.45	5.415	5.382	6.817
2000	165	1700	-20	4.664	-20.45	5.482	5.382	6.917
2000	165	1800	-20	4.682	-20.45	5.383	5.35	6.652
2000	165	1900	-20.1	4.652	-20.49	5.387	5.337	6.689
2000	165	2000	-20.1	4.619	-20.55	5.404	5.387	6.556
2000	165	2100	-20.2	4.719	-20.65	5.421	5.387	6.572
2000	165	2200	-20.3	4.452	-20.75	5.387	5.387	6.622
2000	165	2300	-20.4	4.686	-20.82	5.421	5.387	6.622
2000	165	2400	-20.4	4.703	-20.84	5.454	5.37	6.606
2000	166	100	-20.4	4.719	-20.85	5.421	5.387	6.589
2000	166	200	-20.5	4.753	-20.89	5.387	5.421	6.656
2000	166	300	-20.5	4.653	-20.92	5.387	5.421	6.672
2000	166	400	-20.5	4.669	-20.95	5.454	5.354	6.622
2000	166	500	-20.6	4.703	-20.99	5.387	5.354	6.589
2000	166	600	-20.6	4.686	-20.99	5.354	5.387	6.622
2000	166	700	-20.6	4.671	-21.02	5.389	5.389	6.657
2000	166	800	-20.6	4.687	-21.02	5.421	5.421	6.59
2000	166	900	-20.5	4.686	-20.99	5.454	5.387	6.689
2000	166	1000	-20.5	4.686	-20.9	5.387	5.387	6.672
2000	166	1100	-20.4	4.686	-20.85	5.404	5.32	6.622
2000	166	1200	-20.4	4.686	-20.79	5.37	5.37	6.656
2000	166	1300	-20.3	4.319	-20.75	5.421	5.421	6.622
2000	166	1400	-20.3	4.686	-20.75	5.454	5.387	6.656
2000	166	1500	-20.2	4.719	-20.69	5.454	5.421	6.722
2000	166	1600	-20.2	4.703	-20.62	5.454	5.354	6.689
2000	166	1700	3.4	4.619	-20.59	5.387	5.32	6.622
2000	166	1800	3.3	4.753	-20.62	5.471	5.387	6.622
2000	166	1900	3.3	4.636	-20.65	5.454	5.387	6.639
2000	166	2000	3.1	4.653	-20.75	5.487	5.387	6.639
2000	166	2100	3.1	4.719	-20.89	5.354	5.437	6.689
2000	166	2200	3.1	4.686	-20.97	5.421	5.387	6.539
2000	166	2300	3	4.619	-21.02	5.404	5.354	6.722
2000	166	2400	3.1	4.72	-21.05	5.422	5.422	6.657
2000	167	100	3.1	4.724	-21.09	5.392	5.392	6.661
2000	167	200	3.1	4.658	-21.12	5.392	5.359	6.628
2000	167	300	3.1	4.724	-21.14	5.426	5.426	6.511
2000	167	400	3.1	4.694	-21.15	5.361	5.361	6.63
2000	167	500	3.1	4.726	-21.19	5.36	5.393	6.562
2000	167	600	3	4.729	-21.18	5.397	5.363	6.649
2000	167	700	3	4.695	-21.18	5.396	5.396	6.632
2000	167	800	3	4.728	-21.18	5.396	5.429	6.581
2000	167	900	3	4.728	-21.17	5.396	5.429	6.498
2000	167	1000	3	4.66	-21.14	5.395	5.361	6.664
2000	167	1100	3	4.691	-21.09	5.392	5.392	6.627
2000	167	1200	3	4.686	-20.99	5.387	5.387	6.622
2000	167	1300	3	4.586	-20.92	5.421	5.32	6.656
2000	167	1400	3	4.686	-20.89	5.421	5.387	6.556
2000	167	1500	3	4.686	-20.79	5.387	5.421	6.856
2000	167	1600	3	4.653	-20.75	5.421	5.32	6.656
2000	167	1700	3	4.669	-20.72	5.387	5.387	6.622

2000	167	1800	3	4.686	-20.69	5.387	5.421	6.656
2000	167	1900	3	4.653	-20.69	5.437	5.354	6.622
2000	167	2000	3	4.619	-20.72	5.421	5.32	6.622
2000	167	2100	3	4.719	-20.77	5.387	5.387	6.622
2000	167	2200	3	4.719	-20.82	5.387	5.354	6.706
2000	167	2300	2.9	4.703	-20.85	5.421	5.421	6.856
2000	167	2400	2.9	4.619	-20.89	5.437	5.387	6.672
2000	168	100	2.9	4.719	-20.92	5.354	5.387	6.689
2000	168	200	2.9	4.719	-20.95	5.421	5.387	6.622
2000	168	300	2.9	4.719	-20.99	5.421	5.387	6.589
2000	168	400	2.9	4.686	-21.02	5.404	5.37	6.656
2000	168	500	2.9	4.653	-21.02	5.387	5.32	6.622
2000	168	600	2.9	4.654	-21.05	5.455	5.355	6.657
2000	168	700	2.8	4.688	-21.05	5.423	5.389	6.641
2000	168	800	2.8	4.688	-21.05	5.423	5.423	6.625
2000	168	900	2.8	4.686	-21	5.337	5.387	6.589
2000	168	1000	2.8	4.653	-20.92	5.454	5.387	6.689
2000	168	1100	2.8	4.686	-20.89	5.304	5.387	6.689
2000	168	1200	2.8	4.686	-20.82	5.454	5.387	6.656
2000	168	1300	2.8	4.719	-20.79	5.354	5.387	6.672
2000	168	1400	2.8	4.386	-20.72	5.421	5.387	6.656
2000	168	1500	2.9	4.686	-20.65	5.421	5.32	6.622
2000	168	1600	2.9	4.686	-20.6	5.421	5.354	6.689
2000	168	1700	2.9	4.686	-20.57	5.387	5.387	6.622
2000	168	1800	2.8	4.653	-20.55	5.454	5.387	6.589
2000	168	1900	2.8	4.586	-20.59	5.42	5.387	6.622
2000	168	2000	2.8	4.619	-20.65	5.421	5.354	6.689
2000	168	2100	2.7	4.686	-20.75	5.387	5.354	6.689
2000	168	2200	2.7	4.686	-20.82	5.421	5.387	6.622
2000	168	2300	2.7	4.686	-20.89	5.404	5.387	6.672
2000	168	2400	2.7	4.686	-20.95	5.421	5.387	6.656
2000	169	100	2.7	4.686	-20.99	5.387	5.387	6.656
2000	169	200	2.7	4.686	-21.02	5.37	5.354	6.656
2000	169	300	2.7	4.653	-21.05	5.388	5.388	6.623
2000	169	400	2.7	4.688	-21.05	5.406	5.389	6.624
2000	169	500	2.7	4.674	-21.09	5.392	5.392	6.644
2000	169	600	2.7	4.658	-21.09	5.392	5.392	6.594
2000	169	700	2.7	4.658	-21.09	5.392	5.392	6.628
2000	169	800	2.7	4.641	-21.09	5.426	5.392	6.644
2000	169	900	2.7	4.691	-21.09	5.392	5.392	6.661
2000	169	1000	2.7	4.656	-21.05	5.374	5.358	6.66
2000	169	1100	2.7	4.72	-21.02	5.404	5.388	6.656
2000	169	1200	2.7	4.753	-20.99	5.421	5.421	6.672
2000	169	1300	2.7	4.619	-20.97	5.354	5.387	6.656
2000	169	1400	2.7	4.719	-20.92	5.421	5.387	6.322
2000	169	1500	2.7	4.719	-20.85	5.454	5.387	6.689
2000	169	1600	2.7	4.686	-20.89	5.421	5.354	6.656
2000	169	1700	2.7	4.686	-20.92	5.421	5.37	6.622
2000	169	1800	2.7	4.686	-20.89	5.421	5.354	6.756
2000	169	1900	2.7	4.653	-20.95	5.387	5.337	6.689
2000	169	2000	2.7	4.619	-21	5.421	5.387	6.689
2000	169	2100	2.7	4.686	-21.05	5.421	5.404	6.672

2000	169	2200	2.7	4.689	-21.09	5.39	5.423	6.692
2000	169	2300	2.7	4.658	-21.12	5.359	5.376	6.661
2000	169	2400	2.7	4.693	-21.14	5.395	5.395	6.663
2000	170	100	2.7	4.727	-21.17	5.428	5.428	6.597
2000	170	200	2.7	4.728	-21.19	5.429	5.396	6.531
2000	170	300	2.7	4.728	-21.18	5.413	5.38	6.598
2000	170	400	2.7	4.695	-21.18	5.363	5.363	6.482
2000	170	500	2.7	4.696	-21.18	5.397	5.364	6.7
2000	170	600	2.7	4.679	-21.18	5.431	5.397	6.399
2000	170	700	2.7	4.663	-21.18	5.397	5.397	6.399
2000	170	800	2.7	4.629	-21.18	5.397	5.397	6.599
2000	170	900	2.7	4.662	-21.15	5.447	5.414	6.599
2000	170	1000	2.7	4.692	-21.12	5.394	5.394	6.546
2000	170	1100	2.7	4.67	-21.04	5.388	5.354	6.523
2000	170	1200	2.7	4.669	-20.99	5.421	5.387	6.656
2000	170	1300	2.7	4.719	-20.95	5.32	5.387	6.656
2000	170	1400	2.7	4.686	-20.95	5.421	5.387	6.639
2000	170	1500	2.7	4.386	-20.95	5.454	5.421	6.706
2000	170	1600	2.7	4.703	-20.95	5.37	5.337	6.656
2000	170	1700	2.7	4.686	-20.95	5.454	5.387	6.656
2000	170	1800	2.7	4.719	-20.95	5.404	5.387	6.656
2000	170	1900	2.7	4.686	-20.94	5.387	5.387	6.656
2000	170	2000	2.7	4.619	-20.95	5.387	5.387	6.622
2000	170	2100	2.7	4.653	-20.99	5.387	5.387	6.622
2000	170	2200	2.7	4.653	-21.05	5.454	5.421	6.689
2000	170	2300	2.7	4.687	-21.05	5.388	5.405	6.657
2000	170	2400	2.7	4.69	-21.09	5.407	5.391	6.676
2000	171	100	2.7	4.691	-21.09	5.392	5.392	6.627
2000	171	200	2.7	4.724	-21.09	5.359	5.359	6.628
2000	171	300	2.7	4.691	-21.1	5.392	5.376	6.661
2000	171	400	2.7	4.693	-21.12	5.461	5.361	6.563
2000	171	500	2.7	4.444	-21.12	5.362	5.395	6.564
2000	171	600	2.7	4.676	-21.12	5.394	5.377	6.73
2000	171	700	2.7	4.676	-21.12	5.411	5.394	6.663
2000	171	800	2.7	4.695	-21.12	5.429	5.396	6.665
2000	171	900	2.6	4.693	-21.09	5.428	5.394	6.696
2000	171	1000	2.6	4.687	-21.02	5.421	5.405	6.656
2000	171	1100	2.6	4.703	-20.97	5.387	5.387	6.622
2000	171	1200	2.7	4.703	-20.92	5.404	5.387	6.622
2000	171	1300	2.7	4.586	-20.85	5.404	5.354	6.656
2000	171	1400	3.6	4.719	-20.82	5.437	5.37	6.656
2000	171	1500	2.9	4.719	-20.75	5.32	5.387	6.656
2000	171	1600	3	4.653	-20.72	5.454	5.387	6.405
2000	171	1700	3	4.619	-20.69	5.437	5.32	6.689
2000	171	1800	3	4.686	-20.65	5.32	5.354	6.722
2000	171	1900	3	4.653	-20.69	5.404	5.354	6.455
2000	171	2000	2.9	4.653	-20.72	5.421	5.387	6.656
2000	171	2100	3	4.653	-20.77	5.421	5.387	6.639
2000	171	2200	2.9	4.653	-20.82	5.387	5.387	6.622
2000	171	2300	2.9	4.619	-20.85	5.454	5.387	6.689
2000	171	2400	2.9	4.653	-20.89	5.254	5.421	6.522
2000	172	100	3	4.686	-20.92	5.421	5.354	6.622

2000	172	200	3	4.686	-20.95	5.354	5.387	6.622
2000	172	300	3	4.719	-20.97	5.387	5.387	6.622
2000	172	400	3	4.686	-21	5.387	5.354	6.622
2000	172	500	3	4.687	-21.02	5.388	5.388	6.59
2000	172	600	3	4.656	-21.05	5.39	5.374	6.659
2000	172	700	2.9	4.638	-21.05	5.389	5.389	6.624
2000	172	800	2.9	4.622	-21.05	5.423	5.39	6.658
2000	172	900	2.9	4.62	-21	5.421	5.388	6.623
2000	172	1000	2.9	4.686	-20.95	5.32	5.421	6.322
2000	172	1100	3	4.686	-20.89	5.471	5.354	6.656
2000	172	1200	2.9	4.719	-20.82	5.454	5.354	6.622
2000	172	1300	2.9	4.452	-20.75	5.387	5.387	6.639
2000	172	1400	2.9	4.653	-20.69	5.387	5.387	6.656
2000	172	1500	3	4.686	-20.65	5.421	5.354	6.689
2000	172	1600	3	4.686	-20.62	5.421	5.37	6.622
2000	172	1700	3	4.686	-20.59	5.421	5.32	6.656
2000	172	1800	3	4.686	-20.59	5.387	5.387	6.722
2000	172	1900	3	4.719	-20.62	5.354	5.387	6.656
2000	172	2000	2.9	4.686	-20.65	5.421	5.354	6.622
2000	172	2100	2.9	4.686	-20.69	5.421	5.387	6.622
2000	172	2200	2.9	4.669	-20.74	5.354	5.354	6.606
2000	172	2300	2.8	4.619	-20.79	5.454	5.387	6.689
2000	172	2400	2.8	4.653	-20.82	5.487	5.354	6.639
2000	173	100	2.8	4.686	-20.85	5.12	5.387	6.656
2000	173	200	2.8	4.686	-20.89	5.487	5.387	6.656
2000	173	300	2.8	4.686	-20.92	5.32	5.421	6.656
2000	173	400	2.8	4.686	-20.95	5.421	5.387	6.656
2000	173	500	2.8	4.703	-20.95	5.421	5.37	6.606
2000	173	600	2.8	4.686	-20.99	5.421	5.354	6.622
2000	173	700	2.8	4.619	-21	5.32	5.354	6.622
2000	173	800	2.8	4.638	-21.09	5.422	5.422	6.658
2000	173	900	2.7	4.662	-21.15	5.397	5.397	6.616
2000	173	1000	2.7	4.679	-21.18	5.431	5.397	6.65
2000	173	1100	2.7	4.696	-21.18	5.447	5.397	6.65
2000	173	1200	2.8	4.729	-21.15	5.364	5.431	6.666
2000	173	1300	2.8	4.528	-21.08	5.396	5.396	6.665
2000	173	1400	2.8	4.653	-21	5.388	5.355	6.623
2000	173	1500	2.7	4.686	-20.95	5.354	5.337	6.622
2000	173	1600	2.7	4.719	-20.95	5.421	5.421	6.572
2000	173	1700	2.8	4.753	-20.97	5.437	5.32	6.489
2000	173	1800	2.8	4.603	-20.99	5.32	5.354	6.489
2000	173	1900	2.7	4.653	-20.99	5.387	5.387	6.589
2000	173	2000	2.7	4.653	-21.02	5.387	5.387	6.622
2000	173	2100	2.7	4.653	-21.05	5.354	5.354	6.656
2000	173	2200	2.7	4.658	-21.09	5.426	5.392	6.594
2000	173	2300	2.7	4.676	-21.12	5.393	5.393	6.612
2000	173	2400	2.7	4.662	-21.12	5.33	5.397	6.699
2000	174	100	2.7	4.679	-21.15	5.381	5.397	6.65
2000	174	200	2.7	4.696	-21.15	5.397	5.397	6.466
2000	174	300	2.7	4.696	-21.18	5.431	5.397	6.666
2000	174	400	2.7	4.713	-21.18	5.397	5.364	6.65
2000	174	500	2.7	4.696	-21.18	5.397	5.364	6.633

2000	174	600	2.7	4.663	-21.22	5.364	5.397	6.566
2000	174	700	2.6	4.646	-21.22	5.414	5.397	6.633
2000	174	800	2.6	4.629	-21.22	5.397	5.397	6.466
2000	174	900	2.6	4.696	-21.18	5.397	5.397	6.566
2000	174	1000	2.6	4.729	-21.12	5.431	5.431	6.599
2000	174	1100	2.7	4.755	-21.05	5.457	5.323	6.658
2000	174	1200	2.9	4.636	-20.95	5.387	5.337	6.622
2000	174	1300	2.9	4.686	-20.89	5.404	5.387	6.622
2000	174	1400	2.9	4.719	-20.82	5.421	5.387	6.656
2000	174	1500	2.9	4.719	-20.75	5.354	5.387	6.606
2000	174	1600	3	4.619	-20.72	5.487	5.387	6.622
2000	174	1700	3	4.719	-20.65	5.754	5.354	6.656
2000	174	1800	3	4.386	-20.65	5.421	5.354	6.522
2000	174	1900	3	4.669	-20.69	5.454	5.354	6.622
2000	174	2000	3	4.686	-20.72	5.32	5.354	6.639
2000	174	2100	3	4.653	-20.82	5.387	5.354	6.622
2000	174	2200	2.9	4.619	-20.89	5.287	5.387	6.656
2000	174	2300	2.9	4.619	-20.92	5.454	5.387	6.622
2000	174	2400	3	4.653	-20.99	5.153	5.387	6.622
2000	175	100	2.9	4.653	-21.02	5.521	5.371	6.589
2000	175	200	2.9	4.674	-21.05	5.425	5.392	6.627
2000	175	300	2.9	4.692	-21.09	5.126	5.393	6.629
2000	175	400	2.9	4.661	-21.12	5.429	5.396	6.648
2000	175	500	2.9	4.662	-21.12	5.396	5.363	6.699
2000	175	600	2.9	4.646	-21.12	5.381	5.364	6.616
2000	175	700	2.9	4.696	-21.12	5.431	5.397	6.599
2000	175	800	2.9	4.695	-21.08	5.396	5.396	6.632
2000	175	900	2.9	4.706	-21.02	5.424	5.391	6.643
2000	175	1000	2.9	4.72	-20.95	5.421	5.354	6.656
2000	175	1100	2.9	4.653	-20.87	5.454	5.354	6.572
2000	175	1200	2.9	4.653	-20.79	5.037	5.354	6.589
2000	175	1300	2.9	4.686	-20.72	5.487	5.387	6.572
2000	175	1400	2.9	4.686	-20.65	5.287	5.387	6.622
2000	175	1500	2.9	4.669	-20.59	5.421	5.32	6.889
2000	175	1600	2.9	4.719	-20.52	5.421	5.354	6.689
2000	175	1700	2.9	4.553	-20.49	5.571	5.387	6.656
2000	175	1800	2.9	4.686	-20.49	5.387	5.387	6.856
2000	175	1900	2.9	4.653	-20.52	5.387	5.354	6.722
2000	175	2000	2.9	4.653	-20.59	5.354	5.354	6.606
2000	175	2100	2.9	4.653	-20.64	5.521	5.354	6.606
2000	175	2200	2.9	4.619	-20.69	5.32	5.354	6.689
2000	175	2300	2.8	4.619	-20.72	5.454	5.37	6.622
2000	175	2400	2.9	4.686	-20.79	5.554	5.387	6.656
2000	176	100	2.8	4.686	-20.82	5.354	5.354	6.622
2000	176	200	2.8	4.686	-20.85	5.421	5.387	6.622
2000	176	300	2.8	4.686	-20.89	5.387	5.354	6.606
2000	176	400	2.8	4.686	-20.92	5.454	5.387	6.689
2000	176	500	2.8	4.686	-20.94	5.404	5.387	6.589
2000	176	600	2.8	4.619	-20.95	5.354	5.387	6.589
2000	176	700	2.8	4.653	-20.95	5.37	5.354	6.589
2000	176	800	2.8	4.686	-20.94	5.387	5.354	6.522
2000	176	900	2.8	4.669	-20.89	5.387	5.387	6.606

2000	176	1000	2.8	4.686	-20.82	5.387	5.387	6.622
2000	176	1100	2.7	4.686	-20.75	5.387	5.387	6.589
2000	176	1200	2.7	4.719	-20.72	5.454	5.32	6.639
2000	176	1300	2.7	4.619	-20.65	5.421	5.354	6.656
2000	176	1400	2.7	4.653	-20.59	5.421	5.387	6.639
2000	176	1500	2.7	4.719	-20.52	5.404	5.387	6.622
2000	176	1600	2.7	4.586	-20.49	5.387	5.387	6.288
2000	176	1700	2.7	4.719	-20.45	5.421	5.32	6.656
2000	176	1800	2.7	4.719	-20.45	5.387	5.354	6.556
2000	176	1900	2.7	4.586	-20.5	5.387	5.387	6.656
2000	176	2000	2.7	4.686	-20.55	5.454	5.387	6.622
2000	176	2100	2.6	4.669	-20.62	5.421	5.354	6.689
2000	176	2200	2.6	4.636	-20.65	5.387	5.354	6.622
2000	176	2300	2.6	4.653	-20.72	5.487	5.387	6.656
2000	176	2400	2.6	4.653	-20.75	5.421	5.387	6.622
2000	177	100	2.6	4.686	-20.82	5.387	5.387	6.622
2000	177	200	2.6	4.686	-20.89	5.387	5.387	6.656
2000	177	300	2.6	4.686	-20.92	5.27	5.387	6.689
2000	177	400	2.6	4.686	-20.95	5.421	5.387	6.656
2000	177	500	2.6	4.686	-20.95	5.387	5.354	6.622
2000	177	600	2.5	4.653	-20.99	5.454	5.32	6.622
2000	177	700	2.6	4.653	-20.99	5.32	5.387	6.622
2000	177	800	2.5	4.653	-20.95	5.404	5.387	6.556
2000	177	900	2.5	4.653	-20.92	5.421	5.387	6.672
2000	177	1000	3.1	4.703	-20.82	5.421	5.421	6.589
2000	177	1100	2.5	4.719	-20.72	5.421	5.387	6.672
2000	177	1200	2.5	4.719	-20.65	5.421	5.354	6.656
2000	177	1300	2.5	4.686	-20.59	5.454	5.354	6.689
2000	177	1400	2.5	4.686	-20.52	5.471	5.354	6.639
2000	177	1500	2.5	4.686	-20.45	5.354	5.387	6.639
2000	177	1600	2.7	4.686	-20.42	5.421	5.387	6.823
2000	177	1700	2.5	4.619	-20.38	5.42	5.32	6.555
2000	177	1800	2.5	4.65	-20.39	5.402	5.385	6.52
2000	177	1900	2.5	4.669	-20.42	5.404	5.387	6.689
2000	177	2000	2.5	4.653	-20.49	5.387	5.387	6.639
2000	177	2100	2.7	4.619	-20.59	5.454	5.32	6.622
2000	177	2200	2.6	4.653	-20.65	5.32	5.354	6.589
2000	177	2300	2.6	4.686	-20.72	5.454	5.404	6.656
2000	177	2400	2.7	4.686	-20.75	5.437	5.421	6.656
2000	178	100	2.6	4.719	-20.79	5.454	5.387	6.589
2000	178	200	2.6	4.719	-20.82	5.387	5.354	6.589
2000	178	300	2.6	4.636	-20.85	5.387	5.354	6.639
2000	178	400	2.6	4.619	-20.89	5.387	5.337	6.589
2000	178	500	2.6	4.653	-20.92	5.387	5.387	6.539
2000	178	600	2.6	4.653	-20.95	5.454	5.387	6.589
2000	178	700	2.6	4.686	-20.97	5.387	5.387	6.656
2000	178	800	2.5	4.653	-20.95	5.454	5.387	6.622
2000	178	900	2.5	4.653	-20.92	5.404	5.354	6.556
2000	178	1000	2.5	4.703	-20.85	5.421	5.387	6.656
2000	178	1100	2.5	4.719	-20.79	5.421	5.387	6.639
2000	178	1200	2.5	4.586	-20.75	5.454	5.354	6.489
2000	178	1300	2.5	4.719	-20.67	5.387	5.354	6.622

2000	178	1400	2.5	4.686	-20.59	5.454	5.404	6.689
2000	178	1500	2.6	4.653	-20.59	5.354	5.32	6.672
2000	178	1600	2.7	4.619	-20.65	5.337	5.32	6.622
2000	178	1700	2.9	4.753	-20.82	5.454	5.454	6.689
2000	178	1800	2.5	4.686	-20.92	5.437	5.287	6.606
2000	178	1900	2.6	4.753	-20.99	5.454	5.421	6.656
2000	178	2000	2.6	4.654	-21.02	5.388	5.388	6.64
2000	178	2100	2.6	4.692	-21.05	5.426	5.36	6.595
2000	178	2200	2.6	4.692	-21.05	5.426	5.326	6.628
2000	178	2300	2.6	4.695	-21.07	5.429	5.396	6.598
2000	178	2400	2.6	4.695	-21.08	5.413	5.429	6.631
2000	179	100	2.5	4.696	-21.12	5.397	5.397	6.666
2000	179	200	2.5	4.696	-21.12	5.414	5.397	6.666
2000	179	300	2.6	4.713	-21.12	5.431	5.33	6.633
2000	179	400	2.5	4.729	-21.12	5.364	5.397	6.633
2000	179	500	2.5	4.529	-21.15	5.364	5.397	6.633
2000	179	600	2.5	4.696	-21.15	5.447	5.397	6.633
2000	179	700	2.5	4.663	-21.15	5.381	5.364	6.633
2000	179	800	2.5	4.679	-21.15	5.431	5.431	6.65
2000	179	900	2.5	4.729	-21.12	5.314	5.431	6.633
2000	179	1000	2.5	4.728	-21.08	5.396	5.329	6.631
2000	179	1100	2.5	4.727	-21.08	5.395	5.428	6.647
2000	179	1200	2.5	4.675	-21.05	5.426	5.426	6.662
2000	179	1300	2.5	4.703	-20.99	5.321	5.354	6.522
2000	179	1400	2.5	4.719	-20.92	5.521	5.354	6.689
2000	179	1500	2.5	4.619	-20.92	5.387	5.387	6.622
2000	179	1600	2.5	4.653	-20.89	5.387	5.387	6.522
2000	179	1700	2.5	4.686	-20.89	5.387	5.337	6.789
2000	179	1800	2.5	4.686	-20.89	5.387	5.32	6.656
2000	179	1900	2.5	4.686	-20.89	5.471	5.354	6.622
2000	179	2000	2.5	4.653	-20.92	5.454	5.387	6.606
2000	179	2100	2.5	4.686	-20.95	5.32	5.387	6.622
2000	179	2200	2.4	4.653	-20.99	5.404	5.354	6.656
2000	179	2300	2.4	4.669	-21.02	5.387	5.387	6.622
2000	179	2400	2.4	4.658	-21.05	5.392	5.376	6.628
2000	180	100	2.5	4.693	-21.09	5.461	5.394	6.796
2000	180	200	2.5	4.545	-21.12	5.397	5.33	6.633
2000	180	300	2.5	4.679	-21.15	5.381	5.381	6.633
2000	180	400	2.5	4.663	-21.15	5.397	5.397	6.666
2000	180	500	2.5	4.713	-21.18	5.397	5.414	6.65
2000	180	600	2.4	4.679	-21.22	5.364	5.397	6.583
2000	180	700	2.4	4.663	-21.2	5.431	5.397	6.633
2000	180	800	2.4	4.696	-21.18	5.397	5.414	6.633
2000	180	900	2.4	4.696	-21.18	5.397	5.397	6.633
2000	180	1000	2.5	4.729	-21.13	5.447	5.381	6.633
2000	180	1100	2.5	4.692	-21.09	5.359	5.376	6.628
2000	180	1200	2.5	4.688	-21.02	5.406	5.372	6.674
2000	180	1300	2.5	4.603	-20.95	5.421	5.387	6.773
2000	180	1400	2.9	4.753	-20.92	5.454	5.354	6.622
2000	180	1500	2.5	4.586	-20.9	5.754	5.387	6.639
2000	180	1600	2.5	4.686	-20.9	5.387	5.32	6.656
2000	180	1700	2.5	4.669	-20.89	5.387	5.32	6.606

2000	180	1800	2.5	4.653	-20.92	5.421	5.387	6.689
2000	180	1900	2.5	4.653	-20.99	5.087	5.421	6.639
2000	180	2000	2.5	4.653	-21.05	5.321	5.421	6.64
2000	180	2100	2.5	4.661	-21.08	5.395	5.328	6.631
2000	180	2200	2.5	4.679	-21.13	5.497	5.397	6.633
2000	180	2300	2.5	4.663	-21.18	5.414	5.397	6.566
2000	180	2400	2.6	4.696	-21.18	5.431	5.397	6.633
2000	181	100	2.5	4.696	-21.22	5.364	5.397	6.599
2000	181	200	2.6	4.713	-21.23	5.297	5.431	6.65
2000	181	300	2.6	4.729	-21.22	5.414	5.397	6.633
2000	181	400	2.6	4.496	-21.22	5.431	5.364	6.633
2000	181	500	2.6	4.663	-21.22	5.464	5.381	6.599
2000	181	600	2.5	4.663	-21.22	5.598	5.364	6.633
2000	181	700	2.6	4.696	-21.22	5.397	5.431	6.633
2000	181	800	2.5	4.679	-21.22	5.397	5.397	6.616
2000	181	900	2.5	4.663	-21.23	5.431	5.397	6.599
2000	181	1000	2.5	4.663	-21.22	5.364	5.397	6.633
2000	181	1100	2.5	4.663	-21.18	5.364	5.364	6.599
2000	181	1200	2.5	4.693	-21.12	4.96	5.395	6.697
2000	181	1300	2.5	4.688	-21.05	5.456	5.322	6.474
2000	181	1400	2.5	4.72	-20.99	5.421	5.404	6.589
2000	181	1500	2.5	4.586	-20.95	5.354	5.387	6.606
2000	181	1600	2.5	4.703	-20.92	5.387	5.32	6.756
2000	181	1700	2.5	4.719	-20.92	5.387	5.354	6.689
2000	181	1800	2.5	4.653	-20.92	5.387	5.387	6.589
2000	181	1900	2.5	4.653	-20.92	5.521	5.387	6.622
2000	181	2000	2.5	4.636	-20.92	5.454	5.354	6.622
2000	181	2100	2.4	4.686	-20.95	5.387	5.387	6.622
2000	181	2200	2.4	4.686	-21.02	5.654	5.354	6.656
2000	181	2300	2.4	4.655	-21.04	5.423	5.356	6.625
2000	181	2400	2.4	4.657	-21.05	4.991	5.409	6.861
2000	182	100	2.4	4.677	-21.1	5.328	5.395	6.697
2000	182	200	2.4	4.696	-21.15	5.43	5.397	6.699
2000	182	300	2.4	4.696	-21.18	5.397	5.397	6.633
2000	182	400	2.4	4.696	-21.18	5.397	5.397	6.616
2000	182	500	2.4	4.696	-21.18	5.397	5.364	6.632
2000	182	600	2.4	4.662	-21.18	5.363	5.346	6.632
2000	182	700	2.4	4.663	-21.18	5.397	5.397	6.633
2000	182	800	2.5	4.663	-21.18	5.431	5.431	6.666
2000	182	900	2.6	4.679	-21.15	5.33	5.364	6.65
2000	182	1000	2.6	4.693	-21.08	5.428	5.361	6.63
2000	182	1100	2.6	4.686	-20.99	5.421	5.387	6.639
2000	182	1200	2.5	4.686	-20.92	5.354	5.354	6.272
2000	182	1300	2.6	4.686	-20.89	5.421	5.387	6.656
2000	182	1400	2.5	4.619	-20.82	5.354	5.404	6.622
2000	182	1500	2.5	4.686	-20.79	5.421	5.354	6.622
2000	182	1600	2.5	4.719	-20.79	5.421	5.354	6.622
2000	182	1700	2.5	4.686	-20.79	5.404	5.354	6.622
2000	182	1800	2.5	4.719	-20.79	5.387	5.387	6.656
2000	182	1900	2.5	4.686	-20.82	5.421	5.387	6.606
2000	182	2000	2.5	4.653	-20.82	5.354	5.32	6.622
2000	182	2100	2.5	4.686	-20.85	5.354	5.354	6.656

2000	182	2200	2.5	4.619	-20.92	5.454	5.354	6.656
2000	182	2300	2.5	4.653	-20.99	5.32	5.387	6.622
2000	182	2400	2.5	4.688	-21.05	5.405	5.422	6.624
2000	183	100	2.5	4.71	-21.08	5.378	5.361	6.63
2000	183	200	2.5	4.713	-21.12	5.33	5.38	6.599
2000	183	300	2.5	4.729	-21.18	5.397	5.397	6.633
2000	183	400	2.5	4.663	-21.18	5.364	5.397	6.533
2000	183	500	2.5	4.695	-21.18	5.396	5.363	6.631
2000	183	600	2.5	4.662	-21.17	5.363	5.38	6.632
2000	183	700	2.5	4.695	-21.15	5.463	5.396	6.632
2000	183	800	2.5	4.695	-21.15	5.33	5.396	6.665
2000	183	900	2.5	4.694	-21.1	5.462	5.395	6.631
2000	183	1000	2.5	4.689	-21.02	5.356	5.39	6.642
2000	183	1100	2.5	4.719	-20.94	5.421	5.387	6.672
2000	183	1200	2.5	4.636	-20.85	5.404	5.354	6.622
2000	183	1300	2.5	4.686	-20.79	5.421	5.354	6.622
2000	183	1400	2.5	4.686	-20.72	5.471	5.421	6.656
2000	183	1500	2.5	4.719	-20.69	5.387	5.387	6.672
2000	183	1600	2.5	4.719	-20.64	5.404	5.354	6.622
2000	183	1700	2.5	4.352	-20.62	5.153	5.354	6.656
2000	183	1800	2.5	4.619	-20.59	5.421	5.387	6.622
2000	183	1900	2.5	4.686	-20.62	5.421	5.387	6.722
2000	183	2000	2.5	4.686	-20.69	5.421	5.354	6.589
2000	183	2100	2.5	4.653	-20.75	5.354	5.387	6.622
2000	183	2200	2.5	4.636	-20.85	5.437	5.387	6.622
2000	183	2300	2.5	4.653	-20.9	5.437	5.387	6.622
2000	183	2400	2.5	4.653	-20.95	5.437	5.387	6.622
2000	184	100	2.5	4.653	-20.99	5.354	5.387	6.656
2000	184	200	2.5	4.688	-21.02	5.356	5.389	6.658
2000	184	300	2.5	4.658	-21.07	5.359	5.392	6.528
2000	184	400	2.5	4.66	-21.1	5.495	5.361	6.363
2000	184	500	2.5	4.662	-21.12	5.346	5.397	6.465
2000	184	600	2.5	4.662	-21.15	5.431	5.397	6.833
2000	184	700	2.4	4.663	-21.17	5.397	5.364	6.599
2000	184	800	2.5	4.678	-21.12	5.396	5.413	6.649
2000	184	900	2.5	4.726	-21.05	5.427	5.427	6.629
2000	184	1000	2.5	4.72	-20.95	5.387	5.387	6.639
2000	184	1100	2.5	4.619	-20.85	5.421	5.387	6.656
2000	184	1200	2.5	4.686	-20.75	5.421	5.32	6.656
2000	184	1300	2.5	4.686	-20.69	5.454	5.387	6.639
2000	184	1400	2.5	4.719	-20.62	5.454	5.387	6.656
2000	184	1500	2.5	4.586	-20.59	5.421	5.387	6.672
2000	184	1600	2.5	4.719	-20.55	5.404	5.354	6.656
2000	184	1700	2.5	4.619	-20.52	5.387	5.354	6.656
2000	184	1800	2.5	4.686	-20.52	5.404	5.354	6.622
2000	184	1900	2.5	4.669	-20.55	5.387	5.354	6.689
2000	184	2000	2.5	4.686	-20.62	5.454	5.354	6.589
2000	184	2100	2.5	4.653	-20.65	5.287	5.354	6.706
2000	184	2200	2.5	4.619	-20.72	5.387	5.354	6.656
2000	184	2300	2.5	4.653	-20.75	5.421	5.387	6.722
2000	184	2400	2.5	4.686	-20.8	5.421	5.421	6.556
2000	185	100	2.5	4.686	-20.82	5.421	5.387	6.589

2000	185	200	2.5	4.686	-20.85	5.387	5.354	6.656
2000	185	300	2.5	4.669	-20.89	5.354	5.354	6.589
2000	185	400	2.5	4.653	-20.92	5.387	5.387	6.606
2000	185	500	2.5	4.619	-20.95	5.421	5.354	6.489
2000	185	600	2.5	4.653	-20.99	5.421	5.387	6.722
2000	185	700	2.5	4.687	-21.02	5.422	5.422	6.674
2000	185	800	2.5	4.689	-21.02	5.39	5.39	6.625
2000	185	900	2.5	4.703	-20.99	5.371	5.387	6.706
2000	185	1000	2.5	4.719	-20.92	5.454	5.387	6.656
2000	185	1100	2.5	4.519	-20.82	5.437	5.354	6.556
2000	185	1200	2.5	4.653	-20.75	5.32	5.387	6.489
2000	185	1300	2.4	4.686	-20.69	5.421	5.354	6.622
2000	185	1400	2.5	4.719	-20.62	5.421	5.354	6.672
2000	185	1500	2.5	4.719	-20.59	5.454	5.387	6.422
2000	185	1600	2.5	4.603	-20.55	5.387	5.32	6.656
2000	185	1700	2.5	4.686	-20.55	5.421	5.37	6.622
2000	185	1800	2.5	4.686	-20.55	5.404	5.354	6.489
2000	185	1900	2.5	4.653	-20.59	5.354	5.387	6.606
2000	185	2000	2.5	4.653	-20.62	5.421	5.354	6.589
2000	185	2100	2.5	4.653	-20.69	5.471	5.387	6.889
2000	185	2200	2.4	4.636	-20.72	5.421	5.354	6.522
2000	185	2300	2.4	4.619	-20.79	5.421	5.421	6.689
2000	185	2400	2.5	4.686	-20.82	5.387	5.32	6.923
2000	186	100	2.4	4.686	-20.85	5.454	5.387	6.606
2000	186	200	2.4	4.669	-20.89	5.387	5.387	6.622
2000	186	300	2.4	4.686	-20.92	5.454	5.421	6.622
2000	186	400	2.4	4.686	-20.95	5.37	5.387	6.689
2000	186	500	2.4	4.686	-20.95	5.421	5.37	6.689
2000	186	600	2.4	4.653	-20.97	5.421	5.32	6.522
2000	186	700	2.4	4.653	-20.99	5.421	5.354	6.622
2000	186	800	2.5	4.653	-20.97	5.387	5.387	6.723
2000	186	900	2.5	4.686	-20.92	5.421	5.404	6.656
2000	186	1000	2.6	4.719	-20.85	5.454	5.387	6.656
2000	186	1100	2.5	4.719	-20.79	5.421	5.337	6.622
2000	186	1200	2.5	4.619	-20.7	5.421	5.354	6.656
2000	186	1300	2.5	4.686	-20.65	5.421	5.37	6.656
2000	186	1400	2.5	4.719	-20.62	5.387	5.387	6.656
2000	186	1500	2.5	4.352	-20.57	5.387	5.387	6.622
2000	186	1600	2.5	4.686	-20.52	5.404	5.32	6.639
2000	186	1700	2.6	4.686	-20.54	5.387	5.354	6.589
2000	186	1800	2.6	4.719	-20.55	5.487	5.354	6.639
2000	186	1900	2.5	4.586	-20.57	5.387	5.354	6.622
2000	186	2000	2.5	4.686	-20.62	5.387	5.354	6.622
2000	186	2100	2.5	4.653	-20.65	5.454	5.387	6.589
2000	186	2200	2.5	4.653	-20.72	5.454	5.387	6.622
2000	186	2300	2.5	4.669	-20.75	5.421	5.387	6.622
2000	186	2400	2.5	4.686	-20.8	5.37	5.387	6.689
2000	187	100	2.5	4.686	-20.84	5.487	5.387	6.572
2000	187	200	2.5	4.686	-20.87	5.354	5.354	6.622
2000	187	300	2.5	4.686	-20.92	5.421	5.387	6.556
2000	187	400	2.5	4.686	-20.95	5.454	5.354	6.505
2000	187	500	2.5	4.653	-20.95	5.287	5.354	6.622

2000	187	600	2.5	4.654	-20.99	5.422	5.356	6.574
2000	187	700	2.4	4.671	-21.02	5.389	5.389	6.558
2000	187	800	2.4	4.653	-20.99	5.421	5.387	6.572
2000	187	900	2.4	4.686	-20.92	5.421	5.387	6.672
2000	187	1000	2.4	4.686	-20.85	5.421	5.387	6.622
2000	187	1100	2.4	4.719	-20.75	5.37	5.387	6.672
2000	187	1200	2.4	4.719	-20.69	5.387	5.354	6.656
2000	187	1300	2.4	4.653	-20.59	5.404	5.354	6.522
2000	187	1400	2.4	4.686	-20.55	5.421	5.354	6.656
2000	187	1500	2.4	4.719	-20.49	5.32	5.387	6.656
2000	187	1600	2.4	4.719	-20.45	5.437	5.354	6.756
2000	187	1700	2.4	4.619	-20.42	5.454	5.354	6.656
2000	187	1800	2.4	4.686	-20.42	5.421	5.354	6.589
2000	187	1900	2.4	4.686	-20.45	5.387	5.354	6.889
2000	187	2000	2.4	4.686	-20.52	5.404	5.387	6.622
2000	187	2100	2.4	4.653	-20.59	5.354	5.387	6.505
2000	187	2200	2.4	4.619	-20.69	5.404	5.32	6.622
2000	187	2300	2.4	4.653	-20.74	5.404	5.354	6.589
2000	187	2400	2.4	4.686	-20.79	5.421	5.387	6.622
2000	188	100	2.4	4.703	-20.82	5.421	5.37	6.472
2000	188	200	2.4	4.719	-20.89	5.404	5.32	6.622
2000	188	300	2.4	4.603	-20.92	5.387	5.354	6.689
2000	188	400	2.6	4.653	-20.95	5.404	5.387	6.622
2000	188	500	2.6	4.653	-20.99	5.354	5.354	6.556
2000	188	600	2.6	4.654	-21	5.389	5.355	6.557
2000	188	700	2.6	4.675	-21.04	5.427	5.393	6.528
2000	188	800	2.6	4.655	-20.99	5.389	5.356	6.691
2000	188	900	2.6	4.653	-20.92	5.387	5.354	6.589
2000	188	1000	2.6	4.719	-20.85	5.654	5.421	6.556
2000	188	1100	2.5	4.719	-20.75	5.387	5.387	6.856
2000	188	1200	2.5	4.419	-20.65	5.421	5.387	6.689
2000	188	1300	2.6	4.686	-20.59	5.387	5.354	6.622
2000	188	1400	2.6	4.719	-20.52	5.421	5.354	6.689
2000	188	1500	2.5	4.369	-20.49	5.421	5.354	6.656
2000	188	1600	2.5	4.686	-20.45	5.421	5.354	6.589
2000	188	1700	2.5	4.652	-20.42	5.42	5.386	6.621
2000	188	1800	2.5	4.618	-20.39	5.385	5.319	6.871
2000	188	1900	2.5	4.586	-20.42	5.354	5.354	6.589
2000	188	2000	2.4	4.636	-20.49	5.421	5.387	6.606
2000	188	2100	2.4	4.653	-20.55	5.421	5.354	6.522
2000	188	2200	2.4	4.669	-20.62	5.421	5.354	6.606
2000	188	2300	2.4	4.686	-20.67	5.387	5.354	6.522
2000	188	2400	2.4	4.653	-20.72	5.404	5.387	6.639
2000	189	100	2.4	4.669	-20.75	5.404	5.421	6.606
2000	189	200	2.4	4.653	-20.79	5.404	5.387	6.622
2000	189	300	2.4	4.686	-20.79	5.387	5.354	6.639
2000	189	400	2.4	4.653	-20.82	5.387	5.354	6.589
2000	189	500	2.4	4.653	-20.82	5.387	5.387	6.839
2000	189	600	2.4	4.636	-20.85	5.354	5.387	6.589
2000	189	700	2.4	4.653	-20.89	5.487	5.354	6.656
2000	189	800	2.4	4.653	-20.89	5.387	5.387	6.656
2000	189	900	2.5	4.653	-20.85	5.421	5.354	6.639

2000	189	1000	2.5	4.686	-20.82	5.454	5.387	6.622
2000	189	1100	2.7	4.686	-20.75	5.421	5.387	6.622
2000	189	1200	2.7	4.686	-20.69	5.387	5.354	6.656
2000	189	1300	2.8	4.653	-20.62	5.421	5.387	6.99
2000	189	1400	2.7	4.669	-20.55	5.454	5.387	6.622
2000	189	1500	2.7	4.686	-20.52	5.454	5.387	6.656
2000	189	1600	2.7	4.336	-20.49	5.354	5.387	6.622
2000	189	1700	2.7	4.653	-20.45	5.487	5.387	6.422
2000	189	1800	2.7	4.686	-20.45	5.37	5.354	6.639
2000	189	1900	2.6	4.653	-20.45	5.421	5.354	6.622
2000	189	2000	2.6	4.653	-20.49	5.437	5.354	6.856
2000	189	2100	2.6	4.619	-20.55	5.421	5.404	6.656
2000	189	2200	2.6	4.653	-20.59	5.404	5.354	6.589
2000	189	2300	2.6	4.653	-20.65	5.421	5.387	6.823
2000	189	2400	2.6	4.686	-20.7	5.387	5.421	6.539
2000	190	100	2.6	4.686	-20.75	5.404	5.387	6.622
2000	190	200	2.6	4.686	-20.79	5.421	5.354	6.622
2000	190	300	2.6	4.686	-20.82	5.421	5.387	6.622
2000	190	400	2.6	4.686	-20.89	5.421	5.37	6.622
2000	190	500	2.6	4.653	-20.92	5.387	5.354	6.656
2000	190	600	2.6	4.653	-20.95	5.354	5.354	6.64
2000	190	700	2.6	4.622	-21	5.356	5.389	6.658
2000	190	800	2.5	4.638	-21	5.389	5.422	6.591
2000	190	900	2.6	4.686	-20.95	5.421	5.454	6.589
2000	190	1000	2.5	4.686	-20.89	5.354	5.37	6.722
2000	190	1100	2.5	4.686	-20.79	5.37	5.32	6.622
2000	190	1200	2.5	4.719	-20.72	5.387	5.387	6.455
2000	190	1300	2.5	4.653	-20.67	5.454	5.387	6.622
2000	190	1400	2.5	4.686	-20.62	5.287	5.387	6.622
2000	190	1500	2.5	4.686	-20.59	5.437	5.337	6.689
2000	190	1600	2.6	4.703	-20.52	5.454	5.354	6.622
2000	190	1700	2.6	4.569	-20.49	5.387	5.354	6.622
2000	190	1800	2.5	4.686	-20.49	5.454	5.387	6.622
2000	190	1900	2.6	4.686	-20.52	5.454	5.387	6.606
2000	190	2000	2.5	4.686	-20.55	5.421	5.354	6.556
2000	190	2100	2.5	4.653	-20.62	5.387	5.354	6.606
2000	190	2200	2.5	4.653	-20.69	5.387	5.387	6.739
2000	190	2300	2.5	4.653	-20.75	5.421	5.421	6.589
2000	190	2400	2.5	4.653	-20.82	5.387	5.354	6.389
2000	191	100	2.5	4.653	-20.85	5.404	5.354	6.656
2000	191	200	2.5	4.653	-20.89	5.387	5.354	6.622
2000	191	300	2.5	4.686	-20.94	5.421	5.387	6.656
2000	191	400	2.5	4.669	-20.99	5.387	5.354	6.622
2000	191	500	2.5	4.656	-21.02	5.391	5.358	6.526
2000	191	600	2.5	4.624	-21.07	5.392	5.375	6.678
2000	191	700	2.5	4.626	-21.09	5.36	5.393	6.696
2000	191	800	2.5	4.658	-21.07	5.393	5.393	6.628
2000	191	900	2.4	4.707	-20.99	5.391	5.391	6.626
2000	191	1000	2.4	4.719	-20.89	5.421	5.387	6.689
2000	191	1100	2.4	4.669	-20.77	5.421	5.32	6.889
2000	191	1200	2.4	4.352	-20.65	5.421	5.354	6.622
2000	191	1300	2.4	4.653	-20.59	5.387	5.387	6.572

2000	191	1400	2.4	4.686	-20.52	5.421	5.387	6.689
2000	191	1500	2.4	4.619	-20.45	5.387	5.354	6.622
2000	191	1600	2.4	4.583	-20.42	5.418	5.351	6.636
2000	191	1700	2.4	4.681	-20.35	5.432	5.349	6.584
2000	191	1800	2.5	4.714	-20.35	5.449	5.315	6.584
2000	191	1900	2.4	4.582	-20.39	5.383	5.316	6.785
2000	191	2000	2.4	4.652	-20.44	5.353	5.353	6.521
2000	191	2100	2.4	4.619	-20.52	5.421	5.387	6.589
2000	191	2200	2.4	4.653	-20.59	5.387	5.387	6.639
2000	191	2300	2.4	4.653	-20.65	5.387	5.387	6.639
2000	191	2400	2.4	4.686	-20.72	5.37	5.387	6.706
2000	192	100	2.4	4.686	-20.75	5.354	5.354	6.589
2000	192	200	2.4	4.653	-20.79	5.387	5.32	6.622
2000	192	300	2.4	4.669	-20.82	5.421	5.354	6.622
2000	192	400	2.4	4.653	-20.82	5.437	5.387	6.622
2000	192	500	2.4	4.653	-20.84	5.421	5.387	6.656
2000	192	600	2.6	4.619	-20.87	5.387	5.37	6.355
2000	192	700	2.8	4.669	-20.89	5.404	5.387	6.589
2000	192	800	2.8	4.686	-20.89	5.421	5.387	6.589
2000	192	900	2.8	4.686	-20.82	5.387	5.387	6.622
2000	192	1000	2.8	4.653	-20.75	5.471	5.354	6.656
2000	192	1100	2.8	4.686	-20.69	5.254	5.387	6.622
2000	192	1200	2.9	4.686	-20.59	5.421	5.387	6.622
2000	192	1300	2.7	4.719	-20.52	5.454	5.37	6.622
2000	192	1400	2.8	4.686	-20.45	5.454	5.37	6.656
2000	192	1500	2.8	4.719	-20.38	5.353	5.353	6.622
2000	192	1600	2.8	4.45	-20.35	5.451	5.351	6.653
2000	192	1700	2.8	4.631	-20.32	5.449	5.365	6.65
2000	192	1800	2.8	4.748	-20.32	5.432	5.349	6.634
2000	192	1900	2.7	4.649	-20.35	5.417	5.35	6.585
2000	192	2000	2.7	4.619	-20.42	5.386	5.353	6.889
2000	192	2100	2.7	4.619	-20.47	5.421	5.354	6.639
2000	192	2200	2.7	4.686	-20.52	5.387	5.387	6.672
2000	192	2300	2.7	4.686	-20.59	5.387	5.387	6.539
2000	192	2400	2.7	4.686	-20.62	5.387	5.387	6.606
2000	193	100	2.7	4.686	-20.69	5.421	5.37	6.622
2000	193	200	2.7	4.686	-20.72	5.354	5.387	6.622
2000	193	300	2.7	4.686	-20.75	5.421	5.387	6.656
2000	193	400	2.7	4.619	-20.79	5.387	5.421	6.589
2000	193	500	2.7	4.653	-20.82	5.354	5.354	6.622
2000	193	600	2.6	4.653	-20.85	5.437	5.32	6.622
2000	193	700	2.6	4.653	-20.89	5.421	5.387	6.606
2000	193	800	2.6	4.669	-20.87	5.421	5.387	6.622
2000	193	900	2.6	4.686	-20.82	5.254	5.387	6.622
2000	193	1000	2.6	4.686	-20.72	5.421	5.387	6.622
2000	193	1100	2.6	4.719	-20.62	5.454	5.421	6.639
2000	193	1200	2.7	4.586	-20.55	5.354	5.354	6.672
2000	193	1300	2.7	4.653	-20.49	5.454	5.354	6.589
2000	193	1400	2.7	4.686	-20.45	5.454	5.387	6.622
2000	193	1500	2.7	4.686	-20.4	5.421	5.354	6.722
2000	193	1600	2.4	4.55	-20.35	5.451	5.367	6.636
2000	193	1700	2.4	4.483	-20.32	5.401	5.318	6.62

2000	193	1800	2.8	4 682	-20.32	5.383	5.316	6 618
2000	193	1900	2.8	4.685	-20.39	5 486	5.353	6.655
2000	193	2000	2.7	4.653	-20.42	5.37	5.354	6.622
2000	193	2100	2.7	4.636	-20.49	5.454	5.387	6.706
2000	193	2200	2.7	4 636	-20.55	5.421	5.354	6.622
2000	193	2300	2.7	4.653	-20.59	5.421	5.354	6.639
2000	193	2400	2.7	4.686	-20.65	5 387	5.387	6.656
2000	194	100	2.7	4 719	-20.69	5.387	5.421	6.689
2000	194	200	2.7	4.719	-20.72	5.387	5.354	6 622
2000	194	300	2.7	4 619	-20.75	5.421	5.354	6.622
2000	194	400	2.7	4.686	-20.79	5.404	5 354	6.622
2000	194	500	2.7	4.686	-20.82	5.387	5.354	6.622
2000	194	600	2.7	4.653	-20.85	5.354	5.37	6.589
2000	194	700	2.6	4.653	-20.89	5.387	5.354	6.622
2000	194	800	2.7	4.653	-20.89	5.404	5.421	6 639
2000	194	900	2.6	4.653	-20.84	5.421	5.387	6.556
2000	194	1000	2.6	4.636	-20.79	5.421	5.32	6.622
2000	194	1100	2.6	4 686	-20.72	5.437	5.37	6 622
2000	194	1200	2.6	4.719	-20.64	5.387	5.387	6.656
2000	194	1300	2.6	4.452	-20.59	5.387	5.387	6.622
2000	194	1400	2.6	4.686	-20.55	5.421	5.354	6.589
2000	194	1500	2.6	4.686	-20.49	5.421	5.354	6.656
2000	194	1600	2.6	4.686	-20.45	5.387	5.387	6 556
2000	194	1700	2.6	4.619	-20.42	5.354	5 354	6.589
2000	194	1800	2.6	4.736	-20.42	5.387	5.354	6.556
2000	194	1900	2.6	4.619	-20.42	5 42	5.353	6.521
2000	194	2000	2.5	4.719	-20.47	5.454	5.354	6.622
2000	194	2100	2.5	4.419	-20.52	5.487	5.354	6.639
2000	194	2200	2.5	4 653	-20.59	5.421	5.387	6 656
2000	194	2300	2.5	4.719	-20.65	5.354	5.387	6.639
2000	194	2400	2.5	4.719	-20.72	5.421	5.387	6.622
2000	195	100	2.5	4 653	-20.75	5 421	5.387	6 639
2000	195	200	2.5	4.686	-20.79	5.421	5 354	6.589
2000	195	300	2.5	4.686	-20.82	5.37	5.354	6 622
2000	195	400	2.5	4.686	-20.84	5.387	5 354	6.656
2000	195	500	2.5	4.686	-20.85	5.387	5.354	6.556
2000	195	600	2.5	4.653	-20.89	5.354	5.337	6.572
2000	195	700	2.5	4.653	-20.89	5.421	5 387	6.472
2000	195	800	2.5	4.636	-20.89	5.454	5.37	6.606
2000	195	900	2.5	4 619	-20.82	5 421	5.387	6 622
2000	195	1000	2.7	4.653	-20.75	5.437	5.387	6.622
2000	195	1100	2.8	4.653	-20.69	5.387	5.387	6.689
2000	195	1200	2.8	4.653	-20.62	5 421	5 354	6.639
2000	195	1300	2.8	4.686	-20.59	5.304	5.354	6.656
2000	195	1400	2.8	4.686	-20.52	5.421	5 32	6.522
2000	195	1500	2.9	4.686	-20.49	5.454	5.32	6.622
2000	195	1600	2.9	4.686	-20.45	5.387	5.354	6.656
2000	195	1700	2.9	4 719	-20.42	5.421	5 387	6.656
2000	195	1800	2.9	4.619	-20.42	5.387	5 387	6.656
2000	195	1900	2.9	4 619	-20.45	5.421	5.387	6.656
2000	195	2000	2.9	4 653	-20.49	5.387	5 354	6.622
2000	195	2100	2.9	4.653	-20.52	5 421	5.354	6.589

2000	195	2200	2.8	4 653	-20.59	5.421	5.354	6.589
2000	195	2300	2 8	4.653	-20 64	5.421	5.387	6 622
2000	195	2400	2 8	4.653	-20.69	5.387	5.387	6 589
2000	196	100	2 8	4 669	-20.74	5.387	5.387	6.706
2000	196	200	2.9	4.686	-20 75	5.421	5.387	6 589
2000	196	300	2.9	4.686	-20.79	5.421	5.354	6 589
2000	196	400	2.9	4 686	-20.79	5.387	5.354	6.589
2000	196	500	2.9	4.686	-20.82	5.387	5 354	6.689
2000	196	600	2 9	4.686	-20 87	5.387	5.354	6.622
2000	196	700	2.8	4.653	-20.92	5.354	5 354	6.622
2000	196	800	2.8	4 636	-20.92	5.387	5.37	6.589
2000	196	900	2.8	4.636	-20.85	5.387	5 354	6.589
2000	196	1000	2.8	4.653	-20 79	5.421	5.387	6.522
2000	196	1100	2 8	4.653	-20.72	5.421	5.387	6.656
2000	196	1200	2 8	4.653	-20.65	5.421	5.354	6 556
2000	196	1300	2.8	4 686	-20.59	5.387	5 387	6 672
2000	196	1400	2.8	4.619	-20.52	5.454	5.354	6.622
2000	196	1500	2.8	4.719	-20.47	5 404	5.354	6.622
2000	196	1600	2.9	4.386	-20 42	5.437	5.387	6.656
2000	196	1700	2.9	4.7	-20.39	5.401	5 317	6 586
2000	196	1800	2.9	4.617	-20.35	5.418	5.335	6.62
2000	196	1900	2.9	4.585	-20.39	5.419	5.353	6.621
2000	196	2000	2.9	4.686	-20.42	5.437	5.354	6.756
2000	196	2100	2.8	4.686	-20 49	5.387	5.354	6.689
2000	196	2200	2 8	4.653	-20.59	5.387	5.387	6.622
2000	196	2300	2 8	4.653	-20.64	5.421	5 387	6.589
2000	196	2400	2.8	4 653	-20.69	5.421	5.387	6 639
2000	197	100	2.8	4.653	-20.75	5.421	5.387	6.589
2000	197	200	2.8	4.653	-20.79	5.387	5.387	6.606
2000	197	300	2.8	4.686	-20.82	5.404	5.387	6.622
2000	197	400	2.8	4.686	-20.87	5.37	5.354	6 589
2000	197	500	2 8	4.686	-20.89	5.387	5.354	6.589
2000	197	600	2.8	4 653	-20.92	5.421	5.387	6.656
2000	197	700	2.8	4.636	-20.92	5.421	5.387	6.789
2000	197	800	2.7	4.619	-20 89	5.387	5.387	6.622
2000	197	900	2.7	4.636	-20.85	5.354	5 387	6.656
2000	197	1000	2.7	4.653	-20.79	5.354	5.354	6.656
2000	197	1100	2.7	4 653	-20.69	5.421	5.354	6 622
2000	197	1200	2.7	4.686	-20.59	5.454	5.354	6.656
2000	197	1300	2.7	4.653	-20.52	5.437	5.354	6.589
2000	197	1400	2 8	4.536	-20.49	5.387	5.32	6.889
2000	197	1500	2 8	4.719	-20.43	5.404	5.354	6 589
2000	197	1600	2.8	4 619	-20.38	5 386	5.353	6.655
2000	197	1700	2.8	4.617	-20.35	5 518	5 351	6.67
2000	197	1800	2 8	4.715	-20.32	5.383	5 349	6 601
2000	197	1900	2 7	4.685	-20.35	5.453	5 353	6.588
2000	197	2000	2 8	4 352	-20 38	5.454	5.387	6 589
2000	197	2100	2.7	4.686	-20 45	5 387	5.354	6.589
2000	197	2200	2.7	4.686	-20.52	5.421	5 354	6.622
2000	197	2300	2.7	4.653	-20.59	5 37	5 354	6.505
2000	197	2400	2.7	4.619	-20.62	5 387	5 37	6.756
2000	198	100	2.7	4 619	-20 69	5.37	5.387	6.672

2000	198	200	2.7	4.686	-20.72	5.454	5.387	6.656
2000	198	300	2.7	4.686	-20.75	5.304	5.387	6.656
2000	198	400	2.7	4.686	-20.79	5.421	5.387	6.589
2000	198	500	2.7	4.686	-20.82	5.437	5.37	6.622
2000	198	600	2.7	4.653	-20.85	5.387	5.354	6.656
2000	198	700	2.6	4.653	-20.89	5.387	5.32	6.639
2000	198	800	2.6	4.619	-20.89	5.354	5.354	6.589
2000	198	900	2.6	4.653	-20.85	5.387	5.387	6.556
2000	198	1000	2.6	4.686	-20.79	5.354	5.421	6.672
2000	198	1100	2.5	4.686	-20.72	5.354	5.387	6.589
2000	198	1200	2.6	4.686	-20.65	5.421	5.37	6.556
2000	198	1300	2.6	4.686	-20.59	5.454	5.354	6.622
2000	198	1400	2.6	4.553	-20.52	5.354	5.354	6.622
2000	198	1500	2.6	4.653	-20.45	5.454	5.37	6.622
2000	198	1600	2.6	4.686	-20.43	5.454	5.353	6.622
2000	198	1700	2.6	4.685	-20.42	5.42	5.32	6.621
2000	198	1800	2.6	4.686	-20.42	5.42	5.32	6.622
2000	198	1900	2.6	4.653	-20.43	5.387	5.354	6.489
2000	198	2000	2.5	4.653	-20.47	5.454	5.387	6.656
2000	198	2100	2.5	4.619	-20.52	5.387	5.387	6.589
2000	198	2200	2.5	4.619	-20.55	5.387	5.354	6.639
2000	198	2300	2.5	4.603	-20.6	5.404	5.387	6.622
2000	198	2400	2.5	4.653	-20.65	5.454	5.354	6.589
2000	199	100	2.5	4.686	-20.69	5.354	5.387	6.656
2000	199	200	2.5	4.686	-20.72	5.387	5.387	6.589
2000	199	300	2.5	4.686	-20.79	5.354	5.387	6.656
2000	199	400	2.5	4.686	-20.79	5.421	5.387	6.622
2000	199	500	2.5	4.686	-20.82	5.421	5.354	6.606
2000	199	600	2.5	4.469	-20.85	5.387	5.387	6.589
2000	199	700	2.5	4.653	-20.89	5.421	5.387	6.455
2000	199	800	3.1	4.669	-20.89	5.421	5.354	6.722
2000	199	900	2.6	4.653	-20.82	5.454	5.354	6.622
2000	199	1000	2.7	4.686	-20.75	5.354	5.354	6.589
2000	199	1100	2.7	4.669	-20.69	5.437	5.354	6.689
2000	199	1200	2.7	4.686	-20.6	5.387	5.387	6.622
2000	199	1300	2.7	4.653	-20.55	5.32	5.421	6.656
2000	199	1400	2.7	4.653	-20.49	5.387	5.337	6.622
2000	199	1500	2.5	4.619	-20.52	5.454	5.32	6.622
2000	199	1600	2.5	4.653	-20.59	5.387	5.354	6.622
2000	199	1700	2.4	4.653	-20.59	5.387	5.387	6.622
2000	199	1800	2.5	4.686	-20.59	5.421	5.254	6.689
2000	199	1900	2.4	4.669	-20.59	5.387	5.387	6.589
2000	199	2000	2.4	4.653	-20.62	5.387	5.354	6.739
2000	199	2100	2.4	4.653	-20.64	5.387	5.354	6.672
2000	199	2200	2.4	4.619	-20.65	5.454	5.387	6.656
2000	199	2300	2.4	4.653	-20.69	5.387	5.387	6.389
2000	199	2400	2.4	4.686	-20.72	5.32	5.387	6.589
2000	200	100	2.4	4.719	-20.75	5.487	5.354	6.622
2000	200	200	2.4	4.502	-20.75	5.387	5.354	6.656
2000	200	300	2.4	4.619	-20.79	5.387	5.354	6.639
2000	200	400	2.4	4.686	-20.79	5.421	5.387	6.589
2000	200	500	2.4	4.686	-20.82	5.387	5.354	6.455

2000	200	600	3.2	4.619	-20.82	5.421	5.354	6.622
2000	200	700	2.7	4.653	-20.85	5.454	5.421	6.622
2000	200	800	2.4	4.653	-20.89	5.354	5.387	6.622
2000	200	900	2.6	4.703	-20.89	5.421	5.387	6.505
2000	200	1000	2.4	4.703	-20.89	5.421	5.37	6.622
2000	200	1100	3	4.686	-20.85	5.387	5.354	6.589
2000	200	1200	2.4	4.703	-20.82	5.387	5.387	6.572
2000	200	1300	2.4	4.619	-20.79	5.32	5.421	6.622
2000	200	1400	2.3	4.653	-20.67	5.421	5.387	6.622
2000	200	1500	2.4	4.669	-20.55	5.387	5.337	6.656
2000	200	1600	2.4	4.686	-20.49	5.387	5.37	6.622
2000	200	1700	2.4	4.686	-20.42	5.421	5.387	6.622
2000	200	1800	2.4	4.685	-20.38	5.42	5.386	6.555
2000	200	1900	2.4	4.603	-20.42	5.687	5.354	6.622
2000	200	2000	2.4	4.719	-20.45	5.437	5.387	6.556
2000	200	2100	2.4	4.719	-20.49	5.421	5.32	6.722
2000	200	2200	2.4	4.686	-20.52	5.404	5.354	6.622
2000	200	2300	2.4	4.686	-20.55	5.37	5.354	6.589
2000	200	2400	2.4	4.653	-20.62	5.454	5.354	6.622
2000	201	100	2.4	4.653	-20.65	5.354	5.354	6.556
2000	201	200	2.4	4.686	-20.69	5.471	5.404	6.622
2000	201	300	2.5	4.686	-20.69	5.387	5.387	6.622
2000	201	400	2.4	4.686	-20.72	5.37	5.387	6.556
2000	201	500	2.4	4.653	-20.77	5.354	5.354	6.589
2000	201	600	3.1	4.653	-20.79	5.454	5.32	6.756
2000	201	700	3	4.636	-20.82	5.421	5.354	6.622
2000	201	800	2.4	4.619	-20.8	5.387	5.387	6.589
2000	201	900	2.9	4.653	-20.75	5.354	5.387	6.622
2000	201	1000	2.4	4.686	-20.69	5.454	5.354	6.589
2000	201	1100	2.3	4.686	-20.59	5.387	5.354	6.656
2000	201	1200	2.3	4.703	-20.52	5.354	5.387	6.622
2000	201	1300	2.3	4.703	-20.45	5.454	5.387	6.622
2000	201	1400	3.1	4.585	-20.38	5.42	5.32	6.605
2000	201	1500	2.3	4.683	-20.35	5.351	5.351	6.602
2000	201	1600	2.3	4.7	-20.35	5.452	5.351	6.653
2000	201	1700	2.3	4.348	-20.32	5.349	5.383	6.584
2000	201	1800	2.3	4.697	-20.32	5.448	5.382	6.683
2000	201	1900	2.5	4.685	-20.35	5.436	5.352	6.621
2000	201	2000	2.4	4.369	-20.38	5.387	5.32	6.589
2000	201	2100	2.8	4.653	-20.45	5.387	5.354	6.606
2000	201	2200	2.8	4.653	-20.49	5.354	5.387	6.656
2000	201	2300	2.4	4.653	-20.55	5.454	5.37	6.589
2000	201	2400	2.4	4.653	-20.62	5.32	5.354	6.756
2000	202	100	2.6	4.653	-20.65	5.437	5.387	6.572
2000	202	200	2.5	4.686	-20.72	5.421	5.387	6.622
2000	202	300	2.4	4.686	-20.75	5.387	5.421	6.639
2000	202	400	2.6	4.686	-20.79	5.387	5.354	6.639
2000	202	500	2.4	4.686	-20.85	5.32	5.37	6.722
2000	202	600	2.5	4.686	-20.89	5.404	5.354	6.639
2000	202	700	3.1	4.686	-20.9	5.404	5.354	6.589
2000	202	800	2.4	4.669	-20.92	5.404	5.354	6.656
2000	202	900	2.5	4.686	-20.89	5.387	5.354	6.789

2000	202	1000	3	4 686	-20.85	5.387	5.387	6 589
2000	202	1100	2 3	4.686	-20.79	5.387	5 421	6.639
2000	202	1200	2.9	4.703	-20.7	5 421	5.387	6.589
2000	202	1300	2.3	4.686	-20.62	5.421	5.354	6.622
2000	202	1400	2.9	4.586	-20.65	5.32	5.304	6.656
2000	202	1500	2.4	4.686	-20.79	5.421	5.387	6 689
2000	202	1600	3.2	4 719	-20.85	5.387	5.32	6.606
2000	202	1700	2 9	4.686	-20 87	5 387	5.387	6.656
2000	202	1800	2.8	4 686	-20.85	5.354	5.354	6.656
2000	202	1900	2 9	4.653	-20.89	5.421	5.354	6 639
2000	202	2000	2.4	4.653	-20.92	5.404	5 354	6 773
2000	202	2100	2 4	4.653	-20 95	5.387	5.354	6.606
2000	202	2200	2.5	4.637	-20.99	5.372	5.388	6.624
2000	202	2300	2.5	4.657	-21 02	5.425	5 425	6.56
2000	202	2400	2.7	4.641	-21.04	5 426	5.359	6.494
2000	203	100	2.5	4.693	-21.09	5.36	5.377	6.462
2000	203	200	3.2	4 729	-21.12	5 33	5.363	6 565
2000	203	300	3.1	4.729	-21.15	5.381	5.364	6.633
2000	203	400	2.5	4.696	-21.15	5.397	5 364	6.499
2000	203	500	2.5	4.545	-21.13	5.396	5.43	6.699
2000	203	600	2.9	4.677	-21.12	5.395	5.429	6.631
2000	203	700	3	4.661	-21.15	5.379	5.363	6.598
2000	203	800	2.7	4.663	-21.18	5 364	5.364	6.633
2000	203	900	2.7	4.663	-21.18	5.364	5.364	6.599
2000	203	1000	2.5	4.663	-21 15	5.364	5.364	6.599
2000	203	1100	2.7	4.661	-21.08	5 362	5.379	6 648
2000	203	1200	2.4	4.69	-21.05	5.424	5.424	6 659
2000	203	1300	2 5	4 686	-21	5.421	5.388	6 623
2000	203	1400	2.4	4.719	-20.97	5.354	5 387	6.622
2000	203	1500	2 7	4.619	-20.92	5.421	5.387	6.589
2000	203	1600	2.4	4.653	-20.89	5.421	5.32	6.639
2000	203	1700	2.5	4.653	-20.89	5.287	5.32	6.522
2000	203	1800	2.4	4.686	-20.89	5.454	5.354	6.589
2000	203	1900	2.4	4.686	-20.89	5 37	5.387	6.622
2000	203	2000	2.6	4.653	-20 92	5.354	5.387	6.656
2000	203	2100	2.5	4.669	-20 95	5.37	5.387	6 589
2000	203	2200	2.7	4 653	-20.99	5.354	5.387	6.455
2000	203	2300	2.4	4 653	-21.02	5.371	5 354	6 656
2000	203	2400	2.4	4 657	-21.05	5.391	5.358	6.66
2000	204	100	2.5	4 66	-21.09	5.428	5 394	6.496
2000	204	200	3	4.661	-21.12	5.429	5.395	6.648
2000	204	300	2.5	4.679	-21.15	5.414	5.381	6.766
2000	204	400	2.5	4.696	-21.18	5 297	5.397	6.633
2000	204	500	2.5	4.696	-21.18	5 397	5 33	6.65
2000	204	600	2.5	4.663	-21 18	5.33	5.364	6.733
2000	204	700	3	4.629	-21 22	5 464	5.397	6.599
2000	204	800	2.6	4.629	-21.2	5 33	5.397	6.633
2000	204	900	3.2	4 663	-21.15	5 431	5.397	6.633
2000	204	1000	2.5	4 659	-21.09	5 36	5 394	6 629
2000	204	1100	2.7	4 654	-21 02	5 389	5 372	6.624
2000	204	1200	2.4	4 686	-20.95	5.454	5 387	6.722
2000	204	1300	2 4	4 703	-20.89	5 354	5 387	6.622

2000	204	1400	2.4	4.719	-20.82	5.487	5.337	6.622
2000	204	1500	2.9	4.653	-20.79	5.32	5.354	6.656
2000	204	1600	2.4	4.686	-20.79	5.421	5.387	6.656
2000	204	1700	2.4	4.753	-20.79	5.454	5.454	6.656
2000	204	1800	2.4	4.619	-20.82	5.387	5.32	6.622
2000	204	1900	2.5	4.686	-20.82	5.421	5.354	6.639
2000	204	2000	3.2	4.686	-20.89	5.387	5.354	6.622
2000	204	2100	2.5	4.669	-20.95	5.421	5.387	6.589
2000	204	2200	2.9	4.653	-20.99	5.387	5.354	6.622
2000	204	2300	2.5	4.654	-21	5.355	5.355	6.59
2000	204	2400	2.5	4.655	-21.02	5.373	5.356	6.625
2000	205	100	2.5	4.657	-21.05	5.392	5.392	6.594
2000	205	200	2.5	4.692	-21.09	5.427	5.393	6.612
2000	205	300	3.3	4.691	-21.1	5.409	5.393	6.628
2000	205	400	2.9	4.659	-21.12	5.361	5.394	6.629
2000	205	500	2.6	4.678	-21.15	5.396	5.38	6.481
2000	205	600	2.7	4.696	-21.15	5.381	5.364	6.599
2000	205	700	2.5	4.663	-21.18	5.364	5.364	6.666
2000	205	800	2.8	4.646	-21.18	5.481	5.364	6.566
2000	205	900	3.3	4.663	-21.18	5.464	5.397	6.633
2000	205	1000	3.1	4.66	-21.12	5.478	5.411	6.63
2000	205	1100	2.4	4.656	-21.07	5.458	5.324	6.66
2000	205	1200	2.4	4.67	-20.99	5.354	5.32	6.539
2000	205	1300	2.4	4.686	-20.95	5.387	5.387	6.656
2000	205	1400	2.4	4.686	-20.89	5.387	5.387	6.656
2000	205	1500	2.5	4.636	-20.89	5.421	5.387	6.656
2000	205	1600	2.6	4.719	-20.84	5.32	5.354	6.606
2000	205	1700	2.9	4.719	-20.79	5.454	5.354	6.622
2000	205	1800	3.2	4.619	-20.79	5.387	5.354	6.622
2000	205	1900	3	4.619	-20.82	5.37	5.387	6.622
2000	205	2000	2.9	4.686	-20.85	6.122	5.37	6.689
2000	205	2100	3.2	4.686	-20.9	5.087	5.354	6.656
2000	205	2200	2.9	4.686	-20.95	5.387	5.387	6.622
2000	205	2300	3.2	4.686	-21.02	5.437	5.387	6.656
2000	205	2400	2.5	4.672	-21.05	5.323	5.389	6.591
2000	206	100	2.8	4.691	-21.09	5.359	5.392	6.594
2000	206	200	2.5	4.692	-21.12	5.427	5.393	6.662
2000	206	300	2.5	4.562	-21.15	5.397	5.397	6.582
2000	206	400	2.5	4.696	-21.18	5.364	5.397	6.666
2000	206	500	2.6	4.696	-21.18	5.431	5.364	6.633
2000	206	600	3	4.696	-21.18	5.43	5.364	6.633
2000	206	700	2.6	4.695	-21.18	5.396	5.363	6.632
2000	206	800	2.5	4.661	-21.19	5.395	5.395	6.681
2000	206	900	2.6	4.662	-21.18	5.363	5.397	6.632
2000	206	1000	3	4.66	-21.12	5.378	5.394	6.596
2000	206	1100	2.5	4.658	-21.05	5.359	5.392	6.628
2000	206	1200	2.9	4.686	-21	5.387	5.387	6.589
2000	206	1300	2.4	4.653	-20.95	5.421	5.354	6.622
2000	206	1400	2.8	4.669	-20.89	5.354	5.37	6.556
2000	206	1500	2.4	4.686	-20.85	5.354	5.354	6.656
2000	206	1600	2.8	4.686	-20.8	5.421	5.354	6.622
2000	206	1700	3	4.603	-20.75	5.387	5.354	6.622

2000	206	1800	2.4	4.719	-20.75	5.387	5.354	6.622
2000	206	1900	2.4	4.636	-20.79	5.471	5.354	6.589
2000	206	2000	2.5	4.619	-20.82	5.421	5.354	6.589
2000	206	2100	2.5	4.586	-20.89	5.387	5.354	6.656
2000	206	2200	2.6	4.653	-20.95	5.387	5.354	6.722
2000	206	2300	2.5	4.653	-21.02	5.387	5.387	6.572
2000	206	2400	2.6	4.656	-21.05	5.39	5.39	6.726
2000	207	100	3	4.659	-21.12	5.393	5.36	6.646
2000	207	200	2.5	4.695	-21.15	5.429	5.362	6.531
2000	207	300	2.5	4.692	-21.15	5.393	5.343	6.595
2000	207	400	3.1	4.692	-21.15	5.393	5.393	6.695
2000	207	500	2.6	4.659	-21.15	5.361	5.394	6.663
2000	207	600	2.5	4.658	-21.15	5.343	5.393	6.595
2000	207	700	3.2	4.658	-21.17	5.459	5.359	6.695
2000	207	800	2.8	4.643	-21.17	5.228	5.395	6.597
2000	207	900	2.5	4.676	-21.14	5.427	5.394	6.73
2000	207	1000	3	4.69	-21.05	5.408	5.391	6.626
2000	207	1100	2.5	4.653	-20.95	5.387	5.354	6.622
2000	207	1200	2.4	4.686	-20.85	5.37	5.387	6.589
2000	207	1300	2.4	4.653	-20.79	5.387	5.354	6.656
2000	207	1400	2.4	4.653	-20.75	5.421	5.354	6.689
2000	207	1500	2.7	4.686	-20.72	5.354	5.354	6.522
2000	207	1600	2.4	4.319	-20.65	5.387	5.354	6.722
2000	207	1700	2.4	4.619	-20.62	5.37	5.354	6.455
2000	207	1800	2.4	4.719	-20.62	5.421	5.354	6.556
2000	207	1900	2.4	4.619	-20.62	5.487	5.354	6.722
2000	207	2000	3.2	4.619	-20.69	5.421	5.354	6.622
2000	207	2100	2.5	4.653	-20.75	5.354	5.354	6.556
2000	207	2200	3.1	4.653	-20.82	5.387	5.354	6.622
2000	207	2300	3.2	4.653	-20.85	5.387	5.387	6.656
2000	207	2400	2.9	4.653	-20.92	5.387	5.37	6.672
2000	208	100	2.5	4.686	-20.99	5.387	5.387	6.589
2000	208	200	2.5	4.686	-21.02	5.388	5.388	6.656
2000	208	300	2.6	4.691	-21.09	5.392	5.375	6.66
2000	208	400	3	4.691	-21.12	5.359	5.392	6.678
2000	208	500	2.9	4.694	-21.15	5.361	5.378	6.614
2000	208	600	2.7	4.662	-21.17	5.363	5.347	6.699
2000	208	700	2.5	4.662	-21.18	5.43	5.363	6.632
2000	208	800	2.5	4.661	-21.15	5.395	5.395	6.597
2000	208	900	3.2	4.642	-21.1	5.427	5.36	6.496
2000	208	1000	2.6	4.653	-21	5.321	5.388	6.657
2000	208	1100	2.8	4.653	-20.9	5.387	5.387	6.622
2000	208	1200	3.2	4.669	-20.82	5.421	5.37	6.639
2000	208	1300	2.4	4.085	-20.72	5.454	5.337	6.856
2000	208	1400	2.4	4.953	-20.65	5.32	5.855	6.589
2000	208	1500	2.9	5.487	-20.62	5.37	5.421	6.572
2000	208	1600	2.4	5.387	-20.59	5.354	5.554	6.622
2000	208	1700	2.4	5.37	-20.59	5.454	5.587	6.656
2000	208	1800	2.4	5.387	-20.59	5.454	5.587	6.639
2000	208	1900	2.4	5.387	-20.59	5.454	5.554	6.656
2000	208	2000	2.6	5.387	-20.62	5.404	5.521	6.622
2000	208	2100	2.7	5.37	-20.65	5.354	5.487	6.639

2000	208	2200	2.8	5.37	-20.72	5.387	5.537	6.656
2000	208	2300	2.8	5.387	-20.79	5.421	5.604	6.622
2000	208	2400	2.9	5.387	-20.82	5.421	5.554	6.622
2000	209	100	2.9	5.387	-20.87	5.421	5.554	6.606
2000	209	200	2.9	5.387	-20.95	5.387	5.554	6.856
2000	209	300	2.9	5.404	-20.99	5.387	5.554	6.656
2000	209	400	2.9	5.424	-21.04	5.357	5.491	6.526
2000	209	500	2.9	5.41	-21.09	5.393	5.56	6.628
2000	209	600	2.9	5.393	-21.12	5.527	5.593	6.595
2000	209	700	2.9	5.397	-21.15	5.364	5.564	6.616
2000	209	800	2.9	5.397	-21.12	5.364	5.564	6.599
2000	209	900	2.9	5.391	-21.05	5.408	5.592	6.56
2000	209	1000	2.9	5.387	-20.95	5.421	5.588	6.556
2000	209	1100	2.9	5.387	-20.82	5.421	5.587	6.572
2000	209	1200	2.9	5.421	-20.72	5.387	5.537	6.522
2000	209	1300	2.9	5.421	-20.65	5.387	5.537	6.622
2000	209	1400	2.9	5.454	-20.59	5.354	5.521	6.622
2000	209	1500	2.9	5.454	-20.52	5.387	5.521	6.606
2000	209	1600	2.9	5.454	-20.45	5.337	5.537	6.656
2000	209	1700	2.9	5.452	-20.44	5.586	5.552	6.337
2000	209	1800	2.9	5.452	-20.42	5.385	5.552	6.954
2000	209	1900	2.9	5.454	-20.45	5.42	5.537	6.756
2000	209	2000	2.9	5.471	-20.52	5.42	5.554	6.906
2000	209	2100	2.9	5.454	-20.6	5.387	5.521	6.622
2000	209	2200	2.9	5.437	-20.69	5.404	5.554	6.823
2000	209	2300	2.9	5.421	-20.75	5.421	5.554	6.639
2000	209	2400	2.9	5.437	-20.82	5.421	5.554	6.656
2000	210	100	2.9	5.454	-20.89	4.92	5.554	6.756
2000	210	200	2.9	5.454	-20.92	5.454	5.587	6.589
2000	210	300	2.9	5.454	-20.95	5.32	5.554	6.722
2000	210	400	2.9	5.455	-20.99	5.455	5.555	6.623
2000	210	500	2.9	5.455	-21	5.388	5.555	6.59
2000	210	600	2.9	5.442	-21.02	5.342	5.525	6.627
2000	210	700	2.9	5.442	-21.05	5.426	5.559	6.461
2000	210	800	2.9	5.459	-21.04	5.459	5.593	6.644
2000	210	900	2.9	5.454	-20.97	5.388	5.555	6.573
2000	210	1000	2.9	5.454	-20.89	5.454	5.554	6.622
2000	210	1100	2.9	5.454	-20.79	5.421	5.537	6.622
2000	210	1200	2.9	5.454	-20.69	5.337	5.554	6.939
2000	210	1300	2.9	5.454	-20.59	5.404	5.571	6.622
2000	210	1400	2.9	5.487	-20.52	5.454	5.521	6.689
2000	210	1500	2.9	5.487	-20.45	5.37	5.554	6.639
2000	210	1600	2.9	5.518	-20.42	5.385	5.518	6.637
2000	210	1700	3	5.517	-20.39	5.45	5.483	6.618
2000	210	1800	2.9	5.516	-20.37	5.382	5.516	6.617
2000	210	1900	2.9	5.517	-20.42	5.383	5.55	6.568
2000	210	2000	2.9	5.504	-20.45	5.437	5.52	6.455
2000	210	2100	2.9	5.487	-20.54	5.387	5.554	6.856
2000	210	2200	2.9	5.454	-20.62	5.454	5.554	6.656
2000	210	2300	2.9	5.471	-20.69	5.354	5.587	6.722
2000	210	2400	2.9	5.471	-20.72	5.354	5.571	6.656
2000	211	100	2.9	5.487	-20.79	5.437	5.487	6.589

2000	211	200	2.9	5.487	-20.82	5.404	5.521	6.622
2000	211	300	2.9	5.487	-20.85	5.387	5.554	6.556
2000	211	400	2.9	5.487	-20.89	5.387	5.554	6.622
2000	211	500	2.9	5.487	-20.92	5.387	5.521	6.689
2000	211	600	2.9	5.454	-20.94	5.454	5.554	6.639
2000	211	700	2.9	5.471	-20.95	5.32	5.587	6.589
2000	211	800	2.9	5.454	-20.95	5.387	5.554	6.639
2000	211	900	2.9	5.454	-20.94	5.454	5.554	6.556
2000	211	1000	2.9	5.454	-20.9	5.387	5.521	6.522
2000	211	1100	2.8	5.437	-20.85	5.354	5.521	6.689
2000	211	1200	2.9	5.454	-20.85	5.421	5.604	6.656
2000	211	1300	2.9	5.454	-20.84	5.404	5.587	6.622
2000	211	1400	2.9	5.454	-20.75	5.454	5.554	6.656
2000	211	1500	2.9	5.471	-20.72	5.387	5.554	6.622
2000	211	1600	2.9	5.487	-20.69	5.37	5.554	6.622
2000	211	1700	2.9	5.487	-20.72	5.37	5.554	6.656
2000	211	1800	2.9	5.487	-20.75	5.421	5.521	6.589
2000	211	1900	2.9	5.487	-20.79	5.404	5.487	6.522
2000	211	2000	2.9	5.454	-20.79	5.387	5.537	6.656
2000	211	2100	3.3	5.421	-20.89	5.354	5.521	6.489
2000	211	2200	2.6	5.454	-20.99	5.354	5.587	6.622
2000	211	2300	2.6	5.458	-21.04	5.358	5.558	6.693
2000	211	2400	2.6	5.46	-21.09	5.41	5.527	6.612
2000	212	100	2.6	5.445	-21.08	5.395	5.528	6.63
2000	212	200	2.6	5.462	-21.1	5.429	5.596	6.664
2000	212	300	2.6	5.48	-21.12	5.363	5.597	6.632
2000	212	400	2.6	5.462	-21.12	5.362	5.529	6.631
2000	212	500	2.6	5.464	-21.12	5.397	5.514	6.566
2000	212	600	2.6	5.464	-21.12	5.397	5.564	6.599
2000	212	700	2.5	5.429	-21.12	5.395	5.579	6.631
2000	212	800	2.5	5.43	-21.12	5.43	5.563	6.615
2000	212	900	2.5	5.43	-21.12	5.346	5.58	6.598
2000	212	1000	2.5	5.427	-21.1	5.427	5.561	6.629
2000	212	1100	2.5	5.426	-21.05	5.426	5.559	6.544
2000	212	1200	2.5	5.422	-20.99	5.422	5.556	6.825
2000	212	1300	2.5	5.421	-20.92	5.337	5.587	6.539
2000	212	1400	2.5	5.437	-20.85	5.37	5.554	6.606
2000	212	1500	2.5	5.454	-20.79	5.387	5.521	6.656
2000	212	1600	2.5	5.454	-20.72	5.387	5.521	6.556
2000	212	1700	2.5	5.454	-20.69	5.421	5.521	6.556
2000	212	1800	2.5	5.454	-20.65	5.454	5.521	6.823
2000	212	1900	2.5	5.454	-20.67	5.37	5.554	6.556
2000	212	2000	2.5	5.421	-20.72	5.354	5.554	6.689
2000	212	2100	2.5	5.421	-20.77	5.421	5.554	6.622
2000	212	2200	2.4	5.404	-20.84	5.387	5.537	6.422
2000	212	2300	2.4	5.387	-20.89	5.421	5.521	6.656
2000	212	2400	2.4	5.387	-20.92	5.421	5.554	6.622
2000	213	100	2.4	5.387	-20.95	5.32	5.587	6.522
2000	213	200	2.4	5.421	-20.99	5.421	5.521	6.623
2000	213	300	2.5	5.425	-21.04	5.425	5.525	6.594
2000	213	400	2.5	5.426	-21.05	5.326	5.526	6.545
2000	213	500	2.5	5.396	-21.08	5.48	5.597	6.599

2000	213	600	2.7	5.394	-21.1	5.36	5.561	6.462
2000	213	700	2.7	5.379	-21.12	5.362	5.562	6.531
2000	213	800	2.5	5.396	-21.08	5.362	5.563	6.565
2000	213	900	2.4	5.376	-21.05	5.36	5.56	6.562
2000	213	1000	2.4	5.389	-20.99	5.389	5.589	6.491
2000	213	1100	2.4	5.387	-20.92	5.421	5.521	6.455
2000	213	1200	2.4	5.387	-20.84	5.454	6.455	6.472
2000	213	1300	2.4	5.421	-20.79	5.354	6.455	6.672
2000	214	1100	3.2	5.3	-20.9	5.2	6.4	6.5
2000	214	1200	2.4	5.3	-20.8	5.3	6.4	6.5
2000	214	1300	2.4	5.3	-20.8	5.4	6.4	6.5
2000	214	1400	2.5	5.3	-20.9	5.4	6.4	6.5
2000	214	1500	2.4	5.4	-20.9	5.4	6.4	6.6
2000	214	1600	2.4	5.4	-20.9	5.3	6.4	6.6
2000	214	1700	2.5	5.4	-20.8	5.3	6.4	6.4
2000	214	1800	2.6	5.4	-20.8	5.4	6.4	6.6
2000	214	1900	2.4	5.4	-20.7	5.4	6.4	6.7
2000	214	2000	2.7	5.4	-20.8	5.3	6.3	6.6
2000	214	2100	2.5	5.4	-20.8	5.3	5.9	6.7
2000	214	2200	2.5	5.3	-20.9	5.3	6.4	6.5
2000	214	2300	2.5	5.3	-20.9	5.4	6.4	6.6
2000	214	2400	2.5	5.3	-20.9	5.4	6.4	6.6
2000	215	100	2.6	5.3	-21	5.3	6.3	6.6
2000	215	200	2.6	5.4	-21	5.3	3.4	6.5
2000	215	300	2.5	5.4	-21.1	5.3	6.4	6.5
2000	215	400	2.5	5.4	-21.1	5.3	6.4	6.2
2000	215	500	2.8	5.3	-21.1	5.3	6	6.6
2000	215	600	3.1	5.3	-21.1	5.3	6.4	6.6
2000	215	700	2.5	5.3	-21.1	5.3	6.4	6.4
2000	215	800	2.5	5.3	-21.1	5.3	6.3	6.6
2000	215	900	2.4	5.3	-21.1	5.4	4.5	6.5
2000	215	1000	2.4	4.8	-21	5.3	6.4	6.6
2000	215	1100	3.2	4.9	-20.9	4.9	5.7	6.7
2000	215	1200	2.8	5.3	-20.8	5.3	6.2	6.5
2000	215	1300	2.5	5.3	-20.7	5.4	6.4	6.6
2000	215	1400	2.4	5.4	8.4	5.3	6.5	6.6
2000	215	1500	2.5	5.4	8.4	5.3	6.5	6.6
2000	215	1600	2.5	5.4	8.4	5.4	6.2	6.5
2000	215	1700	2.5	5.4	8.4	5.3	6.5	6.6
2000	215	1800	2.5	5.4	8.4	5.4	6.5	6.5
2000	215	1900	3.2	5.4	8.4	5.4	5.8	6.5
2000	215	2000	2.6	5.4	8.4	5.4	6.3	6.6
2000	215	2100	3.2	5.3	8.4	5.4	6.4	6.5
2000	215	2200	2.4	5.3	8.4	5.3	6.4	6.7
2000	215	2300	2.5	5.3	8.4	5.4	6.4	6.6
2000	215	2400	2.4	5.3	8.4	5.3	6.4	6.7
2000	216	100	2.6	5.3	8.4	5.3	6.3	6.5
2000	216	200	2.5	5.3	8.4	5.3	6	6.5
2000	216	300	2.5	5.3	8.4	5.3	5.6	6.5
2000	216	400	2.4	5.3	8.4	5.4	6.4	6.5
2000	216	500	2.5	5.3	8.4	5.4	6.4	6.6
2000	216	600	3.2	5.3	8.3	5.3	6.3	6.5

2000	216	700	3	5.3	8.3	5.3	4.4	6.5
2000	216	800	3.2	5.3	8.3	5.4	6.4	6.6
2000	216	900	2.4	5.3	8.3	5.3	6.4	6.5
2000	216	1000	2.5	5.3	8.4	5.4	6.4	6.4
2000	216	1100	2.4	5.3	8.4	5.4	6.4	6.4
2000	216	1200	2.4	5.3	8.4	5.3	6.4	6.4
2000	216	1300	3.2	5.3	8.4	5.4	5.8	6.6
2000	216	1400	2.4	5.4	8.4	5.3	6.4	6.6
2000	216	1500	2.4	5.4	8.4	5.7	6.5	6.4
2000	216	1600	3	5.4	8.4	5.3	5.3	6.8
2000	216	1700	2.4	5.4	8.4	5.4	6.4	6.6
2000	216	1800	2.4	5.4	8.4	5.3	6.5	6.6
2000	216	1900	2.4	5.4	8.4	5.4	6.5	6.5
2000	216	2000	3.1	5.4	8.4	5.4	5.6	6.6
2000	216	2100	2.4	5.4	8.4	5.3	6.2	6.7
2000	216	2200	2.4	5.3	8.4	5.3	6.3	6.5
2000	216	2300	2.4	5.3	8.4	5.3	6.3	6.6
2000	216	2400	2.6	5.3	8.4	5.4	6.3	6.7
2000	217	100	2.4	5.3	8.4	5.4	6.2	6.7
2000	217	200	2.7	5.3	8.4	5.4	5.5	6.5
2000	217	300	2.4	5.3	8.4	5.3	6.4	6.5
2000	217	400	2.4	5.3	8.4	5.4	6.4	6.5
2000	217	500	2.5	5.3	8.4	5.4	6.4	6.6
2000	217	600	2.5	5.3	8.3	5.4	6.4	6.6
2000	217	700	2.9	5.3	8.3	5.3	6.1	6.6
2000	217	800	3.1	5.3	8.3	5.3	5.4	6.7
2000	217	900	2.8	5.3	8.3	5.3	6.4	6.5
2000	217	1000	2.4	5.3	8.3	5.3	6.4	6.6
2000	217	1100	2.5	5.3	8.3	5.3	6.4	6.5
2000	217	1200	2.4	5.3	8.3	5.4	6.4	6.4
2000	217	1300	2.9	5.4	8.4	5.3	4.8	6.3
2000	217	1400	2.6	5.3	8.4	5.4	6.3	6.6
2000	217	1500	2.9	5.3	8.3	5.3	6.4	6.5
2000	217	1600	2.5	5.4	8.4	5.3	6.4	6.5
2000	217	1700	2.5	5.4	8.4	5.3	6.4	6.7
2000	217	1800	2.5	5.4	8.4	5.3	6.4	6.7
2000	217	1900	2.4	5.4	8.4	5.3	6.4	6.5
2000	217	2000	2.4	5.4	8.4	5.3	6.4	6.6
2000	217	2100	2.4	5.4	8.4	5.4	6.2	6.5
2000	217	2200	3.2	5.4	8.4	5.3	4.8	6.6
2000	217	2300	3.1	5.3	8.4	5.3	6.4	6.5
2000	217	2400	2.5	5.3	8.4	5.3	6.4	6.5
2000	218	100	2.5	5.4	8.4	5.4	6.4	6.6
2000	218	200	2.5	5.4	8.4	5.4	6.2	6.7
2000	218	300	3.2	5.4	8.4	5.4	6	6.6
2000	218	400	2.5	5.4	8.4	5.4	6.4	6.6
2000	218	500	2.5	5.4	8.4	5.3	6.4	6.5
2000	218	600	2.9	5.3	8.4	5.3	6.3	6.5
2000	218	700	2.6	5.3	8.4	5.3	4.1	6.6
2000	218	800	2.5	5.4	8.4	5.3	6.4	6.6
2000	218	900	2.4	5.3	8.4	5.4	6.4	6.6
2000	218	1000	2.4	5.4	8.4	5.4	6.4	6.6

2000	218	1100	2.4	5.4	8.4	5.4	6.4	6.3
2000	218	1200	2.4	5.4	8.4	5.4	6.4	6.6
2000	218	1300	2.4	5.4	8.4	5.3	6.5	6.5
2000	218	1400	2.6	5.4	8.4	5.4	6.4	6.6
2000	218	1500	2.5	5.4	8.4	5.4	6.5	6.6
2000	218	1600	2.5	5.4	8.4	5.4	6.5	6.6
2000	218	1700	2.5	5.4	8.4	5.4	6.3	6.6
2000	218	1800	2.5	5.4	8.4	5.3	6.5	6.6
2000	218	1900	2.5	5.4	8.4	5.3	6.5	6.6
2000	218	2000	2.4	5.4	8.4	5.4	6.5	6.5
2000	218	2100	3.2	5.4	8.4	5.3	5.7	6.6
2000	218	2200	3	5.4	8.4	5.4	6.1	6.6
2000	218	2300	2.4	5.4	8.4	5.4	6.2	6.6
2000	218	2400	3.1	5.4	8.4	5.3	6.1	6.5
2000	219	100	2.4	5.4	8.4	5.4	5.6	6.6
2000	219	200	2.6	5.4	8.4	5.4	4.9	6.6
2000	219	300	2.4	5.4	8.4	5.4	6.4	6.6
2000	219	400	2.5	5.4	8.4	5.3	6.4	6.6
2000	219	500	2.5	5.4	8.4	5.3	6.4	6.6
2000	219	600	2.9	5.3	8.4	5.3	6.4	6.5
2000	219	700	2.8	5.3	8.4	5.3	6.2	6.7
2000	219	800	3.1	5.3	8.3	5.3	5	6.5
2000	219	900	2.4	5.3	8.3	5.4	6.4	6.6
2000	219	1000	2.4	5.3	8.4	5.4	6.4	6.7
2000	219	1100	2.7	5.3	8.4	5.3	3.6	6.6
2000	219	1200	2.4	5.3	8.4	5.3	6.3	6.5
2000	219	1300	2.4	5.4	8.4	5.4	6.4	6.5
2000	219	1400	2.4	5.4	8.4	5.4	6.5	6.5
2000	219	1500	2.4	5.4	8.4	5.4	6.2	6.6
2000	219	1600	2.4	5.4	8.4	5.3	6.5	6.5
2000	219	1700	2.4	5.4	8.4	5.4	6.5	6.5
2000	219	1800	2.6	5.4	8.4	5.3	6.4	6.4
2000	219	1900	2.5	5.4	8.4	5.4	6.5	6.5
2000	219	2000	2.4	5.4	8.4	5.3	6.5	6.5
2000	219	2100	2.4	5.4	8.4	5.3	6.4	6.6
2000	219	2200	3.2	5.3	8.4	5.3	3.9	6.6
2000	219	2300	3.2	5.3	8.4	5.3	5.7	6.5
2000	219	2400	2.5	5.3	8.4	5.4	5.9	6.4
2000	220	100	3.1	5.3	8.4	5.3	5.4	6.6
2000	220	200	2.6	5.3	8.4	5.3	3.9	6.7
2000	220	300	2.6	5.3	8.3	5.3	6.4	6.6
2000	220	400	2.9	5.3	8.3	5.3	6.4	6.4
2000	220	500	2.4	5.3	8.3	5.3	6.4	6.6
2000	220	600	2.5	5.3	8.3	5.3	6.4	6.7
2000	220	700	3.3	5.3	8.3	5.4	6.3	6.7
2000	220	800	2.5	5.3	8.3	5.3	6.1	6.4
2000	220	900	3.2	5.3	8.3	5.4	5.8	6.6
2000	220	1000	2.4	5.3	8.3	5.3	5.9	6.4
2000	220	1100	2.6	5.3	8.3	5.3	6.3	6.7
2000	220	1200	2.4	5.3	8.3	5.3	6.4	6.6
2000	220	1300	2.4	5.3	8.4	5.4	6.4	6.7
2000	220	1400	2.6	2.2	8.4	5.3	6.3	6.6

2000	220	1500	2.5	2.2	8.3	5.4	6.5	6.6
2000	220	1600	2.5	2.2	8.4	5.4	5.4	6.6
2000	220	1700	2.8	2.2	8.4	5.4	5.3	6.5
2000	220	1800	2.9	2.2	8.4	5.4	5.4	6.4
2000	220	1900	2.8	2.2	8.4	5.3	5.4	6.7
2000	220	2000	2.8	2.2	8.4	5.4	5.4	6.7
2000	220	2100	2.9	2.1	8.4	5.4	5.4	6.5
2000	220	2200	2.9	2.1	8.3	5.3	5.4	6.6
2000	220	2300	2.9	2.2	8.3	5.4	5.4	6.6
2000	220	2400	2.9	2.1	8.3	5.3	5.4	6.4
2000	221	100	2.8	2.1	8.3	5.3	5.3	6.5
2000	221	200	2.8	2.1	8.3	5.4	5.3	6.6
2000	221	300	2.8	2.1	8.3	5.3	5.4	6.4
2000	221	400	2.9	2.1	8.3	5.2	5.4	6.6
2000	221	500	2.8	2.1	8.3	5.4	5.4	6.6
2000	221	600	2.9	2.1	8.3	5.2	5.4	6.4
2000	221	700	2.8	2.1	8.3	5.3	5.3	6.7
2000	221	800	2.8	2.1	8.3	5.4	5.4	6.5
2000	221	900	2.8	2.1	8.3	5.3	5.4	6
2000	221	1000	2.9	2.1	-20.7	5.3	5.4	6
2000	221	1100	2.9	2.1	-20.6	5.3	5.4	6
2000	221	1200	2.9	2.1	-20.6	5.4	5.4	6.1
2000	221	1300	2.9	2.1	-20.5	5.4	5.4	6.1
2000	221	1400	2.8	-20.2	6.9	5.3	5.4	6.2
2000	221	1500	2.8	2.2	4.4	5.4	5.4	6.3
2000	221	1600	2.9	2.2	4.3	5.4	5.4	6.4
2000	221	1700	2.9	2.2	4.3	5.3	5.4	6.4
2000	221	1800	2.9	2.2	4.3	5.4	5.4	6.4
2000	221	1900	2.9	2.2	4.3	5.4	5.4	6.5
2000	221	2000	2.9	2.2	4.4	5.3	5.4	6.5
2000	221	2100	2.8	2.2	4.3	5.3	5.3	6.4
2000	221	2200	2.9	2.1	4.3	5.4	5.4	6.4
2000	221	2300	2.8	2.2	4.3	5.3	5.4	6.4
2000	221	2400	2.9	2.1	4.3	5.4	5.4	6.4
2000	222	100	2.9	2.1	4.3	5.4	5.4	6.4
2000	222	200	2.8	2.2	4.3	5.4	5.3	6.4
2000	222	300	2.8	2.1	4.3	5.4	5.3	6.4
2000	222	400	2.8	2.1	4.3	5.3	5.3	6.5
2000	222	500	2.8	2.1	4.3	5.3	5.4	6.4
2000	222	600	2.8	2.2	4.4	5.3	5.4	6.5
2000	222	700	2.8	2.1	4.4	5.3	5.4	6.4
2000	222	800	2.9	2.2	3.8	5.3	5.4	6.4
2000	222	900	2.9	2.2	4.2	5.3	5.4	6.4
2000	222	1000	2.9	2.2	4.4	5.4	5.4	6.5
2000	222	1100	2.9	2.2	4.3	5.4	5.4	6.5
2000	222	1200	2.9	2.2	4.3	5.3	5.4	6.5
2000	222	1300	2.8	2.2	4.4	5.4	5.4	6.5
2000	222	1400	2.9	2.2	4.3	5.3	5.3	6.6
2000	222	1500	2.9	2.1	4.4	5.3	5.4	6.6
2000	222	1600	2.9	2.1	4.4	5.4	5.4	6.7
2000	222	1700	2.8	2.1	4.4	5.3	5.4	8
2000	222	1800	2.8	2.2	4.4	5.4	5.4	8.1

2000	222	1900	2.8	2.1	4.4	5.4	5.3	8.1
2000	222	2000	2.9	2.1	4.4	5.3	5.3	8.1
2000	222	2100	2.9	2.1	4.4	5.4	5.4	8.1
2000	222	2200	2.9	2.2	4.4	5.4	5.4	8.1
2000	222	2300	2.9	2.1	4.4	5.4	5.4	8.2
2000	222	2400	2.9	2.1	4.4	5.3	5.3	8.2
2000	223	100	2.9	2.1	4.5	5.3	5.3	8.2
2000	223	200	2.9	2.1	4.5	5.4	5.4	8.2
2000	223	300	2.9	2.1	4.5	5.3	5.4	8.2
2000	223	400	2.9	2.1	4.5	5.4	5.4	8.2
2000	223	500	2.8	2.1	4.6	5.3	5.4	8.2
2000	223	600	2.8	2.1	4.6	5.3	5.4	8.2
2000	223	700	3	2.1	4.6	5.3	5.4	8.2
2000	223	800	2.8	2.1	4.7	5.3	5.4	8.2
2000	223	900	2.9	2.2	4.7	5.4	5.4	8.2
2000	223	1000	2.9	2.1	4.8	5.4	5.4	8.2
2000	223	1100	2.8	2.1	4.8	5.4	5.4	8.3
2000	223	1200	2.9	2.1	4.9	5.3	5.4	8.3
2000	223	1300	2.8	2.1	5	5.4	5.4	8.4
2000	223	1400	2.9	2.1	5	5.3	5.3	8.4
2000	223	1500	2.8	2.1	5.1	5.3	5.4	8.5
2000	223	1600	2.9	2.1	5.1	5.3	5.4	8.5
2000	223	1700	2.9	2.1	5.2	5.3	5.3	8.5
2000	223	1800	2.8	2.1	5.2	5.3	5.3	8.5
2000	223	1900	3	2.1	5.1	5.4	5.3	8.4
2000	223	2000	2.9	2.1	5.1	5.1	5.4	8.3
2000	223	2100	2.8	2.1	5.1	5.4	5.3	8.3
2000	223	2200	2.9	2.1	5.2	5.3	5.4	8.4
2000	223	2300	2.9	2.1	5.2	5.4	5.4	8.4
2000	223	2400	2.8	2.1	5.2	5.4	5.4	8.4
2000	224	100	2.8	2.1	5.2	5.3	5.4	8.4
2000	224	200	2.8	2.1	5.2	5.4	5.4	8.3
2000	224	300	2.9	2.1	5.2	5.4	5.4	8.3
2000	224	400	2.8	2.1	5.2	5.2	5.4	8.4
2000	224	500	2.8	2.1	5.3	5.4	5.4	8.4
2000	224	600	2.8	2.1	5.3	5.3	5.4	8.4
2000	224	700	2.8	2.1	5.3	5.3	5.3	8.4
2000	224	800	2.9	2.1	5.3	5.3	5.3	8.4
2000	224	900	2.8	2.1	5.3	5.3	5.4	8.4
2000	224	1000	2.8	2.1	5.4	5.4	5.4	8.4
2000	224	1100	2.9	2.1	5.4	5.4	5.4	8.4
2000	224	1200	2.8	2.1	5.4	5.3	5.4	8.4
2000	224	1300	2.8	2.1	5.4	5.4	5.4	8.5
2000	224	1400	2.9	2.1	5.4	5.4	5.3	8.4
2000	224	1500	2.9	2.1	5.5	5.3	5.4	8.5
2000	224	1600	2.8	2.1	5.5	5.4	5.4	8.5
2000	224	1700	2.8	2.1	5.5	5.3	5.4	8.5
2000	224	1800	2.8	2.1	5.5	5.3	5.4	8.5
2000	224	1900	2.9	2.1	5.4	5.3	5.4	8.5
2000	224	2000	2.9	2.1	5.5	5.4	5.3	8.5
2000	224	2100	2.9	2.1	5.4	5.4	5.4	8.5
2000	224	2200	2.8	2.1	5.4	5.3	5.4	8.5

2000	224	2300	2.8	2.1	5.4	5.3	5.4	8.4
2000	224	2400	2.9	2.1	5.4	5.3	5.4	8.4
2000	225	100	2.9	2.1	5.4	5.4	5.4	8.4
2000	225	200	2.9	2.1	5.5	5.4	5.4	8.5
2000	225	300	2.8	2.1	5.5	5.3	5.4	8.5
2000	225	400	2.9	2.1	5.5	5.3	5.4	8.5
2000	225	500	2.9	2.1	5.5	5.4	5.4	8.5
2000	225	600	2.8	2.1	5.4	5.3	5.3	8.5
2000	225	700	2.8	2.1	5.4	5.4	5.4	8.5
2000	225	800	2.8	2.1	5.5	5.4	5.4	8.4
2000	225	900	2.9	2.1	5.5	5.3	5.4	8.4
2000	225	1000	2.8	2.1	5.5	5.3	5.4	8.5
2000	225	1100	3.2	2.1	5.5	5.3	5.4	8.4
2000	225	1200	2.9	2.1	5.5	5.3	5.4	8.5
2000	225	1300	2.9	2.1	5.5	5.3	5.3	8.5
2000	225	1400	2.9	2.1	5.6	5.3	5.4	8.6
2000	225	1500	2.9	2.1	5.6	5.3	5.4	8.6
2000	225	1600	2.9	2.1	5.6	5.3	5.4	8.6
2000	225	1700	2.9	2.1	5.6	5.3	5.3	8.6
2000	225	1800	2.9	2.1	5.6	5.3	5.3	8.5
2000	225	1900	2.9	2.1	5.5	5.4	5.4	8.4
2000	225	2000	2.8	2.1	5.6	5.4	5.4	8.4
2000	225	2100	2.8	2.1	5.5	5.4	5.4	8.4
2000	225	2200	2.9	2.1	5.5	5.3	5.3	8.3
2000	225	2300	2.9	2.1	5.5	5.4	5.4	8.3
2000	225	2400	2.9	2.1	5.5	5.4	5.4	8.3
2000	226	100	2.9	2.1	5.5	5.3	5.4	8.3
2000	226	200	2.9	2.1	5.5	5.4	5.3	8.3
2000	226	300	2.9	2.1	5.5	5.3	5.4	8.3
2000	226	400	2.8	2.1	5.5	5.3	5.4	8.4
2000	226	500	2.8	2.1	5.5	5.3	5.4	8.4
2000	226	600	2.8	2.1	5.5	5.4	5.4	8.3
2000	226	700	2.9	2.1	5.5	5.4	5.4	8.3
2000	226	800	2.9	2.1	5.5	5.3	5.4	8.3
2000	226	900	2.8	2.1	5.5	5.4	5.4	8.3
2000	226	1000	2.9	2.1	5.5	5.3	5.4	8.5
2000	226	1100	2.8	2.1	5.5	5.3	5.4	8.5
2000	226	1200	2.9	2.1	5.5	5.3	5.4	8.5
2000	226	1300	2.9	2.1	5.6	5.4	5.4	8.5
2000	226	1400	2.8	2.1	5.6	5.4	5.4	8.5
2000	226	1500	2.9	2.1	5.6	5.3	5.3	8.6
2000	226	1600	2.9	2.1	5.6	5.3	5.3	8.6
2000	226	1700	2.9	2.1	5.6	5.4	5.4	8.6
2000	226	1800	2.9	2.1	5.6	5.4	5.4	8.7
2000	226	1900	2.9	2.1	5.6	5.4	5.4	8.6
2000	226	2000	2.8	2.2	5.6	5.3	5.4	8.6
2000	226	2100	2.8	2.1	5.5	5.4	5.4	8.6
2000	226	2200	2.9	2.1	5.5	5.4	5.3	8.6
2000	226	2300	2.9	2.1	5.5	5.3	5.4	8.6
2000	226	2400	2.9	2.1	5.5	5.4	5.4	8.5
2000	227	100	2.8	2.1	5.5	5.4	5.4	8.6
2000	227	200	2.8	2.1	5.5	5.3	5.4	8.6

2000	227	300	2.8	2.1	5.5	5.3	5.3	8.1
2000	227	400	2.8	2.1	5.5	5.3	5.3	8.1
2000	227	500	2.8	2.2	5.5	5.4	5.4	8.1
2000	227	600	2.8	2.1	5.5	5.3	5.4	8.1
2000	227	700	2.8	2.1	5.5	5.3	5.4	8
2000	227	800	2.8	2.1	5.5	5.3	5.4	8
2000	227	900	2.8	2.1	5.5	5.3	5.4	8
2000	227	1000	2.9	2.1	5.5	5.4	5.4	8
2000	227	1100	2.9	2.1	5.8	5.3	5.4	8
2000	227	1200	2.8	2.1	6	5.3	5.4	8.1
2000	227	1300	2.9	2.1	6	5.4	5.4	8.1
2000	227	1400	2.9	2.1	6	5.4	5.4	8.1
2000	227	1500	2.9	2.1	6	5.4	5.4	8.4
2000	227	1600	2.9	2.1	6	5.3	5.4	8.4
2000	227	1700	2.8	2.1	5.9	5.4	5.3	8.4
2000	227	1800	2.8	2.1	5.9	5.4	5.3	8.4
2000	227	1900	2.9	2.1	5.9	5.4	5.4	8.4
2000	227	2000	2.8	2.1	5.8	5.4	5.4	8.4
2000	227	2100	2.8	2.1	5.8	5.4	5.4	8.4
2000	227	2200	2.9	2.1	5.7	5.3	5.4	8.3
2000	227	2300	2.9	2.1	5.7	5.3	5.4	8.3
2000	227	2400	2.9	2.1	5.7	5.3	5.4	8.3
2000	228	100	2.8	2.1	5.7	5.3	5.4	8.3
2000	228	200	2.9	2.1	5.7	5.3	5.4	8.3
2000	228	300	2.9	2.1	5.7	5.3	5.3	8.3
2000	228	400	2.9	2.1	5.6	5.3	5.4	8.3
2000	228	500	2.9	2.1	5.6	5.3	5.4	8.3
2000	228	600	2.8	2.1	5.6	5.3	5.4	8.3
2000	228	700	2.8	2.1	5.6	5.3	5.4	8.3
2000	228	800	2.8	2.2	5.6	5.3	5.4	8.3
2000	228	900	2.8	2.1	5.5	5.3	5.4	8.3
2000	228	1000	2.8	2.1	5.5	5.4	5.4	8.3
2000	228	1100	2.8	2.1	5.5	5.4	5.3	8.3
2000	228	1200	2.9	2.3	5.5	5.3	5.3	8.3
2000	228	1300	2.9	2.1	5.5	5.3	5.4	8.3
2000	228	1400	2.8	2.1	5.6	5.3	5.4	8.4
2000	228	1500	2.9	2.1	5.6	5.4	5.3	8.4
2000	228	1600	2.9	2.1	5.6	5.2	5.4	8.4
2000	228	1700	2.8	2.1	5.6	5.4	5.4	8.4
2000	228	1800	2.9	2.1	5.5	5.2	5.4	8.4
2000	228	1900	2.9	2.5	5.5	5.4	5.3	8.4
2000	228	2000	2.8	2.1	5.5	5.4	5.4	8.4
2000	228	2100	2.9	2.2	5.4	5.3	5.4	8.4
2000	228	2200	2.9	2.1	5.4	5.4	5.4	8.3
2000	228	2300	2.9	2.1	5.4	5.3	5.4	8.3
2000	228	2400	3	2.1	5.4	5.4	5.4	8.3
2000	229	100	2.8	2.1	5.4	5.4	5.4	8.3
2000	229	200	2.8	2.1	5.4	5.3	5.4	8.3
2000	229	300	2.9	2.3	5.4	5.3	5.4	8.4
2000	229	400	2.9	2.1	5.4	5.3	5.4	8.4
2000	229	500	2.9	2.1	5.4	5.3	5.4	8.3
2000	229	600	2.7	2.1	5.3	5.3	5.3	8.3

2000	229	700	2.8	2.4	5.3	5.3	5.3	8.3
2000	229	800	2.8	2.1	5.3	5.4	5.4	8.3
2000	229	900	2.8	2.1	5.3	5.3	5.4	8.3
2000	229	1000	2.8	2.1	5.3	5.3	5.4	8.3
2000	229	1100	2.8	2.1	5.4	5.7	5.3	8.4
2000	229	1200	2.9	2.1	5.4	5.4	5.4	8.5
2000	229	1300	2.9	2.1	5.4	5.3	5.4	8.4
2000	229	1400	2.9	2.2	5.4	5.3	5.3	8.4
2000	229	1500	2.9	2.1	5.4	5.3	5.4	8.5
2000	229	1600	2.8	2.1	5.4	5.3	5.4	8.5
2000	229	1700	2.8	2.3	5.4	5.4	5.3	8.5
2000	229	1800	2.9	2.1	5.4	5.4	5.3	8.5
2000	229	1900	2.9	2.2	5.4	5.4	5.4	8.5
2000	229	2000	2.8	2.3	5.4	5.4	5.4	8.5
2000	229	2100	2.8	2.1	5.4	5.3	5.4	8.4
2000	229	2200	2.8	2.3	5.3	5.4	5.3	8.4
2000	229	2300	2.9	2.1	5.3	5.4	5.4	8.4
2000	229	2400	2.8	2.1	5.3	5.4	5.4	8.4
2000	230	100	2.8	2.1	5.4	5.4	5.4	8.4
2000	230	200	2.8	2.1	5.3	5.3	5.3	8.4
2000	230	300	2.8	2.1	5.3	5.4	5.4	8.4
2000	230	400	2.8	2.1	5.3	5.4	5.4	8.4
2000	230	500	2.8	2.2	5.3	5.4	5.4	8.4
2000	230	600	2.8	2.1	5.3	5.3	5.4	8.4
2000	230	700	2.9	2.1	5.3	5.3	5.4	8.4
2000	230	800	2.9	2.1	5.3	5.3	5.4	8.4
2000	230	900	2.8	2.2	5.3	5.3	5.4	8.4
2000	230	1000	2.9	2.1	5.3	5.3	5.4	8.4
2000	230	1100	2.9	2.4	5.3	5.4	5.4	8.4
2000	230	1200	2.8	2.1	5.3	5.4	5.3	8.4
2000	230	1300	2.9	2.1	5.3	5.3	5.4	8.4
2000	230	1400	2.9	2.4	5.4	5.4	5.3	8.4
2000	230	1500	2.9	2.2	5.4	5.4	5.4	8.5
2000	230	1600	2.8	2.3	5.4	5.4	5.3	8.5
2000	230	1700	2.8	2.5	5.4	5.2	5.3	8.5
2000	230	1800	2.9	2.2	5.4	5.4	5.3	8.5
2000	230	1900	2.9	2.1	5.4	5.4	5.3	8.5
2000	230	2000	2.9	2.4	5.4	5.4	5.3	8.5
2000	230	2100	2.9	2.3	5.3	5.3	5.4	8.4
2000	230	2200	2.9	2.2	5.3	5.4	5.4	8.4
2000	230	2300	2.9	2.1	5.3	5.4	5.4	8.4
2000	230	2400	2.8	2.4	5.3	5.3	5.4	8.4
2000	231	100	2.8	2.1	5.3	5.3	5.4	8.4
2000	231	200	2.8	2.1	5.3	5.4	5.4	8.4
2000	231	300	2.9	2.1	5.3	5.3	5.4	8.4
2000	231	400	2.9	2.3	5.3	5.4	5.4	8.4
2000	231	500	2.9	2.4	5.3	5.4	5.4	8.4
2000	231	600	2.8	2.3	5.3	5.3	5.4	8.3
2000	231	700	2.8	2.1	5.3	5.4	5.3	8.2
2000	231	800	2.8	2.8	5.3	5.4	5.4	8.2
2000	231	900	2.9	2.3	5.3	5.3	5.3	8.1
2000	231	1000	2.8	2.1	5.2	5.4	5.4	8.1

2000	231	1100	2.9	2.1	5.3	5.3	5.4	8.2
2000	231	1200	2.8	2.3	5.3	5.4	5.4	8.2
2000	231	1300	2.8	2.3	5.3	5.4	5.4	8.2
2000	231	1400	2.8	2.2	5.3	5.3	5.3	8.2
2000	231	1500	2.8	2.1	5.4	5.4	5.4	8.2
2000	231	1600	2.8	2.1	5.4	5	5.4	8.2
2000	231	1700	2.9	2.3	5.4	5.4	5.4	8.2
2000	231	1800	2.9	2.3	5.4	5.4	5.4	8.3
2000	231	1900	2.9	2.1	5.4	5.4	5.4	8.2
2000	231	2000	2.8	2.4	5.4	5.3	5.3	8.2
2000	231	2100	2.8	2.2	5.3	5.4	5.4	8.2
2000	231	2200	2.9	2.3	5.3	5.4	5.4	8.2
2000	231	2300	2.9	2.1	5.3	5.4	5.4	8.1
2000	231	2400	2.8	2.1	5.3	5.2	5.4	8.2
2000	232	100	2.8	2.3	5.3	5.4	5.4	8.2
2000	232	200	2.8	2.4	5.3	5.4	5.4	8.3
2000	232	300	2.9	2.1	5.3	5.3	5.4	8.3
2000	232	400	2.9	2.3	5.3	5.3	5.3	8.3
2000	232	500	2.8	2.2	5.3	5.3	5.3	8.3
2000	232	600	2.8	2.4	5.3	5.3	5.4	8.3
2000	232	700	2.8	2.2	5.3	5.3	5.4	8.2
2000	232	800	2.8	2.1	5.3	5.3	5.4	8.2
2000	232	900	2.9	2.6	5.4	5.4	5.4	8.3
2000	232	1000	2.8	2.2	5.4	5.3	5.3	8.3
2000	232	1100	2.8	2.3	5.4	5.4	5.3	8.3
2000	232	1200	2.9	2.1	5.4	5.4	5.4	8.3
2000	232	1300	2.9	2.1	5.4	5.4	5.4	8.3
2000	232	1400	2.8	2.4	5.4	5.3	5.3	8.3
2000	232	1500	2.9	2.3	5.5	5.4	5.4	8.3
2000	232	1600	2.9	2.4	5.5	5.3	5.4	8.3
2000	232	1700	2.9	2.3	5.5	5.3	5.4	8.3
2000	232	1800	2.9	2.1	5.5	5.3	5.4	8.3
2000	232	1900	2.9	2.2	5.4	5.3	5.4	8.3
2000	232	2000	2.8	2.1	5.5	5.4	5.4	8.3
2000	232	2100	2.8	2.8	5.4	5.3	5.4	8.3
2000	232	2200	2.8	2.3	5.4	5.3	5.4	8.3
2000	232	2300	2.8	2.3	5.4	5.4	5.4	8.3
2000	232	2400	2.8	2.4	5.4	5.3	5.4	8.3
2000	233	100	2.8	2.3	5.4	5.3	5.4	8.3
2000	233	200	2.8	2.3	5.4	5.3	5.4	8.4
2000	233	300	2.9	2.8	5.4	5.4	5.3	8.3
2000	233	400	2.8	2.1	5.4	5.4	5.3	8.3
2000	233	500	2.8	2.1	5.4	5.3	5.4	8.3
2000	233	600	2.8	2.3	5.4	5.3	5.4	8.3
2000	233	700	2.8	2.4	5.4	5.3	5.4	8.3
2000	233	800	2.8	2.1	5.4	5.3	5.4	8.3
2000	233	900	2.9	2.9	5.3	5.3	5.3	8.2
2000	233	1000	2.9	2.3	5.3	5.4	5.4	8.2
2000	233	1100	2.9	2.5	5.3	5.3	5.4	8.2
2000	233	1200	2.8	2.1	5.4	5.4	5.4	8.3
2000	233	1300	2.8	2.7	5.5	5.3	5.4	8.4
2000	233	1400	2.8	2.1	5.5	5.3	5.3	8.4

2000	233	1500	2.8	2.1	5.5	5.3	5.4	8.4
2000	233	1600	2.9	3	5.5	5.3	5.4	8.4
2000	233	1700	2.9	2.1	5.5	5.3	5.4	8.4
2000	233	1800	2.9	2.1	5.5	5.4	5.3	8.4
2000	233	1900	2.8	2.1	5.5	5.3	5.4	8.3
2000	233	2000	2.8	2.2	5.5	5.3	5.4	8.3
2000	233	2100	2.9	2.1	5.5	5.3	5.4	8.3
2000	233	2200	2.9	2.7	5.4	5.3	5.4	8.3
2000	233	2300	2.9	2.1	5.4	5.4	5.4	8.3
2000	233	2400	2.9	2.2	5.4	5.4	5.4	8.3
2000	234	100	2.9	2.1	5.5	5.3	5.4	8.3
2000	234	200	2.8	2.2	5.5	5.4	5.4	8.3
2000	234	300	2.8	2.2	5.4	5.4	5.4	8.3
2000	234	400	2.8	2.3	5.5	5.3	5.3	8.3
2000	234	500	2.8	2.1	5.4	5.3	5.4	8.2
2000	234	600	2.9	2.5	5.4	5.3	5.4	8.2
2000	234	700	2.9	2.5	5.4	5.4	5.4	8.2
2000	234	800	2.9	2.3	5.4	5.4	5.4	8.1
2000	234	900	2.9	2.1	5.4	5.4	5.4	8.2
2000	234	1000	2.9	2	5.4	5.3	5.4	8.2
2000	234	1100	2.8	2.4	5.4	5.4	5.4	8.2
2000	234	1200	2.8	2.2	5.4	5.3	5.4	8.2
2000	234	1300	2.9	2.4	5.5	5.4	5.4	8.2
2000	234	1400	2.8	2.2	5.5	5.3	5.4	8.2
2000	234	1500	2.9	2.3	5.5	5.3	5.4	8.3
2000	234	1600	2.9	2.3	5.5	5.4	5.3	8.3
2000	234	1700	2.9	2.2	5.5	5.4	5.3	8.3
2000	234	1800	2.9	2.1	5.5	5.3	5.3	8.3
2000	234	1900	2.8	2.2	5.5	5.4	5.4	8.3
2000	234	2000	2.8	2.2	5.5	5.4	5.4	8.3
2000	234	2100	2.9	2.1	5.5	5.4	5.3	8.3
2000	234	2200	2.9	2.1	5.4	5.4	5.4	8.3
2000	234	2300	2.9	2.3	5.4	5.3	5.4	8.3
2000	234	2400	2.9	2.2	5.4	5.4	5.4	8.3
2000	235	100	2.9	2.6	5.4	5.4	5.4	8.3
2000	235	200	2.9	2.3	5.4	5.4	5.4	8.3
2000	235	300	2.8	2.4	5.4	5.3	5.3	8.3
2000	235	400	2.9	2.1	5.4	5.3	5.4	8.2
2000	235	500	2.9	2.1	5.4	5.3	5.4	8.2
2000	235	600	2.8	2.1	5.4	5.4	5.4	8.2
2000	235	700	2.8	2.1	5.4	5.3	5.4	8.2
2000	235	800	2.8	2.2	5.4	5.3	5.4	8.2
2000	235	900	2.9	2.1	5.4	5.4	5.4	8.2
2000	235	1000	2.7	2.1	5.4	5.3	5.4	8.2
2000	235	1100	2.9	2.3	5.4	5.3	5.4	8.2
2000	235	1200	2.9	2.1	5.4	5.4	5.4	8.2
2000	235	1300	2.9	2.1	5.5	5.3	5.4	8.3
2000	235	1400	2.8	2.1	5.5	5.4	5.4	8.3
2000	235	1500	2.9	2.1	5.5	5.3	5.4	8.4
2000	235	1600	2.9	2.1	5.5	5.4	5.3	8.4
2000	235	1700	2.8	2.3	5.6	5.4	5.3	8.4
2000	235	1800	2.9	2.3	5.5	5.3	5.3	8.3

2000	235	1900	2.8	2.2	5.5	5.3	5.3	8.3
2000	235	2000	2.8	2.4	5.5	5.4	5.3	8.3
2000	235	2100	2.9	2.1	5.4	5.4	5.4	8.3
2000	235	2200	2.9	2.1	5.4	5.3	5.4	8.2
2000	235	2300	2.8	2.4	5.4	5.4	5.4	8.3
2000	235	2400	2.9	2.8	5.4	5.3	5.4	8.3
2000	236	100	2.9	2.2	5.4	5.4	5.4	8.3
2000	236	200	2.9	2.2	5.4	5.4	5.4	8.3
2000	236	300	2.8	2.1	5.4	5.2	5.3	8.3
2000	236	400	2.9	2.2	5.4	5.4	5.3	8.3
2000	236	500	2.9	2.6	5.4	5.3	5.4	8.3
2000	236	600	2.8	2.5	5.4	5.3	5.4	8.2
2000	236	700	2.8	2.3	5.4	5.3	5.3	8.2
2000	236	800	2.8	2.8	5.4	5.3	5.4	8.2
2000	236	900	2.8	2.2	5.4	5.3	5.4	8.2
2000	236	1000	2.8	2.2	5.4	5.4	5.4	8.2
2000	236	1100	2.9	2.6	5.4	5.4	5.4	8.2
2000	236	1200	2.8	2.2	5.5	5.4	5.3	8.3
2000	236	1300	2.8	2.3	5.5	5.4	5.4	8.3
2000	236	1400	2.9	2.4	5.5	5.4	5.4	8.3
2000	236	1500	2.9	2.2	5.6	5.3	5.3	8.4
2000	236	1600	2.8	2.2	5.6	5.3	5.4	8.4
2000	236	1700	2.9	2.1	5.6	5.4	5.3	8.4
2000	236	1800	2.8	2.3	5.6	5.6	5.3	8.3
2000	236	1900	3.3	2.3	5.5	5.3	5.3	8.3
2000	236	2000	2.9	2.7	5.6	5.3	5.4	8.3
2000	236	2100	2.9	2.3	5.5	5.3	5.3	8.3
2000	236	2200	2.9	2.2	5.5	5.3	5.3	8.3
2000	236	2300	2.9	2.5	5.5	5.3	5.4	8.3
2000	236	2400	2.8	2.2	5.5	5.4	5.4	8.3
2000	237	100	2.9	2.3	5.5	5.3	5.4	8.3
2000	237	200	2.8	2.1	5.5	5.3	5.3	8.3
2000	237	300	2.8	2.2	5.5	5.4	5.3	8.3
2000	237	400	2.9	2.3	5.5	5.4	5.4	8.3
2000	237	500	2.8	2.1	5.5	5.3	5.4	8.3
2000	237	600	2.9	2.1	5.4	5.3	5.4	8.3
2000	237	700	2.8	2.1	5.4	5.3	5.4	8.2
2000	237	800	2.8	2.1	5.5	5.3	5.4	8.2
2000	237	900	2.8	2.6	5.4	5.3	5.3	8.2
2000	237	1000	2.9	2.5	5.5	5.3	5.4	8.2
2000	237	1100	2.9	2.1	5.4	5.4	5.4	8.2
2000	237	1200	2.8	2.1	-20.6	5.5	5.3	8.2
2000	237	1300	2.9	3.2	7.7	5.4	5.4	8.3
2000	237	1400	2.9	2.1	6.2	5.4	5.3	8.3
2000	237	1500	2.9	2.2	5.8	5.3	5.5	8.3
2000	237	1600	2.8	2.2	6.6	5.2	5.4	8.4
2000	237	1700	2.8	2.3	6.2	5.4	5.4	8.4
2000	237	1800	2.9	2.1	6.4	5.3	5.3	8.4
2000	237	1900	2.9	2.5	6.2	5.4	5.4	8.3
2000	237	2000	2.8	2.1	6.2	5.3	5.4	8.3
2000	237	2100	2.8	2.3	6.2	5.3	5.4	8.3
2000	237	2200	2.9	2.1	6.2	5.4	5.4	8.2

2000	237	2300	2.8	2.5	6.2	5.3	5.4	8.2
2000	237	2400	2.8	2.2	6.2	5.3	5.4	8.2
2000	238	100	2.9	2.1	6.2	5.3	5.4	8.3
2000	238	200	2.9	2.1	6.2	5.3	5.3	8.3
2000	238	300	2.9	2.1	6.2	5.3	5.3	8.3
2000	238	400	2.9	2.7	6.2	5.3	5.3	8.3
2000	238	500	2.8	2.2	6.2	5.4	5.4	8.2
2000	238	600	2.8	2.1	6.2	5.4	5.4	8.2
2000	238	700	2.9	2.1	6.2	5.3	5.3	8.2
2000	238	800	2.8	2.8	6	5.3	5.4	8.2
2000	238	900	2.8	2.1	6.2	5.3	5.4	8.2
2000	238	1000	2.8	2.4	6.2	5.3	5.4	8.2
2000	238	1100	2.8	2.1	6.2	5.4	5.3	8.2
2000	238	1200	2.8	2.1	6.2	5.3	5.4	8.2
2000	238	1300	2.9	2.3	6.2	5.3	5.4	8.2
2000	238	1400	2.9	2.6	6.3	5.4	5.4	8.3
2000	238	1500	2.8	3.2	6.3	5.4	5.4	8.3
2000	238	1600	2.8	2.1	5.8	5.5	5.4	8.4
2000	238	1700	2.9	2.1	6.3	5.3	5.4	8.4
2000	238	1800	2.9	2.3	6.3	5.3	5.4	8.4
2000	238	1900	2.8	2.1	6.3	5.4	5.4	8.3
2000	238	2000	2.8	2.3	6.1	5.3	5.3	8.3
2000	238	2100	2.8	2.3	6.4	5.3	5.3	8.3
2000	238	2200	2.9	2.3	6.2	5.4	5.4	8.2
2000	238	2300	2.9	2.3	6.5	5.2	5.4	8.2
2000	238	2400	2.9	2.1	6.3	5.3	5.4	8.2
2000	239	100	2.9	2.3	6.2	5.4	5.4	8.3
2000	239	200	2.9	2.3	6.2	5.3	5.4	8.3
2000	239	300	2.9	2.1	6.4	5.4	5.4	8.3
2000	239	400	2.8	2.6	6.6	5.4	5.3	8.3
2000	239	500	2.9	2.1	6.2	5.4	5.3	8.3
2000	239	600	2.8	2.6	6.2	5.3	5.4	8.3
2000	239	700	2.8	2.3	6.2	5.3	5.3	8.2
2000	239	800	2.9	2.5	6.2	5.3	5.4	8.2
2000	239	900	2.9	2.2	6.2	5.3	5.4	8.2
2000	239	1000	2.8	2.1	6.1	5.4	5.3	8.2
2000	239	1100	2.9	2.9	6.3	5.4	5.4	8.2
2000	239	1200	2.8	2.2	5.7	5.4	5.4	8.2
2000	239	1300	2.9	2.1	6.1	5.2	5.4	8.3
2000	239	1400	2.9	2.3	6.4	5.4	5.4	8.3
2000	239	1500	2.8	2.3	6.4	5.3	5.4	8.3
2000	239	1600	2.9	2.4	6.3	5.3	5.3	8.3
2000	239	1700	2.9	2.3	6.2	5.4	5.3	8.3
2000	239	1800	2.9	2.1	6.2	5.2	5.3	8.3
2000	239	1900	2.8	2.2	6.2	5.4	5.4	8.3
2000	239	2000	2.8	2.4	6.2	5.4	5.4	8.3
2000	239	2100	2.9	2.2	6.2	5.4	5.4	8.3
2000	239	2200	2.9	2.6	6.5	5.3	5.3	8.3
2000	239	2300	2.9	2.6	6.3	5.3	5.3	8.3
2000	239	2400	2.9	2.3	6.2	5.4	5.4	8.3
2000	240	100	2.8	2.2	6.3	5.4	5.4	8.3
2000	240	200	2.8	2.3	6.3	5.4	5.4	8.3

2000	240	300	2.7	2.1	6.3	5.3	5.3	8.3
2000	240	400	2.9	2.2	6.6	5.4	5.3	8.3
2000	240	500	2.9	2.5	6.3	5.4	5.4	8.3
2000	240	600	2.9	2.9	6.3	5.3	5.4	8.3
2000	240	700	2.8	2.1	6.2	5.3	5.4	8.2
2000	240	800	2.8	2.5	6.2	5.3	5.3	8.2
2000	240	900	2.8	2.2	6.2	5.3	5.3	8.2
2000	240	1000	2.9	2.2	6.5	5.3	5.4	8.2
2000	240	1100	2.9	2.1	6.3	5.3	5.4	8.2
2000	240	1200	2.9	2.3	6.1	5.3	5.4	8.2
2000	240	1300	2.8	2.1	6.2	5.4	5.3	8.2
2000	240	1400	2.9	2.5	6.3	5.4	5.4	8.3
2000	240	1500	2.9	3	6	5.4	5.4	8.3
2000	240	1600	2.9	2.4	5.9	5.4	5.4	8.3
2000	240	1700	2.8	2.7	5.8	5.4	5.3	8.3
2000	240	1800	2.9	2.4	6.4	5.4	5.3	8.3
2000	240	1900	2.9	2.1	5.9	5.4	5.4	8.3
2000	240	2000	2.8	2.9	6.4	5.3	5.3	8.3
2000	240	2100	2.8	2.2	6	5.3	5.3	8.3
2000	240	2200	2.8	2.3	6.5	5.4	5.4	8.3
2000	240	2300	2.9	2.3	6.2	5.3	5.4	8.2
2000	240	2400	2.8	2.3	6.2	5.3	5.4	8.3
2000	241	100	2.8	2.3	6.2	5.3	5.4	8.3
2000	241	200	2.9	2.3	6.2	5.3	5.4	8.3
2000	241	300	2.9	2.1	6.2	5.4	5.4	8.2
2000	241	400	2.8	2.1	6.2	5.3	5.4	8.2
2000	241	500	2.8	2.1	6.2	5.3	5.3	8.2
2000	241	600	2.9	2.1	6.2	5.3	5.4	8.2
2000	241	700	2.8	2.3	6.2	5.3	5.4	8.2
2000	241	800	2.8	2.1	6.3	5.3	5.4	8.2
2000	241	900	2.8	2.3	6.2	5.1	5.4	8.2
2000	241	1000	2.8	2.3	6.6	5.3	5.4	8.1
2000	241	1100	2.9	2.7	6.2	5.4	5.4	8.2
2000	241	1200	2.9	2.8	6.5	5.4	5.3	8.2
2000	241	1300	2.9	2.1	6.4	5.3	5.3	8.3
2000	241	1400	2.7	2.4	6.3	5.3	5.4	8.3
2000	241	1500	2.9	2.3	6.3	5.4	5.3	8.3
2000	241	1600	2.9	2.7	6.3	5.5	5.3	8.3
2000	241	1700	2.9	2.3	6.2	5.4	5.3	8.3
2000	241	1800	2.9	2.1	6.1	5.3	5.3	8.3
2000	241	1900	2.9	2.3	6.5	5.4	5.3	8.3
2000	241	2000	2.9	2.2	6.4	5.3	5.3	8.3
2000	241	2100	2.8	2.1	6.1	5.4	5.4	8.3
2000	241	2200	2.7	2.2	6	5.4	5.4	8.2
2000	241	2300	2.9	2.3	6.3	5.4	5.4	8.2
2000	241	2400	2.9	2.3	6.1	5.4	5.4	8.2
2000	242	100	2.9	2.3	6.2	5.4	5.4	8.2
2000	242	200	2.9	2.3	6.2	5.3	5.3	8.2
2000	242	300	2.8	2.1	6.2	5.4	5.3	8.2
2000	242	400	2.9	2.3	6.2	5.3	5.4	8.2
2000	242	500	2.8	2.1	6.4	5.3	5.4	8.2
2000	242	600	2.9	2.2	6.1	5.3	5.4	8.2

2000	242	700	2.8	2.4	6.2	5.3	5.4	8.2
2000	242	800	2.8	2.1	6.2	5.3	5.4	8.2
2000	242	900	2.8	2.2	6.2	5.4	5.4	8.2
2000	242	1000	3	2.2	6.2	5.4	5.4	8.2
2000	242	1100	2.9	2.4	5.7	5.3	5.4	8.2
2000	242	1200	2.9	2.3	6.2	5.3	5.3	8.2
2000	242	1300	2.8	2.6	6.2	5.4	5.3	8.3
2000	242	1400	2.8	2.4	6.2	5.3	5.3	8.3
2000	242	1500	2.8	2.2	5.7	5.1	5.4	8.3
2000	242	1600	2.9	2.2	6.3	5.2	5.4	8.3
2000	242	1700	2.9	2.1	6.3	5.4	5.4	8.4
2000	242	1800	2.9	2.8	6.3	5.4	5.3	8.3
2000	242	1900	2.9	2.3	6.4	5.3	5.3	8.3
2000	242	2000	2.9	2.3	6.5	5.3	5.4	8.3
2000	242	2100	2.8	2.9	6.5	5.3	5.4	8.3
2000	242	2200	2.9	2.3	6.6	5.4	5.4	8.3
2000	242	2300	2.8	2.2	6.5	5.4	5.4	8.3
2000	242	2400	2.9	2.2	6.2	5.4	5.4	8.3
2000	243	100	2.9	2.2	6.6	5.4	5.4	8.3
2000	243	200	3.2	2.1	6.3	5.4	5.4	8.3
2000	243	300	2.8	2.3	6.1	5.4	5.4	8.3
2000	243	400	2.8	2.3	6.4	5.4	5.3	8.3
2000	243	500	2.8	2.2	5.9	5.3	5.3	8.3
2000	243	600	2.8	2.1	6.2	5.3	5.3	8.2
2000	243	700	2.9	2.3	6.2	5.3	5.4	8.2
2000	243	800	2.8	2	6.2	5.4	5.4	8.2
2000	243	900	2.8	2.6	6.2	5.4	5.3	8.2
2000	243	1000	2.9	2.2	6	5.4	5.4	8.2
2000	243	1100	2.8	2.3	6.4	5.3	5.4	8.2
2000	243	1200	2.8	2.4	5.9	5.2	5.4	8.3
2000	243	1300	2.9	2.4	6.4	5.3	5.3	8.3
2000	243	1400	2.9	2.1	6.4	5.4	5.3	8.3
2000	243	1500	2.9	2.2	6.3	5.4	5.4	8.4
2000	243	1600	2.9	2.3	6.2	5.3	5.4	8.4
2000	243	1700	2.9	2.1	6.6	5.3	5.3	8.4
2000	243	1800	2.8	2.1	5.8	5.4	5.3	8.4
2000	243	1900	2.9	2.4	6	5.4	5.4	8.4
2000	243	2000	2.8	2.1	6.6	5.4	5.3	8.3
2000	243	2100	2.8	2.4	6.3	5.4	5.4	8.3
2000	243	2200	2.9	2.2	6	5.4	5.4	8.3
2000	243	2300	2.9	2.1	6.2	5.1	5.4	8.2
2000	243	2400	2.9	2.1	6.1	5.6	5.4	8.3
2000	244	100	2.8	2.6	6.2	5.3	5.4	8.3
2000	244	200	2.8	2.3	6.2	5.3	5.4	8.3
2000	244	300	2.9	2.9	6.2	5.4	5.4	8.3
2000	244	400	2.8	2.3	6.2	5.4	5.3	8.3
2000	244	500	2.9	2.2	5.9	5.4	5.3	8.3
2000	244	600	2.8	2.9	6.2	5.3	5.4	8.3
2000	244	700	2.8	2.3	6.2	5.3	5.4	8.2
2000	244	800	2.8	2.7	6.2	5.4	5.3	8.2
2000	244	900	2.8	2.1	6.2	5.3	5.4	8.2
2000	244	1000	2.8	2.7	6.7	5.3	5.4	8.2

2000	244	1100	2.8	2.2	6.4	5.4	5.4	8.2
2000	244	1200	2.9	2.2	6.5	5.3	5.3	8.2
2000	244	1300	2.9	2.1	6.3	5.3	5.3	8.3
2000	244	1400	2.8	2.1	6.4	5.4	5.3	8.3
2000	244	1500	2.9	2.2	6.3	5.4	5.4	8.3
2000	244	1600	2.9	2.1	5.9	5.4	5.4	8.4
2000	244	1700	2.9	2.5	6.2	5.3	5.3	8.3
2000	244	1800	2.8	2.5	5.9	5.3	5.3	8.3
2000	244	1900	2.8	2.3	6.3	5.3	5.3	8.3
2000	244	2000	2.9	2.1	6.3	5.4	5.3	8.3
2000	244	2100	2.8	2.3	6.3	5.4	5.4	8.2
2000	244	2200	2.9	2.3	6.2	5.4	5.4	8.2
2000	244	2300	2.9	2.1	6	5.4	5.4	8.2
2000	244	2400	2.8	2.7	6.5	5.3	5.4	8.2

Data June-August 2000

Flow Rate (in GPM)							
RW-09	RW-03	RW-04	RW-05	RW-06	RW-07	RW-08	RW-09
6.889	-12	1.906	-4.134	9.59	5.772	-0.134	22.71
6.923	-12	1.706	-4.134	9.58	5.782	36.38	22.51
6.939	-12.01	1.826	-4.141	9.49	5.562	32.21	22.31
6.923	-12.05	1.746	-4.147	9.38	5.552	29.03	22.31
6.889	-12.08	3.278	-4.161	9.61	5.492	28.38	22.33
6.889	-12.11	5.882	-4.167	9.51	5.522	28.18	22.33
6.923	-12.14	1.446	-4.181	9.49	5.332	27.44	22.13
6.889	-12.17	-0.157	-4.187	9.59	5.251	26.61	22.33
6.889	-12.19	-0.157	-4.197	9.71	5.171	26.13	22.33
6.856	-12.21	6.303	-4.204	9.41	5.332	26.23	22.33
6.856	-12.24	7.24	-4.214	9.6	5.151	25.65	22.33
6.892	-12.27	5.864	-4.221	9.59	5.203	25.31	22.14
6.897	-12.29	0.328	-4.227	9.5	5.026	26.99	21.97
6.847	-12.31	6.669	-4.234	9.4	4.776	25.04	21.95
6.9	-12.32	0.249	-4.241	9.52	4.637	24.57	21.66
6.897	-12.31	3.733	-4.234	9.5	4.916	24.46	21.74
6.894	-12.27	-0.125	-4.221	9.49	4.623	22.48	21.71
6.923	-12.21	0.004	-4.204	9.59	4.831	24.18	21.61
6.906	-12.16	-0.157	-4.187	9.49	4.65	24.08	21.61
6.923	-12.12	-0.157	-4.171	9.5	4.65	23.9	21.69
6.856	-12.07	1.426	-4.154	9.56	4.751	24.45	22.01
6.889	-12.03	1.786	-4.141	9.66	4.951	23.9	22.01
6.99	-11.99	2.317	-4.127	9.56	5.011	23.45	21.79
6.956	-11.97	2.217	-4.121	9.59	4.911	23.7	21.91
6.856	-11.95	8.96	-4.114	9.58	4.781	24.1	22.28
6.856	-11.95	1.366	-4.114	9.66	4.891	24.38	22.31
6.889	-11.97	2.347	-4.121	9.59	4.871	24	22.11
6.756	-12.01	1.746	-4.134	9.59	4.941	24.28	22.61
6.889	-12.06	1.836	-4.154	9.61	4.6	24	21.94
6.823	-12.09	1.946	-4.164	9.64	4.47	23.08	22.33
6.923	-12.12	1.936	-4.174	9.49	4.671	23.33	21.73
6.889	-12.13	4.19	-4.177	9.49	4.62	24.45	21.43
6.889	-12.15	3.208	-4.187	9.6	4.4	23.33	21.53
6.923	-12.19	-0.047	-4.194	9.51	4.39	23.25	21.32
6.906	-12.21	6.864	-4.207	9.49	4.29	22.59	21.63
6.907	-12.25	1.767	-4.214	9.6	4.591	22.4	21.53
6.929	-12.27	0.858	-4.224	9.52	4.524	23.16	21.34
6.899	-12.31	-0.152	-4.234	9.41	4.446	22.69	21.34
6.9	-12.32	-0.002	-4.24	9.52	4.276	22.69	21.34
6.899	-12.31	1.811	-4.234	9.37	3.995	22.78	21.32
6.912	-12.27	8.56	-4.221	9.49	4.364	21.84	21.21
6.89	-12.2	-0.177	-4.201	9.36	4.39	21.95	21.28
6.923	-12.14	1.716	-4.181	9.49	4.53	22.78	21.28
6.789	-12.09	1.456	-4.161	9.56	4.56	22.85	21.78
6.923	-12.04	1.756	-4.147	9.56	4.33	22.78	21.61
6.923	-12.01	2.197	-4.134	9.66	4.31	21.85	21.61
6.889	-11.98	1.706	-4.127	9.49	4.721	22.98	21.91
7.09	-11.95	5.702	-4.121	9.59	4.691	22.78	20.88
6.889	-11.93	2.878	-4.107	9.54	4.711	22.5	21.91

6.938	-11.94	2.957	-4.111	9.58	4.45	22.85	21.63
6.889	-11.97	1.746	-4.121	9.59	4.29	23.06	21.73
6.322	-12.01	2.027	-4.134	9.39	4.51	22.32	26.29
7.66	-12.05	2.127	-4.147	9.39	4.41	22.78	17.25
6.823	-12.09	3.739	-4.161	9.39	4.35	22.42	21.66
6.889	-12.11	-0.147	-4.167	9.5	4.23	21.57	21.13
6.923	-12.13	6.323	-4.174	9.29	3.929	21.84	21.13
6.923	-12.15	3.028	-4.181	9.51	4.24	21.75	21.13
6.889	-12.17	1.235	-4.187	9.39	4.43	22.57	21.23
6.856	-12.19	1.946	-4.194	9.39	4.38	21.75	21.43
6.923	-12.19	1.966	-4.201	9.5	4.45	21.65	21.23
6.889	-12.21	2.107	-4.204	9.49	3.949	21.55	21.32
6.857	-12.23	2.167	-4.211	9.41	4.21	21.75	21.32
6.944	-12.25	2.96	-4.217	9.57	4.122	22.32	20.94
6.963	-12.27	-0.064	-4.221	9.31	4.134	21.84	20.74
7.16	-12.28	0.248	-4.227	9.3	4.255	21.66	19.54
6.929	-12.29	3.292	-4.231	9.39	3.823	22.06	20.94
6.947	-12.29	6.318	-4.227	9.4	4.184	22.06	20.93
6.796	-12.29	-0.073	-4.227	9.38	4.174	21.66	21.52
6.896	-12.29	0.247	-4.227	9.39	4.434	20.83	21.13
6.929	-12.29	2.21	-4.227	9.39	4.234	22.13	21.14
6.862	-12.27	2.11	-4.227	9.39	3.993	21.84	21.51
6.894	-12.26	2.389	-4.221	9.59	4.152	21.75	21.5
6.856	-12.23	2.307	-4.211	9.36	4.51	22.49	21.61
6.923	-12.21	2.467	-4.201	9.49	4.45	21.85	21.41
6.923	-12.2	1.946	-4.194	9.39	4.37	21.85	21.43
6.889	-12.21	2.437	-4.197	9.4	3.969	21.75	21.31
6.889	-12.21	7.43	-4.201	9.21	4.12	21.19	21.43
6.873	-12.21	2.698	-4.207	9.39	4.29	21	21.43
6.923	-12.23	2.017	-4.214	9.39	4.37	23.05	21.23
6.909	-12.25	2.228	-4.214	9.42	4.322	21.84	21.33
6.912	-12.27	1.96	-4.221	9.39	4.063	21.66	21.33
6.897	-12.27	5.016	-4.224	9.31	3.994	21.56	21.34
6.93	-12.29	2.341	-4.227	9.31	4.304	21.46	21.33
6.88	-12.29	2.231	-4.227	9.3	4.294	22.13	21.34
6.933	-12.29	2.182	-4.234	9.1	4.266	21.66	21.14
6.833	-12.31	2.433	-4.234	9.4	3.866	21.74	21.44
6.933	-12.31	3.885	-4.241	9.12	3.675	21.66	20.94
6.9	-12.31	2.213	-4.24	9.22	4.006	21.11	20.84
6.9	-12.32	0.64	-4.24	9.22	3.936	21.01	20.94
6.9	-12.33	0.349	-4.24	9.22	3.946	21.56	20.94
6.917	-12.31	1.601	-4.24	9.22	3.735	21.39	20.94
6.916	-12.31	0.058	-4.234	9.22	3.635	21.56	20.84
6.88	-12.29	6.348	-4.234	9.22	3.964	21.29	21.01
6.895	-12.29	4.193	-4.234	9.22	4.143	22.06	21.01
6.898	-12.3	7.87	-4.234	9.22	4.135	21.56	21.03
6.914	-12.31	2.151	-4.234	9.22	4.014	21.56	21.02
6.898	-12.32	3.023	-4.241	9.22	3.985	21.47	21.24
6.899	-12.33	2.352	-4.241	9.22	4.176	21.56	21.24
6.866	-12.31	2.743	-4.241	9.22	4.166	21.75	21.44
6.899	-12.31	0.459	-4.241	9.22	4.186	21.66	21.14
6.917	-12.33	1.431	-4.24	9.12	4.196	21.56	21.14

6.867	-12.35	9.71	-4.247	9.04	3.695	21.31	21.14
6.967	-12.35	3.385	-4.247	9.12	3.996	21.66	20.94
6.867	-12.35	3.054	-4.254	9.1	4.046	21.29	21.14
6.833	-12.35	10.03	-4.247	9.12	4.156	21.56	21.14
6.764	-12.34	2.331	-4.247	9.12	3.774	21.38	21.84
6.949	-12.34	3.484	-4.247	9.12	3.785	21.38	20.85
6.866	-12.33	3.254	-4.244	9.12	3.945	21.49	21.14
6.863	-12.33	0.547	-4.247	8.89	4.214	21.28	21.14
6.898	-12.33	3.664	-4.247	9.15	4.195	21.3	20.94
6.797	-12.33	5.767	-4.244	8.94	3.714	21.21	21.24
6.882	-12.33	2.252	-4.244	8.95	3.604	21.2	21.04
6.85	-12.33	3.264	-4.247	9.01	3.665	20.81	20.94
6.865	-12.33	2.392	-4.241	8.91	3.915	21.01	20.84
6.866	-12.33	2.232	-4.241	9.02	4.046	21.01	20.84
6.833	-12.34	2.683	-4.247	8.85	3.865	21.04	20.64
6.833	-12.36	5.198	-4.254	8.85	3.355	21.19	20.84
6.867	-12.37	2.263	-4.254	8.8	3.415	20.91	20.73
6.933	-12.35	2.233	-4.251	9.01	3.846	20.91	20.54
6.9	-12.33	2.213	-4.24	8.9	3.866	21.11	20.72
6.897	-12.3	-0.173	-4.234	8.79	3.884	21.66	20.71
6.894	-12.29	1.278	-4.227	8.79	3.602	20.63	20.64
6.86	-12.3	3.531	-4.234	8.79	3.581	20.73	20.72
7.03	-12.33	0.327	-4.241	8.82	3.343	20.73	19.74
6.9	-12.37	3.465	-4.254	8.85	3.595	20.63	20.44
6.867	-12.37	0.459	-4.257	8.67	3.856	20.55	20.37
6.9	-12.37	4.086	-4.257	8.61	3.585	20.56	20.09
6.867	-12.38	-0.152	-4.261	8.72	4.086	20.45	20.44
6.867	-12.37	-0.132	-4.261	8.78	3.375	20.45	20.47
6.867	-12.37	-0.122	-4.257	8.78	3.345	20.64	20.47
6.899	-12.37	1.711	-4.254	8.8	3.274	20.56	20.37
6.865	-12.37	2.302	-4.254	8.72	3.354	20.36	20.37
6.898	-12.37	5.347	-4.257	8.76	3.975	20.56	20.17
6.865	-12.39	-0.142	-4.261	8.8	3.624	20.36	20.17
6.9	-12.39	2.022	-4.261	8.8	3.785	20.36	19.97
6.866	-12.39	-0.152	-4.261	8.77	3.254	20.18	19.95
6.967	-12.39	-0.152	-4.261	8.7	3.415	20.08	19.62
6.883	-12.37	-0.152	-4.254	8.75	3.826	20.25	20.23
6.9	-12.35	0.048	-4.247	8.75	3.525	20.18	20.14
6.93	-12.33	-0.163	-4.247	8.74	3.573	22.23	20.13
6.864	-12.35	-0.163	-4.247	8.92	3.563	20.36	20.41
6.866	-12.34	2.753	-4.247	8.7	3.455	20.46	20.67
6.899	-12.32	4.195	-4.241	8.92	3.544	20.63	20.62
6.894	-12.29	6.296	-4.227	8.79	3.852	20.73	20.61
6.89	-12.27	0.514	-4.221	8.79	3.85	20.72	20.61
6.923	-12.25	0.364	-4.214	8.79	3.939	20.72	20.63
6.856	-12.27	12.32	-4.221	8.89	3.579	20.8	20.83
6.873	-12.27	3.028	-4.227	8.84	3.429	20.72	20.63
6.962	-12.32	0.848	-4.241	8.84	3.963	20.63	20.24
6.897	-12.35	1.059	-4.247	8.78	3.994	20.44	20.36
6.913	-12.36	3.503	-4.254	8.72	3.913	20.56	20.36
6.863	-12.37	-0.153	-4.254	8.84	3.383	20.56	20.46
6.863	-12.37	3.303	-4.254	8.78	3.343	20.54	20.46

6 896	-12 36	3.783	-4.254	8.97	3 723	20.18	20 46
6.829	-12 36	4.624	-4.254	8.72	4.063	20.55	20.86
6.962	-12.35	-0.154	-4 251	8.72	4 083	20.63	20.09
6.929	-12.35	-0.054	-4 254	8.79	3.532	20 45	20.26
6.929	-12.37	-0.144	-4.254	8.79	3 192	20 35	20.09
6 88	-12.37	-0.153	-4 261	8.78	3.173	20.46	20.26
6.83	-12.38	2.301	-4.257	8.72	3.022	20 26	20 56
6 93	-12.36	-0.153	-4.254	8.79	3.112	20.46	20.14
6.861	-12.33	-0.155	-4.244	8.82	3.762	20.73	20.64
6.856	-12.29	3.038	-4.231	8.91	3.719	20.55	20.61
6.889	-12.27	1.906	-4 221	8.9	4 02	20.45	20.61
6.956	-12.25	4.11	-4.214	8.9	3.659	20.27	20.53
6.923	-12.23	8 68	-4 207	9.01	3.679	21.75	20.81
6.856	-12.21	4.13	-4 201	8 99	4.04	21.3	21.21
6.706	-12.17	2.567	-4.191	8.99	3.879	21.1	21.91
6.856	-12.14	2.287	-4 181	8.89	4 18	21	21.26
6.923	-12.13	6.673	-4.174	8.89	3.889	20.63	21.01
6.923	-12.14	4.731	-4.181	8.9	3.709	21.3	20.92
6.856	-12.17	2.137	-4.187	8.93	3.99	21.1	20.92
6.939	-12.23	2.107	-4.207	8.84	4.1	20.81	20.55
6.89	-12.29	2.197	-4.227	8.81	3.8	22.78	20.61
6.862	-12.31	2.771	-4 241	8.79	3.703	21.23	20.66
6.879	-12.33	0.948	-4 247	9.07	3.483	20.72	20.66
6.912	-12.35	3.632	-4 247	8.87	3.943	20.73	20.66
6.895	-12.35	0.708	-4.247	8.97	3.973	20.7	20.66
6.895	-12.35	0.627	-4.247	8.82	4.133	20.73	20.66
6.895	-12.35	7.99	-4 247	8.79	3.883	20.73	20.66
6 86	-12.33	0.136	-4.247	8.87	3.511	20.63	20.66
6.89	-12.33	6.995	-4 244	8.79	3.7	20.55	20.36
6.724	-12.33	0.245	-4.244	8.79	3 66	20.35	21.46
6.825	-12.33	2.388	-4.241	8.69	3.901	20.26	20.56
6.89	-12.3	3.549	-4.234	8.71	3.759	20.35	20.22
6.889	-12.27	2.006	-4.221	8.71	3.449	20.55	20 2
6.889	-12.23	2.117	-4.207	8.79	3.909	20.45	20.53
6.889	-12.19	-0.177	-4.194	8.79	3.409	20.45	20.53
6 923	-12.15	2 297	-4.181	8 8	3.308	20.9	20.53
6 856	-12.11	4 931	-4.171	8.99	3.589	21.02	20.81
6 923	-12.09	4.65	-4.161	8.79	3.829	21.2	20.71
6.939	-12.06	2.307	-4.154	8.99	3.819	20.72	20.71
6 856	-12.04	3 098	-4.144	8.79	4.01	20.9	21.11
6.923	-12.03	2.387	-4.141	8.91	3.609	19.8	20 83
6.856	-12.05	2.207	-4.151	8.81	3 669	20 55	20.93
6 906	-12 09	2.287	-4.161	8.83	3.889	20.55	20 63
6.889	-12.15	2.838	-4.181	8.84	3.849	20 62	20 66
6.856	-12 21	1.005	-4 201	8 71	3 889	20.62	20.62
6.906	-12.25	2.067	-4.217	8.74	3.268	19 78	20.35
6.828	-12.29	0.547	-4 231	8 77	3 322	20 35	20.75
6.93	-12.33	2.181	-4.241	8.77	3.744	20.81	20.36
6.931	-12.33	0.147	-4 247	8 74	3.724	20 63	20.44
6.847	-12.33	1.81	-4.247	8.71	3.704	20 54	20.67
6.896	-12.33	2.681	-4.247	8.77	3.934	20 56	20.36
6 863	-12 34	2 551	-4.247	8 77	3.352	20.34	20.36

6.862	-12.33	0.928	-4.247	8.66	3.723	20.35	20.36
6.861	-12.33	0.727	-4.241	8.59	3.472	20.25	20.36
6.928	-12.33	2.22	-4.241	8.58	3.412	20.25	19.94
6.928	-12.29	0.306	-4.234	8.62	3.422	20.18	19.84
6.856	-12.25	0.344	-4.214	8.6	3.689	20.45	20.3
6.889	-12.17	7.87	-4.191	8.59	3.519	20.17	20.3
6.889	-12.11	1.075	-4.167	8.56	3.088	20.17	20.19
6.923	-12.06	1.496	-4.154	8.79	3.098	19.6	20.2
6.889	-12.03	1.656	-4.141	8.7	3.809	20.65	20.53
6.906	-11.99	2.027	-4.127	8.69	3.729	21.3	20.53
6.956	-11.97	2.647	-4.121	8.69	3.939	21.01	20.53
6.889	-11.95	3.198	-4.114	8.71	3.769	20.62	20.81
6.854	-11.97	2.306	-4.121	8.59	3.398	20.54	20.83
6.923	-11.99	2.477	-4.127	8.61	3.679	20.65	20.43
6.923	-12.01	2.948	-4.137	8.46	3.969	20.3	20.43
6.889	-12.05	2.127	-4.147	8.59	3.699	20.45	20.43
6.889	-12.09	0.144	-4.161	8.59	3.889	20.25	20.43
6.923	-12.13	-0.047	-4.174	8.46	3.258	20.25	20.14
6.923	-12.15	2.457	-4.187	8.64	3.208	20.35	20.23
6.889	-12.19	7.33	-4.194	8.56	3.659	20.17	20.35
6.889	-12.22	-0.057	-4.207	8.51	3.929	20.25	20.35
6.889	-12.23	0.544	-4.214	8.54	3.609	20.26	20.35
6.894	-12.26	0.446	-4.221	8.57	3.682	20.25	20.33
6.861	-12.27	7.22	-4.221	8.57	3.582	20.18	20.35
6.945	-12.29	5.305	-4.227	8.54	3.021	19.98	19.85
6.863	-12.29	0.337	-4.231	8.29	3.202	20.08	20.24
6.962	-12.27	0.287	-4.224	8.52	3.722	20.08	19.74
6.907	-12.23	-0.177	-4.207	8.44	3.339	19.87	19.83
6.923	-12.17	-0.177	-4.194	8.31	3.349	20	19.82
6.856	-12.12	-0.167	-4.174	8.41	3.148	19.98	20.1
6.889	-12.08	1.996	-4.161	8.49	3.008	19.87	20.1
6.923	-12.03	2.527	-4.147	8.41	2.928	19.42	20.1
6.889	-12.01	2.838	-4.134	8.59	3.228	20.32	20.53
6.923	-11.97	8.97	-4.127	8.59	3.629	22.68	20.53
6.873	-11.96	3.949	-4.121	8.39	3.819	20.91	20.53
6.889	-11.95	-0.167	-4.114	8.49	3.639	21.66	20.53
6.539	-11.95	4.64	-4.114	8.41	3.849	20.36	22.01
6.889	-11.97	7.54	-4.121	8.44	2.938	20.4	20.55
6.889	-12.01	2.027	-4.134	8.44	2.848	20.27	20.33
6.906	-12.04	-0.157	-4.147	8.4	2.938	20.27	20.13
6.889	-12.07	0.064	-4.161	8.34	3.409	19.51	20.13
6.856	-12.11	0.064	-4.167	8.36	3.759	20.07	20.13
6.956	-12.15	6.483	-4.181	8.54	3.609	20.07	19.83
6.856	-12.17	1.576	-4.194	8.36	3.439	19.97	20.34
6.856	-12.2	-0.147	-4.201	8.39	3.659	21.1	20.34
6.889	-12.24	3.248	-4.214	8.46	3.859	20.25	20.23
6.893	-12.25	4.662	-4.217	8.37	3.521	20.25	20.06
6.861	-12.27	-0.154	-4.221	8.37	3.562	20.08	20.06
6.895	-12.27	-0.054	-4.224	8.3	3.612	19.99	19.94
6.928	-12.29	-0.154	-4.227	8.32	3.502	19.78	19.94
6.895	-12.27	-0.154	-4.221	8.34	3.061	19.88	19.92
6.89	-12.23	-0.167	-4.207	8.33	2.668	19.98	19.82

6.889	-12.17	-0.157	-4.194	8.31	2.788	19.7	19.8
6.889	-12.13	-0.067	-4.174	8.29	2.848	19.98	19.8
6.889	-12.08	0.624	-4.161	8.29	3.339	20	20.1
6.906	-12.03	0.875	-4.141	8.58	3.509	20	20.1
6.889	-11.99	0.644	-4.127	8.5	3.509	19.42	20.3
6.906	-11.95	2.828	-4.114	8.41	3.479	20.25	20.4
6.922	-11.92	6.883	-4.107	8.49	3.738	20.36	20.3
6.918	-11.91	1.994	-4.101	8.48	3.576	20.17	20.3
6.867	-11.91	3.656	-4.101	8.31	3.205	20.16	20.52
6.906	-11.93	2.127	-4.107	8.34	3.028	20.27	20.13
6.923	-11.96	0.044	-4.121	8.44	3.138	20.17	20.13
6.889	-12.01	2.718	-4.134	8.41	3.108	20	20.23
6.923	-12.07	-0.047	-4.154	8.46	3.399	20	19.85
6.856	-12.11	-0.157	-4.171	8.46	3.779	19.82	20.23
6.923	-12.15	6.263	-4.181	8.46	3.459	20.07	19.84
6.856	-12.19	0.064	-4.194	8.29	3.779	20	20.23
6.99	-12.21	-0.057	-4.207	8.34	3.629	20.17	19.55
6.857	-12.25	8.21	-4.214	8.48	3.129	19.98	20.23
6.728	-12.27	0.868	-4.224	8.37	3.011	20.08	21.04
6.895	-12.29	0.046	-4.234	8.38	2.941	19.88	19.95
6.898	-12.31	5.478	-4.241	8.29	2.943	19.78	19.76
6.9	-12.33	0.179	-4.24	8.37	3.305	19.7	19.75
6.896	-12.29	0.047	-4.231	8.27	3.753	19.6	19.74
6.925	-12.23	-0.146	-4.207	8.31	3.54	19.77	19.71
6.889	-12.16	-0.137	-4.187	8.4	3.719	19.87	20
6.889	-12.09	5.121	-4.161	8.49	3.379	20	20
6.889	-12.03	1.906	-4.144	8.29	3.499	19.98	20
6.923	-12	1.436	-4.134	8.5	3.479	20	20
6.923	-11.99	1.526	-4.127	8.31	3.349	20.26	20.2
6.923	-11.95	2.347	-4.114	8.27	3.349	20.27	20.2
7.02	-11.92	4.34	-4.107	8.39	3.108	20.36	19.6
6.886	-11.9	2.345	-4.097	8.38	3.186	20.34	20.53
6.884	-11.89	4.207	-4.094	8.68	3.726	20.27	20.6
6.855	-11.92	2.427	-4.107	8.44	3.699	20.36	20.72
6.923	-11.95	2.217	-4.121	8.39	3.879	20.45	20.43
6.889	-12.01	2.327	-4.134	8.46	3.238	20.27	20.43
6.923	-12.06	0.064	-4.154	8.36	3.118	20.1	20.13
6.889	-12.11	1.726	-4.167	8.36	3.088	20.07	20.13
6.889	-12.14	3.429	-4.181	8.29	3.108	20.17	20.14
6.889	-12.17	0.144	-4.191	8.49	3.719	20.17	20.13
6.923	-12.2	3.529	-4.201	8.36	3.619	20.07	20.14
6.856	-12.22	0.254	-4.207	8.36	3.699	20.25	20.43
6.86	-12.25	0.256	-4.217	8.48	3.501	20.18	20.36
6.928	-12.27	5.645	-4.224	8.32	3.812	20.18	20.15
6.981	-12.29	1.52	-4.234	8.29	3.744	20.18	19.44
6.964	-12.31	0.258	-4.234	8.29	3.944	19.98	19.64
6.928	-12.27	8.52	-4.224	8.34	3.642	20.63	19.91
6.891	-12.21	7.86	-4.204	8.31	3.439	19.98	19.91
6.889	-12.15	2.187	-4.181	8.29	3.519	19.98	20
6.889	-12.09	-0.177	-4.161	8.29	3.298	19.87	20.09
6.889	-12.03	3.989	-4.141	8.31	3.359	19.7	20.18
6.923	-11.97	6.744	-4.121	8.31	3.779	19.07	20.18

6.923	-11.93	2.127	-4.107	8.21	3.499	20.35	20.4
6.921	-11.89	3.968	-4.101	8.39	3.227	20.54	20.53
6.851	-11.88	2.444	-4.094	8.41	3.165	19.51	20.8
6.951	-11.87	2.424	-4.094	8.3	3.656	19.59	20.3
6.936	-11.89	2.435	-4.094	8.43	3.817	20.47	20.53
6.889	-11.91	2.347	-4.104	8.31	3.709	20.27	20.53
6.856	-11.95	2.337	-4.114	8.29	3.148	20.63	20.55
6.889	-11.99	6.033	-4.134	8.29	3.248	20.45	20.44
6.856	-12.07	3.719	-4.154	8.29	3.228	20.27	20.43
6.889	-12.09	0.164	-4.164	8.19	2.848	20.07	19.93
6.889	-12.11	6.413	-4.171	8.11	3.559	20	19.93
6.906	-12.13	-0.157	-4.177	8.24	3.439	19.87	19.93
6.923	-12.15	6.653	-4.181	8.26	3.569	19.98	20.05
6.889	-12.17	3.128	-4.187	8.29	3.819	20.17	20.23
6.889	-12.19	2.227	-4.194	8.2	3.839	20.07	20.23
6.889	-12.2	1.566	-4.201	8.11	3.559	20.08	19.93
6.889	-12.21	6.433	-4.204	8.19	2.978	19.97	19.93
6.924	-12.23	0.044	-4.207	8.19	3.41	19.6	19.74
6.923	-12.23	-0.076	-4.207	8.06	2.598	19.87	19.73
6.889	-12.19	-0.157	-4.197	8.05	3.278	19.7	19.73
6.923	-12.16	-0.117	-4.187	8.09	3.459	19.7	19.72
6.823	-12.12	-0.177	-4.174	8.16	3.579	19.87	20.2
6.923	-12.09	-0.157	-4.161	8.16	3.719	19.78	19.82
6.956	-12.07	3.659	-4.157	8.16	3.489	20.07	19.9
6.923	-12.05	2.177	-4.151	8.09	3.379	20.17	20.3
6.923	-12.01	2.137	-4.141	8.11	3.108	19.97	20.53
6.923	-11.97	2.207	-4.127	8.14	3.268	20.25	20.4
6.856	-0.097	2.347	-4.121	8.17	3.689	20.25	20.4
6.923	-0.097	6.503	-4.127	8.06	3.879	20.17	20.23
6.923	-0.097	5.922	-4.134	7.99	3.889	20.17	20.22
6.923	-0.077	0.144	-4.157	7.89	0.855	19.8	19.63
6.923	-0.077	-0.147	-4.184	8.1	3.789	19.87	19.85
6.889	-0.077	-0.157	-4.201	7.91	3.439	19.87	19.85
6.923	-0.077	-0.057	-4.207	7.95	3.278	19.32	19.43
6.857	-0.076	-0.056	-4.217	7.79	2.959	19.77	19.93
6.894	-0.074	3.982	-4.227	8.02	3.031	19.88	20.05
6.928	-0.074	2.63	-4.227	8.02	3.412	20.08	20.05
6.895	-0.074	2.059	-4.231	8.1	3.542	20.54	20.34
6.898	-0.073	4.726	-4.234	8.02	3.584	20.08	19.94
6.862	-0.074	12.16	-4.241	7.99	3.743	20.35	20.24
6.916	-0.072	1.701	-4.241	8.02	3.725	19.98	20.05
6.899	-0.072	0.208	-4.241	8.03	3.554	19.88	20.05
6.865	-0.072	-0.143	-4.241	8.02	3.264	20.08	20.05
7.22	-0.073	3.073	-4.237	7.91	3.384	20.27	18.25
6.898	-0.083	2.932	-4.234	7.97	3.554	19.69	19.93
6.894	-0.094	0.927	-4.221	7.99	3.542	19.99	20.03
6.906	-0.097	0.634	-4.207	7.96	3.679	20.07	20
6.856	-0.097	2.067	-4.194	7.96	3.759	20.07	20.4
6.856	-0.097	2.127	-4.181	7.89	3.579	20.26	20.2
6.923	-0.107	0.725	-4.164	7.95	3.669	19.6	20.2
6.906	-0.097	2.657	-4.154	7.96	3.729	20.26	20.53
6.889	-0.097	2.287	-4.147	7.94	3.228	20.27	20.61

6.823	-0.097	1.996	-4.141	7.79	3.539	20.35	20.91
6.923	-0.097	2.427	-4.144	7.7	3.819	20.35	20.43
6.856	-0.097	2.027	-4.151	7.79	3.739	20.26	20.23
6.806	-0.097	-0.117	-4.161	7.8	3.509	20.07	21.02
6.889	-0.097	-0.157	-4.167	7.81	3.809	19.78	20.13
6.856	-0.087	-0.157	-4.174	7.52	2.918	19.24	20.13
6.923	-0.097	1.045	-4.181	7.59	2.958	19.78	19.84
6.923	-0.087	-0.157	-4.187	7.81	2.908	19.8	19.84
6.856	-0.077	-0.147	-4.194	7.72	3.148	19.87	20.23
6.889	-0.077	-0.157	-4.201	7.74	3.298	20.07	20.05
6.906	-0.087	-0.157	-4.207	7.61	3.459	19.77	19.84
6.889	-0.087	-0.157	-4.211	7.74	3.549	19.77	19.85
6.924	-0.086	-0.016	-4.214	7.54	3.9	19.6	19.63
6.758	-0.085	-0.156	-4.214	7.54	2.779	19.45	20.04
6.909	-0.095	-0.156	-4.214	7.49	2.138	19.6	19.53
6.89	-0.117	-0.177	-4.204	7.61	1.546	19.6	19.53
6.889	-0.117	-0.167	-4.187	7.51	3.268	19.24	19.5
6.923	-0.117	-0.167	-4.181	7.86	2.818	19.32	19.4
6.906	-0.107	-0.157	-4.167	7.59	3.369	19.41	19.4
6.956	-0.117	-0.157	-4.161	7.79	3.369	19.5	19.5
6.923	-0.117	3.939	-4.147	7.64	3.439	19.78	19.8
6.923	-0.117	2.547	-4.137	7.69	3.168	19.87	20
6.939	-0.117	-0.157	-4.127	7.69	3.008	19.78	20
6.906	-0.117	2.127	-4.121	7.66	3.048	20	20
6.889	-0.097	-0.157	-4.114	7.49	3.539	20	20.1
6.889	-0.097	-0.157	-4.121	7.59	3.569	19.6	19.73
6.873	-0.097	-0.157	-4.137	7.61	3.018	19.42	19.63
6.889	-0.097	-0.147	-4.154	7.64	2.888	19.24	19.54
6.889	-0.087	-0.157	-4.167	7.64	1.336	19.42	19.5
6.856	-0.077	-0.157	-4.181	7.51	2.718	19.32	19.53
6.889	-0.087	-0.157	-4.194	7.59	2.467	19.42	19.43
6.889	-0.077	-0.157	-4.201	7.74	3.098	19.32	19.54
6.906	-0.077	-0.157	-4.207	7.74	1.596	19.6	19.33
6.907	-0.076	-0.157	-4.214	7.66	0.715	19.42	19.25
6.858	-0.076	-0.156	-4.217	7.61	0.956	19.41	19.53
6.895	-0.084	-0.154	-4.221	7.74	2.069	19.33	19.53
6.845	-0.084	-0.154	-4.221	7.74	1.178	19.43	19.53
6.861	-0.074	-0.154	-4.221	7.74	2.29	19.33	19.33
6.928	-0.074	-0.154	-4.221	7.52	1.519	19.33	19.33
6.928	-0.084	-0.154	-4.221	7.78	2.921	19.33	19.33
6.893	-0.095	-0.155	-4.217	7.8	4.012	19.15	19.33
6.923	-0.096	-0.157	-4.207	7.79	2.848	19.32	19.33
6.889	-0.097	-0.167	-4.201	7.8	3.539	19.32	19.53
6.889	-0.097	-0.167	-4.201	7.79	2.998	19.5	19.53
6.889	-0.097	-0.157	-4.187	7.79	2.818	19.53	19.72
6.923	-0.097	-0.157	-4.177	7.86	3.008	19.6	19.73
6.889	-0.087	-0.157	-4.181	7.9	3.058	19.5	19.74
6.889	-0.097	-0.157	-4.187	7.89	2.988	19.7	19.73
6.889	-0.097	-0.157	-4.181	7.8	3.248	19.32	19.73
6.856	-0.077	-0.157	-4.194	7.84	3.819	19.32	19.55
6.889	-0.087	-0.157	-4.207	7.91	2.197	19.32	19.55
6.923	-0.077	-0.157	-4.214	7.82	3.058	19.42	19.55

6.926	-0.075	-0.155	-4.221	7.91	3.601	19.42	19.54
6.895	-0.074	-0.154	-4.227	7.97	3.101	19.33	19.43
6.897	-0.073	-0.153	-4.234	8.02	2.982	19.43	19.44
6.897	-0.073	-0.153	-4.237	8.02	3.153	19.68	19.76
6.865	-0.073	-0.153	-4.241	8.03	3.023	19.98	19.85
6.899	-0.072	-0.152	-4.241	7.92	3.234	19.69	19.44
6.916	-0.072	-0.152	-4.241	8.1	3.004	19.98	19.55
6.867	-0.072	-0.152	-4.24	8.02	2.864	19.51	19.77
6.867	-0.072	-0.152	-4.24	8.02	3.285	20.17	19.64
6.917	-0.082	-0.152	-4.24	8.02	0.64	20.08	19.34
6.85	-0.082	-0.152	-4.24	7.9	0.65	19.33	19.64
6.866	-0.082	-0.142	-4.234	8.02	1.441	19.53	19.64
6.963	-0.093	-0.164	-4.227	8.07	3.613	19.68	19.32
6.89	-0.096	-0.157	-4.214	8.06	3.639	19.98	19.6
6.889	-0.097	-0.157	-4.201	7.99	3.759	19.42	19.63
6.923	-0.097	-0.157	-4.194	8.24	3.629	19.6	19.63
6.923	-0.097	-0.157	-4.194	8.19	3.389	19.6	19.63
6.906	-0.097	2.778	-4.194	8.19	3.659	19.6	19.83
6.856	-0.097	-0.167	-4.194	8.34	3.439	19.7	19.92
6.889	-0.097	-0.157	-4.194	8.11	3.339	19.7	19.83
6.906	-0.097	-0.157	-4.194	8.26	3.108	19.7	19.83
6.889	-0.097	-0.167	-4.187	8.26	3.028	19.68	19.83
6.856	-0.077	-0.157	-4.194	8.27	2.808	19.67	19.84
6.889	-0.077	-0.157	-4.204	8.26	1.786	19.51	19.43
6.923	-0.087	-0.157	-4.214	8	3.068	19.32	19.53
6.89	-0.076	-0.156	-4.217	8.29	3.029	19.32	19.53
6.826	-0.075	-0.155	-4.221	8.29	3.982	19.5	19.83
6.894	-0.074	-0.154	-4.221	8.29	3.492	19.6	19.63
6.895	-0.084	-0.154	-4.221	8.32	3.432	19.6	19.63
6.895	-0.074	-0.174	-4.227	8.34	3.903	19.5	19.64
6.897	-0.083	-0.153	-4.227	8.29	3.603	19.99	19.64
6.865	-0.073	5.938	-4.227	8.37	3.163	19.88	19.86
6.847	-0.083	-0.153	-4.227	8.37	2.882	19.33	19.85
6.93	-0.073	-0.153	-4.227	8.29	2.762	19.43	19.44
6.932	-0.072	-0.152	-4.227	8.27	1.501	19.33	19.44
6.897	-0.093	-0.153	-4.224	8.27	2.822	19.33	19.42
6.89	-0.106	-0.176	-4.211	8.31	2.037	19.32	19.5
6.856	-0.107	-0.157	-4.194	8.44	3.699	19.42	19.6
6.856	-0.097	-0.167	-4.187	8.39	3.339	19.5	19.6
6.923	-0.107	-0.177	-4.174	8.41	3.579	19.6	19.6
6.889	-0.117	-0.157	-4.167	8.41	3.669	19.7	19.8
6.889	18.95	-0.167	-4.154	8.59	3.499	19.7	19.9
6.889	19.54	-0.177	-4.147	8.51	3.679	20.55	20.1
6.873	20.15	-0.137	-4.141	8.49	3.539	19.68	20.1
6.856	20.16	-0.167	-4.134	8.59	3.108	19.7	20.1
6.956	20.17	-0.157	-4.141	8.44	3.188	20.26	19.63
6.856	20.18	-0.157	-4.147	8.45	3.188	19.6	19.93
6.889	20.19	-0.137	-4.154	8.41	2.918	19.68	19.74
6.889	20.19	-0.157	-4.167	8.54	2.828	19.6	19.74
6.889	20.19	-0.147	-4.174	8.46	2.888	19.51	19.74
6.923	20.19	-0.157	-4.181	8.74	2.948	20.17	19.75
6.889	20.19	-0.157	-4.187	8.64	3.098	19.87	19.83

6.923	20.19	-0.157	-4.194	8.59	3.168	19.87	19.93
6.856	20.19	-0.157	-4.194	8.63	3.078	19.97	20.23
6.923	20.19	-0.157	-4.201	8.56	3.198	19.87	19.84
6.89	20.19	-0.156	-4.207	8.55	3.039	19.87	19.83
6.893	20.2	-0.145	-4.207	8.57	3.441	19.69	19.85
6.925	20.2	-0.156	-4.214	8.39	3.51	19.6	19.63
6.892	20.18	-0.155	-4.214	8.45	3.5	19.5	19.63
6.706	20.16	-0.157	-4.204	8.44	1.957	19.6	20.53
6.99	20.15	-0.157	-4.187	8.6	2.988	20.25	19.4
6.889	20.75	-0.167	-4.177	8.51	3.359	19.6	19.7
6.889	21.34	-0.157	-4.161	8.49	3.759	19.6	19.8
6.923	21.34	4.13	-4.154	8.59	3.369	19.68	19.8
6.923	21.34	-0.157	-4.141	8.59	3.349	19.7	19.8
6.906	21.32	-0.137	-4.131	8.59	3.849	20	20.1
6.906	21.34	-0.167	-4.127	8.58	3.549	20.07	20.1
6.856	21.34	-0.167	-4.121	8.58	3.849	19.98	20.4
6.906	21.36	-0.167	-4.121	8.58	3.288	19.87	20.1
6.99	22.58	-0.157	-4.127	8.71	3.278	20.17	19.73
6.889	23.16	-0.157	-4.134	8.5	3.128	20.07	20.2
6.856	23.76	-0.157	-4.141	8.49	3.288	20.07	20.23
6.839	23.76	-0.157	-4.151	8.54	3.749	20	20.23
6.856	24.36	-0.177	-4.161	8.46	3.489	19.7	19.93
6.956	24.36	-0.157	-4.164	8.36	3.899	19.7	19.53
6.906	24.36	-0.157	-4.174	8.59	2.627	19.51	19.63
6.889	24.36	-0.157	-4.181	8.29	3.118	19.6	19.53
6.856	24.36	-0.157	-4.184	8.64	2.828	19.52	19.83
6.889	24.36	-0.157	-4.191	8.46	3.539	19.6	19.63
6.923	24.36	-0.157	-4.194	8.46	3.609	19.77	19.63
6.873	24.36	-0.167	-4.201	8.39	3.088	19.67	19.78
6.823	24.36	-0.157	-4.201	8.44	2.738	19.5	19.73
6.925	24.38	-0.156	-4.221	8.39	2.308	19.42	19.33
6.9	24.39	-0.152	-4.234	8.37	1.551	19.41	19.34
6.933	24.39	-0.152	-4.24	8.37	1.161	19.33	19.34
6.9	24.35	-0.172	-4.24	8.3	0.96	19.33	19.33
6.599	24.34	-0.172	-4.234	8.43	1.541	19.43	21.12
6.932	24.33	3.013	-4.22	8.52	3.624	19.43	19.6
6.907	25.51	-0.176	-4.201	8.43	3.619	19.67	19.7
6.906	26.12	-0.157	-4.191	8.43	3.509	19.67	19.73
6.923	26.14	-0.157	-4.187	8.39	3.679	19.87	19.73
6.856	26.74	-0.157	-4.194	8.46	3.779	20.45	20.23
6.889	26.74	0.244	-4.201	8.64	3.409	20.55	20.23
6.856	26.74	-0.177	-4.201	8.34	3.008	19.77	19.93
6.889	26.75	-0.157	-4.201	8.29	3.068	19.77	19.73
6.856	26.76	-0.157	-4.207	8.34	2.968	19.6	19.85
6.895	26.77	-0.154	-4.221	8.29	3.091	19.68	19.53
6.929	26.77	-0.154	-4.227	8.29	3.433	19.5	19.44
6.9	26.78	-0.152	-4.227	8.38	3.264	19.23	19.44
6.933	26.78	-0.152	-4.234	8.22	4.016	19.43	19.34
6.833	26.78	-0.152	-4.234	8.3	3.605	20.08	19.85
6.9	26.78	-0.152	-4.237	8.3	3.204	19.51	19.64
6.9	26.78	-0.152	-4.24	8.3	3.134	19.58	19.64
6.883	26.78	-0.152	-4.244	8.3	3.154	19.51	19.64

6.867	26.78	-0.162	-4.247	8.21	3.675	19.68	19.64
6.867	26.78	-0.152	-4.247	8.22	0.519	19.33	19.34
6.9	26.76	-0.152	-4.247	8.3	0.149	19.88	19.34
6.933	26.74	-0.152	-4.24	8.18	0.309	19.33	19.04
6.9	26.72	-0.172	-4.227	8.11	0.8	19.42	19.42
6.892	26.71	-0.155	-4.214	8.19	2.899	19.32	19.41
6.856	18.37	-0.177	-4.194	8.24	2.818	19.42	19.6
6.856	18.95	-0.177	-4.181	8.24	2.928	19.42	19.6
6.889	19.54	-0.157	-4.167	8.24	2.848	19.6	19.6
6.906	19.53	-0.167	-4.154	8.39	3.188	19.7	19.6
6.856	19.49	-0.157	-4.144	8.12	3.589	19.7	20
6.889	19.55	-0.177	-4.134	7.49	3.639	19.7	19.8
6.923	19.57	3.288	-4.134	8.21	3.489	20.07	19.82
6.923	19.57	-0.167	-4.141	8.24	3.509	19.75	19.83
6.889	19.58	-0.167	-4.147	8.39	3.839	19.7	19.9
6.856	19.59	-0.157	-4.164	8.29	3.789	19.5	19.93
6.906	19.59	-0.147	-4.177	8.46	4.05	19.42	19.43
6.923	19.59	-0.157	-4.187	8.21	3.619	19.5	19.43
6.856	19.59	-0.157	-4.197	8.64	3.419	19.55	19.85
6.89	19.59	-0.157	-4.207	7.74	4	19.6	19.63
6.861	19.6	-0.155	-4.214	8.22	2.91	19.59	19.63
6.862	20.22	-0.154	-4.221	8.67	2.942	19.6	19.76
6.865	20.21	-0.143	-4.224	8.21	2.883	19.41	19.55
6.899	20.21	-0.152	-4.227	8.12	3.124	19.33	19.55
6.867	20.21	-0.152	-4.227	8.17	3.094	19.41	19.44
6.933	20.21	-0.152	-4.227	8.2	1.952	19.43	19.34
6.866	20.18	-0.162	-4.22	8.2	2.382	19.43	19.54
6.893	20.16	-0.155	-4.207	8.17	3.421	19.42	19.52
6.889	20.15	-0.157	-4.194	8.09	3.599	19.32	19.5
6.923	21.34	-0.167	-4.174	8.14	3.349	19.6	19.39
6.99	20.73	-0.157	-4.161	8.59	3.108	19.6	19.1
6.889	21.92	-0.157	-4.147	8.14	2.838	19.68	19.58
6.889	21.92	-0.177	-4.134	8.49	2.988	19.68	19.88
6.889	21.92	-0.177	-4.121	8.26	2.968	18.94	19.88
6.923	21.92	-0.177	-4.107	8.29	3.088	19.8	19.88
6.856	21.92	0.044	-4.101	8.01	3.128	19.8	20.18
6.889	22.56	-0.177	-4.101	8.29	3.208	19.24	19.9
6.889	22.57	-0.157	-4.107	8.29	3.459	19.6	20.03
6.923	22.14	-0.157	-4.121	8.29	3.479	19.78	19.83
6.889	22.58	-0.157	-4.131	8.19	3.599	19.8	19.83
6.889	22.58	-0.147	-4.141	8.36	3.699	19.5	19.83
6.889	23.18	-0.157	-4.147	8.16	3.559	19.68	19.83
6.923	23.18	-0.157	-4.161	7.89	3.929	19.6	19.63
6.889	23.18	-0.157	-4.167	8.34	3.479	19.68	19.63
6.923	23.18	-0.147	-4.174	8.26	3.639	19.68	19.63
6.923	23.18	-0.157	-4.181	8.19	3.549	19.68	19.74
6.856	23.18	-0.157	-4.184	8.09	4	19.32	19.83
6.889	23.18	-0.157	-4.187	8.2	3.859	19.68	19.63
6.856	23.18	-0.157	-4.194	8.19	3.419	19.68	19.63
6.923	23.16	-0.157	-4.194	8.19	3.519	19.7	19.33
6.873	23.14	-0.157	-4.187	8.16	2.918	19.87	19.53
6.856	23.72	-0.157	-4.181	8.1	1.826	19.42	19.6

6.856	24.3	-0.167	-4.167	8.09	2.958	19.42	19.5
6.906	26.08	-0.177	-4.154	8.14	2.938	19.6	19.4
6.889	26.68	-0.167	-4.144	8.14	3.198	19.6	19.7
6.889	27.87	-0.157	-4.127	8.15	3.519	19.6	19.8
6.889	27.87	-0.157	-4.121	8.19	3.339	19.6	19.7
6.906	27.87	-0.157	-4.107	8.21	3.499	19.68	19.8
6.923	27.87	4.019	-4.101	8.21	3.619	20.55	19.8
6.856	27.89	-0.177	-4.094	8.21	3.569	19.71	20.1
6.923	27.9	-0.157	-4.094	8.24	3.689	20	19.9
6.889	27.91	-0.157	-4.101	8.19	3.479	19.8	19.9
6.889	27.91	-0.157	-4.114	8.14	3.048	19.7	19.9
6.923	27.93	-0.157	-4.127	8.06	2.958	19.42	19.73
6.923	27.93	-0.157	-4.134	8.06	2.808	19.42	19.53
6.906	27.93	-0.157	-4.147	7.96	2.127	19.42	19.33
6.889	28.51	-0.157	-4.154	7.99	1.476	19.32	19.43
6.889	28.53	-0.157	-4.167	8.09	3.489	19.41	19.43
6.906	28.53	-0.157	-4.181	8.09	2.888	19.23	19.43
6.823	28.53	-0.157	-4.187	8.36	3.459	19.23	19.74
6.906	28.53	-0.157	-4.194	8.04	3.018	19.41	19.43
6.856	28.53	-0.157	-4.194	8.01	3.118	19.5	19.83
6.873	28.53	-0.157	-4.197	8.01	3.298	19.42	19.43
6.889	28.53	-0.157	-4.201	8.09	1.075	19.32	19.33
6.889	28.47	-0.157	-4.194	8.06	2.678	19.4	19.33
6.889	28.46	-0.157	-4.181	7.99	2.698	19.14	19.3
6.889	2.257	-0.157	-4.167	8.14	3.579	19.42	19.39
6.889	30.85	-0.167	-4.147	8.02	3.359	19.32	19.38
6.823	30.85	-0.157	-4.134	8.15	3.639	19.32	19.88
6.923	32.03	-0.177	-4.121	8.01	3.409	19.42	19.5
6.689	32.03	-0.157	-4.107	7.96	3.539	19.7	20.68
6.923	32.01	-0.157	-4.101	8.29	3.298	19.6	19.7
6.923	32.03	-0.177	-4.087	8.12	2.988	19.23	19.8
6.839	32.03	-0.157	-4.081	8.11	3.048	19.8	20.18
6.92	32.06	-0.158	-4.081	8.1	2.987	20.17	19.8
6.923	32.07	-0.177	-4.087	8.09	3.118	19.7	19.82
6.889	32.09	-0.157	-4.101	8.19	3.439	19.7	19.83
6.856	17.79	-0.157	-4.121	7.99	3.298	19.51	19.83
6.889	26.74	-0.137	-4.134	8.19	3.749	19.51	19.53
6.923	29.12	-0.157	-4.147	7.91	3.589	19.42	19.43
6.923	27.93	-0.157	-4.154	8.04	3.589	19.5	19.43
6.889	27.33	-0.157	-4.161	7.99	3.599	19.67	19.75
6.856	27.34	-0.157	-4.167	8.07	3.569	19.6	19.74
7.57	27.94	-0.147	-4.174	8.09	3.549	19.6	15.77
6.856	28.51	-0.157	-4.181	8.11	3.869	19.53	19.74
6.923	28.53	-0.157	-4.187	8.09	3.559	19.86	19.43
7.86	28.53	-0.157	-4.194	7.9	3.599	19.42	14.17
6.923	28.52	-0.157	-4.194	8.09	0.214	19.32	19.05
7.09	28.47	-0.157	-4.194	7.84	0.454	19.23	18.23
6.823	25.52	-0.157	-4.184	7.89	0.304	19.32	19.6
6.923	27.28	-0.157	-4.174	7.95	1.336	19.23	19.23
6.923	27.3	-0.157	-4.161	7.96	3.729	19.22	19.3
6.906	27.89	-0.187	-4.154	7.96	3.569	19.77	19.5
6.923	27.87	-0.157	-4.137	7.99	3.379	19.6	19.5

6.923	27.87	-0.167	-4.121	8.01	3.519	19.58	19.7
6.939	27.3	-0.157	-4.121	8.26	3.549	19.68	19.83
6.823	27.93	-0.157	-4.134	8.26	3.539	19.6	20.23
6.923	-0.087	-0.147	-4.167	8.01	-0.137	19.32	19.43
6.889	24.37	-0.157	-4.187	7.91	3.799	19.5	19.43
6.956	26.15	-0.147	-4.201	8.09	2.748	19.58	19.43
6.857	26.14	-0.156	-4.207	8.09	2.398	19.5	19.84
6.929	26.75	-0.154	-4.207	8.02	2.831	19.5	19.34
6.895	26.75	-0.154	-4.214	8.09	3.032	19.4	19.34
6.966	26.77	-0.152	-4.214	7.89	1.661	19.51	19.14
6.832	26.76	-0.152	-4.22	8.09	1.751	19.41	19.84
6.933	25.58	-0.142	-4.224	8.1	2.633	19.41	19.34
6.9	26.77	-0.152	-4.227	8.1	1.601	19.33	19.52
6.867	27.37	-0.152	-4.227	8.03	3.054	19.51	19.75
6.883	27.38	-0.152	-4.227	8.17	3.114	19.51	19.75
6.816	27.37	-0.152	-4.23	8.2	3.034	19.51	19.94
6.883	27.37	-0.152	-4.234	8.02	2.954	19.41	19.54
6.833	27.36	-0.152	-4.234	8.1	2.804	19.32	19.64
6.9	27.36	-0.152	-4.234	7.9	-0.112	19.23	19.05
6.867	27.34	-0.152	-4.227	8.17	-0.112	19.23	19.43
6.882	27.94	-0.153	-4.221	8.07	3.093	19.36	19.41
6.864	27.94	-0.153	-4.217	8.07	0.228	19.23	19.54
6.862	28.49	-0.164	-4.211	8.07	0.838	19.33	19.51
6.856	28.47	-0.167	-4.197	8.19	2.928	19.97	19.6
6.99	29.09	-0.157	-4.187	7.96	3.038	19.23	19.03
6.889	29.09	-0.157	-4.184	8.24	2.848	19.6	19.7
6.889	29.09	-0.157	-4.181	8.15	2.938	20.35	19.8
6.889	29.11	-0.157	-4.181	8.14	2.968	19.14	19.72
6.923	29.12	-0.167	-4.181	8.09	3.038	19.42	19.52
6.99	29.13	-0.167	-4.181	8.06	3.639	19.5	19.03
6.889	29.73	-0.167	-4.187	8.07	3.599	19.42	19.4
5.804	29.21	-0.157	-4.194	8.27	3.879	19.41	24.61
6.889	29.73	-0.157	-4.201	8.14	4.1	19.32	19.33
6.923	29.73	-0.157	-4.207	8.19	3.99	19.32	19.34
6.861	29.74	-0.154	-4.214	8.22	4.143	19.41	19.55
6.897	29.74	-0.153	-4.221	8.22	3.613	18.85	19.55
6.833	29.76	-0.152	-4.227	8.3	3.164	19.51	20.05
6.933	29.74	-0.152	-4.234	8.22	3.134	19.6	19.44
6.85	29.76	-0.152	-4.234	8.3	3.124	19.68	19.94
6.933	29.76	-0.152	-4.24	8.3	3.415	19.51	19.44
6.867	29.76	-0.152	-4.244	8.31	3.595	19.51	19.44
6.9	29.74	-0.152	-4.24	8.22	3.485	19.32	19.44
6.9	29.74	-0.152	-4.24	8.12	3.615	19.42	19.44
6.867	29.72	-0.162	-4.234	8.2	3.605	19.41	19.54
6.9	26.74	-0.162	-4.234	8.18	3.425	19.43	19.53
6.962	26.71	-0.174	-4.221	8.27	3.402	19.48	19.31
6.858	27.89	-0.176	-4.207	8.23	3.48	19.32	19.59
6.906	27.32	-0.167	-4.194	8.21	3.218	19.14	19.59
6.856	2.758	-0.157	-4.187	8.26	3.178	19.77	19.9
6.889	29.11	-0.117	-4.181	7.71	3.068	19.78	19.9
6.722	28.49	-0.157	-4.181	8.34	3.389	19.67	20.98
7.34	29.11	-0.157	-4.181	8.29	3.248	19.77	17.65

6.889	29.13	-0.157	-4.187	8.26	3.088	19.5	19.83
6.923	29.14	-0.157	-4.201	8.64	3.138	19.58	19.83
6.89	29.14	-0.157	-4.214	8.36	3.81	19.67	19.74
6.898	29.16	-0.153	-4.221	8.29	3.784	19.59	19.85
6.866	29.16	-0.152	-4.227	8.02	3.425	19.6	19.77
6.9	29.16	-0.152	-4.237	8.22	3.605	19.51	19.55
6.9	25.59	-0.152	-4.24	8.21	3.655	19.41	19.54
6.9	26.18	-0.152	-4.244	8.3	3.685	19.51	19.54
6.9	25.6	-0.152	-4.247	8.3	3.665	19.41	19.54
6.9	26.18	-0.152	-4.247	8.27	3.705	19.6	19.54
6.867	26.18	5.759	-4.247	8.3	3.655	19.51	19.75
6.867	26.18	-0.152	-4.247	8.22	3.555	19.51	19.77
6.85	25.59	-0.152	-4.247	7.92	3.545	19.43	19.77
6.9	26.18	-0.152	-4.247	8.2	3.004	19.42	19.44
6.9	25.58	-0.152	-4.247	8.2	2.914	19.43	19.34
6.867	25.56	-0.162	-4.247	8.07	2.683	19.43	19.43
6.867	26.14	-0.162	-4.244	8.27	2.914	19.43	19.47
6.867	27.92	-0.172	-4.234	8.21	3.625	19.33	19.42
6.897	27.92	-0.173	-4.227	8.89	3.393	19.24	19.41
6.892	27.31	-0.166	-4.214	8.16	3.44	19.77	19.41
6.622	27.91	-0.177	-4.201	8.25	3.389	19.58	21.11
6.923	29.09	-0.167	-4.191	8.41	3.449	19.6	19.5
6.889	29.69	-0.167	-4.187	8.39	3.419	19.32	19.72
6.889	29.69	-0.157	-4.181	8.39	3.799	19.58	19.9
6.889	29.71	-0.167	-4.181	8.44	3.469	19.77	19.83
6.856	29.71	-0.167	-4.187	8.19	3.559	19.68	19.83
6.906	29.7	-0.157	-4.187	8.27	3.148	19.5	19.73
6.889	29.13	-0.157	-4.194	8.2	2.998	19.5	19.75
6.889	29.14	-0.157	-4.201	7.72	3.098	19.4	19.43
6.892	29.13	-0.156	-4.207	8.19	4.021	19.41	19.43
6.911	29.15	-0.144	-4.214	8.77	3.622	18.2	19.43
6.898	29.16	-0.153	-4.221	8.33	3.333	19.23	19.44
6.9	29.16	-0.152	-4.23	8.22	3.755	18.93	19.44
6.9	29.16	-0.152	-4.237	8.3	3.665	19.43	19.57
6.866	29.17	-0.152	-4.237	8.3	3.184	19.33	19.65
6.866	29.16	-0.152	-4.241	8.31	3.164	19.33	19.64
6.866	29.16	-0.152	-4.241	8.22	3.023	19.16	19.36
6.9	29.14	-0.152	-4.24	8.12	3.315	19.16	19.35
6.917	18.38	-0.152	-4.24	8.2	-0.092	19.23	19.25
6.933	23.15	-0.172	-4.23	8.35	3.525	19.23	19.32
6.897	23.15	-0.163	-4.214	8.24	3.864	19.33	19.41
6.856	24.1	-0.177	-4.201	8.19	3.96	19.32	19.5
6.873	24.92	-0.157	-4.187	8.31	3.389	20.72	19.5
6.923	24.92	-0.177	-4.174	8.24	3.008	19.32	19.38
6.889	23.71	-0.177	-4.167	8.41	2.708	19.42	19.39
6.889	25.51	-0.157	-4.161	8.32	2.948	19.5	19.7
6.889	24.9	-0.177	-4.161	8.26	2.828	19.6	19.7
6.889	24.92	-0.157	-4.154	8.32	3.088	19.6	19.82
6.856	24.94	-0.157	-4.161	8.34	3.569	19.6	20.03
6.889	23.76	-0.157	-4.161	8.34	3.429	19.6	19.83
6.889	23.76	-0.157	-4.167	8.31	3.519	19.5	19.63
6.889	23.18	-0.157	-4.174	8.29	3.869	19.5	19.63

6.889	23.2	-0.157	-4.187	8 19	3.419	19.32	19.75
6 906	22 6	-0.157	-4.201	8.37	3.929	19.32	19.43
6.891	22.6	-0.156	-4.214	8.29	0.385	19.42	19.43
6 93	23.21	-0.153	-4.221	8 22	3 603	19.42	19.44
6.866	23.21	-0.152	-4 23	8.35	3.525	19.51	19.77
6.867	23 25	-0.152	-4.237	8.37	3.595	19.51	19.85
6.867	23.79	-0.152	-4 234	8.4	3.625	19.78	19 77
6.899	23 21	-0 152	-4.237	8 31	3.244	19.51	19.56
6.899	24.39	-0.152	-4.234	8.22	3.164	19.23	19.36
6.865	24.37	-0.152	-4.234	8.2	0.519	19.33	19.35
6.866	24 93	-0.162	-4.234	8.27	0 229	19.16	19.34
6.898	24.93	-0.173	-4.221	8.17	0.168	19.23	19.31
6.942	24.92	-0 166	-4 207	8.21	0.856	19.22	19.08
6.889	24.92	-0.167	-4.187	8 19	3.409	19 22	19.38
6.923	26.7	-0.167	-4.174	8.24	3.339	19.42	19.39
6.839	26.14	-0.177	-4.161	8.24	3.329	19.42	19.9
6.923	26.69	-0.177	-4.147	8.24	3.579	19 42	19.4
6.889	28.47	-0.167	-4.141	8.41	3 459	19.23	19.88
6.889	27.89	-0.177	-4.131	8.26	3.499	19.68	20
6.873	28.47	9.27	-4.127	8.44	3.519	19.7	20
6.889	27.91	-0.157	-4.121	8.31	3.699	19.7	20
6.923	28.5	-0.167	-4 127	8.34	3.288	19.24	19 73
6.889	28.51	-0.157	-4.141	8.31	3.078	19.77	19.73
6.889	28.53	-0.157	-4.154	8.3	2.978	19.5	19.75
6.856	27.95	-0.147	-4.167	8.2	2.968	19.42	19.75
6.889	27.95	-0.157	-4.181	8.19	2.778	19.41	19 53
6.923	27.95	-0 157	-4.187	8.19	3.439	19.97	19.53
6.923	27 95	-0.157	-4.201	8.29	3.519	19.4	19.43
6 891	27.96	-0.156	-4.207	8.35	3.59	19.5	19.76
6.895	27.95	-0.154	-4.214	8.37	3.642	19.88	19.75
6 93	27.97	-0.153	-4.221	8.09	3.934	20 26	19.54
6.899	27.97	-0.152	-4.227	8 37	3 835	19.98	19.54
6 867	27.98	-0.152	-4.234	8.12	3 685	18.67	19.55
6.867	27.36	-0.152	-4.234	8.2	2.874	19.33	19.54
6.899	24.34	-0.162	-4.227	8 18	0.279	19 23	19.34
6 93	24.93	-0.174	-4.214	8.17	2.491	19.33	19 24
6 89	26.08	-0.177	-4.194	8.21	3 879	19.3	19.4
6.889	26.08	-0.167	-4.174	8.19	3.409	19.32	19 4
6.889	21.94	-0.177	-4.154	8 24	3 819	19 32	19.6
6.889	22.54	-0.177	-4.141	8.24	3 719	19.42	19.7
6.956	23 7	-0.177	-4.131	8.22	2.768	19.42	19.5
6.889	24.3	-0.167	-4.121	8.21	2.988	19.53	19.8
6.889	24.3	-0 157	-4.114	8.29	2.978	19 5	19.8
6 889	26 08	-0.167	-4.107	8.3	3.519	19 6	19.9
6.856	23.72	-0.177	-4.107	8.29	3.679	19.6	19.9
6.856	23.74	-0.177	-4.114	8.24	3 529	19.42	19.9
6.956	23 9	-0.157	-4.124	8.11	3 399	19.7	19.63
6.856	23.76	-0.157	-4.134	8 34	3.899	19 32	19.93
6.856	26.12	-0 157	-4.147	8.19	3 609	19.32	19 63
6 889	23.76	-0.157	-4.154	8.19	3 559	19.06	19.53
6 956	24.34	-0.147	-4.161	8 19	3.349	19.32	19.53
6 906	23.76	-0 147	-4.167	8.11	3.078	19.42	19.53

6.856	23.76	-0.157	-4.174	8.19	2.998	19.41	19.73
6.856	25.56	-0.157	-4.181	8.19	2.828	19.41	19.73
6.906	26.14	-0.157	-4.187	8.19	2.658	19.42	19.33
6.906	25.56	-0.157	-4.194	8.06	3.178	19.67	19.33
6.856	25.9	-0.157	-4.201	8.04	-0.067	18.89	19.33
6.891	26.14	-0.156	-4.207	8.09	0.044	19.15	19.33
6.893	26.13	-0.155	-4.204	8.19	3.511	19.24	19.33
6.89	26.1	-0.167	-4.201	8.16	3.469	19.14	19.3
6.889	26.09	-0.157	-4.181	7.99	2.818	19.22	19.3
6.889	23.7	0.845	-4.167	8.01	2.788	19.24	19.3
6.906	25.5	-0.157	-4.154	8.24	2.647	19.68	19.3
6.923	25.5	-0.177	-4.141	8.14	2.998	19.32	19.3
6.923	26.08	-0.167	-4.127	8.16	3.178	19.22	19.5
6.956	26.08	-0.157	-4.121	8.09	3.389	20.45	19.5
6.889	26.08	-0.157	-4.114	8.17	3.649	19.5	19.8
6.856	26.1	-0.157	-4.114	8.14	3.449	19.6	19.9
6.923	26.1	-0.177	-4.114	8.21	3.379	19.87	19.72
6.889	26.12	-0.177	-4.121	8.14	3.389	19.6	19.73
6.889	26.12	-0.157	-4.127	8.1	3.939	19.5	19.63
6.906	26.12	-0.157	-4.137	8.06	3.469	18.67	19.53
6.889	26.12	-0.157	-4.147	8.06	3.078	19.67	19.63
6.923	26.12	-0.147	-4.157	8.09	3.379	19.14	19.43
6.923	26.14	-0.157	-4.167	8.16	3.719	18.47	19.43
6.856	26.14	-0.157	-4.174	7.96	3.899	19.5	19.53
6.856	26.14	-0.157	-4.181	8.07	2.838	19.32	19.53
6.873	26.14	-0.157	-4.187	8.09	2.968	19.32	19.53
6.889	26.14	-0.157	-4.194	8.11	2.998	19.14	19.53
6.856	26.14	-0.157	-4.194	7.99	3.799	19.23	19.53
6.923	26.14	-0.157	-4.197	8.07	3.819	19.5	19.25
6.923	26.12	-0.157	-4.201	8.09	3.529	19.14	19.23
6.889	21.94	-0.157	-4.194	8.02	1.185	18.09	19.23
6.873	20.73	-0.167	-4.187	7.99	0.064	19.22	19.4
6.889	22.53	-0.167	-4.174	7.96	2.738	19.22	19.4
6.889	23.12	-0.167	-4.154	8.04	2.808	19.32	19.39
6.923	23.7	-0.167	-4.144	8.01	2.718	19.32	19.3
6.923	23.7	-0.167	-4.134	7.99	3.339	19.32	19.58
6.889	23.7	-0.167	-4.127	8.09	3.559	19.42	19.6
6.889	24.3	2.517	-4.114	8.12	3.278	19.42	19.8
6.889	24.3	-0.157	-4.111	8.14	3.599	19.6	19.88
6.889	24.32	-0.157	-4.107	8.14	3.739	19.6	19.9
6.906	24.32	-0.167	-4.114	7.99	3.399	19.67	19.82
6.889	24.34	-0.157	-4.114	8.09	3.859	19.6	19.83
6.923	24.34	-0.157	-4.127	8.16	3.579	19.6	19.73
6.889	24.34	-0.157	-4.134	7.99	2.868	19.5	19.73
6.906	24.35	-0.157	-4.147	7.99	2.908	19.5	19.53
6.923	24.36	-0.157	-4.154	7.99	3.879	19.32	19.53
6.889	24.95	-0.147	-4.161	8.11	3.669	19.32	19.53
6.923	27.95	-0.157	-4.167	7.99	3.339	19.5	19.53
6.889	27.95	-0.157	-4.174	8.09	3.899	19.5	19.63
6.856	28.53	-0.157	-4.184	8	3.419	19.67	19.83
6.856	28.53	-0.157	-4.187	7.99	4.04	19.87	19.73
6.889	28.53	-0.157	-4.194	8.11	2.838	19.42	19.53

6.891	28.53	-0.156	-4.201	8.09	2.939	19.41	19.43
6.925	27.93	-0.156	-4.207	8	3.38	19.32	19.26
6.89	27.89	-0.157	-4.201	7.99	3.809	19.32	19.23
6.906	28.45	-0.167	-4.187	7.96	2.778	19.04	19.22
6.923	25.48	-0.157	-4.174	8.01	3.058	19.22	19.2
6.889	29.65	-0.157	-4.154	8.14	3.809	19.14	19.38
6.889	29.65	-0.157	-4.137	8.14	3.779	19.23	19.58
6.889	26.68	-0.157	-4.121	8.1	3.709	19.7	19.58
6.923	30.25	-0.157	-4.114	8.09	3.339	19.41	19.58
6.889	30.85	-0.157	-4.101	8.21	3.268	19.5	19.8
6.923	30.85	-0.177	-4.094	8.01	3.008	19.3	19.8
6.889	30.25	-0.167	-4.087	8.01	3.128	19.5	19.8
6.906	30.28	-0.157	-4.087	8.09	3.028	19.87	19.8
6.889	30.87	-0.157	-4.094	8.09	2.998	18.67	19.9
6.889	30.3	-0.157	-4.107	8.16	3.138	19.6	19.9
6.889	30.31	-0.137	-4.121	8.19	3.078	19.87	19.83
6.923	30.31	-0.157	-4.134	7.99	3.539	19.42	19.53
6.889	30.31	-0.157	-4.147	7.9	3.639	19.5	19.53
6.923	30.32	-0.157	-4.161	7.96	3.679	19.41	19.53
6.923	30.33	-0.157	-4.167	8	3.409	20.07	19.53
6.889	30.33	-0.157	-4.174	8.09	3.759	20.71	19.74
6.856	30.33	-0.157	-4.181	8.02	3.228	19.41	20.03
6.889	21.38	-0.157	-4.191	7.99	2.968	19.5	19.63
6.889	23.77	-0.157	-4.201	8.09	2.918	19.4	19.63
6.891	23.78	-0.156	-4.204	7.91	2.698	19.42	19.33
6.896	23.76	-0.154	-4.207	7.89	1.098	19.43	19.34
6.875	23.72	-0.156	-4.201	7.79	2.008	18.83	19.31
6.923	22.52	-0.167	-4.187	7.79	1.997	19.22	19.02
6.889	21.92	-0.157	-4.171	7.39	0.785	19.41	19.3
6.906	21.32	-0.157	-4.154	7.94	2.647	18.57	19.3
6.956	21.3	1.866	-4.134	8.02	2.868	19.22	19.29
6.856	22.52	-0.157	-4.121	7.96	2.978	19.42	19.8
6.889	21.32	-0.167	-4.111	8.01	3.389	19.23	19.7
6.906	24.29	2.918	-4.101	8.01	3.379	19.57	19.8
6.923	24.88	-0.157	-4.091	8.01	3.599	19.68	19.8
6.922	24.89	-0.167	-4.084	7.99	3.458	19.59	19.8
6.904	24.92	-0.158	-4.081	7.96	3.548	19.07	19.89
6.889	25.52	-0.107	-4.087	8.04	3.859	19.78	19.82
6.923	25.52	-0.157	-4.101	7.89	3.459	19.5	19.6
6.923	28.5	-0.157	-4.114	7.89	3.439	19.6	19.42
6.923	29.11	-0.157	-4.127	7.79	2.828	19.42	19.43
6.823	29.11	-0.157	-4.134	7.79	2.878	19.67	19.9
6.889	29.11	-0.157	-4.147	7.89	2.738	19.32	19.43
6.923	28.51	-0.157	-4.154	7.89	3.178	19.32	19.43
6.889	28.51	-0.157	-4.161	7.89	3.449	19.32	19.43
6.873	29.13	-0.157	-4.161	7.79	3.479	19.32	19.53
6.856	28.51	-0.157	-4.167	7.96	4.03	19.32	19.53
6.856	28.51	-0.157	-4.167	7.89	3.799	18.47	19.53
6.923	29.12	-0.157	-4.174	7.89	2.007	19.32	19.23
6.889	28.51	-0.167	-4.181	7.71	1.916	19.14	19.33
6.839	28.49	-0.157	-4.181	7.69	0.284	18.93	19.4
6.906	17.15	-0.157	-4.177	7.76	0.634	19.03	19.02

6.923	22.52	-0.147	-4.167	7.85	0.184	19.14	19
6.889	16.55	-0.167	-4.154	7.76	1.336	19.14	19.28
6.889	17.75	-0.147	-4.141	7.79	2.988	19.14	19.28
6.923	13.56	-0.167	-4.127	7.76	2.908	17.89	19.28
6.856	19.53	-0.157	-4.114	7.84	3.278	19.23	19.7
6.923	16.55	-0.177	-4.107	7.84	3.699	19.32	19.38
6.939	20.73	2.708	-4.101	7.99	3.138	19.32	19.38
6.889	23.12	-0.157	-4.094	7.67	3.469	19.87	19.58
6.889	23.72	-0.157	-4.094	7.91	3.619	19.42	19.6
6.889	23.72	-0.157	-4.094	7.86	3.649	19.5	19.6
6.889	23.73	-0.157	-4.101	7.89	3.429	18.67	19.5
6.923	23.74	-0.157	-4.114	7.8	3.689	19.14	19.43
6.889	23.74	-0.157	-4.121	7.79	3.639	19.14	19.43
6.923	21.36	-0.157	-4.134	7.86	0.965	18.47	19.13
6.923	23.74	-0.147	-4.147	7.89	0.154	19.41	19.13
6.923	23.75	-0.157	-4.154	7.89	2.728	19.22	19.24
6.889	23.76	-0.157	-4.161	7.79	3.359	19.22	19.43
6.889	23.76	-0.157	-4.167	7.79	3.218	19.22	19.33
6.889	23.76	-0.157	-4.181	7.89	4	19.22	19.33
6.856	23.76	-0.157	-4.187	7.9	3.589	18.93	19.33
6.857	23.76	-0.156	-4.194	7.89	2.097	19.15	19.33
6.908	23.76	-0.156	-4.204	7.89	-0.156	18.83	18.96
6.891	23.72	-0.166	-4.201	7.84	-0.156	18.93	18.93
6.856	23.7	-0.177	-4.194	7.86	-0.177	19.14	19.3
6.889	20.13	-0.177	-4.181	7.95	1.796	18.57	19
6.923	21.32	-0.167	-4.161	7.94	3.439	19.04	19.1
6.856	21.92	-0.177	-4.147	7.86	3.809	19.67	19.49
6.889	22.54	-0.177	-4.137	7.94	3.429	19.32	19.38
6.906	23.12	-0.177	-4.127	8.14	3.318	19.32	19.38
6.939	23.12	-0.157	-4.121	8.01	2.908	19.23	19.38
6.889	23.12	-0.157	-4.111	7.97	2.798	19.5	19.7
6.889	23.12	-0.157	-4.101	8.09	3.749	19.42	19.7
6.923	23.14	-0.157	-4.101	8.01	3.799	19.5	19.5
6.956	22.56	-0.157	-4.104	8.04	3.379	19.42	19.72
6.906	24.34	-0.157	-4.114	8.06	3.939	19.42	19.6
6.856	24.34	-0.157	-4.127	7.99	4.09	19.42	19.63
6.889	25.54	-0.157	-4.141	7.99	3.869	19.22	19.53
6.756	22.6	-0.157	-4.154	8.09	3.789	19.4	20.43
6.889	26.14	-0.157	-4.167	8.09	3.959	20.07	19.43
7.72	23.18	-0.157	-4.174	8.09	3.489	19.32	13.08
6.923	25.56	-0.157	-4.181	8.01	3.238	19.41	19.25
6.856	26.14	-0.157	-4.191	8.09	2.958	19.5	19.63
6.889	26.14	-0.157	-4.201	8.1	2.968	19.41	19.43
6.893	26.16	-0.155	-4.207	8.1	2.83	19.68	19.43
6.861	26.17	-0.154	-4.214	8.07	3.502	19.23	19.43
6.863	26.15	-0.154	-4.221	7.99	2.12	18.93	19.44
6.929	26.11	-0.164	-4.217	8.07	3.152	19.23	19.14
6.827	28.45	-0.175	-4.201	8.04	1.398	19.22	19.6
6.923	27.85	-0.177	-4.181	8.01	3.539	19.04	19.1
6.856	29.64	-0.177	-4.154	7.96	3.739	18.39	19.49
6.856	29.05	7.92	-4.134	7.96	3.819	19.23	19.49
6.956	29.65	-0.157	-4.121	8.14	3.699	19.5	19.1

6.956	26.06	-0.157	-4.107	8.14	3.539	19.23	19.3
6.956	26.06	-0.157	-4.094	8.11	3.278	19.6	19.48
6.887	26.06	-0.168	-4.087	8.08	2.926	19.59	19.88
6.951	29.04	-0.159	-4.074	8.11	2.895	19.76	19.48
6.901	29.66	-0.179	-4.074	8.11	3.486	19.86	19.8
6.885	29.68	-0.169	-4.081	8.13	3.106	19.32	19.81
6.889	29.69	-0.157	-4.094	8.09	3.488	19.77	19.73
6.923	26.78	-0.157	-4.107	7.99	3.469	19.5	19.53
6.923	27.32	-0.147	-4.121	8.06	3.419	19.32	19.25
6.889	27.93	-0.157	-4.131	8.06	3.599	19.32	19.63
6.873	29.72	-0.157	-4.144	8.19	3.659	19.22	19.53
6.889	29.71	-0.157	-4.154	7.99	4	19.42	19.63
6.856	29.71	-0.157	-4.161	7.99	3.819	19.41	19.53
6.889	29.71	-0.157	-4.164	8.09	3.929	19.32	19.53
6.906	29.71	-0.157	-4.167	8.06	3.158	19.32	19.33
6.889	29.71	-0.157	-4.167	8.02	2.868	19.32	19.33
6.856	13.61	-0.157	-4.174	7.99	2.798	19.97	19.43
6.856	15.41	-0.157	-4.181	7.96	3.749	19.22	19.43
7.01	15.39	-0.187	-4.181	8.05	3.589	19.22	18.63
6.956	15.37	-0.177	-4.167	8.04	4.02	19.22	19.02
6.889	18.33	-0.157	-4.154	7.89	3.619	19.14	19.2
6.722	18.34	-0.157	-4.137	8.19	3.669	19.23	20.3
6.889	20.71	-0.167	-4.121	8.01	3.829	19.22	19.48
6.99	21.92	-0.177	-4.107	8.01	3.409	19.32	19.28
6.923	21.92	-0.157	-4.094	8.01	3.288	19.41	19.58
6.855	23.1	-0.167	-4.081	8.2	3.518	19.49	19.88
6.92	22.51	2.616	-4.074	7.96	3.417	19.49	19.7
6.917	22.51	-0.159	-4.067	8.01	3.536	19.59	19.7
6.917	22.53	-0.169	-4.067	8.01	3.616	19.59	19.7
6.886	23.13	-0.168	-4.074	8.02	3.757	19.68	19.7
6.889	23.16	-0.157	-4.087	8	3.038	18.74	19.73
6.906	22.56	-0.157	-4.097	7.94	2.878	19.42	19.53
6.889	22.58	-0.157	-4.107	7.99	3.038	19.23	19.53
6.923	22.58	-0.157	-4.121	7.99	3.559	19.32	19.33
6.923	22.58	-0.137	-4.127	7.99	3.519	19.32	19.33
6.889	22.58	-0.157	-4.137	7.79	3.759	19.32	19.42
6.889	23.18	-0.157	-4.147	8.06	3.789	19.32	19.4
6.923	22.58	-0.157	-4.154	7.89	3.439	19.22	19.33
6.889	23.18	-0.147	-4.161	8	3.629	19.5	19.62
6.823	23.18	-0.157	-4.167	7.91	3.329	19.32	19.63
6.923	23.18	-0.157	-4.174	7.79	3.198	19.14	19.13
6.889	23.16	-0.157	-4.181	7.89	0.845	19.14	19.13
6.889	22.54	-0.177	-4.177	7.85	1.746	19.04	19.13
6.889	23.1	-0.177	-4.164	8.04	1.816	19.14	19.1
6.889	23.1	-0.157	-4.147	7.79	2.177	19.22	19.1
6.956	23.11	-0.177	-4.127	7.79	3.359	19.14	19.1
6.839	22.52	-0.157	-4.114	8.04	3.639	19.23	19.7
6.889	22.52	-0.157	-4.101	7.84	3.669	19.41	19.38
6.923	22.52	-0.167	-4.094	7.82	3.298	19.42	19.38
6.856	23.7	-0.167	-4.081	7.96	3.288	19.14	19.8
6.886	36.21	0.182	-4.074	7.91	3.687	19.59	19.8
6.92	36.77	2.035	-4.074	7.91	3.387	19.67	19.8

6.885	18.35	-0.159	-4.067	7.93	3.136	19.69	19.9
6.855	21.93	-0.157	-4.081	7.71	2.967	19.49	19.9
6.889	21.96	-0.157	-4.087	7.89	3.018	19.41	19.53
6.889	21.96	-0.157	-4.101	7.79	3.018	19.32	19.53
6.923	21.96	-0.157	-4.114	7.8	2.878	19.41	19.42
6.923	21.96	-0.157	-4.121	7.79	2.818	19.22	19.4
6.856	22.58	-0.157	-4.134	7.81	1.916	19.12	19.4
6.923	22.58	-0.157	-4.141	7.79	3.238	19.14	19.23
6.889	22.58	-0.157	-4.147	7.8	3.569	19.32	19.53
6.889	22.58	-0.157	-4.154	7.89	3.479	19.31	19.53
6.856	22.58	-0.157	-4.161	7.81	3.579	19.32	19.53
6.889	22.58	-0.157	-4.167	7.71	3.048	19.32	19.53
6.889	22.58	-0.157	-4.174	7.74	2.237	19.22	19.23
6.889	22.58	-0.157	-4.181	7.81	2.758	18.92	19.23
6.889	22.56	-0.157	-4.181	7.79	-0.157	19.04	19.23
6.923	22.54	-0.167	-4.174	7.76	0.324	19.32	19.22
6.889	22.54	-0.167	-4.161	7.67	3.939	19.14	19.22
6.906	19.51	-0.167	-4.147	7.66	3.889	19.04	19.2
6.923	26.06	-0.167	-4.131	7.84	3.018	19.22	19.2
6.889	27.26	1.426	-4.121	7.84	2.657	19.42	19.38
6.923	27.26	-0.187	-4.114	7.77	2.938	19.5	19.38
6.923	27.26	-0.157	-4.101	7.76	2.958	19.32	19.38
6.856	27.26	-0.157	-4.094	7.84	2.918	19.6	19.8
6.856	27.26	-0.157	-4.087	7.84	3.258	19.5	19.6
6.956	27.28	-0.157	-4.084	7.82	3.339	19.68	19.4
6.922	27.3	-0.157	-4.087	7.69	3.478	19.59	19.4
6.889	26.7	-0.157	-4.094	7.66	3.629	19.22	19.3
6.889	26.72	10.98	-4.107	7.71	3.539	19.22	19.33
6.889	26.72	-0.157	-4.121	7.71	2.758	18.92	19.13
6.923	24.34	-0.157	-4.134	7.74	2.367	19.14	19.23
6.923	27.32	-0.157	-4.147	7.61	3.639	19.14	19.23
6.889	27.33	-0.157	-4.154	7.71	2.908	19.22	19.33
6.839	27.32	-0.157	-4.161	7.71	3.118	19.32	19.63
6.923	26.73	-0.157	-4.164	7.81	2.838	19.22	19.13
6.889	26.74	-0.157	-4.167	7.66	2.978	19.22	19.33
6.889	26.74	-0.157	-4.174	7.69	2.998	19.41	19.33
6.906	26.7	-0.157	-4.177	7.81	3.359	19.22	19.13
6.906	26.72	-0.157	-4.181	7.71	0.454	19.22	19.13
6.889	26.7	-0.167	-4.181	7.71	0.434	19.09	19.13
6.889	26.66	-0.177	-4.167	7.49	0.785	19.04	19.1
6.889	13	-0.167	-4.154	7.61	2.868	19.14	19.1
6.889	15.96	-0.177	-4.141	7.74	1.856	18.93	19.28
6.889	15.97	-0.157	-4.127	7.66	2.948	19.14	19.2
6.923	17.13	-0.177	-4.121	7.84	3.098	19.14	19.2
6.889	16.54	-0.177	-4.107	7.67	3.649	19.5	19.48
6.889	16.55	-0.157	-4.101	7.66	3.339	19.32	19.48
6.923	16.55	-0.177	-4.094	7.74	3.278	19.32	19.49
6.889	16.55	-0.167	-4.087	7.72	3.659	19.32	19.69
6.889	15.99	-0.177	-4.087	7.69	3.389	19.32	19.7
6.856	17.77	-0.157	-4.094	7.6	3.278	19.24	19.72
6.906	17.17	-0.157	-4.101	7.76	2.948	19.22	19.3
6.889	16.59	-0.157	-4.107	7.71	2.908	19.32	19.33

6.889	16.01	-0.157	-4.121	7.71	2.878	19.22	19.23
6.889	17.79	-0.157	-4.131	7.61	2.547	19.14	19.25
6.889	17.19	-0.157	-4.141	7.6	2.047	19.14	19.24
6.906	16.59	-0.157	-4.151	7.74	2.207	19.04	19.24
6.923	17.19	-0.157	-4.157	7.72	2.427	18.93	19.23
6.889	17.19	-0.157	-4.161	7.71	3.609	19.32	19.33
6.856	14.81	-0.167	-4.164	7.71	3.539	19.32	19.42
6.856	16.59	-0.157	-4.167	7.76	3.619	19.04	19.43
6.856	16.01	-0.157	-4.177	7.81	3.238	19.22	19.43
6.889	17.19	-0.157	-4.187	7.81	1.986	19.09	19.13
6.889	15.38	-0.177	-4.187	7.79	0.154	19.04	19.13
6.889	18.33	-0.177	-4.174	7.69	0.815	19.14	19.08
6.889	14.16	-0.177	-4.161	7.69	0.284	19.4	19.1
6.923	15.37	-0.177	-4.147	7.75	1.556	19.14	19.1
6.856	18.33	-0.167	-4.134	7.66	3.589	19.24	19.29
6.889	19.51	-0.177	-4.121	7.84	3.639	19.14	19.38
6.906	18.33	-0.177	-4.111	7.76	2.808	19.23	19.33
6.889	20.11	-0.177	-4.101	7.81	2.678	19.41	19.58
6.923	20.11	2.557	-4.087	7.81	2.818	19.32	19.48
6.886	18.91	-0.178	-4.081	7.9	3.096	19.54	19.7
6.887	18.89	-0.168	-4.074	7.66	3.307	19.49	19.7
6.888	18.95	-0.177	-4.084	7.71	3.678	19.67	19.8
6.889	18.95	-0.157	-4.094	7.79	3.419	19.14	19.72
6.856	21.36	-0.157	-4.101	7.79	3.889	19.22	19.73
6.889	21.36	-0.157	-4.121	7.79	3.599	19.22	19.4
6.889	21.36	-0.157	-4.134	7.61	3.499	19.41	19.43
6.889	21.38	-0.157	-4.141	7.79	3.699	19.32	19.43
6.889	21.38	-0.157	-4.154	7.71	3.038	19.41	19.43
6.906	21.38	-0.147	-4.161	7.81	2.848	19.41	19.43
6.889	21.38	-0.157	-4.167	7.86	2.808	19.5	19.63
6.873	21.38	-0.157	-4.181	7.69	3.118	19.4	19.63
6.856	21.38	-0.157	-4.181	7.84	3.028	19.5	19.63
6.856	21.38	-0.157	-4.187	7.72	3.258	19.32	19.63
6.923	21.96	-0.157	-4.187	7.72	3.569	18.57	19.23
6.923	21.32	-0.167	-4.181	7.61	3.699	19.22	19.23
6.889	21.32	-0.177	-4.174	7.71	3.539	19.32	19.39
6.889	21.91	-0.177	-4.157	7.76	3.359	19.32	19.38
6.889	21.9	-0.167	-4.141	7.74	2.958	19.32	19.38
6.923	21.3	-0.167	-4.121	7.74	2.848	19.32	19.38
6.856	21.3	-0.167	-4.107	7.66	2.778	19.4	19.69
6.889	21.32	5.281	-4.101	7.82	3.108	18.74	19.7
6.923	19.51	-0.177	-4.094	7.82	3.409	19.67	19.7
6.855	19.51	-0.177	-4.081	7.74	3.478	19.59	19.98
6.853	18.91	-0.178	-4.074	7.48	3.477	19.59	19.98
6.885	19.53	-0.169	-4.067	7.66	3.576	19.59	19.7
6.855	19.55	-0.157	-4.074	7.69	3.698	19.49	19.71
6.923	19.55	2.738	-4.081	7.69	3.108	19.67	19.53
6.906	21.36	-0.157	-4.094	7.61	3.048	19.6	19.53
6.889	21.36	-0.157	-4.107	7.5	2.938	19.41	19.53
6.889	21.36	-0.157	-4.121	7.66	2.838	19.77	19.33
6.906	21.36	-0.157	-4.127	7.71	3.068	19.32	19.23
6.923	21.36	-0.157	-4.141	7.71	3.859	19.04	19.13

6 906	21 36	-0 157	-4.147	7.54	3.629	19.22	19 23
6.856	21.36	-0.157	-4.154	7 69	3 599	19.14	19.42
6.856	21.36	-0.157	-4.161	7 59	4.11	19.22	19.43
6.856	21.38	-0 157	-4.167	7.62	4.16	19.22	19.43
6.906	21.38	-0.157	-4.174	7.64	3 138	19.04	19.13
6.889	21.36	-0.157	-4 181	7 61	3.969	19.02	19 13
6.873	21 34	-0.167	-4.181	7.4	0.654	19 04	19.03
6.923	20.73	-0 157	-4.174	7.57	-0 017	19.13	18.91
6.689	23.7	-0.177	-4.161	7 69	0.254	18.92	20.18
6.906	24.28	-0.167	-4.147	7.56	0.935	19.04	18.9
6.923	24.28	-0 177	-4.134	7.47	2.557	19.14	18.9
6.889	24.28	-0.177	-4 121	7.49	3.258	19.14	19.28
6.889	24 88	-0.147	-4.107	7.74	2.868	19 14	19.2
6.889	24.28	-0.177	-4.094	7.46	2.778	19.14	19.28
6.922	24.87	-0.177	-4.094	7.56	2 727	19.23	19.22
6.889	24 88	-0.177	-4.087	7.47	3.168	19.23	19 38
6.889	24.9	-0.167	-4.087	7.54	3.168	19.22	19.38
6.873	24.92	-0 157	-4.094	7.69	3.899	19.6	19.4
6.856	24.92	-0.157	-4 101	7.51	3.689	19.23	19 4
6.889	24 92	-0.157	-4.107	7.54	3.339	19 14	19 23
6.889	24.92	-0.157	-4.114	7.49	3.238	18.83	19.03
6.889	24.92	-0 157	-4.124	7.61	0.514	18.93	18.93
6.906	24.94	-0.157	-4.134	7 44	-0.137	18.92	18.83
6.923	24 94	-0.157	-4.141	7.71	-0.157	18.92	18 83
6.889	24.94	-0 157	-4.147	7.51	0.654	18.92	19.03
6.889	24.94	-0.157	-4.161	7.61	0 494	18.74	19.03
6 889	24.94	-0.157	-4.164	7 61	0 374	18.93	19.13
6.889	24 94	-0.157	-4.167	7.61	0.665	18.92	19 13
6.889	24.94	0.644	-4.174	7.61	0.805	18.93	19.03
6.856	24.94	-0.157	-4.174	7.51	0.745	19.4	19.03
6.856	-0.117	-0.157	-4.177	7.54	0.174	18.64	19.13
6 889	17.15	-0 177	-4.167	7.59	0.314	18.83	18.93
6.923	17.77	-0 177	-4 154	7.76	0 755	18.92	18.7
6.856	18.34	-0.167	-4.141	7 57	0 494	18.64	19
6 856	19.52	-0.177	-4.124	7.59	1.836	19.04	19.09
6.906	19 51	-0 177	-4 114	7.81	0.715	19.04	19
6.873	19.52	-0.177	-4.101	7.75	3.469	19.14	19.28
6.856	27.32	-0.157	-4.107	7 71	3 529	19.07	19 33
6 956	27 91	-0.157	-4.121	7.74	3.529	19 14	18 93
6.889	27.89	-0.157	-4.124	7.79	3.599	19.14	19.1
6.956	27 9	-0.157	-4.121	7 86	3 599	19.14	19.1
6 823	27.91	-0.147	-4.121	7.77	3.198	19.22	19.5
6.889	27.91	-0.157	-4.127	7.79	2.918	18.84	19.13
6.889	27.93	-0 157	-4.131	7 81	2 657	18.84	19.13
6.873	27.91	-0.157	-4.134	7 64	2 137	18.93	19.13
6 923	27.91	-0.157	-4.141	7.81	2.197	19.77	18.83
6.889	27 92	-0.157	-4.147	7.99	2.768	19.14	19.13
6.823	27.93	-0.157	-4.154	7.8	3 909	19.14	19.53
6 906	27.92	0.354	-4.154	7 89	3 419	19.22	19.23
6.923	27.93	-0.157	-4.161	7.96	3.559	19.22	19.23
6 923	27.93	-0.157	-4.161	7.99	3.789	19.32	19.33
6.856	27.93	-0.157	-4.167	7 89	3 839	19.77	19 53

6.889	1 105	-0.157	-4.167	7.71	1.826	18.84	18.93
6.923	0.444	-0.157	-4.174	7.61	-0.017	18.82	18.83
6.889	29.12	-0.157	-4.181	7.99	-0.157	18.83	18.73
6.889	29.71	-0.157	-4.181	7.99	2.868	19.4	19.13
6.889	29.69	-0.157	-4.181	7.87	3.048	19.04	19.13
6.856	27.79	-0.157	-4.174	7.9	2.708	19.04	19.1
6.889	30.29	-0.177	-4.167	7.89	3.088	19.14	19.1
6.923	30.25	-0.177	-4.157	8.14	2.157	19.14	19.1
6.856	30.24	-0.177	-4.141	8.04	3.318	19.32	19.58
6.923	30.23	-0.167	-4.121	8.11	3.379	19.22	19.28
6.939	30.23	-0.177	-4.101	8.09	3.238	19.5	19.38
6.889	30.24	-0.167	-4.087	8.09	3.599	19.5	19.58
6.888	30.27	-0.177	-4.081	8.04	3.508	19.67	19.58
6.889	30.27	-0.157	-4.087	7.31	3.118	19.5	19.6
6.906	30.29	-0.157	-4.094	8.06	2.958	19.6	19.53
6.889	30.29	-0.157	-4.101	7.99	3.128	19.14	19.52
6.856	30.29	-0.157	-4.107	8.04	2.938	19.41	19.53
6.923	30.29	-0.147	-4.114	8.06		19.41	19.3
6.889	30.29	-0.157	-4.121	7.97	3.849	19.22	19.32
6.889	30.3	-0.157	-4.127	8.14	4.07	19.41	19.33
6.923	30.31	-0.157	-4.137	7.99	3.599	19.32	19.33
6.889	30.91	-0.157	-4.144	8.17	3.519	19.32	19.4
6.856	30.91	-0.157	-4.147	8.19	3.439	19.97	19.4
6.856	30.91	-0.157	-4.157	8.19	2.948	19.32	19.42
6.839	-0.097	-0.157	-4.161	7.91	2.938	18.74	19.4
6.889	30.9	-0.157	-4.161	7.91	2.617	19.04	19.13
6.889	30.87	-0.157	-4.161	8.06	0.995	19.04	19.13
6.889	-0.127	-0.177	-4.154	8.14	0.604	19.04	19.1
6.923	30.83	-0.167	-4.141	8.02	2.818	19.14	19
6.889	30.82	-0.177	-4.121	7.96	2.708	19.14	19.2
6.873	30.82	-0.167	-4.107	8.11	3.238	19.22	19.38
6.856	30.82	-0.167	-4.094	8.01	3.278	19.22	19.38
6.888	-0.137	-0.167	-4.081	8.11	3.628	19.22	19.3
6.92	30.83	-0.178	-4.074	8.21	3.477	19.32	19.2
6.92	30.82	-0.178	-4.071	7.96	3.577	19.22	19.2
6.885	30.82	2.605	-4.067	8.18	3.336	19.31	19.37
6.85	30.85	-0.169	-4.067	7.98	2.945	19.14	19.67
6.888	30.87	-0.157	-4.074	8.14	3.017	19.22	19.3
6.889	30.89	3.809	-4.081	7.99	3.118	19.22	19.28
6.923	30.89	-0.157	-4.094	8.11	2.818	19.14	19.13
6.889	30.89	-0.157	-4.101	8.16	2.748	18.92	19.13
6.889	30.9	-0.157	-4.114	7.97	2.978	19.04	19.13
6.923	30.91	-0.157	-4.127	8.26	1.456	18.64	18.93
6.923	30.91	-0.167	-4.134	7.99	2.778	19.22	19.03
6.856	-0.087	-0.157	-4.147	8.06	0.855	19.13	19.33
6.856	30.91	-0.157	-4.154	8.06	3.489	19.14	19.33
6.873	30.92	-0.157	-4.161	8.19	2.647	19.04	19.23
6.889	30.91	-0.157	-4.171	8.26	2.748	18.12	19.23
6.889	30.93	-0.157	-4.181	7.99	3.148	19.13	19.23
6.889	4.08	-0.157	-4.187	8.1	3.058	19.32	19.23
6.889	30.87	-0.167	-4.187	8.06	3.879	19.14	19.23
6.873	30.87	-0.167	-4.181	8.16	3.619	18.54	19.22

6.923	-0.117	-0.177	-4.174	8.1	1.376	19.13	19
6.856	30.87	-0.167	-4.161	8.09	3.188	19.14	19.38
6.873	-0.117	-0.167	-4.144	8.04	3.539	19.31	19.38
6.889	30.85	-0.177	-4.127	8.14	3.709	19.32	19.38
6.839	30.91	-0.157	-4.131	8.16	3.759	19.04	19.33
6.956	27.62	-0.157	-4.161	8.14	2.968	19.04	19.13
6.889	-0.097	-0.157	-4.174	8.16	2.908	19.5	19.6
6.889	-0.117	-0.167	-4.174	8.14	2.768	19.31	19.39
6.856	30.91	-0.177	-4.174	8.16	3.689	19.13	19.4
6.856	31.51	-0.167	-4.181	7.99	2.758	19.14	19.32
6.889	30.93	-0.167	-4.187	7.99	2.487	18.54	19.13
6.873	30.93	-0.157	-4.194	8.06	3.318	19.04	19.13
6.891	30.93	-0.156	-4.201	8.09	-0.156	18.83	18.83
6.928	30.94	-0.155	-4.207	8.02	-0.154	19.68	18.83
6.862	31.54	-0.154	-4.214	7.9	1.178	19.4	19.13
6.896	30.95	-0.164	-4.221	8.09	1.409	19.13	19.14
6.899	-0.092	-0.152	-4.224	8.2	3.494	19.32	19.34
6.9	31.48	-0.152	-4.234	8.22	3.795	19.23	19.34
6.8	30.97	-0.152	-4.234	8.07	2.994	19.51	19.64
6.899	30.96	-0.152	-4.231	7.99	-0.152	18.93	19.14
6.898	30.96	-0.153	-4.231	8.09	-0.153	19.13	19.15
6.865	30.96	-0.152	-4.234	8.09	1.24	19.06	19.14
6.9	30.94	-0.162	-4.24	8.1	0.74	18.93	18.95
6.9	30.91	-0.162	-4.24	8.05	0.8	18.93	18.94
6.9	30.91	-0.172	-4.234	7.97	1.101	18.93	19.03
6.865	-0.093	-0.163	-4.221	7.97	-0.173	18.65	18.93
6.91	30.9	-0.175	-4.214	8.07	0.416	18.84	18.92
6.89	30.89	-0.167	-4.207	8.06	1.035	18.92	19
6.823	30.87	-0.177	-4.194	8.09	1.135	19.04	19.3
6.923	30.89	-0.177	-4.187	8.09	3.599	19.4	19.3
6.839	30.89	-0.177	-4.181	8.16	3.839	19.22	19.8
6.889	30.91	-0.157	-4.181	8.34	3.499	19.67	19.52
6.889	30.91	-0.157	-4.181	8.04	3.909	19.31	19.32
6.889	30.91	-0.157	-4.181	8.09	2.447	19.22	19.23
6.889	30.91	-0.157	-4.187	8.14	1.125	18.92	18.98
6.856	30.93	-0.157	-4.191	8.19	1.836	19.14	19.23
6.856	30.93	-0.157	-4.201	8.19	1.135	19.57	19.23
6.856	31.53	-0.157	-4.207	8.09	1.276	19.04	19.23
6.894	30.94	-0.155	-4.214	7.98	1.468	18.92	19.05
6.93	30.95	-0.153	-4.221	8.09	1.199	19.49	19.05
6.898	-0.093	-0.153	-4.231	8.09	2.833	19.05	19.14
6.867	30.97	-0.152	-4.234	8.1	0.96	18.56	19.25
6.867	30.97	-0.152	-4.24	8.3	1.221	19.06	19.27
6.883	30.96	-0.162	-4.24	8.12	3.675	19.09	19.25
6.833	30.96	-0.162	-4.24	8.21	1.251	18.66	19.24
6.9	-0.092	-0.152	-4.247	8.02	0.519	18.93	18.84
6.917	30.91	-0.162	-4.244	8.18	-0.152	18.92	18.74
6.867	-0.112	-0.172	-4.234	7.98	0.88	18.93	19.04
6.863	30.88	-0.174	-4.221	8.12	0.698	18.93	19.01
6.858	30.87	-0.176	-4.207	8.04	0.966	18.92	19
6.923	30.87	-0.177	-4.191	8.14	2.888	18.84	19
6.923	30.86	-0.177	-4.174	8.24	2.377	19.12	19

6 856	30.87	-0.157	-4.167	7.96	3.449	19.07	19.3
6.856	30.89	-0.167	-4.161	8.31	3.399	19.14	19.3
6 889	30.89	-0.157	-4.161	8.16	3.969	19.14	19.3
6.956	30.89	-0.157	-4.161	8.25	3.419	19.32	19.3
6.823	30.91	-0.177	-4.167	8.24	2.848	19.32	19.72
6.889	30.91	-0.167	-4.171	8.1	2.788	19.22	19.32
6.856	-0.097	-0.167	-4.181	8.19	2.327	19.14	19.33
6.923	30.93	-0.157	-4.194	8.19	2.107	19.14	19.03
6.873	-0.097	-0.157	-4.201	8.19	1.225	18.82	19.04
6.874	30.92	-0.156	-4.204	8.11	2.718	19.05	19.03
6.875	30.93	-0.156	-4.207	8.14	0.736	19.05	19.03
6.894	30.94	-0.154	-4.214	8.19	0.657	19.05	19.03
6.896	30.94	-0.154	-4.221	8.19	2.471	19.14	19.05
6.895	-0.094	-0.154	-4.224	8.19	1.278	19.05	19.06
6.88	30.94	-0.153	-4.227	8.19	2.271	19.05	19.24
6.882	21.39	-0.162	-4.234	8.27	2.543	19.13	19.14
6.867	30.34	-0.152	-4.234	8.3	1.762	19.06	19.14
6.867	30.34	-0.162	-4.24	8.2	2.483	18.83	19.14
6.867	29.7	-0.172	-4.24	8.08	0.62	18.93	18.84
6.9	-0.112	-0.172	-4.24	8.1	0.359	18.93	18.81
6.897	-0.123	-0.173	-4.227	8.07	0.228	18.93	19.11
6.86	30.88	-0.175	-4.214	8.15	3.321	18.92	19.11
6.89	30.87	-0.177	-4.201	8.31	3.459	19.22	19.1
6.856	30.87	-0.177	-4.191	8.29	1.796	19.14	19.3
6.856	30.87	-0.167	-4.181	8.29	2.257	19.19	19.3
6.889	30.27	-0.177	-4.177	8.24	3.979	19.14	19.3
6.889	30.87	-0.177	-4.167	8.41	3.399	19.22	19.3
6.889	30.87	-0.177	-4.161	8.22	3.359	19.32	19.29
6.889	-0.107	-0.157	-4.161	8.29	3.629	19.22	19.3
6.889	-0.097	-0.177	-4.167	8.32	3.268	19.27	19.3
6.856	-0.097	-0.157	-4.174	6.873	3.038	19.04	19.33
6.923	-0.077	-0.157	-4.181	9.09	2.477	19.14	19.04
6.889	-0.097	-0.157	-4.194	8.26	1.336	19.03	19.05
6.889	-0.097	-0.157	-4.207	8.19	0.755	19.04	19.04
6.892	30.93	-0.156	-4.214	8.36	0.616	19.15	19.06
6.895	30.94	-0.164	-4.217	8.37	0.637	19.05	19.05
6.896	30.95	-0.154	-4.224	8.28	3.463	19.05	19.25
6.883	30.96	-0.152	-4.234	8.37	2.503	19.23	19.27
6.9	30.96	-0.162	-4.24	8.27	3.495	19.06	19.25
6.867	30.97	-0.152	-4.24	8.3	3.405	19.13	19.27
6.866	30.96	-0.152	-4.241	8.3	2.693	18.93	19.27
6.849	30.94	-0.162	-4.241	8.3	2.172	19.06	19.26
6.898	30.9	-0.163	-4.241	8.21	0.659	18.75	18.95
6.9	6.48	-0.172	-4.241	8.32	0.82	19.06	18.94
6.897	-0.103	-0.173	-4.227	8.33	0.638	19.05	18.91
6.911	31.48	-0.174	-4.214	8.32	0.797	19.05	18.91
6.856	-0.117	-0.177	-4.204	8.31	3.849	19.13	19.3
6.889	31.46	-0.177	-4.194	8.26	3.569	19.14	19.3
6.906	-0.117	-0.177	-4.181	8.49	3.399	19.4	19.3
6.889	31.45	-0.177	-4.174	8.41	3.288	19.22	19.38
6.823	31.45	-0.167	-4.161	8.41	3.479	19.4	19.8
6.889	31.47	-0.167	-4.154	8.4	3.759	19.41	19.5

6.889	31.49	-0.177	-4.154	8.39	3.028	19.41	19.5
6.923	31.51	-0.157	-4.161	8.25	3.379	19.41	19.33
6.889	31.51	-0.147	-4.167	8.35	3.188	19.22	19.33
6.856	31.52	-0.167	-4.177	8.36	2.958	19.04	19.33
6.839	31.53	-0.157	-4.194	8.31	2.828	18.84	19.33
6.889	31.53	-0.157	-4.207	8.34	1.195	19.22	19.15
6.843	31.54	-0.155	-4.214	8.37	0.857	18.84	19.43
6.896	-0.084	-0.154	-4.227	8.37	3.873	19.4	19.26
6.898	31.56	-0.153	-4.234	8.37	3.624	19.48	19.34
6.896	31.55	-0.154	-4.234	8.34	3.713	19.23	19.26
6.895	-0.004	-0.154	-4.234	8.37	3.723	19.05	19.34
6.897	31.56	-0.153	-4.234	8.37	3.112	19.15	19.26
6.862	31.56	-0.174	-4.234	8.37	4.253	19.23	19.35
6.845	-0.094	-0.154	-4.234	8.12	2.711	18.83	19.26
6.914	31.5	-0.163	-4.234	8.69	0.678	19.14	18.95
6.913	31.48	-0.173	-4.227	8.17	0.818	18.84	18.94
6.877	-0.115	-0.175	-4.214	8.24	0.987	18.92	19.01
6.923	31.45	-0.177	-4.194	8.24	1.706	18.82	18.78
6.856	31.45	-0.177	-4.174	8.26	1.275	19.04	19.28
6.856	31.47	-0.177	-4.161	8.29	3.679	18.94	19.2
6.923	31.46	-0.177	-4.154	8.31	3.449	19.04	19.1
6.856	31.45	-0.177	-4.147	8.41	3.439	19.5	19.58
6.889	31.46	3.248	-4.134	8.41	3.499	19.14	19.6
6.889	31.45	-0.167	-4.127	8.39	3.639	19.97	19.58
6.889	31.49	-0.177	-4.127	8.29	3.419	19.6	19.53
6.923	31.49	-0.167	-4.127	8.24	3.419	19.06	19.3
6.889	-0.087	-0.157	-4.141	8.26	3.238	19.22	19.33
6.873	31.51	-0.157	-4.151	8.21	2.818	19.41	19.33
6.906	-0.097	-0.157	-4.161	8.2	2.948	19.4	19.05
6.906	-0.097	-0.157	-4.174	8.29	1.746	19.41	19.05
6.889	-0.097	-0.157	-4.187	8.19	1.015	18.82	19.05
6.889	31.53	-0.157	-4.201	8.19	0.594	19.04	19.05
6.89	31.53	-0.157	-4.207	8.21	0.955	18.92	19.04
6.894	30.36	-0.155	-4.221	8.27	0.857	18.93	19.06
6.895	-0.084	-0.154	-4.227	8.29	0.657	18.84	19.06
6.881	31.54	-0.163	-4.234	8.21	0.779	19.05	19.14
6.866	31.56	-0.152	-4.241	8.2	1.22	18.74	19.15
6.833	31.55	-0.172	-4.241	8	0.8	18.93	19.14
6.881	31.5	-0.163	-4.234	8.07	0.308	18.93	18.84
6.93	-0.103	-0.164	-4.224	8.06	0.488	19.4	18.64
6.823	31.47	-0.176	-4.204	8.24	0.805	18.75	19.2
6.856	31.45	-0.177	-4.181	8.12	0.614	18.92	19.1
6.923	-0.117	-0.177	-4.161	8.09	2.327	18.92	18.78
6.889	29.65	2.958	-4.147	8.14	2.597	18.29	19.1
6.923	30.85	-0.177	-4.134	8.31	-0.177	19.22	19.1
6.873	-0.117	-0.167	-4.127	8.31	1.005	19.5	19.5
6.889	31.45	-0.157	-4.121	8.26	-0.177	18.57	19.5
6.889	31.45	-0.177	-4.121	8.11	-0.177	19.32	19.5
6.889	31.47	-0.177	-4.121	8.24	-0.177	19.32	19.5
6.906	31.47	-0.177	-4.121	8.24	-0.177	19.22	19.4
6.923	31.49	-0.157	-4.127	8.09	-0.157	19.22	19.23
6.889	16.59	-0.157	-4.134	8.09	-0.157	19.04	19.23

6.923	17.19	-0.157	-4.147	8.06	-0.157	18.93	18.83
6.823	17.19	-0.157	-4.161	8.09	-0.167	19.04	19.43
6.906	17.19	-0.157	-4.167	8.06	-0.157	19.04	19.05
6.923	17.21	-0.157	-4.177	8.04	-0.157	19.14	19.05
6.889	17.21	-0.157	-4.187	8.09	-0.157	18.37	19.13
6.889	17.21	-0.157	-4.201	8.19	-0.157	19.14	19.25
6.893	17.21	-0.155	-4.211	8.19	-0.155	19.31	19.24
6.862	17.22	-0.154	-4.221	8.19	-0.154	19.05	19.25
6.829	17.22	-0.154	-4.227	7.82	-0.154	19.05	19.26
6.9	17.22	-0.162	-4.234	8.11	-0.152	19.06	18.97
6.9	17.18	-0.172	-4.23	8.17	-0.172	19.06	18.94
6.894	17.15	-0.175	-4.214	8.04	-0.175	19.15	18.92
6.856	17.15	-0.177	-4.191	8.02	-0.177	18.64	18.9
6.99	17.75	-0.177	-4.167	7.96	-0.177	19.04	18.48
6.889	17.75	-0.177	-4.147	8.11	-0.177	19.22	19
6.939	17.75	-0.167	-4.134	8.14	-0.177	19.04	19
6.839	18.34	-0.177	-4.121	8.22	-0.177	19.14	19.5
6.906	18.33	-0.177	-4.107	8.11	-0.177	19.23	19.2
6.923	18.33	-0.177	-4.097	8.19	-0.177	19.14	19.2
6.854	18.35	-0.178	-4.094	7.63	-0.178	20.24	19.58
6.854	18.35	-0.158	-4.087	8.12	-0.178	18.19	19.58
6.889	18.37	-0.157	-4.094	8.14	-0.177	20.43	19.4
6.956	18.37	-0.167	-4.107	8.11	-0.157	18.47	19.13
6.856	18.39	-0.157	-4.124	7.99	-0.157	19.23	19.43
6.823	18.39	-0.157	-4.141	8.06	-0.157	18.57	19.43
6.889	18.39	-0.157	-4.154	8.09	-0.157	19.04	19.05
6.923	18.39	-0.157	-4.167	8.09	-0.157	19.04	19.04
6.889	18.4	-0.157	-4.181	8.56	-0.157	18.47	19.25
6.889	18.4	-0.157	-4.187	8.04	-0.157	19.31	19.23
6.889	18.39	-0.157	-4.194	8.19	-0.157	18.92	19.33
6.857	18.39	-0.156	-4.201	7.99	-0.156	19.15	19.33
6.874	18.4	-0.166	-4.204	8.09	-0.156	19.22	19.23
6.844	18.41	-0.154	-4.207	8.1	-0.154	19.05	19.23
6.928	18.4	-0.174	-4.214	7.99	-0.154	19.23	18.95
6.895	18.38	-0.174	-4.211	7.99	-0.174	19.05	19.13
6.823	18.35	-0.177	-4.201	8.04	-0.177	19.32	19.3
6.889	18.33	-0.177	-4.181	7.91	-0.177	19.14	19
6.889	18.91	-0.177	-4.161	7.86	-0.177	19.04	19.09
6.889	18.91	-0.177	-4.141	8.02	-0.177	18.01	19
6.906	19.51	-0.177	-4.121	8.01	-0.177	19.14	19.1
6.856	19.51	-0.177	-4.107	8.02	-0.177	19.14	19.49
6.889	19.51	-0.167	-4.097	8.09	-0.177	19.32	19.48
6.92	19.51	-0.168	-4.087	8.11	0.062	19.77	19.48
6.852	19.52	-0.179	-4.081	8.01	0.642	19.58	19.99
6.901	19.53	-0.179	-4.074	8.01	0.462	19.59	19.5
6.885	19.55	-0.159	-4.087	8.03	0.042	20.17	19.6
6.872	19.55	-0.157	-4.094	7.89	-0.017	20.07	19.6
6.906	19.57	-0.157	-4.114	7.96	-0.157	18.57	19.33
6.856	19.57	-0.137	-4.127	7.89	-0.157	19.22	19.33
6.906	19.57	-0.157	-4.141	8.09	-0.157	18.84	19.13
6.923	19.57	-0.157	-4.147	7.9	-0.157	19.14	19.13
6.889	19.57	-0.157	-4.161	7.79	0.104	19.32	19.4

6.906	18.97	-0.157	-4.167	7.9	0.104	19.31	19.42
6.823	18.98	-0.157	-4.174	7.89	-0.157	19.4	19.73
6.889	19.58	-0.157	-4.181	7.99	-0.157	19.31	19.53
6.856	19.57	-0.157	-4.187	7.84	-0.127	19.22	19.42
6.889	19.57	-0.167	-4.191	7.66	-0.167	19.14	19.23
6.889	19.57	-0.157	-4.194	7.89	-0.167	19.29	19.23
6.906	19.57	-0.147	-4.191	7.79	-0.167	19.22	19.13
6.889	19.57	-0.157	-4.191	7.71	-0.177	19.31	19.03
6.856	19.53	-0.167	-4.187	7.69	-0.177	19.22	19.1
6.923	19.54	-0.157	-4.174	7.77	-0.177	18.74	18.71
6.889	19.55	-0.177	-4.174	7.7	-0.177	18.92	19.03
6.889	19.53	-0.177	-4.171	7.66	-0.177	18.94	19
6.856	19.52	-0.177	-4.157	7.61	-0.177	19.04	19.28
6.889	19.53	-0.177	-4.147	7.69	-0.157	19.22	19.3
6.923	19.54	-0.167	-4.141	7.76	-0.017	19.32	19.3
6.923	19.55	-0.167	-4.147	7.79	-0.077	19.32	19.4
6.856	19.56	-0.157	-4.154	7.71	-0.087	19.32	19.6
6.889	19.57	-0.147	-4.161	7.61	-0.057	19.5	19.23
6.856	23.74	-0.157	-4.161	7.61	-0.167	18.89	19.23
6.906	6.794	-0.157	-4.181	7.71	-0.157	19.4	18.65
6.906	26.74	-0.157	-4.201	7.74	-0.157	18.92	19.04
6.86	26.75	-0.155	-4.214	7.64	-0.155	18.92	19.23
6.863	26.75	-0.154	-4.217	7.52	-0.154	19.13	19.24
6.897	26.75	-0.153	-4.221	7.57	-0.163	19.05	18.94
6.948	26.76	-0.153	-4.221	7.64	-0.163	19.06	19.04
6.865	26.76	-0.152	-4.224	7.74	-0.152	19.23	19.41
6.831	26.76	-0.163	-4.227	7.74	-0.153	19.23	19.41
6.867	27.36	-0.162	-4.227	7.42	-0.152	19.23	19.04
6.883	27.34	-0.162	-4.227	7.53	-0.162	19.13	19.14
6.931	27.36	-0.163	-4.231	7.47	-0.163	18.93	18.82
6.899	26.76	-0.162	-4.227	7.47	-0.162	18.93	18.83
6.882	26.74	-0.152	-4.227	7.54	-0.162	18.93	18.94
6.896	27.33	-0.163	-4.224	7.33	-0.173	18.93	18.94
6.861	26.71	-0.174	-4.214	7.42	-0.174	19.13	19.11
6.875	27.49	-0.176	-4.201	7.41	-0.176	18.2	19
6.889	27.28	-0.177	-4.187	7.57	-0.177	19.22	19
6.923	27.26	-0.177	-4.174	7.57	-0.177	19.22	18.9
6.923	27.26	-0.167	-4.161	7.49	-0.157	19.14	19.2
6.906	27.26	-0.177	-4.147	7.56	-0.177	19.5	19.2
6.889	27.26	-0.177	-4.141	7.39	-0.097	19.41	19.28
6.889	27.3	-0.177	-4.134	7.39	-0.097	18.57	19.3
6.856	27.3	-0.157	-4.137	7.41	-0.167	19.77	19.3
6.856	27.32	-0.157	-4.147	7.51	-0.157	18.83	19.33
6.923	26.72	-0.157	-4.157	7.34	-0.157	18.92	18.83
6.889	26.73	-0.157	-4.167	7.36	-0.157	19.4	18.83
6.889	26.74	-0.157	-4.181	7.46	-0.157	18.74	18.83
6.889	27.34	-0.157	-4.187	7.2	-0.157	18.92	18.83
6.889	27.34	-0.157	-4.194	7.54	-0.157	19.22	18.83
6.856	27.35	-0.157	-4.201	7.46	-0.157	19.05	19.13
6.877	27.35	-0.155	-4.207	7.46	-0.154	19.14	19.13
6.862	27.35	-0.154	-4.214	7.64	-0.154	19.05	19.13
6.849	27.36	-0.152	-4.22	7.22	-0.152	19.06	19.14

6.896	27.95	-0.164	-4.224	7.44	-0.153	19.32	18.74
6.898	2.973	-0.163	-4.227	7.56	-0.163	19.23	18.74
6.899	28.5	-0.163	-4.22	7.54	-0.172	19.06	18.64
6.929	29.07	-0.174	-4.214	7.32	-0.174	19.05	18.61
6.858	29.05	-0.176	-4.201	7.46	-0.176	19.22	18.9
6.889	29.05	-0.177	-4.184	7.4	-0.177	19.4	18.9
6.856	29.05	-0.177	-4.167	7.49	-0.177	19.4	19.08
6.873	29.05	-0.177	-4.161	7.56	-0.177	19.14	19.08
6.8	0.6	-0.1	-4.1	7.8	-0.1	19.3	18.9
6.9	6.9	-0.1	-4.1	7.8	-0.1	19.2	18.9
6.8	6.9	-0.1	-4.1	7.6	-0.1	19.3	19
6.8	6.9	-0.1	-4.1	7.7	-0.1	19.3	19.1
6.8	6.9	-0.1	-4.1	7.7	-0.1	19.2	19.1
6.8	6.9	-0.1	-4.1	7.9	-0.1	19.2	19.5
6.8	6.9	-0.1	-4.1	7.9	-0.1	19.8	19.4
6.8	6.9	-0.1	-4.1	7.6	-0.1	19.1	19.2
6.9	6.9	-0.1	-4.1	7.7	-0.1	19	19.1
6.9	6.9	-0.1	-4.1	7.9	-0.1	19.3	19.2
6.8	6.9	-0.1	-4.1	7.8	-0.1	18.7	19.2
6.8	6.9	-0.1	-4.1	7.7	-0.1	19.2	18.9
6.8	6.9	-0.1	-4.1	7.6	-0.1	19	18.8
6.8	6.9	-0.1	-4.2	7.8	-0.1	19.1	18.8
6.9	6.9	-0.1	-4.2	7.9	-0.1	19.1	18.9
6.8	0.7	-0.1	-4.2	8	28.6	19.4	19.1
6.8	6.9	-0.1	-4.2	7.9	-0.1	19.2	19.2
6.8	6.9	-0.1	-4.2	7.9	-0.1	19.9	19.1
6.8	6.9	-0.1	-4.2	8	-0.1	19	19.2
6.8	0.6	-0.1	-4.2	8	-0.1	19	19.2
6.8	6.9	-0.1	-4.2	7.9	-0.1	19.4	18.9
6.9	6.9	-0.1	-4.2	7.7	-0.1	19.1	18.7
6.8	6.9	-0.1	-4.2	7.8	-0.1	19	19
6.8	6.9	-0.1	-4.2	7.9	-0.1	19.2	19
6.8	0.6	-0.1	-4.1	9.5	-0.1	18.7	19
6.8	6.9	-0.1	-4.1	8.1	-0.1	19.3	19
6.8	6.9	-0.1	-4.1	7.8	-0.1	19.3	19.2
6.8	6.9	-0.1	-4.1	8.1	-0.1	19.3	19.2
6.8	6.9	-0.1	-4.1	8	-0.1	19.4	19.5
6.8	6.9	-0.1	-4.1	8	-0.1	19.3	19.5
6.8	6.9	-0.1	-4.1	7.9	-0.1	19.4	19.4
6.8	6.9	-0.1	-4.1	7.9	-0.1	19.5	19.4
6.8	0.6	-0.1	-4.1	7.9	-0.1	19.5	19.4
6.8	6.9	-0.1	-4.1	7.9	-0.1	19.3	19.3
6.8	0.6	-0.1	-4.1	7.9	-0.1	19.3	19
6.8	6.9	-0.1	-4.1	7.8	-0.1	18.7	19
6.9	6.9	-0.1	-4.1	7.9	-0.1	18.8	18.9
6.8	6.9	-0.1	-4.1	7.9	-0.1	18.6	19.1
6.8	6.9	-0.1	-4.1	7.9	-0.1	19.2	19.1
6.8	6.9	-0.1	-4.1	7.9	-0.1	19.3	18.9
6.8	6.9	-0.1	-4.1	7.8	-0.1	19.2	18.9
6.8	6.9	-0.1	-4.2	7.9	-0.1	19.2	18.9
6.8	6.9	-0.1	-4.2	8	-0.1	19.1	18.9
6.8	0.6	-0.1	-4.2	7.9	-0.1	19	18.9

6.8	0.6	-0.1	-4.2	7.8	-0.1	18.8	18.7
6.8	0.6	-0.1	-4.2	7.9	-0.1	18.9	18.6
6.8	6.9	-0.1	-4.2	7.9	-0.1	19.1	18.8
6.8	6.9	-0.1	-4.1	7.9	-0.1	19.4	19
6.8	6.9	-0.1	-4.1	8	-0.1	19.7	19
6.8	6.9	-0.1	-4.1	8	-0.1	19.4	19
6.8	0.6	-0.1	-4.1	8	-0.1	19	19
6.9	6.9	-0.1	-4.1	8.2	-0.1	18.1	19
6.8	6.9	-0.1	-4.1	7.5	-0.1	19.8	19.2
6.8	0.6	-0.1	-4.1	8.1	-0.1	18.7	19.2
6.8	6.9	-0.1	-4.1	7.8	-0.1	19.3	19.3
6.8	6.9	-0.1	-4.1	8.1	-0.1	19.4	19.2
6.8	6.9	-0.1	-4.1	7.9	-0.1	19.4	19.3
6.8	0.6	-0.1	-4.1	8	-0.1	19.2	19.2
6.8	6.9	-0.1	-4.1	8	-0.1	18.8	19
6.9	6.9	-0.1	-4.1	7.9	-0.1	19.1	18.7
6.8	6.9	-0.1	-4.1	7.9	-0.1	19.1	19.1
6.8	6.9	-0.1	-4.1	7.9	-0.1	18.5	18.8
6.8	6.9	-0.1	-4.1	7.9	-0.1	18.6	18.7
6.9	6.9	-0.1	-4.1	7.9	-0.1	19.1	18.8
6.8	6.9	-0.1	-4.1	8.1	-0.1	19.1	19.1
6.8	6.9	-0.1	-4.1	8	-0.1	19.1	19.1
6.8	6.9	-0.1	-4.1	8	-0.1	19.2	19.1
6.8	6.9	-0.1	-4.2	8	-0.1	19	19
6.8	6.9	-0.1	-4.2	7.9	-0.1	18.9	18.7
6.8	0.6	-0.1	-4.2	8	-0.1	18.4	18.7
6.8	6.9	-0.1	-4.2	8	-0.1	18.9	18.7
6.9	6.9	-0.1	-4.1	8	-0.1	18.8	18.7
6.8	6.9	-0.1	-4.1	8.1	-0.1	19.2	18.7
6.8	6.9	-0.1	-4.1	7.9	-0.1	19.4	18.7
6.9	0.6	-0.1	-4.1	8.2	-0.1	19.7	18.7
6.8	0.7	-0.1	-4.1	8	-0.1	19.1	19.1
6.8	6.9	-0.1	-4.1	8.1	-0.1	19.1	19
6.9	6.9	-0.1	-4.1	8.2	-0.1	19.3	19
6.8	6.9	-0.1	-4.1	8.2	-0.1	18.7	19.3
6.8	6.9	-0.1	-4.1	8.2	-0.1	18.9	19.2
6.8	6.9	-0.1	-4.1	8.2	-0.1	19.1	19.2
6.8	6.9	-0.1	-4.1	8.1	-0.1	19	19.1
6.8	6.9	-0.1	-4.1	8	-0.1	19.3	19.1
6.8	0.6	-0.1	-4.1	8.1	-0.1	18.6	19.1
6.8	0.6	-0.1	-4.1	8.1	-0.1	19.3	18.9
6.8	6.9	-0.1	-4.1	8.1	-0.1	19.2	18.9
6.9	6.9	-0.1	-4.2	8.1	-0.1	19.1	18.9
6.8	6.9	-0.1	-4.2	8.1	-0.1	18.8	19.2
6.8	0.5	-0.1	-4.2	8.1	-0.1	19.1	19.2
6.8	6.9	-0.1	-4.2	8.1	-0.1	19.2	19.2
6.8	6.9	-0.1	-4.2	8.1	-0.1	19.2	19.2
6.8	6.9	-0.1	-4.2	8.1	-0.1	19.1	19
6.8	2	-0.1	-4.2	8.1	37.1	19.1	19
6.8	6.9	-0.1	-4.2	8.1	-0.1	19.1	19
6.8	6.9	-0.1	-4.2	8.1	-0.1	18.9	18.9
6.8	6.9	-0.1	-4.1	8.1	-0.1	19	19

6.8	6.9	-0.1	-4.1	8	-0.1	19.8	19
6.8	6.9	-0.1	-4.1	8.1	-0.1	19.3	19.2
6.9	6.9	-0.1	-4.1	8.2	-0.1	19.4	19.2
6.8	6.9	-0.1	-4.1	8.2	-0.1	19.4	19.4
6.8	6.9	-0.1	-4.1	8.2	-0.1	19.4	19.4
6.8	6.9	-0.1	-4	8	-0.1	19.4	19.3
6.9	6.9	-0.1	-4	8.1	-0.1	19.4	19.3
6.9	6.9	-0.1	-4	8.2	-0.1	19.4	19.3
6.9	6.9	-0.1	-4	8.2	-0.1	19.4	19.5
6.8	6.9	-0.1	-4.1	7.9	-0.1	19.6	19.5
6.8	0.6	-0.1	-4.1	8.1	-0.1	19	19.5
6.8	0.6	-0.1	-4.1	8	-0.1	19.3	19.1
6.8	6.9	-0.1	-4.1	8	-0.1	19.2	19.1
6.8	7	-0.1	-4.1	8.2	-0.1	19.4	19.1
6.9	6.9	-0.1	-4.1	7.9	-0.1	19.2	19.1
6.8	6.9	-0.1	-4.1	8	23.5	19.2	19.2
6.8	6.9	-0.1	-4.1	8	-0.1	19.2	19.1
6.8	6.9	-0.1	-4.1	8	-0.1	19.1	19.1
6.8	6.9	-0.1	-4.1	8	-0.1	19.1	19.1
6.8	0.7	-0.1	-4.1	7.9	-0.1	19.2	18.8
6.8	6.9	-0.1	-4.1	8	-0.1	18.5	18.8
6.8	0.6	-0.1	-4.1	7.9	-0.1	19	18.8
6.8	6.9	-0.1	-4.1	7.9	-0.1	18.8	18.8
6.9	6.9	-0.1	-4.1	7.9	-0.1	18.6	18.7
6.8	0.7	-0.1	-4.1	8	34.8	18.9	19.2
6.8	6.9	-0.1	-4.1	8.1	-0.1	19.3	18.9
6.6	6.9	-0.1	-4.1	8	-0.1	19.5	20.3
6.9	6.9	-0.1	-4.1	8	-0.1	19.3	19.1
6.9	6.9	-0.1	-4	8.1	-0.1	19.3	19.1
6.8	6.9	-0.1	-4	8.1	-0.1	19.3	19.2
6.8	6.9	-0.1	-4	8	-0.1	19.4	19.2
6.8	6.9	-0.1	-4	8.1	-0.1	19.6	19.3
6.8	6.9	-0.1	-4	8	-0.1	19.4	19.3
6.8	6.9	-0.1	-4	7.9	-0.1	19.6	19.3
6.9	6.9	-0.1	-4.1	8	-0.1	19.4	18.9
6.8	0.6	-0.1	-4.1	7.9	35	18.9	18.9
6.8	0.6	-0.1	-4.1	7.9	-0.1	19.5	18.8
6.9	6.9	-0.1	-4.1	7.9	-0.1	19.3	18.8
6.9	0.6	-0.1	-4.1	7.8	-0.1	19	18.8
6.9	1	-0.1	-4.1	7.9	33.9	18.5	18.8
6.8	6.9	-0.1	-4.1	7.9	-0.1	18.9	18.9
6.8	6.9	-0.1	-4.1	7.9	-0.1	19.5	18.9
6.8	6.9	-0.1	-4.1	7.9	-0.1	18.8	18.9
6.8	6.9	-0.1	-4.1	7.9	-0.1	18.4	18.8
6.8	0.6	-0.1	-4.1	7.9	-0.1	18.5	18.7
6.8	6.9	-0.1	-4.1	7.9	-0.1	19.3	18.7
6.9	0.6	-0.1	-4.1	7.9	-0.1	18.7	18.7
6.8	6.9	-0.1	-4.1	7.9	-0.1	19.3	19
6.8	6.9	-0.1	-4.1	7.9	-0.1	18.5	19
6.8	6.9	-0.1	-4.1	7.9	-0.1	19.9	18.7
6.9	6.9	-0.1	-4.1	7.9	-0.1	18.4	18.7
6.8	6.9	9.6	-4	8	-0.1	19	19.2

6.9	6.7	10.2	-4	7.9	-0.1	19.2	19
6.9	6.7	9.9	-4	8	3.4	19.4	19
6.8	5.1	9.6	-4	8	3.4	19.3	19.1
6.8	4.5	9.5	-4	7.9	3.1	19.5	19.2
6.8	5	9.1	-4	7.9	3.1	19.6	19.3
6.9	5	9	-4	7.9	2.9	18.8	19.1
6.9	4.8	9	-4	7.9	2.9	19.2	19.1
6.8	4.5	8.5	-4.1	7.9	0.2	19	18.8
6.8	4.5	8.5	-4.1	7.8	0.2	18.8	18.7
6.8	4.5	8.5	-4.1	7.9	0.3	19.3	18.7
6.8	5	8.4	-4.1	8	2.8	18.7	19.3
6.9	5	8.2	-4.1	7.8	3.4	18.7	18.8
6.9	4.8	8.3	-4.1	7.9	2.7	19.4	18.8
6.8	4.8	8.3	-4.1	8.1	0.4	18.8	19
6.8	4.8	7.8	-4.1	7.7	2.7	18.8	19
6.8	4.6	8	-4.1	8	3.8	19.3	19
6.8	4.8	7.4	-4.1	7.8	3.3	18.3	19
6.8	4.6	7.7	-4.1	7.7	0.5	19.1	18.8
6.8	4.6	7.2	-4.1	7.9	0.2	19.8	18.8
6.8	4.4	7.9	-4.1	7.7	-0.1	19.7	18.7
6.8	4.5	7.5	-4.1	7.8	0.5	19.6	18.7
6.9	4.5	7.2	-4.1	7.8	0.5	19.6	18.7
6.8	4.5	6.4	-4.1	7.8	2.4	19.5	18.7
6.9	4.9	-12.3	-4.1	7.9	3.2	19.6	18.7
6.8	4.9	8.5	-4	7.9	3.5	19.5	19.4
6.9	4.9	8.4	-4	8	2.9	19.4	19
6.8	4.9	8	-4	8	2.9	19.5	19.2
6.8	4.9	8.3	-4	8	2.9	19.4	19.2
6.8	4.9	7.7	-4	7.8	2.8	19.4	19.3
6.8	4.9	8	-4	7.9	2.9	19.4	19.4
6.8	4.9	7.6	-4	7.9	3.2	19.3	19.1
6.8	4.8	7.8	-4.1	7.7	2.6	19.3	19
6.8	4.8	7.6	-4.1	7.9	1.5	19.3	19
6.8	4.4	7.8	-4.1	7.7	3.3	19.2	18.9
6.8	4.4	7.6	-4.1	7.8	0.5	19.2	18.9
6.8	4.9	7.6	-4.1	7.8	1.8	19.1	18.9
6.8	4.9	7.4	-4.1	7.8	2.4	19.1	18.9
6.8	4.6	7.4	-4.1	7.9	1.6	19	18.9
6.8	4.6	7.6	-4.1	7.8	0	19	18.8
6.8	4.6	7.4	-4.1	7.8	0.5	19	18.8
6.8	4.6	7.1	-4.1	7.8	0.1	19	18.8
6.8	4.4	7	-4.1	7.8	0	18.9	18.8
6.8	4.4	7.1	-4.1	7.7	0	18.9	18.7
6.8	4.4	7.7	-4.1	7.8	0.3	18.9	18.7
6.9	4.5	7.2	-4.1	7.8	0.4	18.9	18.7
6.9	4.5	7.3	-4.1	8	0.9	18.9	18.7
6.8	4.9	7.4	-4	7.8	3.1	18.9	19
6.9	4.6	7	-4	7.9	3.3	19	19
6.8	4.5	7.3	-4	7.9	3.1	18.9	19.2
6.8	4.5	7.5	-4	8	2.8	18.9	19.2
6.9	5	7.4	-4	8.1	2.9	15.2	19.2
6.8	5	7.5	-4	7.9	2.9	15.2	19.2

6.8	5	7.2	-4	8	3.6	15.2	19.5
6.9	4.8	8.1	-4	8	3.4	15.1	19.1
6.8	4.8	6.8	-4	7.9	3.4	15.2	19.1
6.8	4.5	7.8	-4.1	7.9	3	15.2	19.1
6.9	4.5	8.3	-4.1	7.7	2.7	15.1	18.9
6.8	4.5	7.1	-4.1	7.9	3.2	15.2	19
6.8	4.5	7.6	-4.1	7.9	3.1	15.2	19.3
6.8	4.5	6.9	-4.1	7.8	2.7	15.1	19
6.8	4.6	6.3	-4.1	8	2.7	15.1	19
6.9	4.6	7	-4.1	7.7	2.5	15.1	19
6.9	4.5	7.1	-4.1	8	3	15	19
6.8	4.5	7.2	-4.1	7.8	3.6	15.1	19
6.8	4.9	7.1	-4.1	7.8	3.1	15	19
6.8	4.5	7.3	-4.1	7.8	1.9	15	18.9
6.8	4.3	7	-4.1	7.8	2.9	15	18.9
6.8	4.5	6.4	-4.1	7.8	1.9	15	18.9
6.8	4.5	6.7	-4.1	7.9	2.8	14.9	18.9
6.9	4.5	6.9	-4.1	7.9	3.3	14.9	18.9
6.8	4.9	7.2	-4	7.8	3.2	14.9	19.4
6.8	4.5	7.1	-4	7.9	3.5	14.9	19.4
6.9	5.3	7.1	-4	8	3.7	14.8	19.3
6.8	4.8	7.1	-4	8	3.2	14.8	19.7
6.8	4.8	7.1	-4	7.9	3.3	14.8	19.7
6.9	5	7.4	-4	7.9	3.5	14.8	19.5
6.8	3.6	7	-4	7.6	3.5	14.8	19.1
6.9	4.3	7.5	-4	8.5	0.3	14.8	18.8
6.8	4.5	6.2	-4.1	7.8	3.3	14.8	18.8
6.9	4.5	7	-4.1	7.9	3.6	14.8	18.8
6.8	4.5	7.2	-4.1	7.9	3	14.8	19.4
6.9	4.5	6.9	-4.1	7.8	2.9	14.8	19
6.8	4.5	7.5	-4.1	7.9	1.3	14.8	19
6.8	4.5	7.2	-4.1	7.8	2.5	14.8	19
6.8	3.9	6.5	-4.2	7.7	3.9	14.8	19
6.8	4.7	6.9	-4.2	7.9	3.3	14.8	18.9
6.9	4.6	6.9	-4.2	7.9	3.5	14.8	18.9
6.8	4.5	6.9	-4.2	7.9	3.1	14.8	19.1
6.8	4.5	6.6	-4.2	8	3.6	14.8	19.1
6.8	4.2	6.8	-4.2	7.8	4	14.8	19.1
6.8	4.6	7.9	-4.2	7.8	3.3	14.8	19.1
6.8	4.6	7	-4.1	7.8	3.7	14.7	19
6.8	4.3	7.4	-4.1	7.8	3.7	14.8	19
6.9	4.8	7.3	-4.1	8	3.6	14.8	19
6.8	4.8	7.2	-4.1	7.8	3.5	14.7	19.4
6.8	4.4	9	-4.1	7.9	3.6	14.7	19.2
6.9	4.4	6.7	-4.1	7.9	3.5	14.7	19.2
6.9	4.9	6.6	-4.1	7.9	3.7	14.7	19.4
6.8	4.6	7.1	-4.1	7.9	3.6	14.7	19.6
6.8	4.6	6.8	-4.1	7.9	3.7	14.7	19.3
6.8	4.5	6.6	-4.1	7.8	3.5	14.8	19.4
6.8	4.4	7.2	-4.1	7.7	3.3	14.7	19.4
6.8	4.4	6.5	-4.1	7.8	3.9	14.7	19.1
6.8	4.4	6.9	-4.1	7.8	3.2	14.7	19

6.8	4.4	6.9	-4.1	7.8	3.5	14.7	19
6.9	4.3	6.2	-4.1	7.7	3.4	14.7	19
6.8	4.3	6.7	-4.1	7.7	3	14.7	19.2
6.8	4.3	7	-4.1	7.8	3.1	14.7	19.3
6.8	4.8	6.4	-4.1	7.9	3	14.7	19.4
6.8	4.4	6.4	-4.2	8	2.9	14.7	19.4
6.8	4.4	7.4	-4.2	7.8	3	14.7	19.4
6.8	4.4	6	-4.2	7.9	3.4	14.7	19.3
6.8	4.4	6.9	-4.2	7.9	3.7	14.7	19.1
6.8	4.4	5.9	-4.2	7.7	2.3	14.7	19
6.8	4	6.4	-4.2	7.8	1.6	14.7	19.1
6.8	4.6	5.7	-4.2	7.8	3.3	14.7	19
6.8	0.5	6.3	-4.1	7.8	3.8	14.7	19
6.8	4.4	6.9	-4.1	7.9	3.5	14.7	19.3
6.8	4.4	6.9	-4.1	8	3.4	14.6	19.3
6.8	4.5	6.8	-4.1	7.8	3.1	14.7	19.6
6.8	4.5	7	-4.1	7.9	3	14.6	19.5
6.8	4.5	7.2	-4.1	8	3.7	14.6	19.5
6.9	4.5	7.1	-4.1	7.9	3.6	14.7	19.5
6.8	4.5	7.1	-4.1	7.9	3.9	15.3	19.5
6.8	4.5	7.3	-4.1	7.8	3.4	15.3	19.7
6.8	4.5	7.2	-4.1	7.8	3.3	15.2	19.5
6.8	4.5	6.7	-4.1	7.8	3.2	15.2	19.3
6.8	4.3	7.5	-4.1	7.8	3.4	15.3	19.3
6.8	4.3	7.4	-4.1	7.8	3.5	15.2	19.1
6.9	4.3	7.6	-4.1	7.7	3.4	15.3	19.1
6.8	4.3	6.4	-4.2	7.8	3.7	15.2	19.4
6.8	4.4	6.7	-4.2	7.8	3.7	15.2	19.4
6.8	4.4	6.3	-4.2	7.8	3.8	15.2	19.4
6.8	4.8	7.2	-4.2	7.9	3.4	15.2	19.3
6.8	4.5	6.9	-4.2	7.8	3.5	15.2	19.4
6.8	4.5	6.5	-4.2	7.8	3.2	15.2	19.3
6.8	4.2	6.3	-4.2	7.9	2.9	15.2	19
6.8	4.1	6.4	-4.2	7.9	3.6	15.3	19
6.8	4.5	6.5	-4.2	7.7	2.4	15.2	19
6.9	3.8	6	-4.2	7.8	2.9	14.5	19
6.8	4.6	6.4	-4.1	7.9	3.2	14.6	19.2
6.8	4.1	6.3	-4.1	7.8	3.2	14.6	19.2
6.9	4.4	6.4	-4.1	7.8	3.7	14.6	19.2
6.8	4.4	6.9	-4.1	7.6	3.2	14.5	19.3
6.8	4.1	6.9	-4.1	7.9	3.4	14.3	19.3
6.9	4.4	7	-4.1	8	3.2	14.4	19.3
6.8	4.4	6.5	-4.1	7.9	3.8	14.4	19.6
6.9	4.4	7.5	-4.1	7.8	3.7	14.4	19.5
6.8	4.4	7	-4.1	7.7	3.5	14.4	19.5
6.8	4.4	6.3	-4.1	7.8	3.4	14.4	19.5
6.8	4.4	7.2	-4.1	7.8	3.1	14.4	19.2
6.8	4.2	7.1	-4.1	7.8	2.9	14.4	19.2
6.9	4.2	6.3	-4.1	7.8	2.5	14.4	18.9
6.8	3.7	6	-4.1	7.5	3.2	14.4	18.9
6.8	5	6	-4.1	7.8	3.5	14.4	19
6.8	4.8	6.2	-4.1	7.9	3.6	14.4	19.3

6.8	4.2	15.2	-4.2	7.9	3.9	16	19.3
6.8	4.2	5.7	-4.2	7.7	3.6	16	19
6.8	4.2	-0.1	-4.2	7.7	3.4	16	19
6.8	4.2	7	-4.2	7.8	3.6	16	19
6.8	4.2	5.9	-4.2	7.8	2.9	16	19
6.8	4.1	6	-4.2	7.7	0	16	19
6.8	4.1	6.6	-4.2	7.7	1.3	16	18.7
6.9	3.8	5.4	-4.2	7.7	3	16	18.7
6.9	3.9	6.8	-4.1	7.8	1.3	15.8	18.7
6.8	4.1	5.5	-4.1	7.8	3	15.8	19
6.9	4.1	6.4	-4.1	7.8	3	15.8	19
6.8	4.1	7.2	-4.1	7.7	3	15.8	19.2
6.8	4.1	6.1	-4.1	7.8	3	15	19.2
6.8	4.3	7.4	-4.1	8	2.9	14.9	19.3
6.9	4.6	6.1	-4	7.8	3.2	15	19.3
6.8	4.5	6.4	-4	7.7	3.8	15	19.3
6.8	4.3	6.5	-4	7.7	3.4	15	19.3
6.8	4.5	6.7	-4	7.8	3.6	15	19.4
6.8	4.5	6.9	-4.1	7.7	3.6	15	19.1
6.8	4	6.4	-4.1	7.8	3.3	15.1	19
6.9	4	7.1	-4.1	7.8	2.6	15	19
6.9	4	6.2	-4.1	7.8	4	15.1	19
6.8	4.4	6.4	-4.1	7.8	3.2	15	19
6.8	4	6	-4.1	7.8	3.5	15	19.1
6.8	4	5.8	-4.1	7.9	3.1	15	19.1
6.8	4	6.1	-4.2	7.6	1.1	15.1	19.1
6.8	4	5.7	-4.2	7.8	3	15.1	19
6.8	4	6.9	-4.2	7.9	2.9	15	18.9
6.8	4	5.6	-4.2	7.9	2.8	15.1	18.8
6.8	4	5.6	-4.2	7.7	0	15.1	18.8
6.8	4	16.6	-4.2	7.7	0	15.1	18.7
6.9	4	6.1	-4.1	7.8	0.8	15.1	18.7
6.8	4	6.4	-4.1	7.8	3.6	15.1	19.1
6.8	4.1	4.1	-4.1	7.8	3.3	15.1	19
6.9	4	6.2	-4.1	7.9	3.6	15.1	18.9
6.8	4.3	6.7	-4.1	7.9	3.5	15.1	19.3
6.8	4.3	7.3	-4	7.9	3.5	15.1	19.3
6.9	4.3	7.3	-4	8.1	3.3	15.1	19.3
6.8	4.8	7.8	-4	7.9	3.2	15.1	19.6
6.8	4.1	7.3	-4	8	3.6	15.2	19.3
6.9	4.3	10.7	-4	7.9	3.6	15.2	19.2
6.8	4.6	6.8	-4	7.9	3.8	15.2	19.2
6.8	4.2	6.3	-4.1	7.9	3.4	15.2	19.3
6.8	4.2	5.5	-4.1	7.9	3.7	15.2	19.1
6.8	4.2	0.5	-4.1	7.8	3.6	15.2	19.1
6.8	3.5	7.1	-4.1	7.9	3.4	15.2	19.1
6.9	4.5	7.4	-4.1	7.8	3.1	15.2	19.1
6.9	4.5	5.4	-4.1	7.9	3.1	15.2	19.2
6.8	4	1	-4.1	7.9	3.2	15.3	19.4
6.8	4.3	6	-4.1	8	3.2	15.2	19.4
6.8	4.2	8.3	-4.1	7.9	3	15.2	19.3
6.8	5.5	6.4	-4.1	8	3.5	15.2	19.2

6.8	4.4	4.3	-4.2	7.9	3.5	15.3	19
6.9	4.5	3.5	-4.2	7.8	4.3	15.2	18.9
6.8	4.3	5	-4.1	8	3.4	15.2	18.9
6.9	4.3	6.2	-4.1	8	3.4	15.2	18.9
6.8	4.3	8.3	-4.1	7.2	3.5	14.5	19.1
6.9	4.3	9	-4.1	8	3.4	14.6	19.1
6.8	4.3	6.6	-4	8	3.4	15.1	19.4
6.8	4.3	0.9	-4	8.1	3.7	15.1	19.4
6.8	4.4	6.4	-4	8.1	3.6	15.1	19.5
6.8	4.8	6.1	-4	8.1	3.2	15.1	19.6
6.8	4.8	5.9	-4	8	3.5	15.1	19.7
6.8	4.6	6.9	-4	8	3.9	15.1	19.6
6.8	4.4	7.9	-4	8	3.6	15.2	19.5
6.8	4.5	3.2	-4	7.9	3.6	15.1	19.4
6.8	4.5	0.7	-4	8.4	3.6	15.1	19.5
6.8	4.5	4.2	-4.1	7.8	3.8	15.2	19.2
6.8	4.1	6	-4.1	7.9	3.1	15.2	19.3
6.9	4.5	8.2	-4.1	7.9	3	15.1	19.3
6.8	4.5	6.2	-4.1	7.9	3.2	15.1	19.6
6.8	4.5	6.2	-4.1	8.1	3.4	15.2	19.6
6.8	4.5	6	-4.1	7.9	3.5	15.1	19.6
6.8	4.4	6.2	-4.1	7.8	3.5	15.2	19.4
6.8	4.4	6.3	-4.1	7.8	3.9	15.1	19.3
6.8	4.4	6.9	-4.1	7.8	3.8	15.1	19.3
6.9	3.9	12.8	-4.1	7.9	3.8	15.2	19.1
6.9	4.3	16.5	-4.1	7.7	3.5	15.2	19.1
6.8	4.3	2.8	-4.1	7.8	3.4	15.2	19.2
6.8	4	6.8	-4.1	7.8	3.2	15.1	19.2
6.8	4	2.4	-4.1	7.8	3.3	15.2	19.2
6.9	4.4	7	-4.1	7.8	3.6	15.1	19.2
6.8	4.4	6.8	-4	7.9	3.1	15.1	19.3
6.8	4.4	7.2	-4	7.9	3.6	15.1	19.7
6.8	4.4	-0.1	-4	7.9	3.7	15.1	19.5
6.9	4.8	2.1	-4	7.9	3.7	15.1	19.5
6.8	4.8	2.9	-4	8	3.9	15.1	19.6
6.8	4.3	12	-4	7.9	3.4	15.1	19.6
6.8	4.4	13.9	-4	7.8	3.7	15.1	19.5
6.8	4.4	11.7	-4	7.9	3.6	15.1	19.5
6.9	4.4	0.5	-4	7.8	3.8	15.1	19.4
6.9	4.4	0.9	-4	7.6	3.7	15.1	19.4
6.8	4.4	1.4	-4.1	7.7	3.6	15.2	19.4
6.8	4.4	6.9	-4.1	7.7	3.6	15.1	19.4
6.9	4.4	1.8	-4.1	7.7	2.9	15.1	19.1
6.9	4.4	19.1	-4.1	7.6	3.1	15.1	19.1
6.9	4	29.1	-4.1	7.7	3	15.1	19.1
6.8	4	4.2	-4.1	7.7	3	15.2	19.2
6.8	4	4.7	-4.1	7.7	2.9	15.1	19.3
6.8	4.5	6.5	-4.1	7.7	3.1	15.4	19.3
6.8	4.1	7.5	-4.1	7.4	3.5	15.4	19.3
6.8	4.1	-0.1	-4.1	7.5	2.3	15.4	18.9
6.8	3.8	4.8	-4.1	7.6	0.8	15.4	18.6
6.8	3.8	-0.1	-4.1	7.5	0.4	15.4	18.6

6.9	3.8	17.6	-4.1	7.5	0	15.4	18.6
6.8	4.1	2.8	-4.1	7.5	3.2	15.3	19.1
6.8	4.1	2.5	-4.1	7.6	3.6	15.4	19.2
6.8	4.1	1.1	-4.1	7.8	3.6	15.4	19.2
6.8	4.1	-0.1	-4.1	7.5	3.8	15.3	19.1
6.8	4.1	2	-4.1	8.1	2.9	15.4	19.1
6.8	4.1	4.1	-4.1	7.6	3	15.4	19.1
6.8	4.1	3.8	-4.1	7.5	3.2	15.4	19.3
6.8	4.1	23.7	-4.1	7.6	3	15.4	19.4
6.8	4.1	1.2	-4.1	7.7	3.1	15.4	19
6.8	4.2	14.5	-4.1	7.4	3.1	15.4	19.1
6.8	3.7	14.4	-4.1	7.4	0.6	15.4	18.8
6.8	3.7	-0.1	-4.1	7.6	0	15.4	18.9
6.9	4	4.6	-4.1	7.8	2.9	15.4	18.9
6.8	4	4.4	-4.1	7.6	3.6	15.3	19.1
6.8	4	3.5	-4.2	7.4	3.4	15.2	19.1
6.8	4	5.1	-4.2	7.5	3.5	15.2	19.1
6.8	4	15.1	-4.2	7.7	3.6	15.2	19.1
6.8	4.5	14.8	-4.2	7.6	3.7	15.2	19.1
6.8	4	5.8	-4.2	7.5	3.5	15.2	19.1
6.8	4	14.7	-4.2	7.4	0.6	15.2	19.1
6.8	4	24.9	-4.2	7.6	0.3	15.2	18.9
6.8	4	10.1	-4.2	7.6	2.9	15.2	18.9
6.8	4	2.6	-4.2	7.7	3.6	15.2	18.9
6.9	4	5.9	-4.2	7.4	2.8	15.3	18.9
6.8	4	3.3	-4.1	7.4	2.4	15.2	19.3
6.8	4	13.2	-4.1	7.5	3.1	15.2	19.2
6.8	4.3	1.9	-4.1	7.7	3.1	15.2	19.2
6.8	4.3	4.4	-4.1	7.5	3.1	15.2	19.2
6.8	4.3	2.1	-4.1	7.5	3.2	15.2	19.2
6.8	4.3	3.7	-4.1	7.6	3.1	15.2	19.2
6.9	4.3	-0.1	-4.1	7.6	3.4	15.3	19.3
6.8	4.3	22	-4.1	7.7	3.8	15.2	19.3
6.8	4.3	-0.1	-4.1	7.6	3.7	15.2	19.3
6.8	4.3	-0.1	-4.1	7.4	3.5	15.2	19.3
6.8	4.3	11.4	-4.1	7.7	3.7	15.2	19
6.8	4.3	8.2	-4.1	7.5	3.5	15.2	19.1
6.9	4.2	3.3	-4.1	7.7	3.7	15.2	19.1
6.8	4.2	0.6	-4.1	7.8	3.2	15.2	19.3
6.8	4.3	4.2	-4.1	7.6	3.2	15.2	19.3
6.8	4.2	-0.1	-4.2	7.7	3.3	15.2	19.3
6.8	4.2	-0.1	-4.2	7.6	3.2	15.2	19.3
6.8	4.2	2.1	-4.2	7.7	3	15.2	19.3
6.8	4.2	5.5	-4.2	7.6	3.1	15.1	19.3
6.8	4.2	7.6	-4.2	7.6	3.3	15.2	19
6.8	4	15.5	-4.2	7.6	1.4	15.2	19
6.8	3.7	0.5	-4.2	7.7	3	15.2	18.6
6.8	3.6	2.2	-4.2	7.5	0	15.2	18.6
6.9	3.6	-0.1	-4.2	7.6	-0.1	15.2	18.6
6.8	4.3	25.5	-4.1	7.7	3	15.2	19.2
6.8	4.3	-0.1	-4.1	7.8	3	15.2	19.3
6.8	4.3	26.2	-4.1	7.8	3.5	15.2	19.7

6.8	4.3	-0.1	-4.1	7.7	3.6	15.2	19.3
6.9	4.3	-0.1	-4.1	7.6	3.5	15.2	19.3
6.9	4.3	1.8	-4.1	7.7	3.6	15.2	19.3
6.8	4.3	0.1	-4.1	7.6	3.1	15.2	19.3
6.8	4.3	22.7	-4.1	7.7	3	15.4	19.4
6.8	4.3	13	-4.1	7.7	2.9	15.4	19.2
6.8	4	1	-4.1	7.6	3	15.4	19.1
6.8	4	-0.1	-4.1	7.7	2.9	15.4	19.2
6.8	4	1.5	-4.1	7.7	2.9	15.4	19.2
6.9	4	14.5	-4.1	7.7	3.1	15.3	19.1
6.8	4	13.9	-4.1	7.8	3.2	15.3	19.4
6.8	4.2	1.2	-4.1	7.6	3.3	15.3	19.4
6.8	4.2	-0.1	-4.2	7.7	3.1	15.3	19.4
6.8	4.2	1.9	-4.2	7.7	3.7	15.3	19.3
6.8	4.2	1.9	-4.2	7.7	3.8	15.3	19.1
6.8	3.8	-0.1	-4.2	7.6	0.6	15.3	18.8
6.8	3.8	11.1	-4.2	7.5	1	15.3	18.8
6.9	3.8	3.7	-4.2	7.6	0.1	15.4	18.6
6.8	3.8	1.4	-4.2	7.6	2.7	15.3	19
6.8	3.8	0.5	-4.2	7.7	2.5	15.3	18.9
6.9	4.4	4.5	-4.1	7.5	1.7	15.3	18.7
6.8	3.9	10.7	-4.1	7.7	3.6	15.4	19.3
6.9	3.9	2.8	-4.1	7.7	3.3	15.4	19
6.9	4.1	0.3	-4.1	7.8	3.5	15.4	19
6.8	4.1	14	-4.1	7.7	3.7	15.4	19.3
6.8	4.1	2.4	-4.1	7.7	3.4	15.3	19.3
6.8	4.1	13.8	-4	7.7	3.2	15.3	19.3
6.8	4.1	1.2	-4	7.9	3.2	15.3	19.3
6.8	4.1	20.5	-4	7.7	3.2	15.3	19.3
6.9	4.1	4.3	-4	7.6	3.7	15.2	19.2
6.8	4	8.2	-4.1	7.7	3.5	15.3	19.2
6.9	4	1.2	-4.1	7.7	3.7	15.3	19
6.9	4	2.3	-4.1	7.7	3.5	15.3	19
6.9	4	-0.1	-4.1	7.7	3.4	15.2	19
6.9	4	4.2	-4.1	7.6	3.5	15.3	19.1
6.8	4	18	-4.1	7.7	3.7	15.3	19.4
6.8	4.6	2.3	-4.1	7.7	3.5	15.3	19.3
6.8	3.9	22.9	-4.1	7.7	3.4	15.3	19
6.8	3.4	26	-4.1	7.7	3.1	15.2	18.9
6.8	4	6.9	-4.1	7.6	1.7	15.3	19
6.8	3.9	0	-4.1	7.7	2	15.2	19
6.9	4	2.6	-4.1	7.7	1.2	15.3	18.7
6.6	3.7	-0.1	-4.1	7.7	3	15.3	20.1
6.8	4.8	0.9	-4.1	7.7	3.4	15.2	18.8
6.9	3.6	6.5	-4.1	7.7	3.2	15.2	18.7
6.8	4	15.3	-4.1	7.7	3.4	15.3	19.1
6.9	4	-0.1	-4.1	7.9	3.4	15.3	19.1
6.8	4.5	3.5	-4.1	7.8	3.6	15.3	19.5
6.8	4	4.4	-4	7.8	3.7	15.3	19.4
6.8	4.3	7	-4	7.8	3.3	15.2	19.5
6.9	4.8	7.2	-4	7.8	3.3	15.2	19.4
6.8	4.3	2	-4	7.8	3.6	15.3	19.4

6.8	4.1	19.6	-4	7.7	3.4	15.3	19.3
6.8	4.1	7.2	-4.1	7.6	3.7	15.2	19.2
6.9	3.8	18.2	-4.1	7.7	3.7	15.3	19.1
6.8	3.9	0.9	-4.1	7.7	3.4	15.3	19.1
6.8	4.1	3.7	-4.1	7.7	3.9	15.3	19.1
6.8	3.9	11.3	-4.1	7.6	3.9	15.3	19.1
6.8	3.9	1.1	-4.1	7.7	3.2	15.3	19.1
6.9	3.9	2.2	-4.1	7.7	3.3	15.2	19.1
6.9	4.3	16.4	-4.1	7.8	3.2	15.3	19.1
6.8	3.9	1.3	-4.1	7.8	3.1	15.3	19.2
6.8	3.9	-0.1	-4.1	7.6	2.9	15.3	19.2
6.8	4	4.7	-4.1	7.7	3.4	15.3	19.2
6.8	3.9	3.9	-4.1	7.7	3.4	15.2	18.9
6.8	3.9	-0.1	-4.1	7.7	2.4	15.3	18.9
6.8	3.9	21.6	-4.1	7.7	-0.1	15.2	18.7
6.9	4.4	29.6	-4.1	7.6	2.5	15.3	18.7
6.8	3.9	7.5	-4.1	7.7	3.4	15.2	19
6.8	4.3	3.5	-6999	7.8	3	15.2	19.3
6.8	4.3	12.6	-6999	7.8	2.9	15.2	19.2
6.9	4	3.3	-6999	7.9	2.9	15.2	19.2
6.9	4	1.3	-6999	7.9	3.2	15.3	19.2
6.8	4.5	17.5	-6999	7.9	3.5	15.2	19.9
6.8	4.4	0.4	-6999	7.8	3.6	15.3	19.4
6.8	4.4	2.6	-6999	7.4	3.6	15.3	19.4
6.8	0.6	16.8	-6999	7.8	3.2	15.3	19.2
6.8	3.9	15	-6999	7.8	3.1	15.2	19.3
6.8	3.9	-0.1	-6999	7.8	3	15.3	19.4
6.9	4	16.2	-6999	7.8	3	15.2	18.9
6.8	4	14.4	-6999	7.8	2.8	15.3	19.4
6.9	4.3	13.2	-6999	7.7	3.1	15.3	19
6.9	4.3	3.1	-6999	7.9	3.5	15.3	19.4
6.8	4.3	25.5	-6999	7.8	3.4	15.3	19.7
7.1	4.3	16.1	-6999	7.8	3.7	15.3	17.6
6.9	4	2.8	-6999	7.7	3.4	15.3	18.4
6.8	4	1.5	-6999	7.6	3.6	15.3	19.3
6.8	4	1.7	-6999	7.7	3.5	15.3	19.4
6.8	4	1.7	-6999	7.7	3.7	15.2	18.9
6.9	4	0.2	-6999	7.7	3.9	15.2	18.9
6.8	4	13.8	-6999	7.6	3.5	15.2	19.1
7.1	3.8	1.4	-6999	7.6	1.7	15.3	17.5
6.8	3.8	1.3	-6999	7.4	0.9	15.3	19.2
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6.8	4.6	12	-6999	8.1	3.3	15.3	19.7
6.8	4.4	12.1	-6999	7.7	3.2	15.3	19.7
6.8	4	1.1	-6999	7.8	3.6	15.4	19.5
6.8	4	2.6	-6999	7.7	3.8	15.4	19.4
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6.8	4	1.3	-6999	7.7	3.2	15.4	19.2
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6.8	4	0	-6999	7.5	3.6	15.3	19.3
6.8	3.5	15.6	-6999	7.6	3.6	15.3	18.9
6.8	4	-0.1	-6999	7.7	2.2	15.4	19
6.9	3.9	17.1	-6999	7.7	1.5	15.4	19
6.8	4	9.4	-6999	7.7	3.4	15.4	19.1
6.9	4	0.8	-6999	7.4	3.5	15.4	18.9
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6.8	4.3	11.7	-6999	7.5	3.7	15.4	19.5
6.8	4.4	13	-6999	7.7	3.7	15.4	19.7
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6.9	4	3.6	-6999	7.4	3.5	15.4	19.1
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6.8	4	2.5	-6999	7.4	3.8	15.4	19.1
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6.8	3.9	3.7	-6999	7.3	3.2	15.3	19.4
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6.9	4.1	12.6	-6999	7.1	3.3	15.4	19.2
6.8	4.1	2.7	-6999	7	3.3	15.4	19.4
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6.8	3.9	2.7	-6999	7	3.4	15.3	19.1
6.9	3.9	12	-6999	7	3.6	15.2	18.7
6.8	3.5	4	-6999	6.8	1.3	15.3	19
6.8	3.5	14.2	-6999	6.9	1	15.2	18.9
6.8	3.5	1.9	-6999	6.9	2.7	15.4	18.9
6.9	3.8	0	-6999	6.9	3.4	15.3	18.9
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6.8	3.9	3	-6999	6.6	3.5	15.4	18.9
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6.9	3.9	9.4	-6999	6.8	3.5	15.3	18.7
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6.8	3.5	-0.1	-6999	6.8	2.9	15.3	19.4
6.8	4.5	2.5	-6999	6.8	2.8	15.3	19.1
6.9	3.8	-0.1	-6999	6.6	3.3	15.2	18.6
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6.8	3.8	1.2	-6999	6.7	3.5	15.3	19
6.9	3.8	0.9	-6999	6.8	3.4	15.3	19
6.8	3.8	0.7	-6999	6.7	3.6	15.2	19.2
6.8	3.8	17.1	-6999	6.6	3.3	15.2	19.1
6.8	4.8	11.8	-6999	6.6	3.2	15.3	19.2
6.8	3.4	5.1	-6999	6.7	2.8	15.2	19.1
6.8	3.4	2.7	-6999	6.5	3	15.3	18.9
6.8	3.4	3.7	-6999	6.7	3	15.3	19.3
6.8	3.4	12.8	-6999	6.8	3.8	15.3	19
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6.8	3.8	1.2	-6999	6.6	3.9	15.2	19
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6.8	3.9	13	-6999	6.8	3.6	15.2	18.7
6.9	3.6	-0.1	-6999	6.8	4	15.3	18.7
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6.8	3.4	2	-6999	6.8	3.5	15.3	18.8
6.9	3.6	2.9	-6999	6.9	3.3	15.2	18.8
6.8	3.9	12.5	-6999	6.7	3.4	15.2	19.1
6.8	3.9	6.6	-6999	6.8	3.3	15.2	19.4
6.8	3.9	10.3	-6999	7.4	3.1	15.2	19.3
6.8	3.9	18.9	-6999	7.2	3.1	15.3	19.2
6.8	3.9	7.6	-6999	6.8	3.3	15.2	19.3
6.8	3.9	-0.1	-6999	6.6	3.6	15.3	19.4
6.7	3.9	16.3	-6999	6.8	3.7	15.3	19.2
6.8	3.9	2.8	-6999	6.9	3.6	15.2	19.2
6.8	3.9	9.6	-6999	6.8	3.5	15.3	19.1
6.9	3.7	0.7	-6999	6.8	3.5	15.3	18.6
6.8	3.8	0.3	-6999	6.8	3.1	15.3	19
6.8	3.8	4.1	-6999	6.8	3	15.3	19
6.8	3.3	16.8	-6999	6.8	3.2	15.3	19
6.8	0.6	-0.1	-6999	6.8	3.2	15.2	18.9
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6.8	3.8	2.4	-6999	6.7	3	15.3	19
6.8	3.8	1.5	-6999	6.9	3	15.3	19
6.8	3.7	13	-6999	6.9	3.8	15.2	18.9
6.8	3.3	4.6	-6999	6.9	3.6	15.2	18.9
6.8	3.6	2.7	-6999	6.8	0.1	15.3	18.8
6.8	3.6	6.8	-6999	6.7	3	15.3	18.7
6.8	3.4	16.4	-6999	6.9	3.4	15.3	18.7
6.9	3.6	1.9	-6999	7	3.3	15.2	18.7
6.8	3.6	2.9	-6999	7.5	3.3	15.3	19.1
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6.8	3.8	13.8	-6999	6.9	3.5	15.2	19.7
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6.8	4	16.8	-6999	6.9	3.3	15.3	19.3
6.8	4.5	0	-6999	6.8	3.4	15.3	19.3
6.8	3.9	1.6	-6999	6.8	3.7	15.3	19.3
6.8	3.9	0	-6999	6.9	3.5	15.3	19.2
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6.8	3.7	1.6	-6999	7.2	3.6	15.2	19
6.8	3.7	1	-6999	6.5	3.5	15.3	19
6.8	4	2.3	-6999	7.1	3.4	15.3	18.9
6.8	3.8	3	-6999	7	3.6	15.3	19.2
6.8	3.8	-0.1	-6999	6.8	3.2	15.3	19.1
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6.8	3.8	-0.1	-6999	7	3.2	15.3	19.1
6.8	3.8	3.5	-6999	7	3.4	15.3	18.9
6.8	3.6	0	-6999	6.7	3.4	15.2	18.9
6.8	3.6	4.3	-6999	6.9	0.9	15.2	18.7
6.8	3.6	-0.1	-6999	6.9	1	15.3	18.8

6.8	3.6	13.8	-6999	6.9	2.7	15.2	18.9
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6.8	3.6	17.5	-6999	6.8	3.3	15.2	18.9
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6.8	3.9	17	-6999	6.8	3.5	15.3	19.2
6.8	3.9	-0.1	-6999	6.9	3.7	11.3	19.3
6.8	3.9	4.1	-6999	6.8	3.5	12.1	19.2
6.8	3.9	0	-6999	6.8	3.6	11.6	19.2
6.9	3.9	3.9	-6999	7	3.8	12.1	18.9
6.8	3.6	19.5	-6999	6.9	3.4	12.2	19
6.8	3.6	3.3	-6999	6.7	3.5	11	19
6.8	3.3	0.7	-6999	6.7	3.9	12.2	18.6
6.9	3.3	4	-6999	6.8	0.7	12.4	18.7
6.8	3.5	8.5	-6999	7	0.1	12.3	18.9

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